Journal of Band Research

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2. Style and format of the articles should adhere as closely as possible to current edition of: Kate L. Turabian, *A Manual for Writers of Term Papers, Theses, and Dissertations*, (Chicago: University of Chicago Press). Empirical studies in music education, however, should conform to the *Publication Manual of the American Psychological Association*, (Washington, D.C.: American Psychological Association).

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TIMING PATTERNS OF PROFESSIONAL AND
STUDENT CONDUCTORS: AN EXPLORATORY STUDY

Christopher M. Johnson & John M. Geringer

A conductor has many interpretive aspects to consider with any composition they want
to rehearse and perform. One critical aspect is tempo (Confredo et al., 2021). Indeed, tempo
of ensemble performance has been the subject of many investigations to date (Berz & Ferrara,
2006). It has been noted that, while there is the marking a composer indicates on the score, the
composer's tempo markings seem to be a starting point for interpretation (Green, 1992). There
are many other considerations that enter performance preparation that a conductor chooses to
take. Among those are the ensemble one is working with, the venue of the intended performance,
and even other relationships of the work with the rest of the program (Collier & Collier, 1994;
Confredo et al., 2021; Geringer et al., 2016; Geringer & Johnson, 2007; Schuller, 1997; Slatkin,
2012).

Beyond the overall tempo a conductor selects for a piece, there is the element of tempo
deviation, which is inherent in every iteration. In addition to the large-scale changes marked in
the musical score (e.g., accelerando, ritardando, etc.), there are numerous micro-level variations
(in milliseconds) that are happening throughout every performance (Gabrielsson, 1974; Palmer,
1989; Repp, 1999b). Ample evidence suggests that these micro-deviations to the musical flow are
a key component in the listener's perception of musical affect in a performance (Johnson, 1996b;
Repp, 1990; 1992).

While naïve listeners have not been shown to consciously track alterations to musical
flow, they appear to have intuitive assessments that can be directly linked to it (Colley et al.,
2018; Drake & Botte, 1993; Honing & Ladinig, 2009). There is also evidence to suggest that
musical experience greatly influences one's ability to overtly detect rubato in performance
(Johnson, 1996a). But the context of those changes in flow is a substantial mediating factor. It
seems axiomatic that a novice musician will not have great control over aspects of temporal flow
at the millisecond level, but there is evidence to suggest that, if pursued with the same attention
to detail as facets of playing with excellent intonation and timbre, then perhaps it could be
mastered earlier than might be expected (Johnson, 1998). There is also some level of evidence
that if the refined fine motor components of performance are removed from the equation, then
less experienced musicians can perform with tempo variations that have been found to be more
aesthetically pleasing (Johnson et al., 2012a; 2012b).

Most extant research regarding use of rubato in musical performances has been carried
out with performances by soloists or examining individuals with accompaniment (Gabrielsson
et al., 1983; Johnson, 1996a; 1999; Palmer, 1989; Repp, 1992; 1999a; Shaffer, 1981). Findings
have repeatedly indicated that performances that adhere to one set of tempo variations are heard

differently from others (Johnson, 1996b). Researchers have concluded that there is some level of common practice, though attempts to write the rules for this common practice have fallen short of any universality (Johnson et al., 2012b; Povel, 1977; Repp, 1998). It has been posited that whatever rules there are, they are inextricably connected to genre and style, and mostly arrived at by experience and intuition within individual performers (Repp, 1995; 1999a). This flow has been related to musical structure, but Gunther Schuller goes even further to suggest that melody and temporal flow are inextricably linked (1997).

Regardless, the question of tempo variation within an ensemble context is a more complex issue. There has been research into how duos start and flow with each other (Bishop & Goebl, 2018; Colley et al., 2018; Shaffer, 1984). Most of that work has been looking at temporal flow and physical cues. One interpretation might be that this research is looking at how duos conduct each other and/or together. However, the research that has looked into larger ensembles has mostly examined overall tempo, and not the ebb and flow of more micro-level temporal deviation or patterns (Collier & Collier, 1994).

It seems axiomatic that if a large ensemble is to use tempo rubato in concert, there might be several facets to examine. Some aspects would center around the conductor's choices, while others might examine an ensemble's expectations regarding an underlying tempo rubato common practice. The purpose of this project was to examine such timing patterns chosen by expert and novice conductors. Specific research questions were: 1) Were there similarities of timing choices within and/or between the different experience groups; 2) Were there patterns of rubato usage that could be seen in the piece; and 3) Were patterns of rubato in the piece related to the compositional structure of the of the work?

Method

Participants

Participants were 12 volunteer individuals connected with a large Midwestern university in the United States. Four were outstanding undergraduate students. These four students were in their final semester of the university's band conducting sequence, and were selected as the four most talented undergraduate students in their class. Four were outstanding instrumental graduate students with substantial conducting experience. Substantial conducting expereince was defined by their work in the public schools before they came back to graduate school, including outstanding performances at the state festivals and state contests, but also by their work with the university bands. And finally, the four faculty members whose university work included regular podium time with the university bands. All twelve participants were purposefully solicited for participation based on their demonstrated high level of musicianship, and all twelve were very willing to do the research task.

Apparatus

We captured conductor's tempo data with original software and hardware adaptations developed by Eitaro Kawaguchi at the Center for Music Research at Florida State University. The program (named "Einsatz") was written in C# using Visual Studio Community, made available by Microsoft™ (Kawaguchi, 2017). The software program uses input from the infrared camera of a Nintendo Wii™ to determine a given conductor's baton movement. The movement data are used to determine the rate of beat pulses, which are applied in real time to control the playback speed of pre-recorded audio files. A commercial software program, Chronotron©, plays back the detected tempo of the baton movements in real time with almost no distortion to the audio signal. The end result is that the "conductor" feels like he/she is conducting the pre-recorded music. The baton movement captured by the Wii Remote's camera is recorded and used for subsequent analysis. This is the first study that made use of this equipment and software. We used a Dell Precision M3800 laptop with Windows 10 to run the software, including audio playback, and to save the captured motion data from the camera. The excerpt was heard on Logitech z320 speakers connected directly to the laptop as participants conducted.

Experimental Materials

The first 40 measures (2½ sections, 10 phrases) of the *Yorkshire Ballad* by James Barnes were conducted by each of the participants. The selected recording of that piece for this project was recorded in 1990 by the Tokyo Kosei Wind Orchestra (KO CD-3014), and conducted by the composer. This excerpt contains an opening AABA section, which was then re-orchestrated and repeated (AABA), and then re-orchestrated and repeated again (only the AA section of this repeat was used). The excerpt (in the original recorded tempo) was edited and uploaded for playback and beat-note timings were entered into the data collection software.

Procedure

Conductors participated individually. Participants entered the experimental laboratory and were given a copy of the Instructions to Participants. The instructions appear in Figure 1.

Participants then began to conduct the performance. Their goal was to learn to control the timing elements of the performance through their conducting to achieve what they thought was a "musical" performance. They were permitted to continue working on their "perfect" performance as long as they chose, until they were satisfied with it in its entirety. When they felt like their performance was what they wanted, the onset data were saved and marked as their "perfect performance."

Figure 1

Instructions to Participants

This is another project studying the use of rubato in making a performance more musical. This one branches out into the area of conducting. We have developed a new technology where we have taken an ensemble recording, and as you conduct, the ensemble performance will follow your beat to play the next note. The algorithms are pretty good, but, as in all ensembles, they will follow behind, and generally not anticipate very well.

What I would like for you to do is conduct the Tokyo Kosei Wind Orchestra in the first 40 measures of the *Yorkshire Ballad* arranged by James Barnes. The score is on the white board in front of you. The task is to make the first two and a half phrases as musical as you possibly can, given the limits of the technology. You may restart and/or repeat this process as many times as you want until you get the performance with which you are most satisfied. As stated above, you are going to do this with a completely new technology designed just for this project. Warning – it is sometimes a little buggy, and has some limitations.

KNOWN LIMITATIONS
- Conducting must be done with a somewhat consistent beat pattern. The program will consider each beat a quarter note.
- The program reads only vertical baton movements at this point (Y axis).
- The inaccuracy of the band's performance depends on the nature of conducting movement - a snappy movement at downbeat point will reduce the delay in beat detection, but is not very characteristic of the piece.

HOW TO DO IT
Place baton (marker with reflector) above the yellow line on the computer window and hold it steady for 2 seconds … Low BEEP is heard and status (orchestra) changes to READY.
Start conducting – The program counts down 2, 1, (0) … Initial BPM is established during countdown. The music starts at count 0.
During count down, a vertical movement of more than 1/8 window is required to be recognized as beats.
If glitches happen, please start over. The program does take a little getting used to.
You may stop and/or repeat as many times as you would like in order to get the recording of timing you like best. I want whatever you think is musical, and am willing to sit and experiment as long as you would like.

Results

All professional and graduate student conductors claimed to be familiar with the *Yorkshire Ballad* excerpt. The undergraduate students all stated they knew the piece, and had played it, but none reported to have studied the score. As the piece is not highly complex, a musician who has played it could reasonably claim a level of familiarity sufficient to make informed musical decisions in this exercise.

Data were analyzed first by looking at similarities within groupings of subjects and differences between groups. We calculated group means of the individual note onsets for the undergraduate conductors, the graduate conductors, and the professional conductors. The graph of these means is included (see *Figure 2*). Similarities between all three groups are evident. The average intraclass correlation coefficient was .87 across the three groups. The inter-item correlation between the undergraduate conductors and the graduate students ($r = .76$) was slightly higher than the association between undergraduate students and the professional conductors ($r = .74$). However, the inter-item correlation between the graduate students and professionals was lower ($r = .63$).

Figure 2

Mean Note Onset Times for the Three Conductor Experience Levels
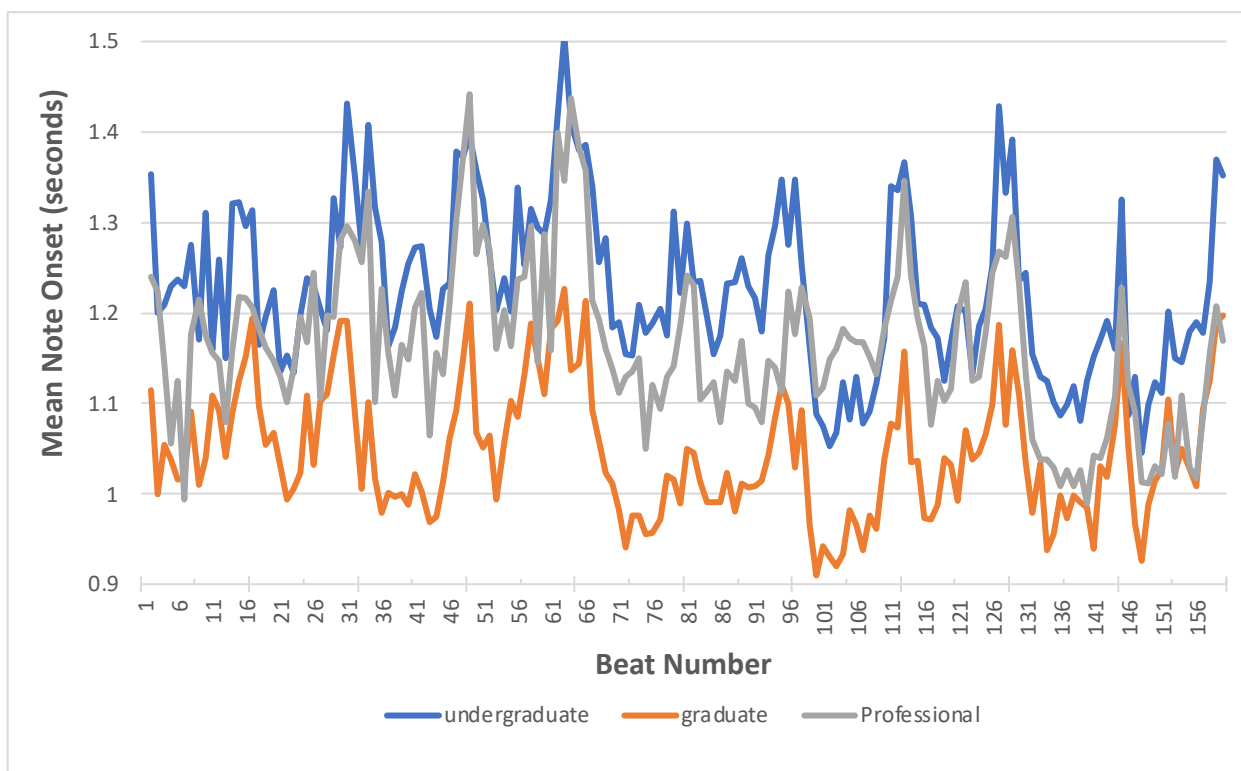
Three aspects can be noted from the data in Figure 2. First, the graduate students generally chose to take a faster overall tempo than the other two groups of conductors (also see Table 1). There was a significant difference between the three groups (Kruskal Wallis X^2 (2, 159) = 222.65, $p < .001$) in beat onset times. All pairwise comparisons of means were significantly different from each other, $p < .001$, using Dunn's multiple comparison procedure with Bonferroni correction. Second, while the graduate students used less rubato than the other two groups, the undergraduate students and the professional conductors used almost the exact same amount of tempo variation: standard deviations being 0.092 seconds and 0.090 seconds, respectively (see Table 1). The third observation is probably the most critical, and that is to note that where variations in tempo did occur; they occurred in almost the exact same place temporally, and in the same direction for all three groups, thus accounting for the high intraclass correlation. This finding would seem to indicate the presence of some generally agreed upon common practice, which has been noted in previous research as well.

Table 1

Mean Onset Times per Beat for the Conductor Experience Categories

Category	*Mean* onset time	*Standard Deviation*
Graduate	1.05 (seconds)	0.071
Professional	1.16	0.090
Undergraduate	1.23	0.092

To look at the rubato usage in the piece, we examined the form of the phrases. Ten four measure phrases were analyzed in this excerpt. The first four phrases were song form – AABA. In the second section, instrumentation was altered, but the melody and harmonies repeated the first set of phrases – AABA. Orchestration was then altered again, and the AA phrases were repeated before the excerpt ended. We compared the timings for all eight repetitions of the A phrase in a factor analysis using principal component analysis method employing a varimax rotation. Six occurrences of the A phrase—the first three iterations, the last two iterations in the second section, and the second iteration in the third section—all loaded on one factor. However, the other two occurrences of A, that is, the first iteration of the second and third sections loaded on a different factor. We illustrated that timing pattern as A[1]. The B themes were performed with remarkable similarity in both iterations ($r = .94$), and the timings were extremely similar to the A theme on the first factor. These timings are illustrated in Figure 3.

Figure 3

Mean Note Onset Times for Phrases A, A¹, and B
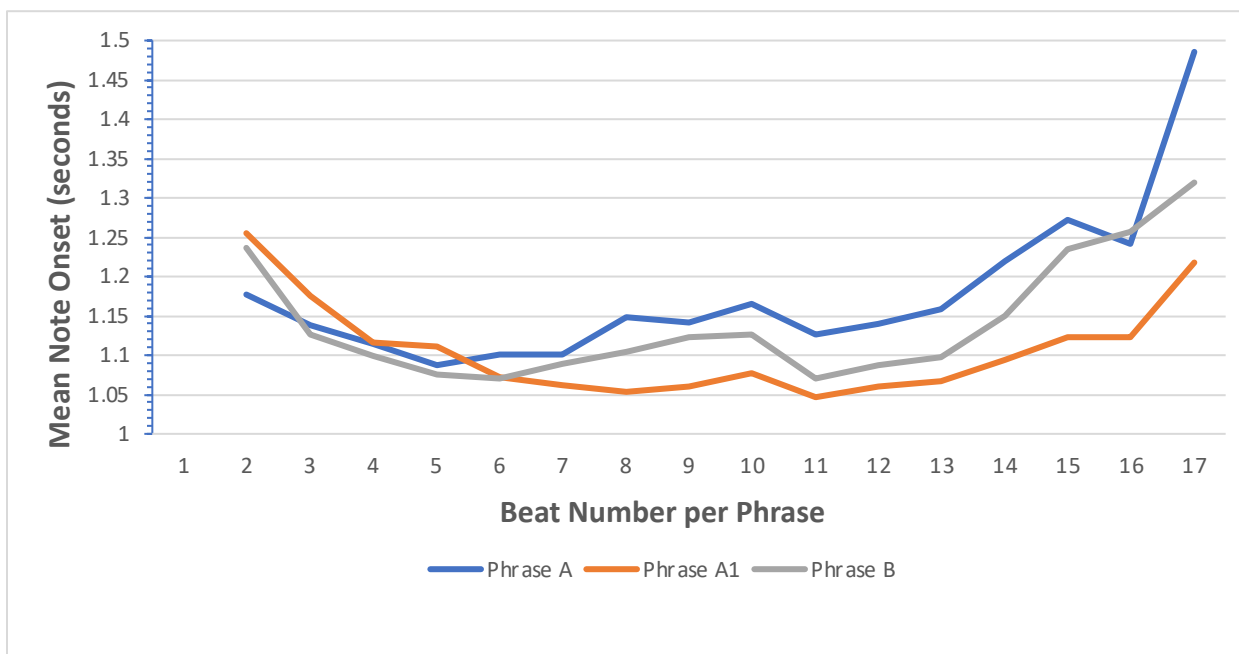
Discussion

No prior experience with the work in question was required to conduct the piece of music using this program, although all participants indicated at least some familiarity. The only musical element that the conductor controlled was the rhythmic flow/onset of each pitch. Pitches, amplitude, timbre, phrasing, and all other musical variables were not affected. After participants had generated a performance of the excerpt with which they were pleased, we analyzed the chosen performance to determine their musical decisions regarding tempo variations.

Participants were solicited in order to produce three groups: outstanding undergraduate students, graduate students with excellent previous work experience, and professional band directors. We speculated that there might be choices made by the different groups that would distinguish them regarding the use of rubato. Although there were some interesting differences between the groups, there were no large discernable patterns. We now believe that the slight differences noted were anomalies based on individual choices rather than their respective demographically-based categories. While the graduate student group used less rubato, it appears that the rubato to tempo relationship is extremely similar across all three demographic groups; perhaps if the graduate students had chosen a slower tempo, the rubato might well have increased concomitantly. The relationships illustrated in Table 1 would indicate that this supposition is very likely. This finding would also be confirmatory of previous research into the use of rubato (Berz & Ferrara, 2006; Shaffer, 1981).

We believe that the most consequential aspect of these comparisons is that the lines across all three groups are consistently parallel (as seen in Figure 2). This finding leads us to the speculation that there is a definite pattern to the changes in timing, and that they are at the very least intentional, as opposed to random, even if they are intuitive rather than conscious. It might be that this often-referenced emerging common practice of rhythmic performance is at play here (Johnson et al., 2012a; 2012b; Palmer, 1989; Povel 1977; Repp, 1990; 1992; 1996; 2000). If that is the case, these common practice fluctuations might well be at some level intuitively agreed upon, thus allowing ensembles to play and flex together with some level of shared expectation. Of course, this is an inference from the data. What we do know is that these twelve conductors were making similar musical decisions across this excerpt.

While there was a distinct overall parallel in performances at the excerpt, or macro level, these patterns of timing were even more interesting when broken down into smaller phrase units. As clearly indicated in Figure 3, almost all the phrases were started at a slower tempo that accelerated in a curve (beats 1-6) there was a slight slowing in the middle of the phrase (beats 7-8) as those functioned as the musical question. At that point, there is a relaxing of the tempo as the answer begins (beats 9-10), then an immediate acceleration (beats 10-11) before the phrase relaxes into a resolution (beats 11-16). The pause in the middle of the phrase happens in eight of the 10 phrases in a relatively similar way. The two times that the A theme returns with a new section and new instrumentation, the timings were a bit different, thus the categorizing them as A[1]. The tempo of the phrase seems to be a little more of a two-measure speeding up (beats 1-8) into a two-measure slowing down (beats 9-16). Though there is still a tiny acceleration in beat 10 that propels the phrase to its conclusion, it is smaller in magnitude than in other A phrases. It is hypothesized that this difference in the middle of the phrase is a musical way to establish this A section as the new iteration of the AABA sequence.

The question and answer aspect of all ten phrases of the excerpt lend themselves well to this kind of pattern, and provide support for the idea that a common practice of tempo rubato appears present in the performance of conducted works. The relation of these timings is reflective of the timings noted in the performances of Mozart, though the timings themselves are not patterned the same way (Johnson, 1996b). On the other hand, the relationship between the formal structure of the piece and the timings are even more similar to what was noted in performances of the Bach Bourrèe in previous research (Johnson, 1999; Johnson et al., 2012b), both in relation to form and the structure of the tempo changes. In many phrases it was found that players started slowly and then accelerated through the phrase, held back on the tempo at a point, and then rounded out the phrase, marking it with rubato. The relationship of phrases in this study seems to be more uniform than in the above two studies of solo pieces. Though that relationship may be an artifact of arithmetically combining multiple performances, it might also result from differences in musicians' group performance versus solo performance. Taken with previous research in this area (Bishop & Goebl, 2018; Colley et al., 2018; Rose, 1989), it could be hypothesized that in a group, musicians develop an expectation for a uniform pattern that allows an ensemble to perform together, whereas as a soloist, individuals are able to take more liberties in timing.

Comments of the participants indicate that the research apparatus was user friendly; they noted how satisfying it was to control a fine ensemble such that it followed them so well. One person commented "it was like *Guitar Hero* for conductors." All the subjects expressed enthusiasm for the new instrument, and the faculty participants wanted to know if they could use it to teach students. They deemed it an excellent tool for students just learning how to conduct, but also noted that experienced graduate students would also benefit from hearing the effect of their timing changes on the outcome of performances. The task was pleasurable for the participants, which should make recruiting future study participants an easy task. Unfortunately, the person behind the creation of the new apparatus is no longer able to produce this on a wider basis, so the future expansion of this exact technology is questionable.

The specific instrument in existence was extremely user friendly for the researchers as well and will be used to further explore what is being taught as common practice in performance. Clearly the relationships of rubato to phrase structure in this composition is intriguing and provides some insight into how we listen to and process music. The results of this study, and how they relate to previous investigations, seems to warrant further analysis. Though this is a study that is exploratory in nature, there is ample evidence to suggest that more work in this area could be enlightening.

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AURAL SKILLS PEDAGOGY IN THE WIND BAND: A SURVEY OF SECONDARY AND COLLEGIATE WIND BAND CONDUCTORS' PERCEPTIONS AND STRATEGIES

Brady Glenn McNeil

Musicians are tasked with the ongoing challenge of converting aural perception into comprehension. Ideally, music educators train these aural skills in student musicians at an early age and teach them how to connect the written theory to the aural practice and performance (Gordon, 1999). Numerous music researchers, theorists, and pedagogues have emphasized that formal aural skills training is critical for musical development (Buonviri, 2017; Furby, 2016; Hiatt & Cross, 2006; Kariuki & Ross, 2017; Karpinski, 2000; Killam, 1984; McNeil, 2000; Scandrett, 2005). Gordon (2012) defined aural skills and categorized these skills into two primary proficiencies: (a) the ability to convert sounds into aural understanding and give meaning to those sounds, and (b) the ability to then convert that aural image into written notation.

Negligence with focused aural skills training in music ensemble rehearsals can impede students' musical development (May & Elliott, 1980). Existing aural research often employs a pragmatic approach to enhance instructional methods specific to collegiate aural skills courses while limited research contextualizes these skills within the instrumental ensemble setting. Despite the emerging body of literature on technological advancement in the classroom, aural skills pedagogy has changed marginally over the past century (Chen, 2015; Henry & Petty, 2014; Kariuki & Ross, 2017; Killam, 1984; Song, 2015). Traditional sight-singing and dictation prevail as the most common methods of building aural skills (Song, 2015) due to observed positive effects on intonation (Elliott, 1974; Schlacks, 1981), note accuracy (Wolbers, 2002), expression (Dalby, 1999) and harmonic comprehension (Grutzmacher, 1987). Even so, there is a concerning absence of singing in band at the secondary level (Bernhard, 2003; Wolbers, 2002), which band directors often attribute to insufficient time, waning confidence in their singing ability, and concern for how students will respond (Robinson, 1996). While considered a valuable pedagogical strategy, the past two decades have offered little in dictation-specific research (Paney, 2016). Dictation is often more challenging for students as it requires a variety of complex skills navigating melodic, rhythmic, and harmonic elements (Paney, 2016). Moreover, traditional dictation strategies may not necessarily improve listening skills for collegiate musicians, and musicians may not retain these skills past coursework (Potter, 1990). Minimal research studies on dictation have explicitly examined dictation integration in the secondary music ensemble (Allison & Oare, 2013-2014).

Scholars have claimed that the preoperational stage of development is the most optimal time for maximizing aural potential (Gordon, 1999; Ilomäki, 2003; Piaget, 1964; Suzuki,

1989). However, student musicians often only engage in comprehensive aural skills during their first two years of collegiate music study (Paney, 2007). Consequently, non-majoring college musicians and high school students without formal aural courses may never develop these skills if not integrated during ensemble rehearsals.

Multiple factors may influence the frequency of aural skills integration in the wind band rehearsal. Instructors may simply teach and conduct the way their teachers and conductors taught them (Cox, 2014; Oleson & Hora, 2014). Dolloff (1999) explained that our own educational experiences shape our idea of the teacher's role in the rehearsal hall. Students may then enter a teacher education program with implicit biases toward a specific type of teaching. Therefore, teachers who were not taught through aural-based pedagogy may not include those types of strategies in their teaching. Educators' self-identities and teaching styles may also be molded by an influential mentor (Fairbanks et al., 2000).

Another primary variable that could influence the inclusion of aural skills in the wind band rehearsal is conductors' and students' general attitudes regarding the role and importance of aural skills on musical development. Behavioral psychology research has demonstrated that a person's beliefs or attitudes toward a specific object, subject, or behavior may be directly correlated to their own behavior (Ajzen & Fishbein, 2005). Buonviri (2015) examined students' attitudes regarding aural skills and collegiate AP theory instructors' attitudes toward teaching melodic dictation (Buonviri & Paney, 2015), but I could not locate exploratory research on wind band conductors' attitudes. While it is equally important to obtain student buy-in with aural skills, conductors' attitudes are worth examining as they could directly influence their behavior (Ajzen & Fishbein, 2005). It is important to understand why instrumental wind band conductors infrequently integrate aural skills in their rehearsals. As a means of bridging the aural and visual domains, aural skills training should not be exclusive to college music majors in an aural skills course.

In summary, music education researchers have generally found positive attitudes on the importance of aural skills, but band directors' actions in the classroom do not often reflect their attitudes (Bernhard, 2003). The purpose of this study was to explore wind band conductors' attitudes regarding aural-based learning in the rehearsal, determine current trends in pedagogical strategies used to strengthen listening skills via the wind band rehearsal, and examine how conductors' attitudes may influence their integration of aural skills. My research questions were as follows:

1. Do wind band conductors' perceived attitudes toward aural skills predict the extent to which they integrate aural skills in the wind band rehearsal?
2. What strategies are most used in the wind band rehearsal to improve aural skills, and how much rehearsal time do conductors dedicate to this endeavor?
3. Is there a correlation between the amount of wind band rehearsal time and the extent to which conductors integrate aural skills in the rehearsal?

4. Is there a relationship between the extent to which conductors integrate aural skills and their perceptions of students' aural skills proficiency?
5. Will there be any significant differences in responses to survey questions based on participants' demographic variables?

Method

Survey Instrument

I administered the researcher-devised survey through Qualtrics. The instrument consisted of five measurable constructs in accordance with the study's purpose: Ensemble Characteristics, General Attitudes, Integration of Aural-Based Instructional Strategies, Perceptions of Students' Abilities, and Demographics. The survey contained 10 six-point Likert-type scale tables (1 = *strongly disagree*; 6 = *strongly agree*), one five-point Likert-type scale table (1 = *never*; 5 = *daily*), and 17 multiple-choice questions. For the six-point attitude scales, participants were purposely not given a neutral option. The survey part of a dissertation study to collect extensive data on aural skills pedagogy. The estimated time to complete the survey was 20-30 minutes due to the length of the survey.

I engaged a panel of expert music educators to assess the face and content validity of the survey. Based on the panel's feedback, I amended the survey for typos, misspelled words, and restructured questions to provide an easier flow and clarity. After Institutional Review Board approval, I piloted the survey with retired band directors ($N = 31$) who were members of Collegiate Band Directors National Association (CBDNA) or the Alabama Bandmasters Association (ABA). I selected retired wind band conductors to avoid data overlap between the pilot test and the administration of the survey to the targeted population.

Population and Sampling

The target population of this study was secondary and collegiate wind band conductors in the United States. Participants who fit the sampling criteria in three major music education organizations were invited through email to participate: CBDNA, National Association for Music Education (NAfME), and Texas Music Educators Association (TMEA). I chose the two national organizations for the convenience of access to their membership directories. I included the one state organization (TMEA) because of its sizable membership of education professionals who are not necessarily affiliated with the National Association for Music Education due to the state's disaffiliation with the national organization. Including multiple organizations carried a larger chance of increasing the response rate for the study. I used a combination of convenience and snowball sampling methods to recruit participants for this study.

Survey Distribution

Following final adjustments to the survey instrument, the Qualtrics survey was administered via an internet link embedded in emails sent to members of CBDNA, NAfME, and TMEA. I purchased a survey distribution request from NAfME and TMEA; access to CBDNA email lists is free to members. Participants received no compensation for participating in the study. One week following the initial invitation email, a second email was sent encouraging those who had not participated to do so. I sent a third email one week after the second email. Reminder emails were sent after the initial invitation as some may not have received the first email due to technical malfunctions, or the invitation to participate may have gotten lost in spam folders.

After selecting the link to the survey, participants read a short information letter explaining the study's purpose, all risks and benefits, and instructions. Participants were then prompted to choose whether to continue or withdraw from the study. Respondents who consented to participate continued to further questions and those who withdrew were redirected to exit the survey. Respondents were also given the option to withdraw at any time by closing out of their browser window. I downloaded the data from Qualtrics and imported it into the Statistical Package for the Social Sciences (SPSS) software for analysis. Data for those who did not complete at least 50% of the survey were withdrawn and excluded from the analysis.

A total of 11,585 email invitations were successfully sent through email listservs, and email recipients were encouraged to forward the survey link to others who fit the criteria for participation. The survey collected 381 responses, and 214 of those responses were usable for the study. Calculating response rate was not possible for this study due to the use of snowball sampling.

Participants

All participants in this study were current wind band conductors at the secondary or collegiate level in the United States. Demographic choices offered for participants were taken from those offered on the U.S. Census. Of the 214 usable responses, 152 participants (74.1%) identified as male, 46 participants (22.4%) identified as female, and seven participants (3.4%) preferred not to respond. Regarding ethnicity, 176 participants (85.4%) identified as Caucasian, nine participants (4.4%) preferred not to respond, seven participants (3.4%) identified as Hispanic/Latinx, five participants (2.4%) identified as African American, four participants (1.9%) identified as Asian, three participants (1.5%) identified as multiracial, and two participants (1.0%) identified as Native Hawaiian/Pacific Islander. Table 1 shows all demographic information collected from participants.

Table 1
Participant Demographics

Characteristic	n	%
Gender		
Male	152	74.1
Female	46	22.4
Prefer not to respond	7	3.4
Ethnicity		
Caucasian	176	85.4
Prefer not to respond	9	4.4
Hispanic/Latinx	7	3.4
Black/African American	5	2.4
Asian	4	1.9
Multiracial	3	1.5
Native Hawaiian/Pacific Islander	2	1.0
Region		
South	87	42.6
Midwest	64	31.4
Northeast	28	13.7
West	25	12.3
Instrument		
Brass	106	51.5
Woodwind	71	34.5
Percussion	19	9.2
Keyboard	5	2.4
Voice	3	1.5
String	2	1.0
Highest Degree Earned		
Master's	89	43.2
Doctoral	81	39.3
Bachelor's	36	17.5
Years of Teaching Experience		
26+ years	68	33.0
0-5 years	29	14.1
6-10 years	29	14.1
11-15 years	27	13.1
16-20 years	27	13.1
21-25 years	26	12.6
Teaching Area		
Secondary	108	60.3
Collegiate	71	39.7

Results

Institution and Ensemble Characteristics

Participants were asked to provide information about wind band rehearsal meeting times, use of aural skills resources, extracurricular aural skills courses, barriers to implementing aural skills instruction, and comfort levels teaching various aural concepts. Concerning aural skills resources, 112 participants (52.6%) reported their institution did not offer an aural skills course. Sixty participants (28.2%) reported their institution offered an aural skills course exclusive to music students and 41 participants (19.2%) reported their institution offered an aural skills course that was open to all students. Regarding instructional resources, 151 participants (70.6%) used a formal aural skills curriculum with their wind bands and 63 participants (29.4%) did not use a formal aural skills curriculum. See Table 2 for a summary of the most frequently reported resources.

Table 2
Aural Skills Resources Used in the Wind Band

Resource Usage	*f*	%	Specific Resources
Other/various	73	43.2	Singing/listening to repertoire Various instructor-created exercises Exercises based on Edwin Gordon's Learning Theory Yamaha Harmony Director Tonal Energy/other tuner apps Listening to live recorded music Chorales
Web resources	40	20.2	musictheory.net teoria.com breezinthrutheory.com Auralia by Music First Smart Music Sight Reading Factory
Singing text	7	3.6	*40 Days of Sightreading for Full Band,* Marty Nelson *Conversational Solfege,* John Feierabend *Music for Sight Singing,* Nancy Rogers and Robert Ottman *One-Minute Sight Singing,* Neil A. Kjos *Sight-Singing Practice*, Evan Copley
Dictation text	5	2.6	*Conversational Solfege*, John Feierabend *Excellence in Theory*, Neil A. Kjos *Rhythmic Training,* Robert Starer

Barriers and Comfort Levels

Participants were provided a list of potential barriers to aural skills instruction based on literature and researcher experiences. Respondents checked all barriers they felt applied to their situation. The two most selected barriers were time constraints ($f = 110$) and pressure to perform for assemblies, events, and assessments ($f = 76$). Sixty-two participants reported no barriers to implementation. One participant indicated they did not see a purpose in aural skills.

Conductors also rated their comfort levels teaching various aural-based instructional strategies using a six-point scale (1 = *extremely uncomfortable*; 6 = *extremely comfortable*). Participants' mean comfort level was moderately high for all aural-based instructional strategies ($M = 4.82$, $SD = 0.88$) and they were most comfortable modeling with their instruments ($M = 5.33$, $SD = 1.27$), teaching aural identification of tonality ($M = 5.33$, $SD = 1.17$), and teaching aural identification of meters ($M = 5.31$, $SD = 1.20$). Participants were least comfortable teaching composition ($M = 3.97$, $SD = 1.44$) and improvisation ($M = 4.08$, $SD = 1.40$). See Table 3 for a full list of comfort levels.

Table 3
Comfort Levels Teaching Aural Skills

Aural Skill/Activity	*M*	*SD*
Teacher modeling with instrument	5.33	1.27
Aural identification of tonality	5.33	1.17
Aural identification of meters	5.31	1.20
Teacher modeling with voice	5.29	1.16
Aural identification of musical styles	5.29	1.15
Rhythmic dictation	5.23	1.18
Rhythmic counting syllables	5.13	1.38
Aural identification of intervals	4.94	1.34
Student singing	4.92	1.32
Melodic dictation	4.66	1.35
Aural identification of chords	4.59	1.48
Tonal dictation	4.59	1.39
Teacher modeling with piano/keyboard	4.45	1.52
Melodic solmization	4.39	1.54
Harmonic dictation	4.32	1.48
Student improvisation	4.08	1.40
Student composition	3.97	1.44
Subscale	4.82	0.88

Research Question 1

Do perceived attitudes toward aural skills predict the extent to which conductors integrate aural skills in the wind band rehearsal?

Participants selected their level of agreement or disagreement with several statements about the role and importance of aural skills in the wind band using a six-point Likert-type scale (1 = *strongly disagree*; 6 = *strongly agree*). The purpose of these questions was to determine the importance of integrating aural skills into the wind band rehearsal according to participants. I calculated the subscale mean for all attitude statements to serve as the overall score for conductors' perceptions of aural skills.

Participants reported a moderate- to high-level of agreement with most attitude statements. Participants demonstrated the highest level of agreement with the statement, "Well-developed aural skills are critical for musicians" (*M* = 5.56, *SD* = 0.73) and the lowest level of agreement with the statement, "Without proficiency of the aural domain, students cannot be in proficient in the visual domain" (*M* = 3.51, *SD* = 1.24). The subscale mean of all statements indicated that participants generally agreed with all the statements regarding the importance of aural skills in the wind band (*M* = 4.80, *SD* = 0.66).

Participants were also asked to select their level of agreement or disagreement with the importance of various aural-based instructional strategies in the success of their wind band using a six-point Likert-type scale (1 = *strongly disagree*; 6 = *strongly agree*). Participants generally agreed that all strategies were important (*M* = 4.44, *SD* = 0.75). The strategy reported as most important was students' abilities to detect errors in their performance (*M* = 5.69, *SD* = 0.56). The strategy reported as least important was harmonic progression dictation (*M* = 3.53, *SD* = 1.19).

I measured participants' attitudes toward singing in the wind band rehearsal. The participants who reported singing with their wind bands (*n* = 185, 86.9%) were directed to select their level of agreement or disagreement with the impact of singing on various musical objectives using a six-point Likert-type scale (1 = *strongly disagree*; 6 = *strongly agree*). The participants who reported no singing with their wind bands (*n* = 28, 13.1%) were redirected through skip logic to avoid the attitude statements on the impact of singing. Participants who completed the attitude statements about singing in the wind band (*n* = 185) expressed a general agreement to all statements (*M* = 4.98, *SD* = 0.76). Participants reported the highest level of agreement (*M* = 5.60, *SD* = 0.64) to the statement "Singing with my students improves their intonation" and the lowest level of agreement (*M* = 4.33, *SD* = 1.33) to the statement "Singing with my students improves their technique."

Participants were also asked if they used dictation with their wind band. The participants who reported using dictation with their wind bands (*n* = 45, 21.0%) were directed to select their level of agreement or disagreement with the impact of dictation on various musical objectives

using a six-point Likert-type scale (1 = *strongly disagree*; 6 = *strongly agree*). Participants who reported no dictation with their wind bands (*n* = 169, 79.0%) were redirected through skip logic and did not report their attitudes on the impact of dictation. The musical objectives listed were the same as those included with the singing attitudes table to compare whether singing or dictation more effectively improved each musical objective. Participants who completed the attitude statements concerning the effectiveness of dictation in their wind band rehearsals (*n* = 45) agreed that dictation improved all objectives (*M* = 4.64, *SD* = 0.88). Participants most agreed (*M* = 5.51, *SD* = 0.59) with the statement "Dictation with my students improves their error detection" and least agreed (*M* = 3.82, *SD* = 1.54) with the statement "Dictation with my students improves their breath support."

I obtained the Pearson product-moment correlation coefficient to explore the relationship between general attitudes regarding aural skills and how often conductors integrated aural skills training in the wind band rehearsal. There was a significant positive correlation between general attitudes and how often conductors integrated aural skills training in the wind band rehearsal (*r* = .52, *p* < .001). About 26.6% of the variance in aural skills integration was explained by attitude toward aural skills. Since there was a significant correlation, I calculated a simple linear regression to predict the frequency of aural skills instruction based on general attitudes. A significant regression equation resulted ($F_{1, 208}$ = 75.41, *p* < .001) with an R^2 of .27. Participants' predicted frequency of aural skills integration is equal to .50 (ATTITUDE) + .02 when attitude is measured using a six-point Likert-type scale. See Table 4 for a summary of the bivariate regression.

Table 4
Bivariate Regression of General Attitudes and Aural Skills Integration

Variable	*B*	*SE*	β	*t*	*p*
Intercept	.02	.28			
General Attitudes	.50	.06	.52	8.69	<.001

Research Question 2

What strategies are most used in the wind band rehearsal to improve aural skills, and how much rehearsal time do conductors dedicate to this endeavor?

Participants reported which portions of their rehearsals included aural skills integration. Aural skills were mostly integrated into the warm-up (*n* = 154) and throughout the rehearsal (*n* = 128). Seventeen participants (7.9%) reported no integration of aural skills in their rehearsals. Conductors also reported how often they used specific, diverse aural skills instructional strategies in their rehearsals using a five-point Likert-type scale (1 = *never*; 5 = *daily*). Participants most frequently incorporated modeling musical ideas with their voices (*M* = 4.42, *SD* = 0.98), singing

with the whole band (*M* = 3.79, *SD* = 1.23), and specifically singing tuning pitches (*M* = 3.72, *SD* = 1.44). Participants least frequently incorporated two-part melodic dictation (*M* = 1.22, *SD* = 0.63), aural skills textbook resources (*M* = 1.24, *SD* = 0.74), and harmonic progression dictation (*M* = 1.25, *SD* = 0.65). The collective subscale mean for all aural-based instructional strategies indicated a rare inclusion of diverse aural training methods (*M = 2.41, SD* = 0.64).

Research Question 3

Is there a correlation between the amount of rehearsal time and the extent to which conductors integrate aural skills in the rehearsal?

I computed the daily average rehearsal times for each participant and calculated a Pearson product-moment correlation coefficient to examine the relationship between rehearsal time and aural skills integration. Results of the Pearson correlation revealed an extremely weak, nonsignificant relationship between rehearsal time and aural skills integration (*r* = .02, *p* = .82).

Research Question 4

Is there a relationship between the extent to which conductors integrate aural skills and their perceptions of students' aural skills proficiency?

I asked participants to select their level of agreement or disagreement with statements regarding their perceptions of their students' proficiencies in various aural tasks using a six-point Likert-type scale (1 = *strongly disagree;* 6 = *strongly agree*). On average, participants agreed their students were proficient in aural skills tasks (*M* = 4.09, *SD* = 0.71). The results revealed that students were most proficient in sight-reading rhythms on their instruments (*M* = 4.83, *SD* = 0.88) and were least proficient in aurally identifying melodic intervals (*M* = 3.18, *SD* = 1.22).

I obtained a Pearson product-moment correlation to determine if there was a significant relationship between frequency of aural skills integration and conductors' perceptions of their students' aural skills abilities. Results of the Pearson correlation revealed a significant positive relationship between the variables (*r* = .37, *p* < .001). About 13.6% of the variance in perceptions of students' aural proficiencies was explained by how often diverse aural strategies were integrated into the rehearsal.

Research Question 5

Will there be any significant differences in responses to survey questions based on participants' demographic variables?

I ran a series of one-way Multivariate Analysis of Variance tests (MANOVAs), one for each independent variable, to explore any variation in responses based on participants' demographic variables. Separate MANOVAs were run to determine if gender, ethnicity,

instrument group, geographic region, degree level, years of teaching experience, or teaching area influenced the subscale means for comfort levels teaching aural skills, general attitudes regarding aural skills, attitudes toward specific aural skills strategies, frequency of diverse aural skills integration, or attitudes toward students' proficiencies in various aural-based tasks.

Teaching Area

I used a Box's M Test to determine if the assumption of equal covariance matrices between teaching area (secondary vs. collegiate) and survey constructs was met. The test was significant, indicating the assumption was violated ($p = .007$). Therefore, I used Pillai's Trace to interpret the results instead of Wilks' Lambda. The results of the MANOVA demonstrated a significant effect on subscale means based on teaching level (Pillai's $V_{5,165} = .20$, $F_{5,165} = 8.17$, $p < .001$, $\eta^2 = .20$). The effect size for teaching area was large (> .13). About 19.8% of the variance in subscale means was explained by teaching area ($\eta^2 = .20$). The follow-up univariate ANOVAs revealed a significant difference between secondary and collegiate conductors in comfort levels teaching aural skills ($F_{1,169} = 8.96$, $p = .003$, $\eta^2 = .05$), general attitudes regarding aural skills ($F_{1,169} = 8.65$, $p = .004$, $\eta^2 = .05$), and attitudes regarding students' proficiencies in various aural-based tasks ($F_{1,169} = 13.14$, $p < .001$, $\eta^2 = .07$). The effect sizes for teaching area on comfort levels and general attitudes were small (.01~.05). The effect size for teaching area on students' proficiencies was moderate (.06~.13). Collegiate conductors ($M = 5.06$, $SD = 0.77$) were significantly more comfortable ($p = .003$) teaching aural skills than secondary conductors ($M = 4.67$, $SD = 0.90$) and held a significantly more positive attitude ($p = .004$) regarding aural skills ($M = 4.96$, $SD = 0.56$) than secondary conductors ($M = 4.66$, $SD = 0.74$). Collegiate conductors ($M = 4.27$, $SD = 0.56$) also perceived their students as significantly more aurally proficient ($p < .001$) than secondary conductors ($M = 3.89$, $SD = 0.74$). There were no significant differences between secondary and collegiate conductors in attitudes regarding specific aural-based instructional strategies or how often aural skills were integrated into the wind band rehearsal.

Degree Level

I used a Box's M Test to determine if the assumption of equal covariance matrices between degree level and survey constructs was met. The assumption of equal covariance was violated ($p = .001$), and therefore, Pillai's Trace was used to interpret the results of the MANOVA. Results of the MANOVA indicated that degree level had a significant effect on survey responses (Pillai's $V_{10,398} = .15$, $F_{10,398} = 3.20$, $p = .001$, $\eta^2 = .08$). The effect size for degree level was moderate (.06~.13). About 7.5% of the variance in subscale means was explained by degree level. The follow-up univariate ANOVA revealed that degree level significantly influenced participants' general attitudes regarding aural skills ($F_{2,202} = 3.42$, $p = .04$, $\eta^2 = .03$) and their attitudes regarding students' proficiencies in various aural-based tasks ($F_{2,202} = 8.85$, $p < .001$, $\eta^2 = .08$). The effect size for degree level on general attitudes was small (.01~.05) and the effect size for general attitudes on students' proficiencies was moderate (.06~.13). Participants with a doctorate degree ($M = 4.94$, $SD = 0.48$) found aural skills significantly more important

($p = .02$) than participants holding only a bachelor's degree ($M = 4.64$, $SD = 0.75$). Those with a doctorate degree also found aural skills significantly more important ($p = .04$) than those with master's degree ($M = 4.74$, $SD = 0.75$). There was no significant difference ($p = .47$) in general attitudes regarding aural skills between those holding only a bachelor's degree and those holding a master's degree. Additionally, participants with a master's degree were significantly more positive ($p = .03$) toward their students' proficiencies in various aural-based tasks ($M = 4.04$, $SD = 0.67$) than those with only a bachelor's degree ($M = 3.74$, $SD = 0.89$). Those with a doctorate degree ($M = 4.30$, $SD = 0.58$) were significantly more positive toward their students' proficiencies in various aural-based tasks than those with only master's ($p = .02$) or bachelor's degrees ($p < .001$). There were no significant differences in comfort levels, attitudes regarding specific aural-based instructional strategies, or how often aural skills were integrated based on degree level.

Years of Teaching Experience

I used a Box's M Test to determine if the assumption of equal covariance matrices between degree level and survey constructs was met. The test was significant indicating the assumption of equal covariance was violated ($p = .007$), and therefore, Pillai's Trace was used to interpret the results of the MANOVA. The MANOVA revealed a significant difference in subscale means based on years of teaching experience (Pillai's $V_{25,995} = .21$, $F_{25,995} = 1.76$, $p = .01$, $\eta^2 = .04$). The effect size was small for years of teaching experience ($.01\sim.05$). About 4.2% of the variance in subscale means was explained by years of teaching experience ($\eta^2 = .04$). The follow-up univariate ANOVA revealed that years of teaching experience had a significant effect on participants' attitudes regarding their students' proficiencies in various aural-based tasks ($F_{5,199} = 7.31$, $p < .001$, $\eta^2 = .16$). The effect size for teaching experience on students' proficiencies was large ($> .13$). Participants who had taught for 0-5 years ($M = 3.46$, $SD = 0.67$) rated student aural proficiencies significantly lower than those who had taught 6-10 years ($M = 4.13$, $SD = 0.72$, $p < .001$), 11-15 years ($M = 4.09$, $SD = 0.66$, $p < .001$), 16-20 years ($M = 4.00$, $SD = 0.56$, $p = .002$), 21-25 years ($M = 4.30$, $SD = 0.57$, $p < .001$), and more than 25 years ($M = 4.09$, $SD = 0.71$, $p < .001$). There were no significant differences in comfort levels, general attitudes regarding aural skills, attitudes regarding specific aural-based instructional strategies, or how often aural skills were integrated based on years of teaching experience.

There were no significant differences in responses based on gender (Wilks' $\Lambda = .89$, $F_{5,191} = .34$, $p = .89$), ethnicity (Wilks' $\Lambda = .95$, $F_{5,190} = 1.94$, $p = .09$), instrument group (Pillai's $V_{10,398} = .03$, $F_{10,398} = .58$, $p = .83$), or geographical region (Pillai's $V_{15,591} = .12$, $F_{15,591} = 1.59$, $p = .07$). These factors did not significantly influence subscale means.

Discussion

Institution/Ensemble Characteristics, Barriers, and Comfort Levels

The minority of participants expressed that their school offered an aural skills course open to all students. This response corresponds to respondents' teaching level; most were secondary band directors. Secondary schools do not commonly offer aural skills courses. However, there are benefits for collegiate institutions that offer elective aural courses to all students. First, it widens access to non-majors who want to participate in music ensembles and continue their aural development. It also has the potential to increase enrollment of music courses which could possibly increase funding through tuition dollars. Despite many music students without access to an aural skills course, most participants reported no inclusion of an aural skills curriculum in their wind bands. This may coincide with the reported barriers to teaching aural skills in wind band classes. Conductors cited an inadequate amount of rehearsal time as the most common barrier which corroborates Robinson's (1996) claim that conductors prioritize conservation of time.

The common idea that rehearsal time is too limited for aural skills training may be highly detrimental to students' music education as it enhances the issue that collegiate non-majors may not have the opportunity to engage in aural skills training at the collegiate level. The implications of this data place equal weight on secondary conductors to prepare students for aural success and on collegiate conductors to continue developing these skills once students arrive in their ensembles. It is vital to remember that, although students may choose not to continue formal music participation beyond high school, they may play a future role in a job that supports and advocates for music education (Enz, 2013).

Conductors in this study were most comfortable teaching fundamental aural concepts such as tonality, meters, and musical styles, and less comfortable teaching more advanced concepts like composition, improvisation, and harmonic dictation—all of which require strong facilitation of the aural domain (Covington, 1997; Dunmire, 2019; Menard, 2015; Watson, 2010). Conductors' deficient training or inexperience with these activities may inhibit their interest or ability to integrate them into student learning (Menard, 2015; Watson, 2010).

Attitudes Regarding Aural Skills

Participants strongly agreed that well-developed aural skills are critical for musicians. However, importance did not necessarily represent practice in this study as the reported integration of various aural-based tasks was moderately low. Participants scored error detection as the most important aural proficiency for students to achieve, which, according to participants, plays a key role in students' musical awareness and development. This skill has effectively been developed through both sight-singing (Sheldon, 1998) and dictation-based instructional strategies, which justifies the weight placed historically on singing and dictation (Song, 2015). Results from the current study suggest that conductors view dictation as less important and thus

integrate it less than singing. However, conductors should reconsider dictation as an effective judgment of students' aural abilities as it allows them to prescribe appropriate training of those skills (Klonoski, 2006).

Singing is one of the most common instructional strategies for improving aural skills (Beckman, 2011; Song, 2015). Participants who sang with their bands were positive about its effects on students' musical development. Participants in this study reported intonation as the musical factor most improved by consistent singing, which corroborates the results observed by Elliott (1974). The common presence of sight-singing as a major pillar of collegiate music study implies its position as an essential component of aural development (Larson, 1977), yet several participants indicated no singing in their wind bands.

The small minority of participants who reported dictation integration in their wind band viewed it as a valuable strategy. Dictation was reported as most effective in improving students' error detection ability. Research has shown that error detection is a necessary skill for conductors (Brand & Burnsed, 1981; Byo, 1993; Byo, 1997; Crowe, 1996; DeCarbo, 1982; Groulx, 2013; Nápoles, 2012; Sheldon, 1998; Waggoner, 2011), thus reiterating the importance of instilling these skills in students who not only desire to be future conductors but to also increase awareness of discrepancies between written music and performance.

Relationship Between Attitudes and Integration

There was a significant positive relationship between conductors' general attitudes toward aural skills and how often they integrated aural skills instruction. This substantiates the common claim in behavior science that attitude influences behavior (Ajzen & Fishbein, 2005). This correlation also suggests that if individuals have negative attitudes or experiences with aural skills, they are less likely to include them in their rehearsals which could have long-term effects on students' musical growth. Teachers often teach the way they were taught and thus may reflect the attitudes of their mentors (Cox, 2014; Oleson & Hora, 2014). Negative attitudes could also be a result of self-ascribed reputations in collegiate aural skills courses during which they labeled themselves as good or bad at aural skills, creating preconceived notions that often last through their career (Buonviri, 2015). Conductors should consider their own biases and experiences with aural skills and determine whether these are inhibiting their students' musical growth.

Despite the belief that time constraints may affect the amount of time spent on building listening skills (Robinson, 1996), the results of this study could not corroborate a statistically significant relationship between the variables.

Attitudes Regarding Students' Aural Abilities

Participants rated error detection at the top of the list of aural skills for which students are most proficient. This is consistent with participants' rating of error detection as the most important skill to the success of their wind bands. However, participants reported integrating

error detection less often than other aural activities. This suggests that, while error detection is perceived as important, students' error detection skills may already be satisfactory, thus resulting in less error detection-focused training by conductors.

Participants rated all aural activities involving students' instruments toward the top of the list of skills in which they were most proficient. These skills included sight-reading rhythms on instruments, sight-reading repertoire on instruments, playing in tune, and sight-reading tonal patterns on instruments. Many of the aural skills that relied heavily on students' inner instrument (ear) or singing were ranked at the bottom of the list. These included the aural identification and singing of intervals and arpeggiated chords. These skills were reported as important to students' success but were integrated on average only a few times per semester. Based on this data, conductors seem capable of diagnosing the areas in need of improvement but may not integrate training that targets these areas consistently enough to make a difference.

Differences in Responses Based on Demographics

The greatest number of significant differences in subscale means existed based on teaching area. Collegiate conductors felt more comfortable teaching aural skills than secondary conductors, viewed aural skills as more important, and rated their students as aurally more proficient. Tenure-track collegiate faculty positions often require a terminal degree while only 2% of secondary teachers held a terminal degree in the 2017-2018 academic year (National Center for Education Statistics, n.d.). Collegiate conductors' supplementary education has likely boosted their comfortability teaching aural skills in their wind bands.

Collegiate-level ensembles often perform more advanced music than secondary ensembles which may require students to have more advanced aural skills. However, wind bands at the secondary level are likely more focused on fundamental concepts such as technique and intonation while college-level performers obtain continuous training in those areas through supplemental courses and lessons. Collegiate conductors may be less pressured by time constraints and thus able to focus more energy on repertoire preparation. Even so, non-music majors may not be offered enrollment in courses exclusive to music majors, potentially expanding the gap in performance ability and musicianship between music majors and non-music majors (Enz, 2013).

Participants with terminal degrees viewed aural skills as more important and rated students as more aurally proficient than those with lesser degrees. The participants holding a terminal degree are more likely conductors at the collegiate level and these two demographic variables could be correlated.

Limitations

Although the number of respondents to this survey was adequate for performing

inferential statistics, these results are not generalizable to the broad population of music educators and conductors. The limited number of responses represents only a small sample of the target population. This survey was also administered during the height of virtual learning due to the COVID-19 global pandemic. The shifting ground of music education during this time may have resulted in responses that are not indicative of traditional face-to-face instruction. The data collected was entirely self-reported and may not accurately reflect how participants are integrating aural skills in their rehearsals. Lastly, these results do not suggest how music educators integrate aural skills in other instrumental settings such as orchestra, jazz band, or marching band, nor are they representative of choral music ensembles. These avenues should be explored, compared, and contrasted to the results of this study to devise more generalizable claims.

Another limitation of this study was the absence of diversity represented. Using TMEA as the only state music education association meant a stronger representation from the South compared to other regions. Additionally, the field of music is largely dominated by Caucasian males, and it is important to reach other diverse perspectives as well. Researchers interested in pursuing quantitative studies should consider a stratified sampling procedure to ensure all genders, races, and ethnicities are represented in aural skills research.

Conclusions and Future Research

This study was intended to provide a broad overview of trends in aural skills pedagogy and contribute to the sparse literature regarding these skills within the wind band context. There are numerous avenues of research that should be explored to develop a more comprehensive understanding of the effects of aural skills on musical development.

Scholars should seek more in-depth exploration of aural skills attitudes and behavior through qualitative methodologies. Researchers could utilize their unique sets of philosophical assumptions, paradigmatic commitments, and/or methods to study, observe, and engage with wind band conductors/students on their experiences with aural skills training/instruction.

Although aural skills are critical, we must consider the exclusivity of these listening skills as an able-bodied component of musicianship. Research should explore how to widen access to aural training for students who are hearing impaired. There may be fantastic opportunities for cross-curricular research collaboration with audiologists who find interest in such research as well.

Research on aural skills should continue now what face-to-face instruction has resumed, but it is also useful to continue researching how conductors effectively teach aural skills through virtual formats. In summary, my hope is that future research will: (a) narrow the gaps in wind band aural skills pedagogy research; (b) increase student and conductor

attitudes toward aural skills in the wind band; (c) provide equitable access to aural skills training for all students; and (d) provide professional development and education for practical integration of aural skills in the wind band.

This study's results showed that conductors acknowledge the importance of incorporating diverse aural-based instructional strategies but confine themselves to teaching only the basic aural principles. Though many conductors use singing to facilitate listening, this strategy is not sufficient alone. There is no single aural-based instructional strategy that will fix all our students' aural deficiencies or tell us how to incorporate aural skills most appropriately. We must use our education, resources, training, research, and support from colleagues to understand how to develop instruction that is appropriate for our circumstances.

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CONDUCTOR IMMEDIACY BEHAVIORS AS PREDICTORS OF MUSICIAN ENJOYMENT IN COLLEGIATE WIND ENSEMBLES

Jason P. Cumberledge

Effective teaching strategies are of interest to all those involved in music teaching and learning (Regier, 2021). For conductors of music ensembles, many effective teaching strategies involve nonverbal conducting behaviors. Researchers have examined several areas related to nonverbal conducting behaviors including conductor magnitude (Yarbrough, 1975), conductor intensity (Bender & Hancock, 2010; Byo, 1990), expressive gestures (Price et al., 2016; Silvey & Koerner, 2016), facial expressions (Silvey, 2013), general rapport and charisma (Johnson et al., 2008; Running, 2011), and pre-conducting behaviors (Cumberledge et al., 2021; Fredrickson et al., 1998). However, there are components of nonverbal communication in instrumental music education that have not been frequently examined and that have the capacity for improving our understanding of effective teaching. This study examines one of those components, teacher immediacy and specifically, how band directors' immediacy behaviors may influence students' enjoyment of band participation.

Teacher Immediacy

Immediacy research has been conducted in the fields of communication and general education for many years (Denker, 2005; Gorham, 1988; Hussain et al., 2021; Saba, 2018; Velez & Cano, 2008; Witt & Wheeless, 2001). Originally, the concept of immediacy was defined as communication behaviors that "improve closeness and nonverbal contact with another person" (Mehrabian, 1968, p. 203). In education, teacher immediacy behaviors can reduce the perceived gap between instructors and students (Andersen, 1979).

General immediacy behaviors (i.e. proximity, body orientation and placement, smiling, vocal inflections) that are displayed by teachers are important to effective teaching methods (Liu, 2021). In a seminal study, Andersen (1979) used a variety of author-generated measurement scales to examine teachers' immediacy as a successful and latent predictor of students' attitudes and cognitive learning in a college communication course. Findings suggested that immediacy behaviors were a key factor that determined student attitudes toward instructors, although no relationship was found between immediacy and cognitive learning. In subsequent decades, teacher immediacy has been found to be strongly associated with student satisfaction and perceived cognitive learning (Liu, 2021). Additionally, researchers have reported that teacher immediacy behaviors had positive relationships with motivation (Hussain et al., 2021), intent to persist in coursework (Witt et al., 2014), and class attendance (Rocca, 2004).

Verbal and Nonverbal Immediacy Behaviors

Taken together, teacher immediacy can be divided into two distinct categories: verbal and nonverbal behaviors (Gorham, 1988; Liu, 2021; Mehrabian, 1971). In education, verbal immediacy behaviors refer to "stylistic verbal expressions used by teachers to develop within students a degree of like or dislike towards the teacher" (Velez & Cano, 2008, pg. 77). Specific examples include syntactic expressions of present or past tense verbs, probability (will vs. may), ownership statements (my/our class), inclusive references (we vs. I), conversations outside of the regular learning environment, and students addressed by name (Gorham, 1988; Rubin, et al., 1994). Verbal immediacy, a critical factor in communication in its own right, has also been shown to be highly correlated with nonverbal immediacy (Edwards & Edwards, 2001).

Anderson (1979) defined nonverbal immediacy behaviors as "nonverbal manifestation of high affect" (p. 545). In essence, nonverbal immediacy is a language meant to convey affective feelings of warmth, closeness, and belonging (Richmond et al., 1987) and create meaningful and authentic interactions (York, 2013). In education, positive examples of nonverbal immediacy behaviors include relaxed body positions, welcoming gestures, high levels of eye contact, varied facial expressions, and movement around the classroom (Gorham, 1988).

Immediacy Research in General Education

Numerous researchers have investigated teacher immediacy in general education contexts (Denker, 2005; Garza et al., 2014; Gorham, 1988; Hussain et al., 2021; Velez & Cano, 2008). In a study involving undergraduate communication courses, Gorham (1988) devised the Verbal Immediacy Behavior (VIB) and Nonverbal Immediacy Behavior (NIB) measurement instruments and discovered that teachers' nonverbal immediacy behaviors had a positive relationship with students' perceptions of learning. The NIB and VIB scales developed by Gorham (1988) can access teacher's physical and psychological closeness through student's perceptions to or through teacher's self-rating of teacher's immediacy behaviors.

Researchers have used the VIB and NIB scales to measure immediacy behaviors in variety of general educational contexts, including agriculture (Velez & Cano, 2008), communication (Wei & Wang, 2010), education (Hussain et al., 2021), public speaking (Denker, 2005), online teaching (Saba, 2018), and team sports (Turman, 2008). In an exploration of teacher immediacy in university general education classes, Hussain et al. (2021) discovered a positive relationship between perceived teacher immediacy and students' motivation. Similarly, in a descriptive correlational study of university college students, Velez and Cano (2008) reported a direct relationship between nonverbal immediacy and motivation. Turman (2008) surveyed 307 high school athletes via the VIB, NIB, and an author-developed Satisfaction Scale and concluded that perceptions of verbal immediacy behaviors were predictors of athlete satisfaction and team cohesion. Further results revealed that athletes who were starters on winning teams had higher satisfaction scores in comparison to athletes on teams with less

success and with less playing opportunities. Turman (2008) concluded that coaches' attempts to foster satisfaction and cohesion were further enhanced when they engaged in verbal immediacy and talked with athletes about issues beyond the sport and interacted with them outside the locker room. Similarly, other researchers have found that effective teachers can use verbal immediacy to build relationships with students and to convey a sense of empowerment and mutual investment in students' education (Crosnoe, et al., 2004; McKinsey, 2016).

Immediacy Research in Music Education

In music education, teacher immediacy behaviors have been linked to student motivation, enjoyment, and vigor in applied instrumental music lessons (Blackwell et al., 2020; Wang, 2001), applied vocal lessons (Levasseur, 1994), and music class lectures (Hamann et al., 2000). Using the Subjective Vitality Scale, Blackwell et al. (2020) measured student vitality where vitality represented the feeling of being alive, vigorous, and energetic in video-recorded applied music lessons and found a positive correlation between teacher proximity and student vitality. Hamann et al. (2000) surveyed college music students and found that applied teachers who displayed good teaching delivery skills such as a relaxed body posture, high amounts of eye contact, and varied vocal and facial expressions were found to be more interesting than teachers who displayed poor delivery skills.

While much of the extant research regarding immediacy has centered around students' perceptions of such behaviors, some studies have also focused on teachers' self-reported immediacy behaviors. In a survey of university applied music teachers, Kurkul (2007) found that instructors were able to accurately self-identify the nonverbal immediacy behaviors that they displayed in lessons. Roseth (2020) surveyed high school band and orchestra directors' self-reported nonverbal immediacy behaviors and use of space in rehearsal rooms. Results indicated that among all nonverbal immediacy behaviors, teachers used proximity-related behaviors (touch, lean toward, sit/stand close, and move toward) the least. Thus, there may be a need for greater understanding of teacher immediacy in music classrooms.

Need for Study

Effective teaching strategies, including teacher immediacy, are of interest to music educators. In music ensembles, conductors are tasked with providing meaningful, educational, and enjoyable experiences for musicians. Research is needed that focuses on conductor immediacy behaviors, particularly in wind bands. According to Lui (2021), 95% of existing teacher immediacy studies have involved general education courses. Few studies have focused on teacher immediacy in music education. Many researchers that have investigated nonverbal conductor behaviors have only partially referred to teacher immediacy through terms such as magnitude (Yarbrough, 1975) and intensity (Byo, 1990; Madsen et al., 1989). Presently, one music research study (Roseth, 2020) has collected data on band directors' nonverbal immediacy behaviors. As far as can be determined, no other research exists with the primary objective of

exploring conductor immediacy in and out of band rehearsals.

Therefore, the purpose of this study was to explore the relationship between conductors' immediacy behaviors and musicians' enjoyment of their experience and participation in collegiate wind bands. The following research questions were addressed: 1) Is there a relationship between conductors' perceived verbal and nonverbal immediacy behaviors and musicians' enjoyment? 2) Is there a difference between musicians' perceptions of conductor immediacy behaviors and musicians' enjoyment based on ensemble type and chair placement?

Method

Participants

Participants ($N = 238$) were undergraduate ($n = 211$) and graduate ($n = 27$) students enrolled in collegiate wind bands at 10 universities across the United States. The universities were selected for inclusion through convenience sampling. All universities offered at least two wind bands in a first band/second band hierarchy. The labels of the bands (e.g., Wind Ensemble, Symphonic Band) were documented through Internet searches to ensure that the dependent measure contained accurate verbiage. Participant responses were anonymous; student names were not collected and no identifiable data could be traced back to universities. The institutional review board at the host institution of the study granted research approval.

Participants indicated that they were enrolled in Wind Ensemble ($n = 122$), Symphonic Band ($n = 81$), or Concert Band ($n = 35$). Participants' ensemble chair placements included first chair ($n = 65$), last chair ($n = 39$), and other ($n = 134$). Participants indicated that auditions were required ($n = 226$) or not required ($n = 12$) for their ensemble. The divisions of respondents by gender identity were male ($n = 123$), female ($n = 98$), non-binary ($n = 12$), transgender male ($n = 2$), and genderfluid ($n = 1$). Two participants did not provide their gender identity. When categorizing race/ethnicity, respondents who indicated more than one race/ethnicity were identified by a multiracial category to acknowledge their unique life experiences and perspectives as opposed to those from a single racial/ethnic background. Resulting breakdowns of race/ethnicity were as follows: Asian ($n = 6$), Black or African American ($n = 11$), Hispanic, Latino, or Spanish ($n = 6$), Native American ($n = 1$), Native Hawaiian or Pacific Islander ($n = 1$), White ($n = 205$), and Multiracial ($n = 8$).

Dependent Variables

Dependent variables included (a) verbal immediacy, (b) nonverbal immediacy, and (c) musical enjoyment as measured by an online questionnaire divided into four sections (see Appendix A). In the first section, participants supplied demographic information including ensemble type, chair placement, academic status, gender, race/ethnicity, and if auditions were required for their current band. Sections 2 and 3 measured musicians' perceptions of their

conductors' verbal and nonverbal immediacy behaviors. In the final section, participants were asked to self-report their perceptions of enjoyment in wind band participation.

Verbal Immediacy

To assess musicians' perceptions of their conductors' verbal immediacy behaviors, a modified version of the Gorham (1988) Verbal Immediacy Behaviors (VIB) scale was utilized. The original VIB consisted of 17 items designed to collect data regarding students' perceptions of their teachers' verbal immediacy behaviors though Likert-type scales anchored by *Never* (1) to *Very Often* (5). From the original items, 16 were selected for use in the present study, with one item excluded because it was not readily adaptable to a musical context. For the modified version, musicians responded to statements such as "My conductor uses personal examples or talks about experiences they have had outside of rehearsal," and "My conductor has initiated conversations with me before, after, or outside of rehearsal." The VIB scale is widely used in educational research contexts (Denker, 2005; Gorham, 1988; Hussain et al., 2021; Turman, 2008; Velez & Cano, 2008) with alpha reliability scores ranging between .77 and .94 (Rubin et al., 1994; Turman, 2008).

Nonverbal Immediacy

Musicians' perceptions of their conductors' nonverbal immediacy behaviors were measured using a modified version of the Revised Nonverbal Immediacy Measures (RNIM) scale developed by McCroskey et al. (1996). Designed for educational contexts, the RNIM contains items that measure students' perception of their teachers' nonverbal immediacy behaviors. Similar to the VIB, the RNIM contained 10 items that were prepared with 5-point Likert-type scales. For the modified version, musicians responded to statements such as "My conductor moves around the room during rehearsal," and "My conductor looks at the ensemble while conducting." All negative statements in the scale were reversed in scoring prior to data analysis. The RNIM is widely used in the domain of communicative studies (Smythe & Hess, 2005) and has reported alpha reliability scores ranging from .85 to .88 (Hussain et al., 2021; McCroskey et al., 1996).

Musician Enjoyment

Perceptions of musician enjoyment in ensembles were measured using the Enjoyment portion of the Achievement Emotions Questionnaire (AEQ), developed by Pekrun et al. (2005). The AEQ is a multidimensional self-report questionnaire designed to evaluate students' achievement emotions and consists of three different subsections. The scale is designed modularly; the three subsections can be used together or separately (Can & Güven, 2020; Pekrun et al., 2011). In this study, the Enjoyment Achievement Emotion module was used and consisted of 10 modified statements that were answered on 5-point Likert scales ranging from *Strongly Disagree* (1) to *Strongly Agree* (5). Sample items included "I get excited about going to rehearsal" and "After rehearsal I look forward to the next rehearsal." Cronbach's alpha

reliabilities for the AEQ have been reported between .75 to .93 for the entire AEQ (Bieleke et al., 2021) and between .80 and .88 in studies that used only the enjoyment module (Can & Güven, 2020; Davari et al., 2020; Schukajlow & Krug, 2014). Additionally, after wide use and extensive testing, Pekrun et al. (2011) reported that each AEQ module is both internally and externally valid.

Open Response

The questionnaire concluded with one optional open-ended question that asked students to describe what contributes to or detracts them from developing a sense of closeness and approachability with their band director. This question is reworded from a previous study that was designed to investigate teacher immediacy in online university courses (Sada, 2018).

Content Validity and Reliability

To establish content validity, two experts (a college music education professor and a college band director) ensured the structure and usability of the VIB, RNIM, and AEQ in the local context. The experts were tasked with determining if the questionnaire contained a good representation of the targeted content and was appropriate for the chosen population. The most notable change that occurred because of the content validity feedback was the wording of the directions for the Likert-type scales. In the present study, the VIB scale showed a post hoc summated Cronbach's alpha reliability of .86. The reliabilities of the RNIM and AEQ constructs were .70 and .95 respectively, resulting in scores that are considered acceptable to excellent levels of reliability (George & Mallery, 2003).

Procedure

The questionnaire was piloted using members of a college wind band ($N = 22$) not used in the full administration of the study. The purpose of the pilot test was to determine (a) if the questionnaire's directions and questions could be clearly understood, (b) if there were any problems in completing the questionnaire, and (c) how long it would take to complete the questionnaire. Following the pilot test, all parts of the questionnaire were deemed clear and concise. Results of the pilot test indicated that the questionnaire could be completed in less than 10 minutes.

A link to the online questionnaire was emailed to the directors of the participating wind bands. The band directors electronically distributed the questionnaire to potential participants during the 11th week of the spring 2022 semester. The questionnaire link remained open through the end the term. An estimated 600 potential participants at 10 universities received the questionnaire. A total of 238 completed questionnaires were received, resulting in a 39.6% response rate, which is higher than prior studies with similar methodologies (Nayak & Narayan, 2019).

Data Analysis

Data collected through Likert-type scales were analyzed through descriptive and parametric measures. Open responses were examined through a previously established qualitative coding procedure for analyzing participants' answers to each of the open-response questions by (a) assigning codes, (b) combining codes into themes, and (c) displaying the data (Creswell, 2007). The researcher independently coded each response. Using the established list of codes, a graduate student in music education unfamiliar with the study served as a reliability check and independently coded 42 randomly chosen participant responses, approximately 20% of total open responses. Randomization was achieved using an Internet randomizer. Interrater reliability, measured as the number of agreements divided by total observations, was 98.78%, which exceeded the acceptability threshold of 80% suggested by Madsen and Madsen (2016).

Results

Descriptive statistics, including means, standard deviations, and Pearson product-moment correlations for all variables included in the study, are reported in Table 1. The first research question was designed to investigate the relationship between conductors' perceived verbal and nonverbal immediacy behaviors and musicians' enjoyment. A hierarchical regression model was used to investigate this relationship. Ensemble membership was dummy-coded (1 = *wind ensemble*, 2 = *not wind ensemble*) before being input into the regression model. Chair placement was also dummy-coded (1 = *first chair*, 2 = *not first chair*). The regression model, using musician enjoyment as the dependent variable, produced a moderate and significant correlation coefficient, $R = .551$, $F(2, 235) = 51.15$, $R^2 = .303$, $p < .001$, accounting for 30.3% of the variance. The combination of ensemble type and chair placement was a not significant predictor for musician enjoyment, R^2 change $= .001$, F change $= .130$ $p = .878$; however, the resulting standardized regression coefficients indicated that perceptions of band director's verbal immediacy behaviors ($\beta = .407$, $t = 6.27$, $p < .001$), as well as nonverbal immediacy behaviors ($\beta = .211$, $t = 3.25$, $p < .001$) were significant predictors of musician enjoyment.

Table 1
Simple Statistics and Pearson Product Moment Correlations (N = 238)

Variables	*M*	*SD*	1	2	3
Verbal Immediacy	3.41	1.01	--		
Nonverbal Immediacy	4.02	0.81	0.543*	--	
Musician Enjoyment	3.74	1.11	0.521*	0.432*	--

* Denotes that the correlation is significant ($p = <.001$).

The second research question asked if there was a difference between musicians' perceptions of conductor immediacy behaviors and musicians' enjoyment based on ensemble type and chair placement. Data were summed and averaged to determine the dependent variable.

When exploring overall immediacy and enjoyment scores (which were continuous and normally distributed), statistical analyses included analyses of variance (ANOVAs). Overall, there was no significant difference in the scores for perceived immediacy behaviors or musician enjoyment based on ensemble type; however, a moderate and significant difference was found in the overall scores for perceived nonverbal immediacy based on ensemble type (F (2, 238) = 7.01, p = <.001, η^2 = .05). Post hoc analysis revealed musicians in wind ensembles rated nonverbal immediacy significantly higher than musicians in concert bands (p = <.01). See Appendix B for an overall ranking of mean scores for immediacy and enjoyment items. There was no significant difference in the scores for immediacy behaviors or musician enjoyment based on chair placement.

Finally, participants responded to the following optional open-ended question: "please describe what your conductor does inside and/or outside of rehearsals that either contributes to or detracts from developing a sense of closeness and approachability with them." Themes and frequency of the open responses are displayed in Table 2. The largest portion of the total comments (N = 196) involved items that contributed to musicians' perceptions of conductor immediacy such as conductors' friendly and approachable personality (n = 54, 20.77%) and conversations with musicians outside of rehearsal (n = 42, 16.15%). Examples of comments for conductors being friendly and approachable included "he has very open body language which makes him approachable" and "she is very relatable and just a very nice person to be around."

Comments referencing conversations outside of rehearsal included "since he is our marching band conductor, we have a lot of time to get to know him away from the podium, so it's easier to see him as a person" and "he will say hi in the hallways to everyone in the ensemble, or just a wave with a smile." Some comments (n = 26, 10%) referred to items that detracted from musicians' perceptions of conductor approachability, such as intimidating behaviors and little contact outside of rehearsal. Examples of detracting comments included "my band director makes himself closed off and is very intimidating" and "they do not stick around much before or after rehearsals to talk." Comments in the "other" category referenced topics including email communications, concern over correct usage of personal pronouns, and the need for more musician input in ensemble decisions such as scheduling and music programming.

Table 2

Summary of Responses for "Please describe what your conductor does inside and/or outside of rehearsals that either contributes to or detracts from developing a sense of closeness and approachability with them:

Topic	*n*	%
Friendly and Approachable	54	20.77
Conversations Outside Rehearsal	42	16.15
Other	33	12.69
Professional with High Standards	27	10.38
Cares About Students	24	9.23
Knows Students' Names	15	5.77
Sense of Humor	14	5.38
Intimidating Personality	13	5.00
Little Contact Outside Rehearsal	13	5.00
Open Door Policy	9	3.46
Asks for Students' Input	9	3.46
Individual Attention in Rehearsal	8	3.07
Total	260	100

Discussion

The purpose of this study was to survey students in college wind bands across the United States regarding their perceptions of wind band conductor (i.e., band director) immediacy behaviors and enjoyment in their ensembles. The research questions guiding this investigation sought to explore relationships among immediacy, enjoyment, and how these interests varied by ensemble type and chair placement.

The first research question was designed to determine if there was a relationship between students' perceptions of their band directors' verbal and nonverbal immediacy behaviors and students' enjoyment. Results indicated that there was a direct positive correlation between the scores for immediacy behaviors and enjoyment. Students' scores for enjoyment were higher in ensembles led by band directors who more frequently displayed verbal and nonverbal immediacy behaviors. Students who enjoyed band participation were gratified that they understood the music and felt it beneficial to go to rehearsals. The highest rated verbal immediacy scores were for behaviors that connected with togetherness and teamwork. Students appreciated directors who spoke using ownership statements (e.g., our rehearsal) and inclusive references (we vs. I) in rehearsals. Students also appreciated being addressed by their name and being praised for individual work in rehearsals.

Outside of rehearsals, many students indicated that conversations with band directors in the hallway and around music buildings had an impact on their perceptions of director

immediacy. Students also appreciated conversations with directors directly after rehearsal. Students' comments included, "he is always friendly inside and outside of rehearsals, knows his students by name, greets us with a smile, and then he will ask how we are" and "the director always talks to students after rehearsals asking for opinions about how the rehearsal went." Another student offered a specific example of verbal immediacy: "We are asked a 'question of the day' each day, and our conductor responds to every single one! This is a great way to speak to the conductor about how rehearsals are going and what we're learning, which helps develop relationships."

The highest rated nonverbal immediacy behavior was related to conductors' eye contact, which aligns with the findings of previous researchers who found high levels of conductor intensity and magnitude increased perceptions of conductor effectiveness (Bender & Hancock, 2010; Yarbrough, 1975). For behaviors which were negatively phrased in the questionnaire, a strong agreement with the item indicated a low level of the attribute being measured. Thus, many directors in this study did not use monotone voices or have tense body positions in rehearsal, which indicated that positive nonverbal immediacy behaviors were often displayed in rehearsal. The lowest rated nonverbal immediacy behavior pointed to directors' lack of movement around the room during rehearsals, which agrees with the findings of Roseth (2020) who reported that proximity based nonverbal behaviors were utilized very little by music teachers. Previous authors have suggested movement around the room is an effective teaching strategy in music rehearsals (Fallin & Royce, 1994; Schmidt, 1998). It appears that more attention is needed in teacher training and professional development to highlight the importance of director proximity in music rehearsals.

In the examination of open responses, band director approachability was a frequently appearing theme. This finding agrees with previous researchers who found that positive immediacy behaviors can lead teachers to be perceived as approachable (Martinez-Caro et al., 2015; McKinsey, 2016). One student commented, "because she shares personal stories and talks about bigger things than band, she feels approachable. She also openly invites us to talk with her before and after rehearsal."

The theme of director and student conversations outside of rehearsal also appeared frequently in the open responses. These interactions outside of rehearsal can increase perceptions of band director immediacy, thus making band participation more enjoyable for students. Band directors should make personal connections with students by learning their names and showing interest in their musical and personal growth. Band directors who know their students as individuals may make band participation more enjoyable and meaningful for them. As suggested by Cumberledge and Williams (2022), directors should take students' musical lives and backgrounds outside of school into consideration when making ensemble decisions, such as music programming. In this study, students felt valued by band directors who asked for student input on such decisions.

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However, two themes detracted from students' sense of approachability with their directors: "intimidating personality" and "little contact outside of rehearsal." Students noticed when directors were not present and engaged with students. One student mentioned that their director "leaves quickly after rehearsal completes," while another student commented, "my director is never caught in the rehearsal room or halls outside of rehearsal. In other words, you never see my director outside of scheduled interactions." While students appreciated directors that addressed them by name, students also took note of the opposite with such comments as: "I'm pretty sure he doesn't know my name" and "in the rare instances that my name is used it is often mispronounced or varied on the day."

The second research question sought to determine if there was a difference between students' perceptions of band director immediacy behaviors and students' enjoyment based on ensemble type and chair placement. Students in the universities' top wind ensembles perceived their band directors to have more frequent displays of nonverbal immediacy behaviors than students in the universities' concert bands. Perhaps the wind ensemble conductors were more expressive with vocal inflections, gestures, and eye contact when compared to concert band conductors. This finding may also suggest that the students in concert band were less adept to reading nonverbal immediacy behaviors than wind ensemble students. More research in this area is warranted.

There were no significant differences in the overall scores for immediacy behaviors and enjoyment based on chair placement. While 95% of the students auditioned for ensemble and chair placement, it did not appear that audition results had any effect on perceived immediacy behaviors or enjoyment. This suggests that students who auditioned into a first chair placement were likely to have the same ensemble experiences and enjoyment level as students who placed last chair. Overall, it appeared that directors in this study did not show immediacy bias, as perceived by students, based on chair placements.

Limitations and Suggestions for Future Research

Despite the contributions of this study, the results should be interpreted within the limitations of the research design. One limiting factor was the use of a measure of teacher verbal immediacy that has raised validity issues with communication researchers. Most notably, Robinson and Richmond (1995) argued that Gorham's (1988) VIB is ''composed of items representing verbally effective behaviors of teachers,'' rather than a direct assessment of verbally immediate behaviors (p. 82). Richmond et al. (2003) claimed that the VIB is "invalid as a measure of verbal immediacy" and that it is instead "a measure of the verbal behaviors exhibited by good teachers—not necessarily immediacy behaviors" (p. 505). Despite this limitation, many researchers (Arbaugh, 2010; Baker, 2004; Denker 2005; Furlich, 2016; Gendrin & Rucker, 2004; Hussain et al., 2021; Shutt et al., 2009; Velez & Cano, 2008; Wilson & Locker, 2007; Witt & Wheeless, 2001) have continued to use this instrument as a measure of verbal immediacy in the classroom. Therefore, caution should be used when interpreting the results for verbal immediacy

(whereby the findings may better signify that conductors who were more verbally effective increased musicians' enjoyment in ensembles), although in the present study, the VIB measure showed high reliability alpha scores with in-depth validity checks.

Some researchers have argued that socio-emotional cues are a part of the nonverbal immediacy behaviors displayed by teachers in classrooms (Arbaugh, 2001; Baker, 2004; Jensen, 1999). The Revised Nonverbal Immediacy Measures (RNIM) scale used in this study did not include components related to such cues. Additionally, the modified RNIM scale in this study produced a relatively low reliability alpha level compared to the other measures. Further analysis on Statistical Package for the Social Sciences (SPSS) indicated low alpha levels for two nonverbal statements in particular: "Looks at the musical score while conducting" and "Moves around the room during rehearsal." Perhaps rewording these two statements might increase overall nonverbal reliability in future studies.

This study was conducted two years after many band rehearsals were stopped or heavily modified during the COVID-19 pandemic, which may have had a bearing on participants' perceptions of nonverbal behaviors. Finally, for ecological validity, this study did not assess the mediating effects of situational variables (e.g., age, gender, academic degree, etc.) on the relationship between perceptions of conductor immediacy and musician enjoyment. Future studies could investigate these situational variables in more depth. Additionally, the participants in this study were mostly white; future research could incorporate a sample with more racial and ethnic diversity.

Implications

Results of this study indicated that conductor immediacy is linked directly with musician enjoyment in collegiate wind bands. In music teacher education, professors should continue to examine ways to identify teacher traits to effectively prepare future teachers. There may by certain qualities about effective music teaching strategies that can be developed through training and professional development programs. It is recommended that immediacy behavior topics be included in training curricula and professional development clinics to positively enhance teacher effectiveness. Specifically, band directors can develop a habit of moving off the podium and around the band room once per rehearsal, or meeting students at the door of the rehearsal room at the start of rehearsals. Directors should be also present throughout school buildings to build relationships and have genuine interactions with students in places such as cafeterias and athletic events. Additionally, directors can develop strategies for quickly learning students' names, such as studying seating charts or memorizing cards with names and faces. It is important to note that these actions must happen intentionally; additional planning on the part of the directors is required to ensure success.

Band director approachability was a frequently appearing theme in participants' perceptions of nonverbal immediacy. Approachability may influence students' interest in band participation, a key point when considering recruitment and retention is an item of great concern for many band programs. For band directors, the present research highlights the importance of

making personal connections with students and fostering a culture of belonging. Results showed that students notice caring band directors. Clearly, a sense of belonging in band programs can only be created by directors who care about their students.

These findings may provide new insight for band directors to examine their personal teaching philosophy. Directors can benefit from these results by comparing them to their own practices and identifying areas that may need improvement. The premise of music first and above all is an archaic model for teaching. Today, many successful band directors place a priority on caring for students' physical safety and mental well-being, providing a solid foundation upon which good musicianship can be developed.

Results of this study clearly illustrate that band directors must have a desire to create meaningful and authentic interactions with their students. Specifically, results pointed to the importance of band directors making personal connections with students inside and outside of traditional rehearsal settings. Students that perceive their band directors as having a vested interest in their life will be more likely to enjoy band participation and to continue making music.

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Appendix A
Questionnaire Copy

Section A: Demographic Questions

1. What is your gender identity?

2. What is your age?

3. What is your race/ethnicity? (Select all that apply)
   a. White
   b. Hispanic, Latino, or Spanish
   c. Black or African American
   d. Asian
   e. Native American
   f. Middle Eastern or North African
   g. Native Hawaiian or Pacific Islander
   h. Other: _____

4. What is your academic status?

5. At your university, which band you are currently participating in? (Select only one)
   a. Wind Ensemble/Wind Symphony/Wind Orchestra
   b. Symphonic Band/Symphony Band
   c. Concert Band/University Band
   d. Other: _____

6. In the band chosen above, what is your current chair placement in your section? (for example, chair 2 out of 10)

7. Are auditions required for the band?

Section B: Conductor Verbal Immediacy

8. Please describe the frequency with which the conductor of your ensemble uses each behavior below. Please use the following scale to respond to each of the statements: (1 = Never) to (5 = Very Often).

 a. Uses personal examples or talks about experiences they have had outside of rehearsal.
 b. Asks questions or encourages students to talk.
 c. Gets into discussions based on something a student brings up even when this might not be part of the rehearsal plan.
 d. Uses humor in rehearsal.
 e. Addresses students by name.
 f. Addresses me by name.
 g. Gets into conversation with individual students before or after rehearsal.
 h. Has initiated conversations with me before, after, or outside of rehearsal.
 i. Refers to rehearsal as "our" rehearsal or what "we" are doing.
 j. Provides feedback on my individual musicianship.
 k. Asks how students feel about the programmed repertoire.
 l. Invites students to meet outside of rehearsal if they have questions or want to discuss something.
 m. Asks questions that solicit viewpoints or opinions.
 n. Praises students' musicianship, actions, or comments.
 o. Will have discussions with students about things unrelated to rehearsal.
 p. The conductor is addressed by their first name by the students.

Section C: Conductor Non-Verbal Immediacy

9. Please describe the frequency with which the conductor of your ensemble uses each behavior below. Please use the following scale to respond to each of the statements: (1 = Never) to (5 = Very Often).

 a. Gestures while talking to the ensemble.
 b. Uses monotone/dull voice when talking to the ensemble.
 c. Looks at the ensemble while conducting.
 d. Smiles at the ensemble while conducting.
 e. Has a very tense body position while conducting the ensemble.
 f. Moves around the room during rehearsal.
 g. Looks down at the musical score while conducting the ensemble.
 h. Has a very relaxed body position while conducting the ensemble.
 i. Frowns at individual students in the ensemble.
 j. Uses a variety of vocal expressions when talking to the ensemble.

Section D: Musician Enjoyment

10. Attending university wind band rehearsals can induce different feelings. The following questions refer to emotions you may experience in band rehearsals. Please indicate how you feel, typically, in band rehearsals. Please use the following scale to respond to each of the statements: (1 = Strongly Disagree) to (5 = Strongly Agree).

    a.   I get excited about going to rehearsal.
    b.   I enjoy being in rehearsal.
    c.   After rehearsal I start looking forward to the next rehearsal.
    d.   I am looking forward to learning a lot in this rehearsal.
    e.   I am happy that I understood the music.
    f.   I am glad that it paid off to go to rehearsal.
    g.   I am motivated to go to this rehearsal because it's exciting.
    h.   My enjoyment of this rehearsal makes me want to participate.
    i.   It's so exciting that I could sit in rehearsal for hours listening to the conductor.
    j.   I enjoy participating so much that I get energized.

Section E: Open Ended Question

11. Please describe what your conductor does inside and/or outside of rehearsals that either contributes to or detracts from developing a sense of closeness and approachability with them:

PROGRAMMING TRENDS OF POWER FIVE CONFERENCE UNIVERSITY WIND BANDS FROM 2011 - 2022

Christian Folk

The existing literature on wind band repertoire has two main points of focus: (a) determining and measuring the artistic value of wind band literature while identifying a core repertoire and (b) identifying how often this repertoire is performed by various ensembles (Wiltshire et al., 2010). In recent literature on university wind ensemble programming, authors examined wind bands from the Power Five college conferences, including the Atlantic Coast Conference (ACC) (Wiltshire et al., 2010), Big Ten Conference (BIG10) (Powell, 2009), Big Twelve Conference (BIG12) (Paul, 2012), Pacific Twelve Conference (PAC-12) (Paul, 2011; then PAC-10), and the Southeastern Conference (SEC) (Wacker & Silvey, 2016). In those studies, the authors provided insights into the frequency and variety of compositions programmed by university band directors and if programming aligned with the core repertoire identified in previous literature. To achieve this, those researchers cataloged compositions, composers, premieres, and how frequently works were performed. The current study — a replication and extension of Paul (2011, 2012), Powell (2009), Wacker and Silvey (2016), and Wiltshire et al. (2010) — focuses on similar facets of university wind band programming between 2011–2022, with an added emphasis on the increased programming of works by gender and/or racially minoritized composers. The following literature review contextualizes the main foci of the current study and provides a summary of existing scholarship on the core repertoire of collegiate wind bands, past trends of Power Five wind bands, and the programming of gender and/or racially minoritized composers.

Literature Review

Repertoire and Artistic Merit

Hunt (1949) found that most university and professional wind bands primarily played transcriptions of orchestral music and was among the first prominent wind band researchers to recommend that ensembles only play original works and not transcriptions or arrangements. After forming the College Band Directors National Association (CBDNA) in 1950, Revelli reaffirmed Hunt's stance and encouraged directors to perform original works for wind band with artistic merit. The CBDNA established an Original Compositions for Band committee that evaluated new compositions for artistic quality and presented repertoire lists at biennial conferences. Revelli also considered the wind band repertoire as the primary teaching tool for ensembles, "designed to prepare students for a professional career as members or conductors of orchestras and bands" (Mark, 2008, p. 133). According to Revelli, wind band repertoire held elements necessary to teach form, expression, and musicality (Reynolds, 2000).

With the breadth of wind band literature expanding, repertoire selection became more daunting for collegiate band conductors. Ostling (1978), after a meeting with Revelli, concluded the wind band field needed a tool for establishing a core repertoire of pieces performable by college ensembles to simplify the programming process. He sought the opinions of 20 collegiate band directors to evaluate a list of over 1,500 pieces of wind band music, which would "eventually improve the choice of material for study and performance by collegiate and school bands" (Ostling, 1978, p. 15). To determine artistic merit, Ostling developed a list of ten criteria, including structural and expressive elements like balance between repetition and contrast, orchestration, musical form, consistency in musical quality and style, and imaginative development. Ostling purposefully avoided using any criteria that reflected a piece's historical importance or perceived pedagogical usefulness. After this evaluation process, Ostling described the 314 pieces that met the high artistic merit criteria as "an initial repertoire of high quality for the wind band" (1978, p. 181), and these works were played frequently by university ensembles in subsequent decades (Battisti, 2002). Pieces that met this threshold included Percy Grainger's *Lincolnshire Posy*, Paul Hindemith's *Symphony in B-flat*, and Gustav Holst's *Suite No. 1 in E-flat*.

Using Ostling's criteria, Gilbert (1993) identified 153 compositions out of 1,158 that met the artistic merit requirements. New works present in Gilbert's research included Leslie Bassett's *Sounds, Shapes and Symbols*, Warren Benson's *The Passing Bell*, and David Maslanka's *A Child's Garden of Dreams*. In the most recent replication of Ostling's study, Towner (2011) found that 144 compositions met the merit criteria. Contemporary works in this study, like Michael Colgrass's *Arctic Dreams* and *Winds of Nagual* and David Rakowski's *Symphony No. 2*, were considered significant works of artistic merit and part of the core wind band repertoire.

To further contextualize the concept of a substantial body of wind band works, Battisti (2002) alludes to college wind ensembles and other professional wind bands maintaining a core repertoire of pieces in a cyclical process. When a piece was considered to be of high quality by an esteemed collegiate wind band conductor like Frederick Fennell or Frank Battisti, those conductors would program that work frequently. Other conductors would then program that piece due to their trust in the opinions of these well-regarded colleagues, and so on. This was amplified by important recordings by ensembles like the Eastman Wind Ensemble and the New England Conservatory Wind Ensemble that featured this core repertoire of works, encouraging listeners to program the pieces. This process in the years before and immediately following Ostling's (1978) study aided in the maintenance and expansion of this perceived "core repertoire" of works that continues to influence collegiate conductors through the present day (Battisti, 2018).

Frequency of Collegiate Programming

Alongside investigations of the quality of wind band compositions, other researchers have noted the performance frequency of those works, focusing especially on collegiate wind bands. The CBDNA commissioned Holvik (1970) to determine if a core repertoire was

emerging. Holvik indicated that 136 original pieces and 98 transcriptions or arrangements were performed more than 10 times each between 1961 and 1966, including Grainger's *Linconshire Posy* and Holst's *Second Suite in F*. Fiese (1987) created a "Frequency of Performance Report Form" that was sent to 930 conductors, in which 22 composers made up 57% of over 23,000 performances between 1980 and 1985. Although a core repertoire did not emerge, unlike in Ostling (1978), Gilbert (1993), or Towner (2011), directors who responded to Fiese repeatedly programmed works by a core group of composers that included Grainger, Holst, and Hindemith. Kish (2005) analyzed concert programs submitted to the CBDNA between 1998 and 2002 and found that 53 works were played at least 15 times each. Pieces like Colgrass's *Winds of Nagual* and Karel Husa's *Music for Prague 1968* were now being programmed with similar frequency to *Lincolnshire Posy*, potentially signaling the inclusion of more contemporary pieces in the core wind band repertoire.

Following these studies, authors have continued to observe wind band programming trends through analysis of ensemble programs in university conferences. Powell (2009) studied the trends among top wind bands in the BIG10 conference between 2002 and 2006 and found that only four pieces out of 2,106 received more than ten performances. He concluded that the breadth of wind band repertoire was expanding exponentially, but the lack of frequent performances made it difficult to establish a consistent core repertoire. Paul (2011, 2012) investigated programming trends in PAC-10 (now the PAC-12) and BIG12 band programs from 2002–2009. In the PAC-10 study, only Holst's *First Suite in E-flat* and Frank Ticheli's *Blue Shades* had more than ten performances. In the BIG12 study, seven pieces had more than ten performances, though *First Suite in E-flat* and *Blue Shades* were performed less than ten times, potentially indicating some variation in programming practices between conference schools.

Powell (2009), Paul (2011, 2012), and Wiltshire et al. (2010) all found that Grainger was the most performed composer in their respective studies. Wacker and Silvey's (2016) findings were in congruence with the others in that Grainger was the most frequently programmed composer; however, unlike the others, they also reported that Holst's *First Suite in E-Flat* was the most programmed work. Wiltshire et al.'s (2010) study of the ACC identified a possible core repertoire of 41 pieces when combined with Paul (2011) and Powell's (2009) lists, reinforced by Wacker and Silvey (2016). Grainger's *Lincolnshire Posy* was the most frequently programmed work when combining all conference band programs.

Works by Minoritized Composers

Previous authors' works (Paul, 2011, 2012; Powell, 2009; Wacker & Silvey, 2016; Wiltshire et al., 2010) provide many familiar names in wind band literature (e.g., Grainger, Ticheli, John Philip Sousa, and Holst). However, the lists of most performed composers generated from those studies reveals a scarcity of gender and racial diversity. The core repertoire compiled by Wiltshire et al. (2010) of 41 pieces only includes compositions written by White men (Noon, 2020). In Ostling (1978) and Gilbert (1993) no original wind band works considered

to be of serious artistic merit were written by gender or racially minoritized composers. Evaluators in Towner (2011) only found two pieces by women, Susan Botti's *Cosmosis* and Sofia Gubaidulina's *Hour of the Soul*, and no pieces by racially minoritized composers met the merit criteria. Though none of these authors focused on the programming of pieces by gender and/or racially minoritized composers, highlighting the lack of minoritized individuals in that research is important to contextualize a goal of the current study.

Peters (2016) found that conductors that consider race, gender, ethnicity, and other demographic attributes alongside musical content and artistic merit (Ostling, 1978) have a positive impact on students in performing ensembles. Over the last five years, diversity advocates have created a substantial number of resources for conductors and other educators devoted to increasing the representation of gender and racially minoritized composers across all forms of music-making. Several resources exist that catalog and promote the works for wind band by minoritized composers. Folk (2017, 2019) created the Diverse Composers of Wind Band Music database which contains over 3,500 pieces written by minoritized composers, along with a similar database for orchestral pieces. The And We Were Heard organization, formed in 2017, pairs minoritized composers with vetted wind bands and orchestras to collaborate on the premiere and professional recording of new compositions. Similar organizations and resources include Nikk Pilato's Wind Repertory Project (2008), Laura Colgate and Joi Leilani's Boulanger Iniative (2018), Ashley Killiam's Diversify the Stand (2020), Rachel Barton Pine's Music by Black Composers (n.d.), Jodie Blackshaw's ColourFULL Music (2017), and American Indian Band Music (n.d.) created by Stockbridge Munsee Community member Brent Michael Davids.

Purpose

The purpose of the current study was to analyze wind ensemble programs from each of the Power Five conferences (ACC, BIG10, BIG12, PAC-12, SEC) between the 2011–2022 academic years. One goal of this study was to analyze programming trends of the last 11 academic years by replicating the studies previously conducted by Paul (2011, 2012), Powell (2009), Wiltshire et al. (2010), and Wacker and Silvey (2016). Shared aims between previous research and the current study includes identifying the most frequently performed pieces and composers, and to ascertain whether ensembles are consistently performing works deemed to be of serious artistic merit as determined by Ostling (1978), Gilbert (1993), and Towner (2011). Additionally, I focused on identifying new trends over the last ten years in the programming of historically minoritized composers, including gender minoritized composers (e.g., women, transgender, and/or non-binary individuals) as well as racially minoritized composers.

As a result, I have (a) provided an overview of the repertoire most frequently programmed by Power Five conference university band directors from the 2011–2022 academic years compared to previous research, (b) revealed recent trends in the programming frequency of historically minoritized composers, and (c) highlighted works premiered over the last ten years that could be important contributions to the body of wind band literature. I conclude with a

discussion on potential issues for conductors attempting to program more works by gender and/or racially minoritized composers and with suggestions for future research on this topic. The findings of this study can have benefits for collegiate wind conductors interested in new trends in programming, as well as other conductors and musicians focused on issues of wind band repertoire and the increase in performances of music by minoritized composers.

Method

In contrast to previous studies which focused on one collegiate conference, I sought to analyze band programs from all 65 Power Five conference universities. I sent an initial email to each faculty member listed as Director of Bands requesting they send all programs of their top-auditioned concert band (e.g., "wind ensemble," "symphonic wind ensemble," "wind symphony," etc.) from the 2011–2022 academic years. Similarly, previous authors (Paul, 2011, 2012; Powell, 2009; Wiltshire et al., 2010; Wacker & Silvey, 2016) only asked for programs from the top-auditioned ensemble so that parameter is maintained in the current study. The options for sending programs included sending scans or PDFs of printed and/or digital programs, or a conductor's personal record of repertoire performed. If a director did not respond two weeks after the initial email, I sent a follow-up email. In this initial round of communication, 17 directors or administrative assistants across all five conferences responded with copies of concert programs.

For directors who either did not respond or who did not have the means of sending digital concert programs, I attempted to find the programs online through various means. Several ensembles kept records of their concert programs on either their band website or their host school of music's website and I was able to obtain the program data from those sources. If those records did not exist, I checked past issues of The CBDNA Report, which lists director-submitted concert programs several times a year. Finally, if previous sources were not viable, I searched past events located on the ensemble or host school of music's Facebook page, which often contained concert repertoire.

Out of 65 potential schools, I received a complete set of programs from 36 (55%) ensembles. Of the 36 band programs included in the study, five ensembles were from the ACC, 11 were from the BIG10, six were from the BIG12, six were from the PAC-12, and eight were from the SEC. I entered each composition from every regular concert performance into Google Sheets. As with previous researchers (Kish, 2005; Paul, 2011, 2012; Powell, 2009; Wackey & Silvey, 2016; Wiltshire et al., 2010), I excluded special events like alumni concerts, composer concerts (e.g., all-Holst or all-Grainger concerts), and school of music showcase concerts featuring multiple ensembles, to ensure the data reflected typical programming practices. In instances of multiple performances, like conference preview concerts or tours, I entered the composition only once. Each database entry included: (a) title of composition; (b) composer; (c) arranger or transcriber if applicable; (d) date of composition; (e) performance date and season (e.g., Fall 2014, Spring 2017); and (f) race, gender, and ethnicity of the composer.

If the date of composition was not listed on a program, I consulted The Wind Repertory Project (Pilato, n.d.) website or the composer's personal website for this information. After data entry was completed, I created separate spreadsheets of each conference's list of programs, a list of programs for each performance year (i.e., Fall 2017 to Spring 2018), and a master database of each performance alphabetized by school name. I also compared my data with the lists of pieces constructed by Paul (2011, 2012), Powell (2009), Wacker and Silvey (2016), and Wiltshire et al. (2010) to identify common pieces between the studies that maintain high performance frequency and to determine if any new pieces have a high performance rate.

Due to the focus on identifying trends in the programming of gender and/or racially minoritized composers, it is crucial to establish criteria for those demographic categories. In this study, gender minoritized composers are those who identify as women, transgender, genderqueer, and those who do not otherwise identify as cisgender (APA, n.d.). Although women are not considered a numerical minority group in the general population, researchers have extensively written on how they are underrepresented in the field of composition (Ammer, 2001; Creasap, 1996; Halseth, 2002; Hinely, 1984; Jensen, 2014), thus they are considered gender minoritized individuals in the current study.

Racially minoritized composers, often referred to as people of color or BIPOC (Black, Indigenous, and/or Person of Color), "refers to those who have the same shared experience, apart from White individuals, of exposure to systemic and individual racism" (Milner & Jumbe, 2020). These individuals identify as one or more non-White racial and/or ethnic categories. In this study, racially minoritized composers are considered those who are Black, Asian, Latino/a/x, Hispanic, Native American, Indigenous, and/or other minoritized racial/ethnic groups. These groups also include subpopulations (e.g., African Americans, Asian Americans, Japanese Canadians, etc.). Further, composers considered to be Latino/a/x and/or Hispanic in this study are those (a) from a country in North America that is not the United States, (b) from a country in South America, (c) from Spain, and/or (d) belonging to a subgroup of those categories (e.g. Puerto Rican American, Venezuelan Canadian, Chilean American, etc.).

To determine if a composer was gender and/or racially minoritized as described above, I consulted composer websites, The Wind Band Repertory, and, if necessary, direct contact with the composer. In this process, it is also important to acknowledge my positionality as a White non-binary male, and that it is possible I may have mis-identified a gender and/or racially minoritized composer, especially composers who are deceased and that I could not have direct contact with. To mitigate this positionality risk, a reliability observer, a Black cisgender woman, viewed a random sample of 45% of programs to ensure accurate data entry of both composition information and composer demographics. This observer reviewed the sources I utilized to determine composer demographics, including personal correspondence with living composers, to check for accuracy in interpretation of demographics and data entry of that information. Upon conclusion of this process, interrater agreement was 100%.

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Results

Performance Frequency

Of the 6,411 performances cataloged, 4,944 (77.1%) were original wind band compositions and 1,467 (22.9%) were arrangements or transcriptions. Pieces that had editors (e.g., a piece composed by Percy Grainger but edited by Frederick Fennell) were considered original compositions and not arrangements as the medium of the original work did not fundamentally change.

Power Five conference ensembles programmed 32 pieces more than 20 times each. Between the 2011–2022 academic years, the most performed works were Grainger's *Lincolnshire Posy* (51 performances), Hindemith's *Symphony in B-flat* (41), Holst's *First Suite in E-flat* (40), Grainger's *Colonial Song* (37), Richard Strauss's *Serenade in E-flat, Op. 7* (35), Leonard Bernstein's *Overture to "Candide"* (34), Dmitri Shostakovich's *Festive Overture* arranged by Hunsberger (33), Bernstein's *"Profanation" from Symphony No. 1* arranged by Bencriscutto (32), David Maslanka's *Symphony No. 4* (30), and Bernstein's *Symphonic Dances from "West Side Story"* arranged by Lavender (29). See Appendix A for a complete list of works performed by the ensembles included in the study. All appendices can be found at the following web address: https://bit.ly/3J1as5j

Although *Lincolnshire Posy* was performed most frequently across the 11 academic years or "seasons" included in the study, there was variation in the most performed works between each performance year. Out of the 11 years, *Lincolnshire Posy* was the most programmed work in four years. Grainger's *Colonial Song*, Scott McAllister's *Gone*, Holst's *First Suite in E-flat*, Paul Dooley's *Masks and Machines*, Bernstein's *Symphonic Dances from "West Side Story,"* Viet Cuong's *Bull's-Eye*, and Omar Thomas's *Come Sunday* were the most frequently programmed works in one year each.

Out of 945 individual composers, Percy Grainger was programmed most frequently with 251 performances of 21 pieces. The next most programmed composers were Leonard Bernstein with 180 performances of 18 pieces, Frank Ticheli with 149 performances of 29 pieces, John Mackey with 145 performances of 28 pieces, and David Maslanka with 138 performances of 32 pieces. See Appendix B for a complete list of composers and number of performances.

There were changes in the frequency of top-programmed composers from year to year. In the 2011–2012 academic year, for example, Percy Grainger was programmed the most with 21 performances, followed by Frank Ticheli (19), Aaron Copland (17), Leonard Bernstein (11), and John Mackey (11). Variation is shown compared to the final season included in the study from 2021–2022, where Grainger was programmed the most with 17 performances, followed by Omar Thomas (14), film composer John Williams (12), Viet Cuong (9), and Hindemith (9). Percy Grainger was the most performed composer in seven of the 11 years analyzed, Bernstein was most performed in 2 years, and Ticheli and Richard Strauss were most performed in one year

each. As seen in Appendix C, the top ten most programmed composers vary widely between each performance year.

I compared results from this study with previous research (Paul, 2011, 2012; Powell, 2009; Wacker & Silvey, 2016; Wiltshire et al., 2010) to compare the most frequently performed wind band works. Percy Grainger was the most performed composer across all previous studies and the current study; his *Lincolnshire Posy* was the most performed work. Frank Ticheli and Leonard Bernstein were the second or third most programmed composers across all studies except in Paul (2012) in which John Philip Sousa was programmed second most frequently in the BIG12.

Premieres of New Works

Between the 2011–2022 academic years, university ensembles in this study premiered 224 new works for wind band. The year with the most new works was 2017 with 33 new pieces premiered, followed by 2018 with 31 premieres. New works premiered include Pulitzer Prize-winner Julia Wolfe's *Zigzag* (2021), Han Lash's *In Pieces* (2022), David Maslanka's *Symphony No. 10* (2018), and John Mackey's *Wine-Dark Sea: Symphony for Band* (2014), which received 19 performances by Power Five ensembles from its 2014 premiere to the Spring of 2022. Appendix D includes a list of all pieces premiered by ensembles included in the study.

Works of Artistic Merit

In Towner (2011), evaluators determined 144 pieces for wind band were of serious artistic merit. Ensembles in the current study performed 115 of these works at least once. The five most performed pieces across all ensembles were included in Ostling (1978), Gilbert (1993), and Towner (2011), including Grainger's *Lincolnshire Posy* (51 performances), Hindemith's *Symphony in B-flat* (41), Holst's *First Suite in E-flat* (40), Grainger's *Colonial Song* (37), and Strauss's *Serenade in E-flat* (35). Other works frequently performed that were considered of merit by Towner but not Ostling or Gilbert included Maslanka's *Symphony No. 4* (28 performances), Henry Purcell's *Funeral Music for Queen Mary* transcribed by Steven Stucky (16), and John Corigliano's *Symphony No. 3, "Circus Maximus."* (17). Pieces considered to be in the core wind band repertoire (Battisti, 2002) and on Towner's list but not performed by ensembles in the current study included Leslie Bassett's *Designs, Images and Textures*, Oliver Messiaen's *Colors of the Celestial City*, and Husa's *Concerto for Percussion and Wind Ensemble*.

Works by Minoritized Composers

Of the 6,411 performances included in the study, 307 pieces (4.8%) were written by 75 different women composers and 427 pieces (6.7%) were written by 115 different racially minoritized composers. Two pieces were by White non-binary composers, and no pieces were composed by transgender or other gender minoritized composers. Out of the 307 pieces written by women, 40 (1.0%) were written by nine racially minoritized women categorized as Black, Asian, or Asian American, and no pieces were written by Latina/x, Hispanic, Native

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American, or Indigenous women composers. From the 427 pieces written by racially minoritized composers, 162 (37.9%) were composed by Asian or Asian American composers, 125 (29.3%) were by Black composers, and 140 (32.8%) were by Latino/a/x and/or Hispanic composers. No ensembles programmed music composed by Native American or Indigenous composers.

The proportion of pieces by gender and racially minoritized composers to those by cisgender White men grew between the 2011–2012 and 2021–2022 performance years. Of the 586 pieces performed in the 2011–2012 year, 51 (8.7%) were composed by 36 different women or racially minoritized composers. This ratio remained consistent, (i.e., below 10%) until the 2018–2019 performance year, when 103 (14.4%) of 713 works were written by 60 different minoritized composers. In the following years, the number of works by minoritized composers included 92 (18.2%) of 505 works by 49 composers from 2019–2020, 51 (22.6%) of 226 works by 32 composers from 2020–2021, and 122 (30.0%) of 406 works by 61 composers from 2021–2022. Further, ACC, BIG10, PAC-12, and SEC ensembles had between 12.2% and 21.9% of works by minoritized composers from 2018–2020 academic years, and between 22.6% and 42.6% from 2020–2022 academic years. The BIG12 ensembles included in this study had 10% or more pieces by minoritized composers in the 2019–2020 and 2021–2022 years (see Figure 1).

Figure 1

Pieces Written by Gender and/or Racially Minoritized Composers
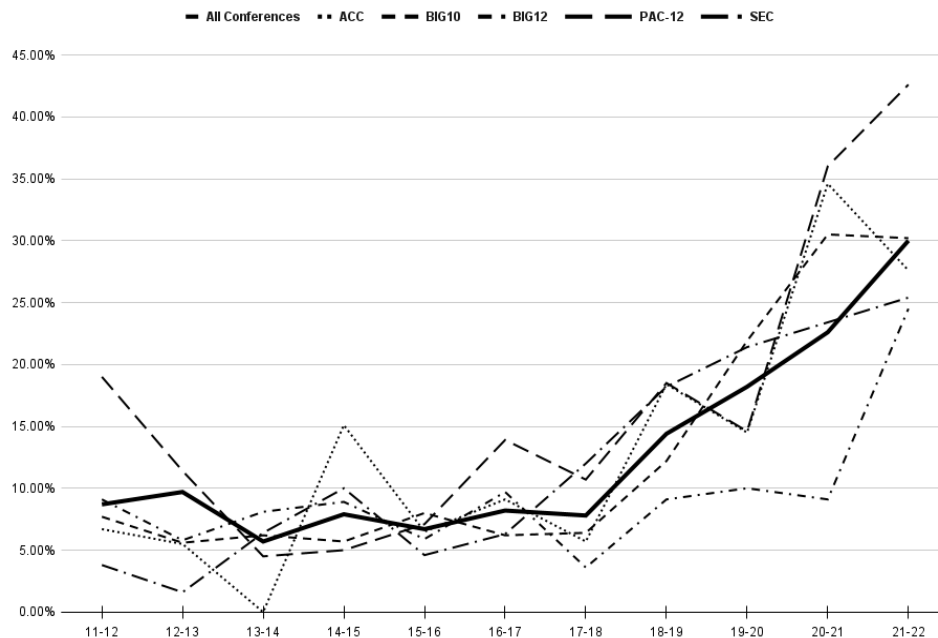
Discussion

Performance Frequency

In this study, Percy Grainger received 251 performances between the 2011–2022 academic years, substantially higher than the next most frequently performed composers including Leonard Bernstein (180 performances), Frank Ticheli (149), John Mackey (145), and David Maslanka (138). Although Grainger, Ticheli, and Bernstein consistently ranked in the top three most performed composers in previous studies, Mackey only appeared in the top ten most performed in the prior PAC-10 (ranked ninth; Paul, 2011) and SEC (ranked fifth; Wacker & Silvey, 2016) studies. Maslanka ranked in the top ten most performed composers in the PAC-12 (ranked tenth; Paul, 2011) and BIG12 (ranked seventh; Paul, 2012) studies.

Similar variations occur when analyzing the frequency of certain pieces programmed in prior studies compared to the current study. The five most programmed pieces from 2011–2022 academic years were Grainger's *Lincolnshire Posy*, Hindemith's *Symphony in B-flat*, Holst's *First Suite in E-flat*, Grainger's *Colonial Song*, and Strauss's *Serenade in E-flat, Op. 7*. Although these pieces occur in the top ten most programmed works from prior studies, only Paul's (2012) BIG12 study had *Lincolnshire Posy* as the most performed work. In Wacker and Silvey (2016), the most recent of these studies which analyzed SEC ensembles, several pieces occur on the top ten most performed list that do not appear in the same list of this study, including H. Owen Reed's *La Fiesta Mexicana*, Reynolds's transcription of Morten Lauridsen's *O Magnum Mysterium*, Morton Gould's *American Salute*, Florent Schmitt's *Dionysiaques*, and Aaron Copland's *The Promise of Living*. Pieces are also included in most performed works of previous studies prior to Wacker and Silvey (2016) that do not appear in the top performed works of the current study. The timespan of this study (11 academic years) and the increased number of conferences and ensembles included in analysis compared to previous studies could explain these variations in findings. Tables 1 through 5 compare each conference's most performed works and composers between the previous individual studies with the current study.

Works of Artistic Merit

Like previous studies (Paul, 2011, 2012; Powell, 2009; Wacker & Silvey, 2016; Wiltshire et al., 2010), ensembles in the current study frequently performed wind band works found by Ostling (1978), Gilbert (1993), and Towner (2011) to be of serious artistic merit. Works including Grainger's *Lincolnshire Posy*, Hindemith's *Symphony in B-flat*, and Holst's *First Suite in E-flat*, were considered to have artistic merit by Ostling, Gilbert, and Towner, and appear consistently in the most programmed works across the previous and current studies. Each of the top ten most performed pieces across conferences in each investigation are by celebrated composers and are continuously programmed by renowned wind band conductors. It is apparent that these pieces have stood the test of time (Reynolds, 1973) and have a solidified place in the core wind band repertoire. There are crucial implications in the lack of gender and/or racially minoritized

composers on these lists of works with artistic merit and how often these individuals are programmed compared to composers featured in Ostling, Gilbert, and Towner. As expanded upon in the proceeding section on future research implications, a replication and update to Towner (2011) may reveal more works written by gender and/or racially minoritized composers to be considered in the "core repertoire" by collegiate wind band conductors based on the increased performance frequency of music by these composers outlined in the current study.

Breadth of Programming

Power Five university wind bands included in this study had 6,411 performances (of individual pieces) during the 11 academic years examined which included 2,223 unique works, a majority of which only had a single performance ($n = 1,243$; 55.9%). The percentage of pieces performed more than once is higher than in Paul (2011, 26.6%; 2012, 31.3%), Powell (2009; 28.15%), Wacker and Silvey (2016; 36.3%), and Wiltshire et al. (18.3%), and the number of individual pieces ($n = 2,223$) is substantially higher than any previous study. These findings indicate that wind band conductors continue to program an extensive number of pieces and that many works are being added to the wind band repertoire. Ensembles also performed pieces written between 2010 and 2020 more than any other decade ($n = 1,482$; 23.1%), reinforcing a continuing focus on new works. Additionally, Power Five conference ensembles performed 4,944 (77.1%) original wind band works out of 6,411. This finding is consistent with Paul (2011, 70.9%; 2012, 68.9%) and Wacker and Silvey (2016; 70.6%), though lower than the results of Powell (2009; 88.1%). This inconsistency could be due to the performance years analyzed in Powell's study, ensemble ability, fluctuating director programming practices, or other extant factors.

In the 11 years analyzed for this study, Power Five conference ensembles premiered 224 new works for wind band, of which 85 (37.9%) had more than one performance. This number of new works is substantially higher than previous conference studies which included between 11 and 50 premieres. The reason for this increase is likely due to the period covered in this study, though it could possibly indicate an increase in the commissioning of new wind band works by university ensembles. Commissioning new pieces is crucial to expanding and diversifying the existing wind band repertoire while exposing performers and audiences to unique composer perspectives and compositional styles.

It is important to note that many of the new compositions were composed by prominent composers, which Battisti (2002) argued is important for the longevity of wind bands and its status as a legitimate ensemble. Composers who wrote new works during the period of this study included Pulitzer Prize winner Julia Wolfe, Grammy winner Mason Bates, and other celebrated contemporary composers like Augusta Read Thomas, Nico Muhly, and Han Lash. Such premieres may signal a trend among university wind bands, especially those with significant financial resources, of commissioning a wider array of composers that were previously thought to be inaccessible. Alongside these celebrated figures, many student

composers also had works commissioned and premiered by their respective university's top wind band, a sign that conductors are encouraging young composers to write for wind band in the early stages of their career.

Works by Minoritized Composers

In the seven academic years between 2011–2018, the average percentage of pieces programmed by gender or racially minoritized composers across all Power Five university ensembles was 7.5%. In the following four years, from 2018–2022, the average percentage was 21.9%, with the 2021–2022 academic year having a 30.1% average. Although these averages would be lower if I did not combine gender minoritized and racially minoritized composers, this four-year period marks a substantial development in equitable programming practices.

There are several potential explanations for this spike in the programming of works by minoritized composers. Diversity advocates created several prominent resources and organizations between 2017 and 2018, including the Diverse Composers of Wind Band Music database (Folk, 2017) and the And We Were Heard organization (2017). These resources and others were featured in presentations and clinics at several international conferences like The Midwest Clinic (Bushman et al., 2018; Croomes et al., 2021) which hosts thousands of wind band conductors annually. Prominent organizations, including The Midwest Clinic ("Programming Rules," 2019), also enacted new rules that require performing ensembles at their conferences to program works by minoritized composers. Additionally, social movements like Black Lives Matter (Hamilton, 2021) and #MeToo (Lonnert et al., 2019) became national calls to action to create more equitable and just environments for minoritized individuals, including in music education research. The trends in programming more works by minoritized composers shown in this data support a claim that college wind band directors are seeking works that reflect this sweeping era of social change.

Gender and racially minoritized composers are also being commissioned to write new pieces for wind bands more frequently. Omar Thomas, who wrote his first work for winds in 2015 (*Of Our New Day* Begun), was the second most programmed composer in the 2021–2022 year with 14 performances despite only having six pieces for wind band. His piece *Come Sunday* was the most performed work of the same year with eight performances and is the only piece by a minoritized composer with the most performances during an individual performance year. In an encouraging sign, the 2021–2022 period is the first occurrence of five or more minoritized composers in the top 20 most programmed composers for that year, which included Omar Thomas (14 performances), Viet Cuong (9), Carlos Simon (5), Anthony Barfield (4), Julie Giroux (4), Jennifer Higdon (4), Augusta Read Thomas (4), and Zhou Tian (4).

Although works like *Come Sunday* are recently composed and thus have not had the time to be considered canonical, these pieces could possibly be considered important contributions to the wind band repertoire based on their performance frequency and reception among directors,

students, and audiences (Croomes et al., 2021). The notoriety that pieces like *Come Sunday* or Viet Cuong's *Bull's-Eye* receive could possibly encourage other gender and/or racially minoritized composers to write new works for wind band.

Impact of the COVID-19 Pandemic

In March 2020, the COVID-19 pandemic had a substantial impact on university wind bands as institutions closed and class, rehearsals, and concerts ceased. Some ensembles included in this study resumed in-person rehearsals beginning in the Fall 2020 semester and these programs were still analyzed. Many ensembles, using modified face masks and bell covers among other mitigation methods, focused heavily on performing chamber wind band works, and that shift is illustrated in the pieces most frequently programmed during the 2020–2021 academic year. This list of most performed works includes chamber pieces like Viet Cuong's *Bull's-Eye* (4 performances), Richard Strauss's *Serenade in E-flat, Op. 7* (4), and Gordon Jacob's *Old Wine in New Bottles* (3). Although these pieces were performed in other years, they were not programmed with the same frequency compared to the 2020–2021 academic year.

Deaths of Significant Composers

During the years analyzed in this study, several significant wind band composers became deceased. The most apparent increase in programming frequency due to the composer becoming deceased followed the death of David Maslanka in August 2017. In the 2016–2017 academic year, Maslanka was the 15th most programmed composer with eight performances, but in the 2017–2018 academic year which proceeded his death, he tied with Leonard Bernstein as the most programmed composer with 28 performances. He was then the third most performed composer in the 2018–2019 (21 performances) and 2019–2020 (13 performances) academic years. Other influential wind band composers became deceased between the 2011–2022 academic years, including Michael Colgrass (d. 2019), Richard Rodney Bennett (d. 2012), W. Francis McBeth (d. 2012), and Karel Husa (d. 2016), but those deaths were not followed by any apparent spikes in programming frequency by the ensembles included in this study.

Conclusion

Limitations

There were some limitations in this study that could have impacted the results. One limitation was only including the top-auditioned wind band from each school analyzed in the study. This parameter was included due to previous studies having the same guidelines, but the results could drastically differ if all school wind band programs were utilized. Additionally, although 36 of 65 (55%) potential ensembles were included, a replication of this study with 100% of eligible ensembles factored into the analysis could produce different findings.

Implications and Actions

Even though conductors are programming and commissioning minoritized composers more frequently, especially in the years following 2018, there are still more ways to achieve equitable and representative programming. Though no current studies exist on the gender, racial, and ethnic demographic makeup of performers in university wind band programs, similar studies of high school students in music ensembles show that 40% were non-White and 60% were female (Elpus & Abril, 2019). In the current study, only 307 pieces out of 6,411 were composed by a woman (4.8%), with only 40 (1.0%) of those written by a racially minoritized woman. Although these numbers increased after 2018, they are still far from being representative of the diverse individuals that make up university wind bands and their audiences.

Additionally, several potential issues arise when advocating for increased representation of gender and/or racially minoritized composers on wind band programs. One example is demonstrated in the programming guidelines for ensembles performing at The Midwest Clinic, which states, "must…include at least one composition by a composer from a historically marginalized group such as but not limited to women, Indigenous/Native, Black/African-American, Hispanic/Latinx, Asian American, and/or Pacific Islander" ("Programming Rules, para. 7). While this requirement is a substantial move by a national music conference, it could also cause directors to simply pick a piece by a minoritized individual from an aforementioned database to "check the diversity box" (Bushman et al., 2018) and then not engage any further with that composer. This can be averted in different ways by collegiate wind conductors, including engaging minoritized composers in rehearsal or Q+A sessions via teleconferencing, in-person or virtual residencies, and recommending pieces by minoritized individuals to colleagues. Further, collegiate wind band conductors who teach undergraduate music education courses or graduate seminars can plan sessions that expose students to (a) tools to find music by minoritized composers, like organizations and databases, and (b) responsible uses of said tools and ways to engage further with minoritized composers beyond "checking the box."

Another potential issue that can occur is navigating the potential underexposure of minoritized composers. While the previous examples of Omar Thomas's *Come Sunday* and Viet Cuong's *Bull's-Eye* highlight successful composers with frequent performances of their work, all minoritized composers do not achieve similar levels of notoriety due to a variety of factors. One of the most significant struggles for minoritized composers is having to self-publish their works instead of having their music available through a larger publishing company. This can cause difficulty when many conductors rely on established publishers to recommend new works for programming consideration. Several organizations are attempting to alleviate this challenge. The …And We Were Heard project (2017) pairs minoritized composers with collegiate wind bands and other ensembles to record new works, giving these individuals a chance to include reference recordings where their music is available. Several individuals have also started independent publishing companies that focus on wind band music by minoritized composers, including Sean Murphy's Murphy Music Press (2012) and Randall Standridge's RSM Publications (2022).

Conductors can utilize these and other sources when searching for new music to program, recommend minoritized composers and independent publishers to other collegiate directors, and including these resources in their undergraduate and graduate course materials.

The issues outlined above display that programming gender and/or racially minoritized composers is a multi-pronged issue that requires a conscious engagement by the conductor. Some basic steps that can have significant impacts include consulting organizations and initiatives that focus on and advocate for minoritized composers, giving and seeking recommendations for works to and from colleagues, corresponding and engaging with minoritized composers when programming their works, and including materials in undergraduate and graduate courses that promote these programming practices. For conductors and ensembles with substantial financial resources, inviting minoritized composers to rehearsal sessions and residencies can have an unmeasurable impact on their careers and provide a meaningful experience for ensemble members. Overall, collegiate wind band conductors should strive to go beyond "checking a box" when seeking to program minoritized composers and should engage in impactful practices including but not limited to the suggestions above.

Future Study

There are several potential avenues for further research focused on university wind band programming. To date, researchers have only examined university ensembles from five of 11 division one college conferences. The current study could be expanded to include universities from smaller college conferences, adding a more diverse set of ensemble sizes and skill levels. In this and previous studies, researchers only analyzed the top auditioned wind band at each school, and unique programming trends could emerge if second (and/or third, fourth, etc.) auditioned and non-auditioned ensembles were surveyed as well. Additional studies could be beneficial in identifying wind band works of serious artistic merit, up to a large-scale update of Towner (2011). The lack of gender and/or racially minoritized composers on these lists of works categorized as possessing high artistic merit by Ostling, Gilbert, and Towner demonstrates the need for the expansion of evaluation criteria that extends beyond aesthetic values that have traditionally been connected to the music of White, male composers. A future study could examine if the gender, race, and/or ethnicity of university wind band conductors impacted their programming of and engagement with minoritized composers. Finally, qualitative studies could also elaborate on the influence of cultural movements, like #MeToo and Black Lives Matter, on programming philosophies of college band directors and repertoire that has emerged as a result of those movements. These continued investigations into wind band repertoire and programming practices are beneficial for determining which pieces and composers are being programmed most frequently, new trends in programming established and contemporary works, and how to make programming more inclusive and representative for ensemble members, students, and audiences.

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Folk

Table 1

Most Frequently Performed Composers and Pieces in the ACC Conference, Previous (Wiltshire et al, 2010) and Current Study

Rank	Composer		Piece	
	Previous	Current	Previous	Current
1	Grainger (75)	Grainger (29)	Irish Tune from County Derry (15)	First Suite in E-flat (7)
2	Ticheli (37)	Bernstein (23)	Lincolnshire Posy (15)	Give Us This Day (5)
3	Bach (28)	Mackey (22)	Symphony in B-flat (13)	Irish Tune from County Derry (5)
4	Sousa (27)	Holst (20)	First Suite in E-flat (10)	Suite from "MASS" (5)
5	Holst (25)	Maslanka (14)	O Magnum Mysterium (10)	Lincolnshire Posy (5)
6	Hindemith (24)	Copland (13)	Russian Christmas Music (9)	Danzón No. 2 (4)
7	Bernstein (24)	Ticheli (12)	Festive Overture (9)	Hammersmith: Prelude and Scherzo (4)
8	Shostakovich (22)	O'Toole (11)	Blue Shades (9)	Colonial Song (4)
9	Reed, A. (19)	Bates (10)	Elsa's Procession to the Cathedral (8)	Overture to "Candide" (4)
10	Grantham (18) Whitacre (18)	Grantham (9) Bryant (9)	Four Scottish Dances (7) Second Suite in F (7) Suite Francaise (7) October (7)	March, Op. 99 (4) Mothership (4) Children's March (4) Aurora Awakes (4) Festive Overture (4)

Table 2

Most Frequently Performed Composers and Pieces in the BIG10 Conference, Previous (Powell, 2009) and Current Study

Rank	Composer		Piece	
	Previous	Current	Previous	Current
1	Grainger (60)	Grainger (97)	Colonial Song (10)	Symphony in B-flat (21)
2	Ticheli (27)	Bernstein (59)	Lincolnshire Posy (10)	Lincolnshire Posy (20)
3	Bernstein (25)	Bach (56)	Hammersmith: Prelude and Scherzo (10)	Emblems (14)
4	Holst (21)	Hindemith (53)	O Magnum Mysterium (10)	Music for Prague 1968 (13)
5	Strauss (19)	Copland (51)	"Profanation" from Symphony No. 1 (9)	Symphonies of Wind Instruments (13)
6	Hindemith (18)	Mackey (46)	Sinfonietta (8)	Colonial Song (13)
7	Mozart (18)	Maslanka (40)	Music for Prague 1968 (7)	"Profanation" from Symphony No. 1 (13)
8	Copland (17)	Ticheli (39)	Symphony in B-flat (7)	Concerto for Wind Ensemble (13)
9	Bach (15)	Strauss (39)	Dionysiaques (7)	Symphony No. 4 (13)
10	Daugherty (15) Sousa (15)	Holst (35)	Festive Overture (7)	Festive Overture (13) Dionysiaques (13) First Suite in E-flat (13)

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Table 3

Most Frequently Performed Composers and Pieces in the BIG12 Conference, Previous (Paul, 2012) and Current Study

Rank	Composer		Piece	
	Previous	Current	Previous	Current
1	Grainger (83)	Grainger (44)	Lincolnshire Posy (14)	Molly on the Shore (9)
2	Sousa (47)	Ticheli (43)	"Profanation" from Symphony No. 1 (13)	Lincolnshire Posy (9)
3	Ticheli (45)	Maslanka (32)	O Magnum Mysterium (13)	Serenade in E-flat, Op. 7 (8)
4	Bernstein (43)	Bernstein (25)	Elsa's Procession to the Cathedral (12)	Blue Shades (8)
5	Grantham (42)	Sousa (23)	Overture to "Candide" (11)	Overture to "Candide" (8)
6	Daugherty (36)	Mackey (21)	Colonial Song (10)	First Suite in E-flat (7)
7	Maslanka (34)	Bryant (17)	Serenade in E-flat, Op. 7 (10)	"Profanation" from Symphony No. 1 (6)
8	Hindemith (32)	Grantham (16)	Sinfonietta (9)	Symphony in B-flat (6)
9	Copland (30)	Strauss (16)	Shepherd's Hey (9)	Symphony No. 4 (6)
10	Strauss (30)	Daugherty (15) Barnes (15)	Symphonic Metamorphosis (9) Symphony in B-flat (9) Dionysiaques (9)	Sinfonietta (6) Firefly (6) Theme and Variations, Op. 43a (6)

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Table 4

Most Frequently Performed Composers and Pieces in the PAC-12 Conference, Previous (Paul, 2011) and Current Study

Rank	Composer		Piece	
	Previous	Current	Previous	Current
1	Grainger (47)	Grainger (32)	First Suite in E-flat (13)	Octet (7)
2	Ticheli (34)	Maslanka (30)	Blue Shades (13)	Symphonic Dances from "West Side Story" (6)
3	Holst (28)	Bernstein (29)	Irish Tune from County Derry (7)	Lincolnshire Posy (6)
4	Bernstein (27)	Ticheli (24)	Lincolnshire Posy (7)	Toccata Marziale (5)
5	Copland (24)	Mackey (22)	Symphony in B-flat (7)	Colonial Song (5)
6	Sousa (19)	Sousa (16)	October (7)	Serenade in E-flat, Op. 7 (5)
7	Persichetti (16)	Stravinsky (12)	Masque (6)	Gone (5)
8	Bach (15)	Holst (12)	Hammersmith: Prelude and Scherzo (6)	Four Scottish Dances, Op. 59 (5)
9	Mackey (15)	Bryant (11)	Redline Tango (6)	Overture to "Candide" (5)
10	Maslanka (15)	Nelson (11) Vaughan Williams (11) Sparke (11) Hindemith (11)	Suite Francaise (6) Fiesta del Pacifico (6)	O Magnum Mysterium (4) Blue Shades (4) First Suite in E-flat (4)

Folk

Table 5

Most Frequently Performed Composers and Pieces in the SEC Conference, Previous (Wacker & Silvey, 2016) and Current Study

Rank	Composer		Piece	
	Previous	Current	Previous	Current
1	Grainger (83)	Grainger (49)	First Suite in E-flat (13)	Lincolnshire Posy (11)
2	Bernstein (46)	Bernstein (45)	Blue Shades (13)	Colonial Song (10)
3	Ticheli (43)	Mackey (34)	Irish Tune from County Derry (7)	Festive Overture (10)
4	Sousa (43)	Ticheli (31)	Lincolnshire Posy (7)	First Suite in E-flat (9)
5	Mackey (42)	Holst (25)	Symphony in B-flat (7)	Symphonic Dances from "West Side Story" (8)
6	Copland (41)	Gershwin (23)	October (7)	Theme and Variations, Op. 43a (8)
7	Holst (36)	Grantham (23)	Masque (6)	J'ai été au bal (8)
8	Hindemith (32)	Maslanka (22)	Hammersmith: Prelude and Scherzo (6)	Overture to "Candide" (8)
9	Grantham (29)	Bach (21)	Redline Tango (6)	Serenade in E-flat, Op. 7 (8)
10	Daugherty (28)	Copland (20)	Suite Francaise (6) Fiesta del Pacifico (6)	Symphony No. 6 for Band, Op. 69 (8) Slava! (8)

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JASON P. CUMBERLEDGE, Ph.D., is Director of Athletic Bands and Assistant Professor of Performance Studies at the University of Louisville, where he directs all aspects of the athletic band program, including the Cardinal Marching Band and Cardinal Pep Band. His duties also include directing the university concert band and teaching courses in music education, including marching band techniques, conducting, and drill writing. Currently, he also conducts the Brass Band of Louisville, including recent performances at the Kentucky Music Educators Association State Convention and the Great American Brass Band Festival. Dr. Cumberledge is active as a guest conductor, adjudicator, clinician, drill writer, and music arranger. His music arrangements have been performed at the middle school, high school, and collegiate levels nationwide. He has presented research at various conferences, including the NAfME Biennial National Conference, CBDNA National Conference, CBDNA Athletic Band Symposium, and Desert Skies Symposium on Research in Music Education. His published articles have appeared in *The Bulletin of the Council for Research in Music Education, Journal of Band Research, Update: Applications of Research in Music Education, Research Studies in Music Education, Contributions to Music Education, The Instrumentalist*, and various other journals.

CHRISTIAN FOLK, M.M.E., is a music educator and conductor currently based in College Park, Maryland. Christian taught for several years in North Carolina and South Carolina private and public schools before beginning their graduate studies in music education. A fierce advocate for diversity in wind band programming, he created databases of pieces for wind band written by gender and/or racially minoritized composers which were featured in presentations at The Midwest Clinic and The College Band Directors National Association conference. His research interests include music education at the intersections of museum education, music education and disability studies, disabled and queer pedagogies, wind band programming, and minimalist music, specifically the works of Philip Glass. They have presented at conferences of The National Association for Music Education, the Society for Music Teacher Education, the College Band Directors National Association, the South Carolina Music Educators Association, and the Society for Minimalist Music. Christian has a bachelor's degree in music education from Winthrop University, a master's in music education from The University of South Carolina, and is currently a Ph.D. candidate in music education at The University of Maryland. He enjoys visiting museums as much as possible with his wife, Christy, and playing with their pets Linny, Sirius, Kingsley, and Remus.