

GRADE 12 STUDENTS' INTENTIONS TO PERSIST IN MUSIC BEYOND GRADUATION:
APPLICATION OF THE EXPECTANCY-VALUE THEORY OF MOTIVATION

by

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DISSERTATION ABSTRACT

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Abstract

Seminal music education accords, including the Housewright and Tanglewood Symposia, call on music educators to support lifelong engagement with music. Citing challenges with retention in music programs and persistence in music across the life cycle, music education researchers have employed a range of methodologies and theoretical frameworks to investigate individuals' motivations to persist in music. While transition periods (e.g., middle school to high school, high school to college, etc.) have garnered significant interest, the transition from grade 12 to life beyond graduation remains insufficiently researched. The purpose of this mixed-methods study was to examine grade 12 music students' transition to life beyond high school (e.g., higher education, work force, military, etc.) and their motivation to persist in music performance experiences through the framework of expectancy-value theory of motivation. The following questions were addressed: (1) To what extent do grade 12 music performance students value continued involvement in music performance experiences beyond high school graduation? (2) To what extent do grade 12 music performance students hold positive views of expectancy in music performance experiences beyond graduation? (3) Which of the constructs discussed in the

expectancy-value theory of motivation (i.e., expectancy, intrinsic value, affirmation value, utility value, cost) are salient predictors of grade 12 music performance students' intentions to persist in music beyond high school graduation? Using modified instruments from existing expectancy-value literature, grade 12 music students in the United States were surveyed to examine perceptions of expectancy of success in music performance experiences and value of participating in music performance experiences beyond high school. A multiple linear regression model indicated that intrinsic value and utility value were salient predictors of individuals' intentions to persist in music beyond graduation. These findings contribute to discourse on supporting persistence in music during the significant transition to life beyond high school. Furthermore, the representation of students on a variety of trajectories (e.g., four-year institution, community college, trade school, military, workforce, gap year, etc.) provided insight into diverse conceptualizations of how music fits into individuals' lives beyond high school.

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I. Introduction

In 2004, roughly 21% of United States high school seniors—621,895 students—participated in band, choir, or orchestra (Elpus and Abril, 2011). During the transition period from high school to life beyond high school graduation, grade 12 music students are tasked (either explicitly or implicitly depending on context) with deciding whether to persist or desist in music-related activities. Following graduation, the transition to the next chapter of life (e.g., higher education, work force, etc.) can be an exciting, turbulent, enriching, and challenging time (Blustein et al., 2000; Clark, 2005; Geller & Greenberg, 2009; Terenzini, 1994). Researchers and theorists have examined how high school graduates, nearing the end of adolescence (Sacks, 2003), undergo identity development processes (Blustein et al., 2000; Jones & Abes, 2013; Samuolis, 2001) as they encounter and navigate new freedoms, ideas, social situations, academic challenges, and experimentation (Dworkin, 2005). This period of social, academic, and/or vocational transition represents a major life upheaval. This turbulent period is the backdrop for grade 12 students as they consider the involvement of music in their lives beyond graduation.

Recognizing that music enriches participants' lives across the life cycle, formative music education initiatives have issued calls for music educators to support lifelong engagement with music. The Housewright Symposium's Housewright Declaration not only called for meaningful music instruction to be made available throughout life, but for music educators to actively identify and remove barriers that impede the aforementioned goals (Madsen, 2020). The Housewright Symposium echoed earlier calls from the Tanglewood Symposium for supporting lifelong music engagement (Choate, 1968). The symposium report highlighted the potential to reframe music as not only a personal pursuit, but a social process that can serve individuals, collectives, communities, and through these networks, society at large. Demonstrating

prescience, participants in the symposium recognized the potential for music to serve as a mechanism for meaningful interpersonal engagement in an increasingly digital age. Furthermore, the commission called for a flexible approach in order to serve adults who are seeking to extend their current skills or explore new areas. Music educators are stewards of musical culture and by creating opportunities for public engagement in music, they can support the transmission of cultural knowledge in society, deemed by the report authors as “the larger school” (Choate, 1968, p. 115).

National organizations have likewise discussed the role of music in society at large as a means to enrich lives. In 1970, following a year of deliberation, the Music Educators National Conference (MENC) released a comprehensive set of goals. MENC’s National Executive Board proclaimed that this effort represented the first time the organization had released a comprehensive agenda to serve as a guiding document for the organization of 60,000 music educators. The missive included the goal of involving people of all ages in music. To accomplish this goal, the board advocated for promoting music classes for college students outside of the concentration of music and expanding access to music education for adults both in and out of school. Furthermore, the board called for partnering with community music institutions to increase the scope of musical education for individuals of all ages (Andrews, 1970).

The ensuing time has been a backdrop for quantitative, qualitative, and philosophical inquiries into the scope, role, and prevalence of music education in American society. Jellison (2020) synthesized prior research to present the benefits and trends regarding music participation throughout the life cycle. Jellison noted that while 84% of respondents to a national survey considered music an important part of life, the percentage of households where at least one individual above the age of five played an instrument decreased from 51% in 1978 to 38% in

1997. The researcher also discussed attrition, highlighting that while 25% of people over the age of 12 actively played an instrument, 28% of people surveyed were former instrumentalists. Jellison proposed that the concept of transition is key to meaningful lifelong music participation. Developing strong foundational musical skills will not only serve students throughout their academic career but will allow them to transfer the concepts and skills to a musical life beyond school. Hence, the focus on transition as the cornerstone of music education refers not only to skills which function in multiple musical environments over the space of time, but also to the different settings and stages of life in which music takes place. Music is inherently social (Elliott, 2014), and the proclamation that music education supports the development of social competence is a concept that has stood the test of time, from classical treatises on music and *pyschē* (Pelosi, 2010) to in vogue discussion of social-emotional learning in the music classroom (e.g., Edgar et al., 2017; Küpana, 2015).

Carter (2020) suggested that rather than asking “how” all people can participate in meaningful music participation, the optimum question is how to provide music education experiences so that all people will “seek” out music participation experiences following their music education in school (p. 129). The disconnect between school music and the music that adults encounter in everyday life, Carter posited, contributes to the attrition seen in music education. Carter maintains that until a more representative sample of the music that exists in American society is presented in listening, performing, and responding experiences in school, the disconnect between music for future-adults (i.e., Carter’s label for children and adolescents) and adults will remain. Reimer discussed music literacy in a “multimusical society,” and the corresponding responsibilities for educators (1993, p. 22). Reimer tasked music educators with

providing students with access to the wide range of music found in contemporary American society in addition to America's musical heritage.

The impact of federal legislation on music education has garnered attention within the discourse on music throughout the life cycle, perhaps in part due to the potential for students to have formative experiences in scholastic music experiences. Greisz (2020) discussed the notable lack of attention paid to music education in seminal federal education legislation over the last 50 years, including the Elementary and Secondary Education Act of 1965 and No Child Left Behind. However, Greisz noted that this trend of excluding the arts in legislative initiatives was resisted through the explicit recognition of the potential for the arts to enrich the educational experiences of students in recent legislation, including the Every Child Succeeds Act and the Guarantee Access to Arts and Music Education Act of 2019. State-level legislation perhaps more directly impacts the scope and sequence of music education. For example, the Texas Education Code stipulates that students must participate in the arts at the elementary level and earn arts credits at the secondary level (Texas Music Educators Association, 2022).

Discourse on content in primary and secondary music education is relevant to the discussion of lifelong music participation due to the complex relation of one's experiences in the cognitive, affective, and psychomotor domains in the context of music education and motivation to pursue further music education experiences. Citing concerns with retention in music programs and persistence across the life cycle, music education researchers have employed a range of methodologies and theoretical frameworks to investigate individuals' motivations to persist in music both within programs and during periods of transition to engage, serve, and retain students more effectively. Researchers have examined student motivation and the intention to persist both within respective K–12 (or internationally equivalent) school levels (e.g., Corenblum &

Marshall, 1998; Freer & Evans, 2019; Freer & Evans, 2018; Kinney, 2010; Yoo, 2021) and during transitions from one K–12 school level to another (e.g., Freer, 2012; Gibson, 2016; Ruybalid, 2016). Individuals' motivation and intention to persist in music has likewise received considerable attention at the higher education level (e.g., Delano & Royse, 1987; Sichivitsa, 2007; Sichivitsa, 2003) and through subsequent life phases as researchers and practitioners seek to create opportunities for lifelong involvement in music (Cavitt, 2005; Kuntz, 2011).

In an effort to gain insight into motivation in music-related activities, music education researchers have examined sample populations through the lens of several models of motivation including the hierarchical model of intrinsic and extrinsic motivation (Yoo, 2021), self-determination theory (Freer & Evans, 2018), Tinto's model of academic and social integration (Sichivitsa, 2003), socio-educational model of music motivation (MacIntyre et al., 2012), and expectancy-value theory (Burak, 2014; McCormick & McPherson, 2007; McPherson & O'Neill, 2010). Expectancy-value theory (Wigfield & Eccles, 2000; Wigfield, 1994), a prominent theory of motivation, has been employed to gain insight into motivation in a variety of areas, including STEM in higher education (Appianing & Van Eck, 2018), elementary physical education (Xiang et al. 2003), unemployment (Feather, 1992), and healthcare (De Simone, 2015).

Academic and social transition phases throughout life have been noted as pivotal periods regarding individuals' persistence in music. Lamont (2011) discussed the transitions for students from one academic level to another within a particular institution (e.g., from K–12 elementary to middle school, etc.) as particularly fraught moments for continued musical involvement. Transitions between institutions—such as matriculating as a higher education student—can impart additional academic and social demands. Additionally, the student's perceived discrepancy between their musical abilities and the presumed demands of musical involvement

can result in students self-selecting out of musical involvement. Following the subsequent departure from higher education, barriers to continued musical involvement in the next phase of life can include time cost, opportunity cost, inability to find opportunities to participate in the desired musical setting, and lack of motivation. The researcher discussed these transitions within the context of Erikson's (1982) posited life phases and the tension between polar constructs at each subsequent developmental stage. Erikson suggested that students transitioning from adolescence to young adulthood (Sawyer et al., 2018) are reckoning with identity vs. role confusion and subsequently intimacy vs. isolation. The intense upheaval of social and academic patterns and expectations, paired with the sociocognitive developmental conflicts, serves as the backdrop for decisions about continued musical involvement and perhaps provides insight into desistance during the transition to college and beyond. Elpus (2018) found that participation in school-based music education correlated with participation in the arts and increased music involvement as adults (after controlling for covariation). However, the path from music participation in school to involvement throughout transition points and as an adult remains ambiguous.

While there has indeed been significant attention paid to persistence across the life cycle, there seems to be a gap in the literature regarding the examination of the specific transition of grade 12 music students to life beyond graduation through the lens of the expectancy-value theory of motivation. Furthermore, this research will include what Blustein et al. (2002) referred to as “the forgotten half”—individuals who directly enter the workforce following high school graduation (p. 311). The inclusion of this population is of particular importance in light of the recognition that among individuals 18 to 24 years of age who recently graduated high school

44.8%—16.7 million people—were not enrolled in college (U.S. Bureau of Labor Statistics, 2021).

This examination of Grade 12 students' intentions to persist in music beyond high school graduation will be preceded by a review of the following topics: involvement and persistence in K–12 music (not associated with specific theoretical frameworks), involvement and persistence in music in higher education (not associated with specific theoretical frameworks), involvement and persistence in music beyond K–12 and outside of higher education (e.g., workforce, adulthood, retirement), psychosocial adolescent development and the transition to college/workforce, application of theories of motivation in music (outside of expectancy-value theory), expectancy-value theory of motivation general literature and application outside of music, and expectancy-value theory of motivation in music. This study has the potential to inform the discourse on supporting lifelong musicianship. The transition from high school to the next chapter of life (i.e., higher education, workforce, armed forces, etc.) is often characterized by dramatic changes to social and academic routines and expectations. While individuals are navigating these newfound freedoms and responsibilities, they are simultaneously undergoing cognitive and physical developments while making decisions about careers, family considerations, and other decisions that will impact their adult lives for presumably decades to come. This dynamic backdrop perhaps complicates investigations into musical persistence during this transition.

II. Review of Literature

Involvement and Persistence in K–12 Music

General/Across K–12

Interest in involvement in music throughout the lifecycle has led to a focus on examining persistence both within and between music programs and/or life stages. Significant effort has been applied to examining high school music participation and the subsequent transition to higher education. Possible reasons for this scrutiny include recognition of developmental frameworks—including Erikson’s life stage theory (Maree, 2021)—and the observation of large rates of attrition during this transitory period (Mantie & Dorfman, 2014). Researchers have also made efforts to create demographic profiles of K–12 music students in part to provide a foundation for examining music involvement and persistence. Elpus and Abril (2011) analyzed data from the 2004 follow-up of the 2002 Education Longitudinal study conducted by the National Center for Educational Statistics to create a demographic description of senior high school students in the United States who were involved in music ensemble. They found that 621,895 high school seniors—representing 21% of all high school seniors—participated in band, choir, and/or orchestra. Examining specific regions of the country, they found that the Midwest had the highest percentage of seniors participating in music ensembles (25.7%) and the West had the lowest (17.7%). 61% of the music students were females while 50% of seniors overall were female. Students from families where there were two parents living at home with the student represented 79.4% of music students. White students were found to be statistically significantly overrepresented. Black students were found to be overrepresented to a non statistically significant degree. Hispanic students were found to be significantly underrepresented. Students whose parents had earned a high school diploma or less were statistically significantly

underrepresented while students whose parents had earned an advanced degree were statistically significantly overrepresented. Elpus and Abril recommended that music education researchers should examine the gap in participation amongst different racial groups.

Citing a lack of consistency of the findings of more than 35 years of research into attrition and retention in K–12 music programs, Hash (2022) conducted an overview of attrition and retention research through the lens of the MUSICSM Model of Academic Motivation (Parkes et al., 2017). This model amalgamated the constructs of empowerment, usefulness, success, interest, and caring (e.g., relationship with instructors) to explain individuals' motivation in academic subjects. While this model has been applied to music education (Parkes et al., 2017), it was created as a general academic model. Hash included 42 studies in the final review and organized findings around three themes: practical considerations, personal attitudes, and the influence of others. Several trends emerged relating to the practical consideration of scheduling. These trends include the findings that block scheduling correlates to a decrease in musical involvement and that class or activity scheduling issues are often cited by respondents as a contributing factor to the decision to desist in music. Hash concluded that while certain motivational factors (e.g., attitude) can be addressed by music instructors, other factors (e.g., scheduling and instrument availability) are often outside the control of the instructor. Therefore, administrative support is essential to developing and maintaining instrumental music programs. The researcher recommended surveying students who desist from instrumental music to identify and remove barriers to persistence in music education. Within the literature reviewed, several disparate findings in the areas of scheduling (e.g., starting beginning band students in 5th or 6th grade), instrument rental costs, and social factors perhaps suggest the need for further research into these areas.

Kinney (2019) extended prior research to examine the decision to sign up and maintain involvement in elective music classes among students in urban middle and high schools. The decisions to enroll and persist in elective band, choir, and string classes were regressed on socioeconomic status, academic achievement, sex, ethnicity, family structure (i.e., number of parents/guardians at home), and mobility (i.e., student transience). The multinomial logistic regression model included data from students in 6th grade ($n = 12,104$), 8th grade ($n = 11,679$), and 10th grade ($n = 13,581$). Students who participated in more than one ensemble were removed from the model due to accounting for less than one percent per grade level.

Kinney found that academic achievement is a significant predictor of students' decisions to enroll and persist in elective instrumental music classes across grades six, eight, and 10. Enrollment in elective choir music classes correlated with reading achievement in grades six, eight, and 10., but did not significantly correlate with math achievement in grades six or eight. A negative correlation between choir enrollment and math scores was observed. Contrary to Kinney's (2010) earlier findings, students from higher socioeconomic status families were more likely to enroll in band and string classes. Kinney's earlier analysis suggests that, among middle school students in urban environments, socioeconomic status was not a significant predictor of enrollment in band classes. However, in the 2019 study, Kinney demonstrated that socioeconomic status was not a significant predictor of string class enrollment for the grades examined. Kinney's finding that socioeconomic status diversity was better represented in choir paralleled findings from his previous study. Regarding mobility, students who experienced higher levels of transience were less likely to participate in instrumental ensemble. Hispanic students and males were less likely to participate in elective band classes. However, mobility did not significantly predict choir involvement. Kinney concluded that music educators should focus

on providing supports for students from lower socioeconomic status, students impacted by student transience, and males to support equitable participation in elective music classes. (See **Theories of Motivation Applied to Music** for discussion of involvement and persistence in K–12 pertaining to specific theories of motivation.)

Involvement and Persistence in Middle School

The transition from compulsory elementary school music education to elective middle school music education has garnered attention as a vital period in supporting musical involvement throughout K–12 education. Ruybalid (2016) examined students' motivation to continue in music using the theory of planned behavior as a framework. The constructs of attitude, subjective norms (i.e., perceived social pressure), perceived behavioral control, parental attitudes, parental expectations, and peer influences were identified as predictor variables. Among the sample population—278 elementary school student participants in southern Louisiana—statistically significant correlations were found between intention to continue and each of the identified predictor variables. Student attitude was the most salient predictor of intention to continue in music. Ruybalid concluded that it would be prudent to expand the examination of intention to continue in elective music over large geographic areas to see what trends are stable.

Cook (2013) undertook an examination of orchestra attrition following the transition to middle school. Sixth grade students ($N = 20$) who had previously completed three years of orchestra in elementary school were invited to respond to a survey which collected information regarding their perceptions of elementary school orchestra, conception of middle school orchestra, school schedule considerations, parental support, and a demographic information that was treated categorically (e.g., gender, instrument, race, socioeconomic status, academic

achievement, etc.). A preference to enroll in other elective classes was a major driver of attrition, accounting for 75% of discontinuation in orchestra. However, 80% of respondents joined other music electives (i.e., band or choir). An emerging trend was a dislike of practicing at home. Cook found that gender, instrument, race, socioeconomic status, and academic achievement were not significant predictors of attrition. Due to the small sample size, a conservative reading of the findings is warranted.

Factors outside of what might be traditionally considered the realm of music have also garnered significant attention. Kinney (2010) examined band enrollment and persistence of middle school in an urban environment. Treating academic achievement, socioeconomic status, ethnicity, family structure, and gender as independent variables, Kinney used logarithmic regression analysis to identify the most salient predictors of enrollment and persistence in band. Of the independent variables identified, the only significant factors relating to the decision to enroll in band were academic achievement and number of parents living at home. Results indicate that while students of different socioeconomic status enrolled in band at similar rates, students from higher socioeconomic status families persisted at a higher rate than their peers from lower socioeconomic status families. Females, students from two-parent homes, and students demonstrating high academic achievement were also more likely to continue involvement in band. Students living in two-parent households and students from higher socioeconomic status families were more likely to persist in band. Socioeconomic status was a more salient predictor of persistence in band than musical ability. Kinney concluded that persistence in music warrants additional examination.

Involvement and Persistence in High School

Due to differences in unique social, academic, and musical factors that impact distinct musical disciplines, researchers have often chosen to examine individually the different musical paths (e.g., band, orchestra, choir, etc.) available to students in the K–12 system. To examine the transition of band students from middle school to high school, Gibson (2016) employed a mixed method design to examine factors relating to students' decisions regarding whether to persist in band in school. Gibson found that of the 282 8th grade students who responded to the researcher-designed questionnaire, 66% indicated that they planned to continue their involvement in band in high school. Participants reported that they harbored concerns about involvement in high school band relating to time cost, social considerations, and repertoire. Gibson found that mandatory marching band requirements negatively impacted some students' intent to continue with band in high school. Students reported that they wanted to be involved in an activity with their friends and were influenced by parents and teachers.

Strickland (2010) employed a qualitative method to investigate the factors relating to two 8th graders' respective decisions to persist in band and desist from band, and the decision-making process of one 8th grader who, at the time of the interview, was unsure of future band participation (the researcher noted in the finished thesis that the student had decided not to continue in band). Strickland focused the investigation on each individual's locus of control and its impact on intention to continue. The researcher found that the student who decided to desist from band largely exhibited an external locus of control. Both the student planning to continue in band and the student unsure of future participation conceptualized the locus of control internally to a greater extent. In the case of the student who was unsure (and eventually discontinued participation), he cited a desire to focus his efforts and time on soccer. Strickland concluded that providing appropriate challenges in the band, and the associated supports to scaffold for success,

will better situate individuals to internalize an internal locus of control which might lead to behaviors to fulfill potential outcomes in the music classroom.

Significant attention has also been paid to the choral discipline. Freer (2012) posited that social disturbance was one of the main reasons for attrition during the transition from middle school to high school for boys involved in chorus. While middle school instructors encourage middle school students to persist in chorus in high school, Freer contended that an opportunity for the middle school boys to sing and interact with the high school students and instructor in the high school environment provides better support for continued involvement. Effective instructors will support the students' transition by addressing the potential value of involvement in high school chorus regarding knowledge, skills, interests, and social desires. Self-identified social perceptions and self-esteem might also play a role in the transition. Social pressures can influence boys' decisions to continue involvement and an aversion to perceived aspects of femininity (i.e., involvement in chorus) is one reason that boys might discontinue their participation in choir. Freer concluded that the transition between middle school and high school is best thought of as a time of connection between two life stages that should be supported from both sides, rather than a disjunction between disparate programs.

Researchers have also investigated factors related to persistence in music among the incoming high school band students who chose to persist in music following the transition from middle school (Corenblum and Marshall, 1998). The researchers built a model that analyzed the impact of musical and extramusical factors on musical persistence in students ($N = 253$) in their first year of high school (grade nine) in Winnipeg, Canada. Corenblum and Marshall constructed a measure that assessed the following areas, which they identified as predictor variables: socioeconomic level, grades and band teacher rating, parental attitudes, student attitudes, teacher

attitudes, and musical interests outside of class. Socioeconomic level, parental support, and teacher support were significant predictors of intention to continue in band. Corenblum and Marshall reasoned that socioeconomic status was, in practicality, a proxy measure of attitudes, norms, and values regarding education. Contrary to the expectations of the researchers, grades in band did not significantly predict intention to continue. The researchers suggested that the field would benefit from future research which examines the congruity between students' perceived parental support and parents self-reported support for their child's musical participation.

Involvement and Persistence in Music in Higher Education (Studies not associated with specific theoretical frameworks of motivation)

Transition from High School to Higher Education

Mountford's (1978) longitudinal inquiry provided unique perspectives into persistence in music beyond high school by collecting data from participants while they were in high school and after the transition to college. High school participants responded to the Musical Experience and Attitude Inventory (MEAI) and a subsequent College Questionnaire. The sample ($N = 75$) consisted of students from 19 public high schools in a county in Ohio. Mountford observed that 21 of the 75 respondents (28%) participated in their college bands. Of the college band participants, 5 (24%) were music majors. Upon analysis, the following predictors emerged as statistically significant factors (non-exhaustive): (1) students made the decision to persist while still in high school; (2) students valued the social enrichment of participating in an ensemble; (3) students' high school peers had encouraged them to join college ensembles upon matriculation. Mountford concluded that as a preponderance of students decided whether to persist in music beyond graduation during high school, music educators should focus on supporting continued musical engagement among high school music participants.

Although the transition from high school to college for instrumentalists is an area of interest for music educators seeking to support lifelong musicianship, Delano and Royse (1987) noted that there had only been five studies that examined this transition at the time of their study. To examine this transition, the researchers surveyed students ($n = 131$) at a Kent State University who had expressed musical interest on their American College Testing (ACT) subject exams but were not enrolled in music ensembles in higher education. The study also included freshman students ($n = 48$) who participated in instrumental ensembles. Participants were asked to respond to prompts (using a Likert-type scale) and short answer questions regarding factors influencing participation or nonparticipation. The results suggest that access to an instrument on campus was not a significant factor impacting participation. Individuals who were involved in music in higher education tended to have more positive feelings towards their high school director as a person and teacher. The researchers also found a correlation between encouragement from high school directors and musical participation in higher education. Delano and Royse concluded that it seems likely that students entering higher education make the decision whether to participate in music in higher education before matriculating, and that increased attention should be placed on supporting and encouraging music students before they transition to college.

Within Higher Education

Qualitative methods have provided insight into the experiences of non music major participants in non-audition ensembles. Isbell and Stanley (2011) provided a qualitative examination of the experiences of non music majors ($N = 100$) in collegiate non audition concert bands. All participants were asked to respond to several short answer questions regarding the impact of participation on their college experience and factors which contributed to their continued participation beyond high school music. Twenty participants were selected for follow-

up interviews. Students indicated that they participated in the non audition concert band (i.e., “campus band”) because of the potential to have aesthetic experience, the enjoyment of playing music, improving or maintaining musical skills, and reasons relating to the accessibility of the ensemble. The researchers noted that participants' most memorable experiences were not necessarily positive experiences. Many non music majors placed intrinsic value on participating in music and appreciate the accessibility, openness, and relaxed atmosphere afforded by non-audition music performance experiences.

Research in participation among non music majors has also been compelled by the recognition that emerging professionals in areas outside of music will contribute to the discourse on the role of music in society. Snyder (2021) conducted a qualitative study into factors impacting participation and attrition, finding that the primary motivator of music ensemble participation in higher education is the intrinsic value of music making. However, social value was also a frequently cited motivator. Perceived time cost and scheduling conflicts inhibited participation significantly more than students' self-assessment of musical ability. Snyder concluded that additional research into supporting continued involvement of music across the transition from higher education to college is warranted. The focus on non music major participation has also spurred examinations of attrition and participation using crowd-sourced research methodologies.

To examine attrition in music, Mantie and Dorfman (2014) collaborated with research assistants across the United States to implement “on the street” data collection on college campuses. Participants ($N = 814$) responded to a 90-second interview consisting of up to 8 questions (depending on applicable skip logic). One hundred forty-seven additional individuals declined to participate. The researchers found a musical involvement attrition rate of 75–80%

among individuals who had participated in music in high school. Sixty percent of participants reported musical involvement before entering college. Time cost was the most frequently cited reason for nonparticipation. Intrinsic value was the most frequently cited reason for continued involvement in music. The researchers concluded that the examination of the impact of supporting musical agency is warranted for its potential to support lifelong musical involvement.

Interest in persistence in music following the transition from high school to higher education has also led to the examination of recruitment efficacy. Cumberledge (2020) explored factors impacting students' decisions to participate in a college marching band and the extent to which social media impacted that decision. Of the 158 participants, the results indicated that the largest driver of high school band participation was enjoyment of music (68.4%) followed by friends and future career considerations (8.2% respectively). Instagram was the most popular social media platform among participants, with 89.9% maintaining accounts. The results suggest that face-to-face conversations with college directors were the most impactful form of communication, followed by YouTube videos, email contact from college director, and high school visits from a college director. Paper recruitment posters were found to be least impactful. Cumberledge suggested that colleges might consider focusing their recruiting efforts on the digital realm and consider forgoing recruitment posters.

Music education researchers have also focused their efforts on comparing the transition to college for high school music participants and non-participants. Elpus (2022) drew upon the High School Longitudinal Study of 2009 to explore the transition from high school to college among American high school students ($N = 21,440$). Specifically, Elpus compared high school music participants and non-participants in the areas of application rates, selectivity of schools attended, financial aid received (e.g., scholarships, grants, etc.), and selection of major. The

results indicated statistically similar rates of completing high school, matriculating into a college, receiving financial aid, and majoring in stem between high school music participants and non-participants. However, high school music participants were more likely to major in an arts-related field than their peers. Elpus concluded that music participation in high school does not disadvantage students in the college process.

Persistence Among Non Music Majors. In part resulting from calls to support music education for individuals across the life cycle (Madsen, 2020), significant attention has fallen on supporting musical involvement in higher education for students not seeking a degree in music. Non-audition concert and jazz ensembles for instrumentalists and vocals, marching bands, world music ensembles, music appreciation, and music theory classes cater to students pursuing a wide variety of majors.

Faber (2010) framed the transition of high school music participants to college by acknowledging that, for non music majors, music morphed from a curricular activity in high school to an extracurricular activity in college. Faber examined the impact of musical and extramusical factors on the non music majors' decisions to persist in vocal and/or instrumental music in college. Participants ($N = 162$) included freshman college students in Indiana who participated in music ensembles in high school. The results indicate that ownership of a musical instrument did not significantly impact decisions to persist among music. However, ensemble participants were more confident in their ability to locate (e.g., rent, borrow, etc.) an instrument. Faber found that the timing of the decision to participate in college ensembles was not consistent and suggested that the students made the decision during the continuum from junior year of high school to arriving on campus. Students who chose to persist in music in college were more likely to be confident that their musical skills were an appropriate match for the college ensemble than

individuals who decided not to persist. Faber concluded that longitudinal research examining musical persistence among non music majors in college is warranted.

The challenges of supporting musical persistence during the transition from high school to higher education have likewise garnered attention. Moder (2018) examined factors impacting whether to participate in college bands among non music majors. Participants in this study included individuals ($N = 2,933$) from 37 states in the United States. It is perhaps notable that 56% of respondents were involved in more than one type of band. Moder found that love/enjoyment of music was the most cited factor impacting individuals' decision to participate in collegiate bands. Other factors which supported involvement included a positive high school band experience, social value of music participation, pride derived from participating in an ensemble, and perceived quality of the ensemble. Students involved in concert bands and jazz bands most often cited love/enjoyment of music as a main driver for participation, while students involved in athletic bands (e.g., pep band, marching band) cited social value as a primary driver for participation. Moder concluded that further research into supporting lifelong musicianship seems prudent.

Qualitative Examinations. Qualitative methodologies have provided nuanced and personal information regarding individuals' decision to persist in music. Mantie's (2018) qualitative examination surveyed the experiences, motivations, and plans of non music major participants ($N = 12$) in a college marching band. This study was conducted to gain insight into persistence in music in higher education and prospects for continued involvement after college graduation. The findings suggest that although some of students involved in the study had plans for continuing musical involvement after graduation from college, many were unsure of how their lives might involve music after graduation. Mantie found that strong parental support did

not have a dramatic impact on individuals' decisions to participate in the college marching band. Respondents indicated that the time cost of participating in the ensemble was significant, but the experience was worth the cost. Most of the participants acknowledged the positive social impact of being involved in marching band. Several of the participants were interested in continuing their involvement in music after graduation, but had only vague notions of possible music outlets. Mantie concluded that including opportunities to learn about music activities available to individuals after graduation can support involvement in music throughout the life cycle.

Quantitative Examinations. To better understand the nuances involved in college students' involvement in choir as non-majors, Sichivitsa (2007) used path analysis to examine correlations of intention to continue involvement in music performance ensembles (as non-majors) with the following predictor variables: parental support of music, previous musical experience, self-concept in music, teachers and peer support, academic and social integration in music classes, and value of music. The model explained 42% of the variance. Sichivitsa concluded that students with increased parental involvement and support developed more positive self-concepts in music performance, felt stronger connections to choir involvement, and placed a higher value on music. The most salient direct predictor of intention to persist in music was individuals' value of music. Sichivitsa concluded that replication of the study among more diverse populations—racially, geographically, socioeconomically, etc.—could increase confidence in the potential for generalizability.

The relationship of musical aptitude and musical motivation has also garnered attention. Asmus and Harrison (1990) examined the relationship between musical aptitude and musical motivation among 187 non music major undergraduate students who were enrolled in a music appreciation class that fulfilled general education requirements. Participants responded to a

musical aptitude instrument that assessed rhythmic aptitude, tonal aptitude, and musical sensitivity. The musical sensitivity subscale was deemed unreliable and was eliminated from analysis. Motivating factors (i.e., effort, musical ability, background, classroom environment, and affect for music) and magnitude of motivation were assessed for each participant. The results demonstrate that affect for music was the construct most closely related with musical motivation. Asmus and Harrison concluded that future research should focus on examining factors within the music learning environment that impact motivational outcomes. However, Karma (2007) demonstrated that shortfalls regarding ecological validity due to the homogenous nature of musical aptitude tests should perhaps prompt consideration.

Psychosocial Adolescent Development and the Transition to College/Workforce

Transition from Adolescent to Adulthood

While adolescence is an observable phase, the chronological demarcation from adolescence to adulthood is often difficult to pinpoint. Sacks (2003) defined adolescence as beginning at “the onset of physiologically normal puberty and [ending] when an adult identity and behaviour [sic] are accepted” (p. 577). While this period usually coincides with individuals’ development from the ages of 10 to 19, the researcher recognized that physiological and social considerations have the potential impact the exact timeline and associated ages. Sacks concluded that a functional determination of the demarcation from adolescence to adulthood is best based on biopsychosocial factors.

The U.S. Bureau of Labor Statistics (2021) reported on the college enrollment and work activity of recent high school and college graduates. Among recent high school graduates (ages 16–24), 54.9% of men and 69.5% of women were enrolled in college. Of individuals in this age

group, 16.7 million (44.8%) were not enrolled in college. Of individuals aged 16–24 not enrolled in college, 79.6% participated in the work force.

Clark (2005) framed a qualitative examination of the means by which college students navigate their first year in higher education by acknowledging the multifaceted and complex nature of the transition. Participants included individuals ($N = 8$) who commuted to an urban, public four-year institution. The research collection phase consisted of 10 60–90-minute semi-structured interviews. Clark found that individuals responded to both negative and positive challenges (e.g., academics, interpersonal relationships, extracurriculars, etc.) by strategizing to confront each specific obstacle. Students reported a focus on adapting to the change intrinsic to the cyclical nature of higher education (i.e., course rotation, semesters/terms, etc.), recognizing that challenges present opportunities to grow (e.g., taking advantage of academic supports), and developing positive study habits (e.g., creating a study schedule). In light of the finding that students, at times, seemed to have difficulty developing and implementing strategies in response to challenges, Clark concluded that institutions can support the transition from high school to college by actively supporting behavioral, social, and academic strategizing.

Researchers have applied theoretical and experimental lenses to discuss identity development during the college period before seeking to elaborate on existing theories by examining the role of intersectionality, conflict theory, and queer theory in changing identities in the college environment (Jones and Abes, 2013). Their work built upon seminal works in the field of identity development, including Erickson's psychosocial theory, Piaget's theory of cognitive development, and Chickering's discussion of college student identity. Jones and Abes discuss the suitability of applying the Model of Multiple Dimensions of Identity to recognize the multifaceted identities held by college students. However, the researchers also recognized the

difficulty in outlining specific procedures to implement respective theories based on the nuanced and personal nature of individuals' identities. Jones and Abes concluded that recognizing multiple dimensions of identity among college students can lead to programs and supports for marginalized communities.

Social development theories can provide insight into intrinsic and extrinsic factors that impact individuals during the transition to life after high school. Erikson (1968) explored the concept of identity, its formation and change over the course of the life cycle, and tensions involved in its development. Erikson drew upon case studies and larger sociological trends to support the theory that the most prominent identity tension for adolescents is the balance of identity vs. identity confusion. The physiological changes that accompany this transitory period from childhood to adulthood coincide with adolescents' fixation on how they are perceived by others. Erikson noted that in situations when an adolescent feels that their ability to express themselves is comprised by an outside force, rebellion becomes more likely. Indeed, some individuals "overidentify" (p. 132) to the point that their individuality seems to become indistinguishable from the clique with which they identify. The text also discusses psychosocial aspects that inform the well- vs. maladjustment to various stages of life over the life cycle.

In review of his previous work, Erikson (1982) discussed conceptual through lines and responded to critiques of his psychosocial analysis of the life cycle. Erikson provided definitions of terms to clarify his discussion of concepts (e.g., hope, fidelity) central to his larger analysis of the formation and development of identity throughout the course of an individual's life. A central theme of Erikson's discussion of the transition from adolescence to adulthood is the recognition of the struggle for identity that characterizes adolescence. Erickson theorized that an individual's ability or inability to commit to roles as an adult is dependent on the development of a sense of

identity, as opposed to identity confusion. Existential identity (i.e., a lasting identity of the conscious “I”) versus psychosocial identity (i.e., malleable sense of self that changes over time and is informed by psychological and social influences) is considered in the context of the transitory period of adolescence. Erickson concluded that identity is malleable and “emerges as an evolving configuration” (p. 74) influenced by environmental, physiological, and social factors.

For many adolescents, the transition to college serves as a backdrop for the first time that they are living apart from parents and family. Samuolis et al. (2001) examined identity development of college students and their attachment to parents to provide insight into developmental processes undergone during the college years. Furthermore, parental modeling seems to be impactful in terms of the enacted behaviors of children during their transition from adolescence to adulthood. Participants ($N = 100$) were first year college students, ages 17 to 20, living away from home (e.g., campus housing, non-familial off-campus housing). Participants responded to the Continued Attachment Scale: Parent version (Berman et al., 1994) for each parent. The measure assessed how often the child thought of their mother or father (respectively), how often they tried to contact their mother or father (respectively), to what extent did they miss their mother or father (respectively), etc. Bivariate correlations demonstrated an (anticipated) relation of attachment to mother and attachment to father. The constructs of the child’s commitment (i.e., connection to a stable identity) and exploration of identity were regressed on gender of participant, attachment to mother, and attachment to father; the model explained 12% of the variance of the construct of commitment and 12% of the construct of exploration. The findings indicate that parental attachment was a more salient predictor of identity development, in the areas of commitment and exploration, for females as opposed to males. Samuolis et al.

concluded that college counselors and other college staff can implement the findings by supporting an ongoing connection of students and their parents.

School to Work Transition

A significant sector of graduating high school students do not matriculate into institutions of higher education, but rather enter the workforce. Blustein et al. (2002) qualitatively examined the school to work transitions among individuals who worked in what the researchers deemed low-skill jobs. Participants ($N = 20$) included 10 men and 10 women who were grouped into either a high or low socioeconomic cohort to examine the impact of socioeconomic status on individuals' attitudes. The researchers organized the findings in five categories: functions outcomes of work, manifestation of self-concept, educational resources (e.g., motivation, engagement with school) and barriers (e.g., lack of motivation, disengagement with school), career path and planning, and parental support. Distinct trends between the high and low socioeconomic cohorts emerged. The researchers found that individuals from the high socioeconomic cohort were more likely to consider their current position in relation to future vocational goals. Participants in the high socioeconomic cohort were also more likely to consider positive psychological impacts of their job (e.g., the satisfaction of a job well done), while participants from the lower socioeconomic group were more likely to view their job "in terms of survival" (p. 315). The researchers found that participants from both cohorts experienced similar levels of internal educational resources but dissimilar levels of external educational resources. For example, students from the lower socioeconomic status cohort reported the necessity of dedicating time to earning money to put toward family bills and lack of parental support navigating the college process. Blustein et al. concluded that marked contrasts exist in the school to work transitions between individuals in disparate socioeconomic realms. The researchers

suggest that this work contributes to the foundation of literature that can support future research on the relation of social class and occupation.

Involvement in Music through the Life Cycle

Promotion of music in school and society

The 1967 Tanglewood Symposium sought to bring together educators, performing artists, scholars, researchers, and music industry representatives to examine the value systems shaping music education, establish common goals by which to chart the music in an “emerging age” (Choate, 1968, p. iii), and identify critical issues relating to music education. The resulting declaration indicated that music educators agreed that “Music of all periods, styles, forms, and cultures belongs in the curriculum” (p. 139), both public schools and institutions of higher learning should support music participation across the life cycle, music educators should strive to general interest and enthusiasm for music in their communities. Participants articulated that these goals should guide efforts in music education as the discipline approached the new millennium.

In the years following the Tanglewood Symposium, The GO Project, enacted by the Music Educators National Conference, rearticulated comprehensive goals and objectives pertinent to music education. In part, this project was driven by recognition that the relevance of music curricula content was essential to the development of music education in the United States. The project identified the following goals for music educators: (1) Develop and support “[c]omprehensive music programs in all schools,” (2) “[Involve] persons of all ages in learning music,” (3) Support the “[q]uality preparation of teachers,” and (4) “Use of the most effective techniques and resources in music instruction” (Andrews, 1970, p. 24). To advance towards these goals, the organization advocated for promoting rigorous and engaging music experiences for non music majors in higher education and expanding access to music education experiences

for adults. The project suggested that ongoing effort is required to support a “musically enlightened public” (p. 26).

Reminiscent of the Tanglewood Symposium, the Housewright Symposium on the Future of Music Education sought to convene music educators to chart a course for American music education over the next 20 years. Prominent music educators were invited to provide commentary on select topics from different perspectives. The accompanying Housewright Declaration distilled the discussions and philosophical inquiries into 12 overarching goals. The declaration proclaimed that all individuals deserve the best music experiences possible, and that all music should be represented in music curricula. Additionally, participants concluded that supporting access to careers in music education was paramount, that expanding paths to licensure could support representation of diverse styles of music in the K–12 environment. The declaration also maintains that quality music education experiences should be provided for individuals throughout the life cycle. Now in its second edition, this document has contributed to the discourse on the aims and scope of music education.

Recent Examinations of the Function of Music in School and Society

More recent efforts have focused on high school students' music experiences both within and outside of the school day. Kuntz (2011) undertook a qualitative investigation of the music experiences of high school music students during the school day and the approaches band directors used to support lifelong music involvement. Participants from an urban school, a suburban school, and rural school ($N = 14$) participated in a focus group interview facilitated by the researcher. Several themes emerged relating to the students' music experiences, including music opportunities during the school day, music outside of the school day, music as an emotional outlet, and goals of lifelong music participation. The interview revealed that many

students were unaware that community bands existed to support community music after high school. Some students reported that music was their favorite part of their school day.

Respondents indicated that they planned to maintain their involvement in music in diverse ways past high school, including leveraging musical skills in a different career (i.e., filmography), writing music, pursuing a career as a music teacher, and performing in a college ensemble. Kuntz concluded that gaining insight into the musical activities of high school students will better allow music instructors to support musical involvement and direct students to music opportunities outside of the school day.

The relation of school-based music education and subsequent engagement in the arts as an adult spurred Elpus's (2018) statistical analysis of pertinent data collected in the 2012 Survey of Public Participation in the Arts conducted by the National Endowment for the Arts. After controlling for factors that correlate with music participation in schools (e.g., socioeconomic status, sex, race/ethnicity), Elpus found that students involved in music appreciation classes in school were almost twice as likely to attend live classical or opera performances as adults. As adults, school music performance participants were roughly three and a half times more likely to play an instrument compared to nonparticipants. Participation in music in school (i.e., the predictor variable) was represented as a dichotomous variable. Consequently, further studies which account for duration and intensity of school-based music involvement has the potential to illuminate the relation between the aforementioned factors and participation in the arts as an adult.

Community bands have also received significant attention from music education researchers. Cavitt (2005) undertook a mixed method study to create a profile of individuals ($N = 401$) who participated in community bands. Members of 10 community bands located in Texas,

Michigan, and California were invited to respond to the researcher-developed questionnaire of 33 items which contained checklist, ranking, and short-answer responses. Cavitt found that the mean age of participants was 40.15 years. Forty-nine percent of respondents indicated they were in professional vocations, 20% indicated involvement in “white collar” occupations, 7.6% indicated involvement in “blue collar” occupations, and 23% indicated “other” (e.g., students, parents taking full time care of children). Ninety-three percent of community band participants had been involved in band from the ages of 13–17. Participants indicated a slight decline in overall band involvement from ages 19–24 (68.6%) before rising to 70.8% among individuals ages 25 or older. The average duration of involvement in community bands for individuals was 8.5 years. Cavitt’s findings indicate that participants deemed “enjoyment, fun, and social interaction” (p. 54) as the most important factors motivating their involvement in community bands. When asked how band teachers might support lifelong involvement, participants suggested that music teachers provide diverse music making experiences and focus on providing non contest performance opportunities.

Researchers have included both music participants and non-participants, from various stages across the life cycle, to study factors related to music involvement, and how the factors impacted motivation and attitudes at various stages of life. Krause et al. (2021) recognized that exposing trends related to music participation and attrition in individuals across the lifecycle had the potential to support lifelong musical involvement. Drawing on a data set from a larger study on musical participation, the researchers included individuals ($N = 383$) ages 17–85 who resided in Australia. Among these individuals, 55.6% actively participated in music activities, while 44.4% were not involved in music activities. Participants were informed that music activities included playing an instrument, music performance, and music production. The results indicated

a negative relation between peer music involvement in childhood and current music participation. The researchers concluded that this finding should encourage music educators to promote music activities to individuals who did not participate in music during childhood. The researchers also found a correlation between music involvement and perceived psychological quality of life among participants. Age, gender, and personality were not significant predictors of musical involvement. Krause et al. concluded that further research into the role of music facilitators in supporting musical involvement would benefit individuals access to music activities across the life cycle.

Mantie et al. (2021) analyzed approaches to music education that supported individual's lifelong engagement with music. Music educators can provide a foundation for sustained musical involvement by facilitating the development of social connections and learner autonomy in the music classroom. The researcher situated leisure music (i.e., participating in musical activities during one's free time) as a pursuit that has the potential to provide social, cognitive, affective, and psychomotor benefit to adults as they age. Mantie posited that aging adults can find meaning in music after, for example, they have retired from working or have fewer family responsibilities. Community music opportunities are essential for lifelong engagement to allow both individuals with and without formal music training to access hands-on music experiences. In addition to making opportunities for individuals available, the authors assert that reframing leisure as a source of meaning, rather than a frivolous diversion from meaningful activities, is essential to supporting lifelong engagement.

Music education catered towards adults can most effectively engage this population by supporting adult development and learning processes, creativity, and intergeneration connections (Myers, 1995). Rather than being a period of stasis, adulthood is the context for sustained change

impacted by environmental, social, economic, and educational factors. Myers argued that acknowledging adult learner characteristics positions music educators to better engage adult learners. The researcher suggested that adult music education—a largely, if not entirely, voluntary endeavor—can best serve learners by creating a collaborative, reflective environment which fosters mutual respect and supports self-directed learning. Supporting intergenerational engagement benefits individuals in a socioeconomic model in which individuals from different generations can be vying for finite resources. Myers concluded that institutions of learning (e.g., universities, secondary schools, etc.) can support music education through the life cycle by reimagining music education as a continuum for all ages, rather than the current focus on adult music education as an auxiliary program. Neurological examinations of the transition period from adolescence to adulthood perhaps provide insight into the challenge of engaging adult learners. Brain reactivity to rewards is more pronounced in adolescents compared to adults (Institute of Medicine and National Research Council, 2013). While brain elasticity remains a prominent neurological feature that supports learning, perhaps decreased brain reactivity to rewards impacts the neurological processes relating to aesthetic experiences. The aesthetic experience, viewed from the lens of subjective task value, perhaps has the potential to impact intrinsic value, which in turn might impact an individual's motivation to pursue a task.

An interest in involvement in the arts on a societal level has led to periodic evaluations on a national level. The National Endowment for the Arts (2019) worked with Activate Research, Inc. to examine national trends regarding adult participation in the arts. The analysts found that in 2017, of Americans aged 18 and older, 74% of respondents consumed artistic content via electronic media, 54% attended artistic or cultural events, 53% created or performed art, 17% pursued artistic learning informally, and 9.5% pursued artistic learning formally. Forty-two

percent of adults attended a live music event, 30% created music, and 3% participated in a music class. Individuals in areas considered non-metropolitan were less likely to attend live music events or take music classes. The analysts suggested that future research should focus on factors related to motivation in the arts, and barriers that prevent participation.

Individuals with disabilities

In 2016, 26% of American adults—61 million people—reported a disability. Cognitive disabilities were the second most prevalent category of disability, after mobility disabilities, and impacted 10.8% of adults (Okoro, 2018). Adamek and Darrow (2012) examined the potential for music education to help prepare individuals with disabilities to live independent lives (to the greatest extent possible depending on the specific circumstances). Noting that social skills and self-determination support independence as individuals with disabilities transition from school to adulthood, Adamek and Darrow propose that embedding social skill development within all areas of education, including music, is essential. These social skills that positively impact lifelong wellbeing include assertiveness, creativity, flexibility, and problem solving. Adamek and Darrow concluded that music educators can better prepare students with disabilities for life after graduation by carefully structuring learning activities to support the development of skills relating to self-determination.

Citing an interest in the impact of music experiences for adults with severe learning disabilities, Pavlicevic et al. (2014) conducted focus groups consisting of the families of the participants and professionals (e.g., speech therapist, occupational therapist, learning support assistant) involved in the music classes. The researchers proposed that the success of these long-term therapeutic music experiences should be assessed by examining gains in psychosocial constructs (e.g., confidence, self-esteem, etc.), rather than developmental change. Family

respondents discussed the role of the music experiences to fulfill social needs for their child with severe learning disabilities. The data also indicated that participation in the long-term therapeutic music experiences had the added benefit of helping to connect families and caregivers who were able to support one another and decrease isolation. The researchers concluded that music classes for individuals with disabilities have the potential to support the development of “musical-social pathways” that support the psychosocial wellbeing of not only participants, but also their families (p. 17).

Theories of Motivation Applied to Music

Theory of Planned Behavior

Researchers have leveraged a variety of theories of motivation to shed light on behaviors in music environments. Yoo (2020) utilized the theory of planned behavior as a theoretical framework of motivation to examine persistence in music among non music majors. Yoo extended the theory of planned behavior framework by including the construct of value of music. Participants ($N = 200$) responded to an online questionnaire that measured attitude, subjective norms (i.e., social influences), perceived behavioral control (i.e., self-efficacy), and value of music. The instrument utilized a seven-point Likert-type scale. Yoo found that a positive attitude toward music was the more salient predictor of intention to persist in music, followed by individuals' value of music. As students progressed through college, they became less influenced by subjective norms. Yoo concluded that expanding research to include intentions to persist in more expansive musical realms (e.g., music appreciation, music theory, recording, ethnomusicology, etc.) would provide further insight into supporting musical involvement across the life cycle.

Hierarchical Model of Intrinsic and Extrinsic Motivation

The hierarchical model of intrinsic and extrinsic motivation provides a lens with which to examine motivation on three distinct levels: the situational level (e.g., specific scenarios), contextual level (e.g., specific environments), and global level (e.g., across multiple environments). Yoo (2021) employed the hierarchical model of intrinsic and extrinsic motivation to examine students' intention to persist in music within high school. The researcher studied the impact of social and learning factors mediated by the teacher (e.g., structure of learning activities, defined expectations, social environment, etc.), psychosocial needs, and types of motivation (e.g., intrinsic motivation, extrinsic motivation) on persistence in music outcomes. The findings indicated that student perception of teacher interpersonal involvement correlated with intention to persist in music. Yoo also noted a strong correlation between student affect in music and intention to continue. There were no statistically significant differences between males and females within the model. As this study focused on the contextual level of the hierarchical model of intrinsic and extrinsic motivation, Yoo concluded that additional research that simultaneously examined the situational and global level is warranted.

Self-Determination Theory

Recognizing that the elective nature of music in high school presents a challenge for music educators facing attrition in their programs, Freer and Evans (2019) extended their previous research and focused specifically on high school music. They applied structural equation modeling to ascertain the extent to which the constructs identified in self-determination theory predicted continued enrollment in high school music classes. Self-determination theory posits that autonomy, competence, and relatedness are the driving psychological factors that impact motivation (Deci & Ryan, 2012). Freer and Evans posited that assessing both students'

needs regarding autonomy, competence, and relatedness, and students' satisfaction regarding autonomy, competence, and relatedness, would allow them to predict intention to continue. To measure students' needs, Freer and Evans modified the Basic Psychological Needs Satisfaction and Frustration Scale to assess autonomy, competence, and relatedness in the music classroom. Participants responded to four prompts for each construct. To measure students' satisfaction in each of the three areas, Freer and Evans utilized three subscales: an abbreviated version of the Learning Climate Questionnaire and two researcher-created measures. Ultimately, Freer and Evans found that participants' psychological needs satisfaction was an effective predictor of intention to continue. They also found that students' grades (classified as achievement by the researchers), were a poor predictor of intention to continue in music when compared with psychological needs satisfaction. Freer and Evans concluded that music instructors should seek to support student autonomy, competence, and relatedness in order to support continued involvement in music.

Socio-Educational Model

Recognizing parallels between language acquisition and music learning, MacIntyre et al. (2012) modified Gardner's socio-educational model of language acquisition to examine motivation to learn music among high school band students in 9th through 12th grade. The researchers administered the Attitude and Motivation Test Battery before fitting participants' ($N = 107$) responses to the socio-educational model. The model regressed motivation on parental encouragement, teacher-induced learning environment (e.g., clarity of feedback, social environment, etc.), and peer support. The researchers deviated from the socio-educational model in that they did not include ability beliefs in the model. The results indicated that the construct of integratedness (i.e., interest in participating in the specific discipline) and attitude toward the

learning situation significantly correlated with motivation. MacIntyre et al. concluded that future research which expands assessment to include more varied measures of achievement might lend further insight into individuals' decision to persist in music.

Tinto Model of Institutional Departure

Tinto's model of institutional departure posited that an individuals' motivation to persist is impacted by the formal and informal integration into social contexts. Sichivitsa (2003) applied Tinto's model of institutional departure to model persistence in college choir participation. Participants ($N = 154$) were music majors (14.7%) and non majors (85.3%) who responded to a researcher-developed instrument that assessed parental support in music, participants' attitude on previous music experiences, ability beliefs, and academic and social integration of music. Choir members specified their intentions to continue music involvement formally (e.g., music classes and school ensembles, etc.) and informally (e.g., community ensembles, informal instruction, etc.). The model accounted for 50% of the variance of intention to persist in music. The value of music and social integration were the most salient predictors of intention to persist in choir. Sichivitsa concluded that future research that delves into high-attrition phases of life would benefit the ability of music educators to support lifelong musicianship.

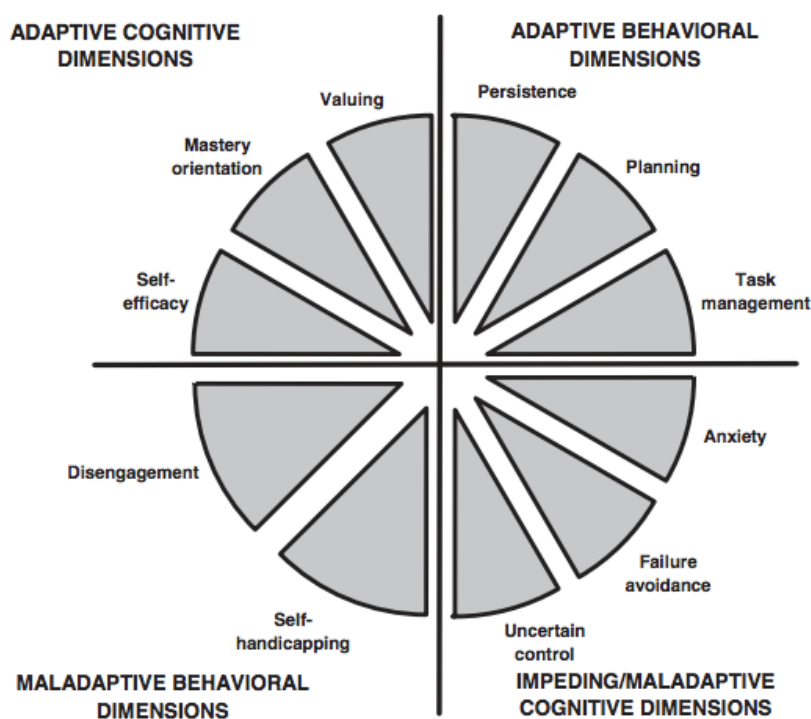
Motivation and Engagement Wheel Model

Martin's examination of motivation in music resulted from the desire to compare motivation and engagement across different disciplines and contexts. Undertaking an integrative approach, Martin (2008a) investigated the degree to which factors related to motivation and engagement were consistent across disciplines and developmental levels using the Motivation and Engagement Scale (Liem & Martin, 2012). The researcher modified the instrument to create a suite of measures appropriate for specific contexts and developmental levels. The instrument

purported to assess four higher order dimensions of motivation and engagement through 11 sub-constructs (see Figure 1). The measure relied on self-reporting from participants. Martin (2008a) collected data from samples representing elementary school students, high school students, college/university students, individuals in the workforce (consisting of primary and secondary school teachers), high school and university level musicians, high school sports participants, and parents and personnel from schools. All respondents resided in Australia. Confirmatory factor analysis demonstrated that constructs related to motivation and engagement (e.g., self-efficacy, mastery orientation, self-handicapping) remained relatively stable across disciplines and contexts.

Figure 1

Higher Order Dimensions and Sub-Constructs



Martin's subsequent study sought to validate the Motivation and Engagement Scale of motivation and engagement in individuals across the "academic life span" (2009, p. 794). The

discussion of the relative stability of constructs relating to motivation and engagement across grade levels included the recognition of unique developmental processes and social pressures both within grade levels and during the transition between grade levels. The finding that motivation and engagement declines from elementary school to middle school corroborated earlier findings (Wigfield et al., 1991). Furthermore, the data demonstrated that university level students were, overall, more engaged and motivated than their high school peers. Perhaps this is, in part, explained by students who self-select out of the academic track after high school. Martin concluded that the reliance on self-report measures represents a limitation for the current study and posited that researchers might contribute to this area by collecting data from parents and teachers regarding motivation and engagement.

Martin cited developmental parallels between the realms of sports and music when discussing the impetus to examine the two areas in tandem. The researcher noted that, in both realms, the development of “high-order skills” required sustained effort, grit, and appropriate intrapersonal and interpersonal competencies (Martin, 2008b, p. 135). The data indicated that the subconstructs were relatively stable across disciplines. Martin concluded that this empirically validated measure supports targeted interventions to support motivation and engagement in music and sports. For example, if a participant scores low in the area of mastery-orientation, an intervention might consist of redirecting the student to focus on their goals and the path to the goals, rather than concentrating on their standing in relation to others.

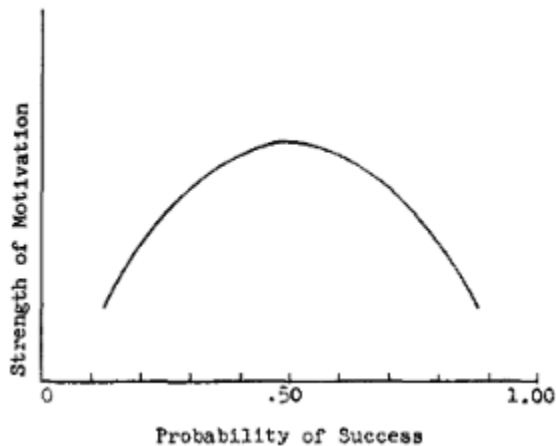
Expectancy-Value Theory General Literature

In an effort to explain individuals’ choice of tasks and the intensity and duration (i.e., motivation) with which they pursued those tasks, Atkinson (1957) discussed the relation of expectancy, incentive, and motive. Atkinson defined expectancy as “a cognitive anticipation,

usually aroused by cues in a situation, that performance of some act will be followed by a particular consequence” (p. 360) and identified two classes of motives: actions towards satisfaction and actions against pain. Atkinson theorized that motivation could be understood as the relation of motive, expectancy, and incentive. The researcher observed that a positive relation between performance and the intensity of a particular motive was present only when expectancy was present in the individual. Furthermore, Atkinson theorized that the relation of an individual’s strength of motivation and the probability of success for a given event can be expressed as a \cap -shaped curve (see Figure 2). The researcher concluded that this model of motivation could be applied to various sociological questions, including aspirations of social mobility.

Figure 2

Relation of strength of motivation and probability of success



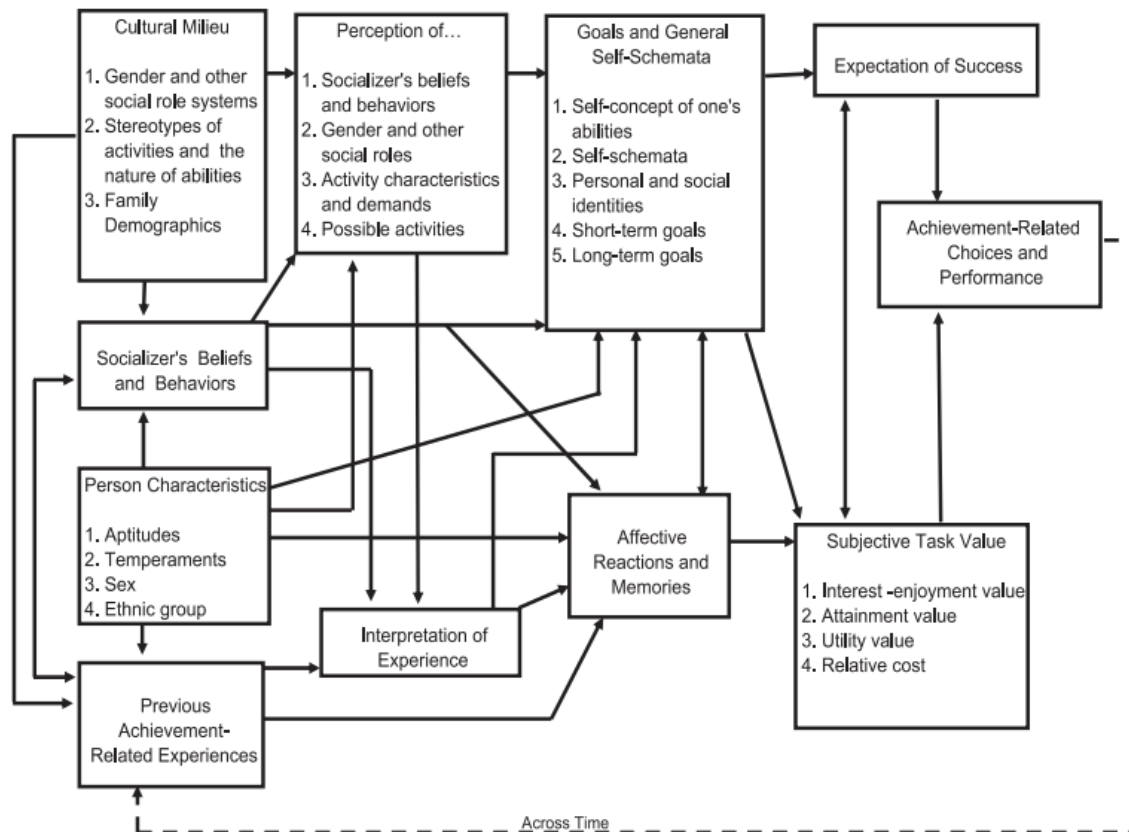
Atkinson theorized that behaviors exhibited by an individual were governed by “the tendency to approach success” (i.e., applying oneself toward a desired outcome) and “the tendency to avoid failure” (i.e., circumventing an activity which would result in an undesired outcome) (Spence, 1983, p. 32). Atkinson further posited that the strength of each of these constructs resulted from three polar factors: an individual's desire to pursue success or avoid

failure, the expectancy (i.e., probability) of success or failure, and the value of success or failure (i.e., incentive). Spence noted that “the usefulness of the general theory has been well established” (1983, p. 37). This recognition has, in part, spurred the development of self-report measures of constructs relating to motivation that address issues with preceding measures such as Murray’s Thematic Appreciation Test (TAT), in which respondents create and write a narrative after viewing a visual representation (e.g., drawing) of an ambiguous interpersonal event.

Atkinson (1964) discussed the impact of two contrasting constructs—a dominant achievement motive versus a dominant anxiety state—on an individual’s aspirations. An individual in an anxious state, Atkinson theorized, is governed primarily by a desire of what “not to do” rather than a desired goal. Conversely, Atkinson deemed individuals exhibiting a dominant achievement motive as displaying an “offensive” approach to achievement. The researcher observed that college students’ behaviors were more likely to be governed by a desire to achieve rather than a desire to avoid failure. Curiously, an individual’s tendency to set excessively high expectations (e.g., perfectionism) can be viewed as a task-avoidance behavior in that it precludes the individual from setting a more realistic goal which might be pursued.

Wigfield and Eccles (2000) extended the framework developed by Atkinson and proposed sociocultural pathways through which the constructs of expectancy and value manifest in individuals. The researchers theorized that while subjective task value and expectancy of success were distinct constructs, an overlapping web of social mechanisms impacted the development of both constructs (See Figure 3).

Figure 3

Wigfield and Eccles's Expectancy-Value Model of Motivation

Notably, Wigfield and Eccles proposed that an individual's expectations of success resulted from prior goals and general self-schemata (e.g., short-term goals, long-term goals, ideal self, self-concept of ability). The goals and self-schemata were in turn influenced by an individual's perceptions of activity stereotypes and gender roles, an individual's interpretation of experiences, and the beliefs and behaviors of parents, guardians, teachers, peers, etc., whom Wigfield and Eccles deemed "socializers" (p. 69). The subjective task value for individuals was proposed as deriving from an individual's affective memories of the task or experience, the individual's interpretation of the experience (e.g., outcome, locus of control), personal aptitudes, and socialized beliefs and behaviors.

Peer influence, both individual and in the form of peer networks, impacts the development of self-efficacy in children and adolescents (Wigfield and Eccles, 2002). The researchers noted that model similarity (i.e., the observation of a peer attempting a task) is most influential when an individual is unsure about their capacity to perform a similar task. Over time, individuals within peer networks often develop similar characteristics. Wigfield and Eccles noted that transitory periods can be particularly fraught for a student's sense of self-efficacy due to changing evaluation practices and expectations, expanding social group, and less individual attention from instructors. During the transitory period, students reevaluate their academic capacities. In the case of college students who are leaving home for the first time, this period of reevaluation of academic abilities often coincides with the upheaval of social networks and can result in a challenging time for individuals (Shaver et al., 1985).

Wigfield and Eccles initially applied their elaborated model to the area of achievement in mathematics. Their discussion included review of research relating to how the ability beliefs, expectancies of success, and subjective task values of children and adolescents change over time. The researchers also discussed the impact of children and adolescents' ability-expectancy beliefs on performance and choice of activities. The researchers mentioned that while ability beliefs (i.e., one's present ability in a specific area) and expectancy beliefs (i.e., one's belief of future success in an area) are distinct, empirical results indicate that the two are highly correlated. Wigfield and Eccles asserted that prudent researchers seeking to measure expectancy should be careful to consider what aspects of ability they are most interested in. Results from longitude examinations of self-abilities beliefs in instrumental music indicated that students' self-ability beliefs decline across elementary school (Wigfield & Eccles, 2000). Wigfield and Eccles

concluded that additional research in diverse content areas to further validate the measures of the constructs and discern differences between ability beliefs and expectancy beliefs.

Researchers' longitudinal examinations of constructs included in the expectancy-value framework have shed light on the sociocognitive development of young children over time. Wigfield (1994) synthesized literature relating to expectancy-value theory to explore the theory from the developmental perspective of young children. Wigfield examined the changes in young children's expectancies of success, subjective task values, and competence beliefs over time. Wigfield concluded that even children in kindergarten differentiate between the constructs of expectancy of success and subjective task value, and that the model can be reliably applied to individuals from second to sixth grade. The findings led to Wigfield's conjecture that the observed linear relation of competence beliefs and both expectancy and subjective task value might incite a cycle that in turn generates increased interest in specific tasks, leading to further effort applied to these areas. Wigfield concluded that more longitudinal research in distinct subject areas can inform the discourse on changes in expectancy and subjective task value respectively and in relation to each other.

In light of the attention that expectancy-value theory has received in the social sciences, Eccles and Wigfield (2020) addressed aspects of the theory to provide clarification. The researchers commented that the theory, now designated Situated Expectancy Value Theory (SEVT), has been, at times, interpreted as a static monolith, perhaps due in part to the two-dimensional representation of the model. However, the model should be understood to be a flexible framework to identify factors relating to achievement behaviors. For example, subjective task values for an individual will not be static, but rather the proportions of the subconstructs (i.e., intrinsic value, attainment value, utility value, cost) can fluctuate when an individual is

analyzing a specific situation. Flexibility is inherently desirable in the model in order to account for multiple layers of societal influences, from macro levels—the “cultural milieu” (p. 2)—to more local levels that could manifest as the influence of socializers (e.g., parents, teachers, peers, etc.).

Eccles and Wigfield acknowledged that the impact of cost on overall subjective task value has often been overlooked and concluded that further examinations of the construct of cost is warranted. While unique aspects of the domain of cost have been addressed using different labels in relevant literature, the researchers took the opportunity to discuss and clarify their concept of cost and its subconstructs. The researchers discussed the importance of addressing cost (i.e., effort cost, opportunity cost, emotional cost) in Situated Expectancy Value Theory models. Eccles and Wigfield concluded that additional efforts to investigate the processes through which individuals decide whether to pursue both macro (e.g., college major) and micro (e.g., a single physical workout) activities is warranted.

Application of Expectancy-Value Theory in Disciplines Outside of Music

Expectancy-value theory has received notable attention in a variety of disciplines, including STEM, physical education, mathematics, pharmacology, the examination of anxiety, unemployment, group collaboration, intercultural group work, and smoking. Shang et al. (2022) discussed leveraging expectancy-value theory to support learning achievement in the area of physical education. The researchers analyzed the effect size of 31 studies that met criteria for inclusion. The analysis revealed that the expectancy-value theory model can, to a statistically significant degree, predict situation interests, learning behaviors, and out-of-school physical activity. The researchers concluded that centering learning sequences around skill-mastery and autonomous learning skills can in turn support the development of motivation in the area of

physical education. A discussion of directions for future research recognized that most of the studies in this meta-analysis did not include the construct of cost (i.e., time, financial, opportunity), and that the relation of cost, value, and motivation deserves additional examination.

The correlation of physical activity and positive health outcomes has led researchers to leverage expectancy-value theory to shed light on factors impacting individuals' motivation in this area. Xiang et al. (2003) applied expectancy-value theory to examine factors relating to the motivation of second and fourth grade children in physical education. The recognition that a lack of physical activity leads to negative health outcomes for children spurred the researchers' efforts in this area. Participants ($N = 414$) indicated their beliefs regarding their general ability in education class, expectancies of success in physical education class, and subjective value of physical education class. Ability beliefs and expectancy of success were combined into a category the researchers deemed expectancy-related beliefs. Using expectancy-beliefs and subjective value as independent variables, the model predicted motivation to a statistically significant degree. The findings also showed that second and fourth grade children did not differentiate among the different domains of value (i.e., intrinsic value, affirmation of identity, utility value, and cost). The researchers concluded that future examinations which focus on trends of subjective value in physical education among different ethnic groups might allow physical educators to better support diverse communities.

Expectancy-value theory of motivation has also been used to examine the influence of unemployment on individuals' psychological well-being and behaviors related to pursuing employment (Feather, 1992). To examine behaviors related to pursuing employment, Feather surveyed two respective groups of adolescents ($n = 131$, $n = 320$) who had not pursued further education after leaving high school. Participants responded to an instrument which measured

control-optimism (i.e., expectancy), subjective value of employment, parental support, length of unemployment, work ethic, and intensity of pursuing employment (i.e., frequency of looking for employment). Results indicated a negative correlation between control-optimism and both length of unemployment and number of failed applications submitted. Feather concluded that future research employing expectancy-value theory in the area of employment might benefit from more detailed measures of expectancy and subjective value (e.g., salary, social desirability, etc.).

Interest in supporting specific populations of individuals in higher education has also led to the use of expectancy-value theory to increase the efficacy of supports. In light of the phenomenon that females leave STEM majors at a significantly higher rate than their male counterparts, Appianing and Van Eck (2018) created an instrument to measure constructs related to expectancy-value theory of motivation. The researchers modified the Values, Interest, and Expectations Scale to create a field specific Value-Expectancy Stem Assessment Scale that was validated with female participants ($N = 356$) from a research institution in the Midwest with a mean age of 23.4 years. Participants were divided into two groups; the first group consisted of students currently enrolled in STEM programs and the second group consisted of those who had switched to non-STEM programs. Factor analysis corroborated the expected two-factor (i.e., expectancy, value) model. Appianing and Van Eck found significant differences between participants who persisted in STEM majors and those who discontinued STEM majors on each of the instrument's subscales. Upon analysis of the subscales, several items were removed because of redundancy and one item was removed to improve internal consistency. The findings indicate a significant correlation between the constructs of expectancy and value among all participants. Consistent with the theoretical framework, the researchers found a significant difference, representing a large effect size, between the means of the two groups on the value

subscale. Appianing and Van Eck concluded that the instrument represents a valuable method to aid in STEM recruitment and retention for females, and that future research could validate the scale for males.

Expectancy-Value Theory of Motivation in Music

Sin et al. (2022) acknowledged the prominence and application of Atkinson's (1957) expectancy-value theory of motivation in a diverse array of fields to explain their efforts in conducting a meta-analysis of expectancy-value theory in the area of music. The researchers utilized the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method to winnow 1,120 studies down to 110 studies for inclusion in the final analysis. The researchers noted a marked increase in utilization of expectancy-value theory in the area of music education, with the preponderance of the studies employing quantitative methodologies. Of the 57 quantitative studies included in the final analysis, no studies focused exclusively on grade 12 students (or the international equivalent) and the transition to life beyond high school graduation (i.e., higher education, workforce, etc.). The researchers concluded that future research might benefit from including participants from non "WEIRD" (Western, educated, industrialized, rich, democratic) countries. The researchers also noted that perceived cost was only included in 29 of 94 studies, and that inclusion of cost alongside intrinsic value, attainment value, and utility value, might provide additional insight into the construct of value.

K-12

The expectancy-value theory of motivation has been applied on an international level to tease out trends relating to motivation, persistence, and attrition in music education. McPherson and O'Neill (2010) utilized expectancy-value theory frameworks to examine the motivational profile of 24,143 students across 8 countries in the content areas of music, art, mother tongue,

physical education, mathematics, science. The results suggest that students valued music less than any other subject besides art. In the area of competence beliefs, results indicate that students' confidence in music was lower than in physical education and mother tongue, but higher than mathematics and art. Analysis revealed that, overall, females have higher competence beliefs in music than males. The relevance of this figure is underscored by Elpus and Abril's (2011) finding that females account for 61% of high school seniors involved in music in the United States. McPherson and O'Neill concluded that once students have gained instrumental experience, they tend to gravitate to other areas in school. They suggested that music education researchers should focus on supporting students' valuation of music as a subject to support continued involvement.

Drawing on the data set of the aforementioned international study of music participation, McPherson and Hendricks (2010) drew upon data from a sample of 3,037 students from grades 6 to 12 in the United States to examine factors impacting motivation to participate in music. The study used the framework of expectancy-value theory to examine factors relating to interest and involvement in music. The researchers focused on individuals' perceptions of the value of music, participants' perceptions of their competence in music, interest in music in school, and interest in music outside of school. They found that while individuals' interest in music outside of school was the second highest ranked subject of interest, music in school was ranked as the lowest subject of interest. McPherson and Hendricks concluded that broadening music opportunities past performance and competition and supporting autonomous musicking skills might support increased interest in music in school.

The researchers found that while interest in all subjects in school decreased from grade 6 to 12, interest in music rebounded during the high school years, in contrast to most other subjects

(see Figure 4). Notably, music was the only subject in which students reported increased interest outside of school over the course of their secondary education (see Figure 5). All other subjects saw a decrease in interest. While interest in music outside of school was significantly higher than interest for most other subjects, students' beliefs of competence in music and art were lower than for any other subject (i.e., physical education, English, math, science).

Figure 4

United States Secondary School Students' Interest in Subjects in School

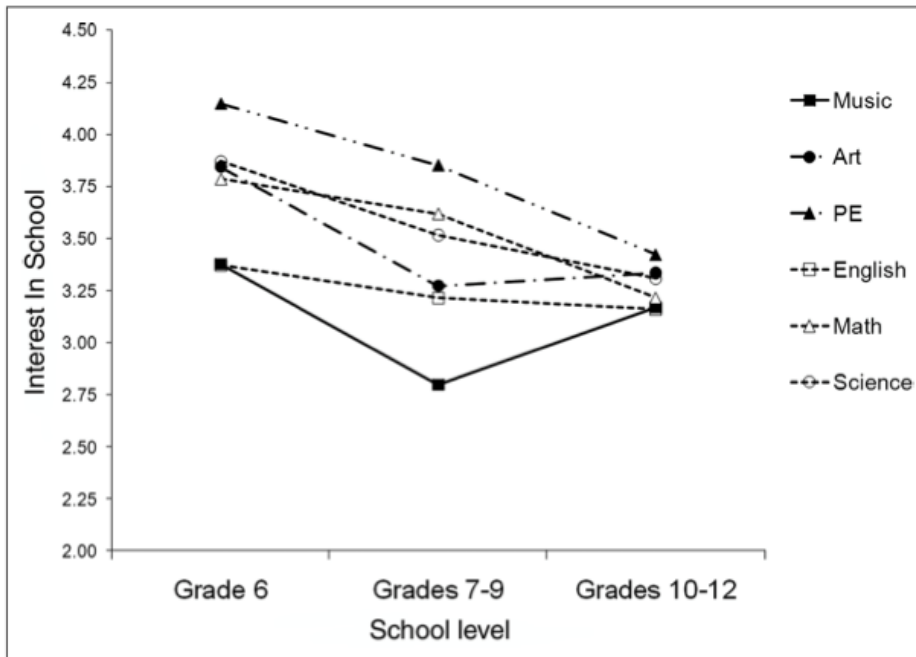
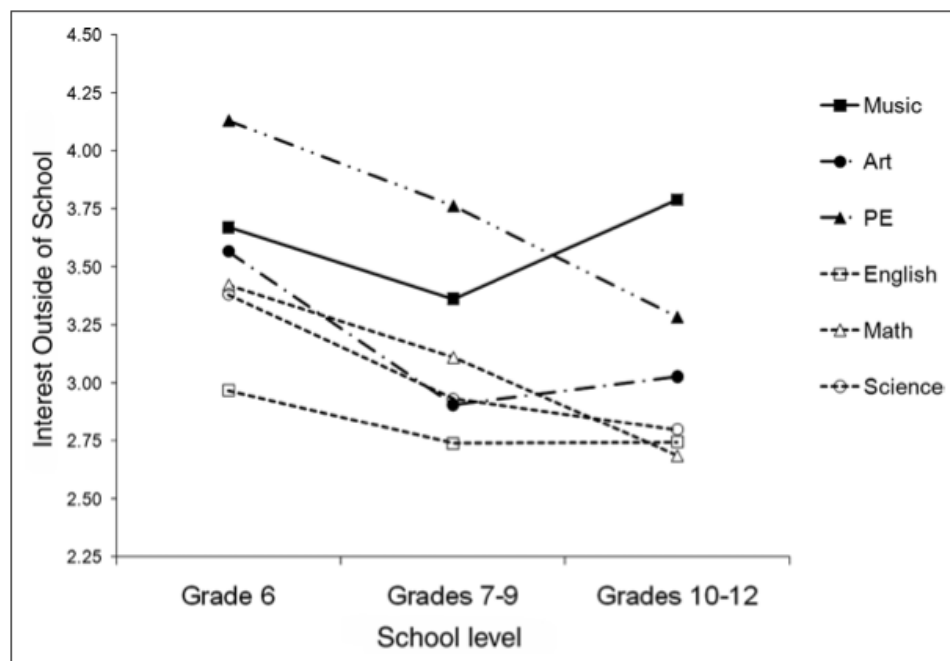


Figure 5***United States Secondary School Students' Interest in Subjects Outside of School***

Venter and Panebianco (2022) extended the research of McPherson and O'Neill (2010) by focusing on value perceptions of elective music and other content areas among 9th and 10th grade students in South Africa. The researcher-created measure was modeled on an instrument created by McPherson and O'Neill. Overall, students valued physical sciences and life sciences/biology more than music as a subject in school. The content areas of history, geography, and accounting were valued lower than music as elective subjects. The data indicated students who selected music as an elective placed greater value on music than other electives. Aggregated scores of perceived value across all the subject areas indicated that females placed a higher value on all subjects included in the study. However, males placed a higher value on music than females. Lipppa's (2005) discussion of the role of the nurturing process in the development of

gender perhaps suggests that conservative efforts to generalize this finding to populations within the United States might be prudent considering presumable cultural differences.

In an effort to examine motivation to persist in music to address declining participation during the transition from required music courses to elective music courses, Freer and Evans (2018) drew upon the self-determination theory of motivation and the expectancy-value theory of motivation to examine participants' intention to continue in music. Using structural equation modeling (SEM), Freer and Evans examined how participants' intention to continue in music related to (1) participants' assessment of the value of music and (2) participants' psychological needs satisfaction. When using participants' assessment of value, psychological needs satisfaction, and instrumental experience, the model accounted for 65% of the variance of participants' intention to persist in music. They also found that psychological needs satisfaction and value were a more salient predictor of intention to persist in music than years of instrumental experience. Freer and Evans used the value subscale of the Student Motivation Scale (Martin, 2003) to assess subjective task value. The researchers found that students were more likely to have a higher subjective task value placed on music when their psychological needs were met. Freer and Evans concluded that in order to support continued involvement in music, music instructors should focus on meeting the psychological needs of their students. They recognized that one limitation was that the sample was drawn from one school, and that future research should draw on multiple sites.

Holster (2023) likewise incorporated aspects of expectancy-value theory and self-determination theory to assess factors relating to persistence in music in middle school. The researcher utilized self-report measures to collect data from participants ($N = 42$) on the constructs of subjective task-value and needs satisfaction (i.e., needs satisfaction, autonomy

satisfaction, relatedness satisfaction). Structural equation modeling revealed correlations between constructs. Subjective task-values emerged as a salient predictor of intent to continue involvement in music. Noting an inverse relation between needs satisfaction and elective intentions, Holster reasoned that individuals with high needs satisfaction but low subjective task-value were unlikely to persist. The researcher concluded that further examinations of subjective task-value in music is warranted to support persistence in music.

Chandler et al. (1987) examined performance expectancy, satisfaction, and locus of control in the context of the high school band classroom. The researchers discussed the impracticability of directly measuring motivation and negotiated this issue by operationalizing motivation as band ensemble chair challenges (i.e., the sanctioned dispute of a ranking within a hierarchical auditioned ensemble). Based on the expectancy-value model, the researchers theorized that an individual's satisfaction with their level of instrumental performance—a surrogate for expectancy—would correlate with their likelihood of initiating a chair challenge. While the researchers discussed the importance of task value, they declined to attempt to measure this construct. This decision stemmed from the researchers' view that an individual's perception of value (within the delimitations of the study) was based on their assessment of the level of import of their instrument. The data demonstrated a correlation between chair challenges and both perceived satisfaction and current level of success. Furthermore, individuals who had an internal locus of control were more likely to engage in chair challenges than individuals with an external locus of control. The researchers concluded that focused help for individuals from the band director might have the unintended consequence of shifting the locus of control to an external locus. This perhaps suggests that individualized help from band directors should focus

on practice skills and concepts that the students can autonomously apply to support their expectancies of success.

Higher Education

Expectancy-value theory has also received attention at the higher education level. Burak (2014) utilized the framework of expectancy-value theory to examine factors impacting motivation in instrumental music study among 190 music students in higher education. The researcher developed an instrument, consisting of eight items, to measure motivational factors relating to instrumental music study from the perspectives of expectancy-value theory and flow theory. The results indicated that students who attended a music conservatory placed a greater importance of being positively regarded by peers than students at non conservatory institutions of higher learning. Burak concluded that future research which examines socio-cultural constructs relating to motivation and instrument student is warranted to better support students.

Expectancy in Music

To examine the impact of motivational factors on a performance assessment, McPherson and McCormick (2000) administered a self-report questionnaire to 349 students between the ages of nine and 18 before the students participated in an instrumental performance assessment. Following the assessment of the performance by external evaluators, McPherson and McCormick examined the relationship of internal factors (e.g., nervousness, effort applied to the practice process) and external factors (e.g., task difficulty) to which students attributed the envisioned quality of their impending performance. The researchers used a one-item Likert-type response to evaluate general self-efficacy and performance self-efficacy, respectively. In each of the student groups (i.e., beginner, intermediate, advanced), self-reported performance self-efficacy accounted for 18%, 28%, and 23% of the variance of the prediction of performance

result. McPherson and McCormick concluded that future research into self-efficacy and performance outcomes will better situate music instructors to support the long-term development of music students.

Need for Study

While roughly one-fifth of high school seniors participated in band, choir, or orchestra in 2004 (Elpus & Abril, 2011), researchers have demonstrated that the rate of attrition beyond high school was significant, with some estimates suggesting an attrition rate as high as 80% during college (Mantie & Dorfman, 2014). While seminal music education conventions and initiatives—including the Tanglewood Symposium, The Housewright Symposium: Vision 2020, and the MENC’s Goals and Objectives Project—have called for supporting music education throughout the life cycle (Andrews, 1970; Choate, 1968; Madsen, 2020), there was a dearth of research concerning concentrated observations of the transition from grade 12 to life after graduation. While expectancy-value theory has been applied to a diverse range of disciplines, and indeed in music as well, to the knowledge of the author there was no research which applied this prominent theory of motivation to the transition from grade 12 to life after graduation—whether that consisted of higher education, the workforce, military, etc. This examination of both musical and nonmusical factors which contributed to musical engagement and/or disengagement provided insight into supporting individuals’ musicianship from “birth to earth.”

Furthermore, the finding that grade 12 students seemed to make decisions about music involvement in college during their senior year of high school (Delano & Royse, 1987) lended credence to the effort to examine grade 12 students’ motivational factors during their senior year. Transition periods in education that result in expanded or different social networks may cause students to reconceptualize their abilities in comparison to their peers (Wigfield and Eccles,

2002). Concurrently, the self-efficacy of students is impacted by perceived model similarity (i.e., the new social network that develops around the student). The future-oriented construct of self-efficacy in Wigfield and Eccles's (2000) expanded expectancy-value model lent itself to assessing grade 12 students' forecasted self-efficacy in the presumably expanded social pool of the higher education environment. In addition to navigating a social network with new individuals, the new academic network likely contains individuals who are specializing in music (i.e., music majors).

This investigation into the music-related self-efficacy of grade 12 students contributed to discourse on how self-efficacy impacts the process through which grade 12 students decide to persist or desist in music after graduation. Grade 12 students who entered instrumental music have often completed at least seven years of music. The completion of this significant sequence—in terms of time, energy, financial resources, etc.—perhaps suggests successful immersion into the musical track. This study shed light on how grade 12 music students envisioned their success in the musical landscape after high school graduation. The drastic discontinuation of musical involvement following what for many students could be considered significant training and involvement in music in K–12 school warranted the investigation of factors that contribute to persistence and desistance. The forward-facing nature of expectancy-value theory was particularly well-suited to the transition beyond high school graduation because it integrated not only past experienced but also forecasted expectations of situations and outcomes.

Research Questions

The purpose of this study will be to address the following: (1) To what extent do grade 12 music performance students value continued involvement in music performance experiences

beyond high school graduation? (2) To what extent do grade 12 music performance students hold positive views of expectancy in music performance experiences beyond graduation? (3) Which of the constructs discussed in the expectancy-value theory of motivation (i.e., expectancy, intrinsic value, affirmation value, utility value, cost) are salient predictors of grade 12 music performance students' intentions to persist in music beyond high school graduation?

Definitions

Attainment Value—“the relative personal/identity-based importance attached by individuals to engage in various tasks or activities” (Eccles (Parsons) et al., 1983, p. 13)

Cost—“how the decision to engage in one activity (e.g., doing schoolwork) limits access to other activities (e.g., calling friends)” (Wigfield & Eccles, 2000, p. 72)

Effort Cost—“the perception of how much effort would need to be exerted to complete a task and whether it is worth doing so” (Eccles & Wigfield, 2020, p. 5)

Emotional Cost—“the emotional or psychological costs of pursuing the task, particularly anticipated anxiety and the emotional and social costs of failure” (Eccles & Wigfield, 2020, p. 5)

Opportunity Cost—“the extent to which doing one task takes away from one's ability or time to do other valued tasks” (Eccles & Wigfield, 2020, p. 5)

Expectancy—“individuals' beliefs about how well they will do on an upcoming task” (Eccles & Wigfield, 2020, p. 3)

Intrinsic value—the “enjoyment one gains from doing the task” (Wigfield & Eccles, 2000, p. 72)

Musicking—the act of participating in music-related activities

Music performance students—students engaged in band, orchestra, choir, class guitar, percussion class, or other music classes or ensembles in which a majority of the time is spent on instrumental performance or performance-related activities

Self-efficacy—individuals’ “beliefs in their capabilities to produce given attainments” (Bandura, 2012, p. 15)

Utility value (i.e., usefulness)—“how a task fits into an individual’s present or future plans” (Eccles & Wigfield, 2020, p. 5)

Assumptions

For the purposes of this study, it is assumed that music performance encompasses instrumental performance, vocal performance, and other active music making activities. For the purposes of this study, post-high school graduation music performance activities include solo and group music performance in the context of higher education, community music environments, individual music lessons, etc. For the purposes of this study, it is assumed that expectancy-value theory of motivation is a valid theoretical framework which illuminates drivers of human behavior.

Delimitations

For the purposes of this study, delimitations include the distinction between instrumental music participation and other forms of musicking. While other forms of musicking (e.g., listening to music, responding to music, recording technology, etc.) merit examination, the intention to participate in musical processes not encompassed by instrumental participation are outside the scope of this study. This examination on grade 12 students’ intentions to persist in music performance will follow theoretical frameworks of expectancy-value theory, and as such, will focus on the constructs and subconstructs included in theory: value—intrinsic value,

affirmation value, utility value, cost— and expectancy—operationalized as self-efficacy. This study will represent the intentions of grade 12 students at one point in time. The study will rely on self-reported information.

III. Method

Participants

Participants for this study included grade 12 music performance students who attended public K–12 schools in the United States with an anticipated graduation date of 2023. Grade 12 students who participated in any type of performance-based music classes or ensembles in K–12 schools were eligible to participate in this study, regardless of intent to pursue higher education, directly enter the workforce, or an alternate path (e.g., military, taking care of family members, etc.). Music performance experiences were defined as classes or ensembles which spend a majority of class time performing music (e.g., band, orchestra, choir, mariachi, percussion ensemble, etc.). *A Priori* power analysis using G*Power 3.1.9.7 (Faul et al., 2007) indicated that in order to realize 80% power to detect a medium effect size of $f^2 = 0.15$ at a significance level of $\alpha = .05$, a minimum sample size of $N = 92$ would be sufficient.

The age range of participants ($N = 216$) was 16–19 years of age. The mean age of respondents was 17.4 years of age with a standard deviation of 0.53 years. The mode of respondents' ages was 17. In response to the prompt "How do you identify?", 129 indicated female, 70 respondents indicated male, 11 indicated "other," and six indicated a preference not to answer. Of participants who selected other, three specified they identified as gender fluid, six identified as non-binary, one identified as genderfluid/non-binary, and one identified as non-binary/agender. Respondents were asked to indicate the number of parents/guardians in their primary residence. The mean number of parents/guardians for respondents was 1.8 with a standard deviation of 0.49 and a range of one to six. (One respondent indicated that 5054924341 parents/guardians lived at home. I attributed this to human error.) Respondents were asked to provide information regarding their race. Ten respondents (4.6%) identified as Asian. Fourteen

respondents identified as black or African American. One hundred seventy-three respondents (80.0%) identified as white. One respondent identified as American Indian or Alaska Native. Eight respondents (3.7%) identified as Hispanic. Seven respondents (3.2%) identified with multiple races (e.g., white/Asian, American Indian/white). Respondents from 27 states completed the questionnaire. Table 1 shows the number of respondents from respective states.

Table 1

Respondents' Home States

State	Number of respondents
Arkansas	2
Connecticut	4
Iowa	7
Kansas	32
Kentucky	3
Maine	22
Massachusetts	27
Michigan	3
Minnesota	2
Missouri	3
Nebraska	1
New Hampshire	2
New Jersey	22
New Mexico	1
North Carolina	10
Ohio	15
Oklahoma	1
Oregon	21
Pennsylvania	3
Rhode Island	7
South Carolina	5
Tennessee	1
Texas	7
Utah	2
Vermont	6
Virginia	4

Table 1, continued

State	Number of respondents
Washington	3

Respondents were asked to indicate the type of performance-based music class or ensemble in which they participated. For the purposes of this study, a performance-based music class was defined as a class or ensemble in which a majority of time is spent engaging in instrumental performance or performance-related activities. One hundred twenty-four respondents indicated participation in band-area classes/ensembles (e.g., wind ensemble, concert band, marching band, jazz band, percussion, chamber groups, etc.). Eighty-one respondents indicated participation in chorus-area classes/ensembles (e.g., chorus, choir, jazz choir, show choir, chamber choir, etc.). Seventy respondents indicated participation in orchestra-area classes/ensembles (e.g., orchestra, string quartet, string chamber group, etc.). One respondent indicated participation in a mariachi ensemble. Fifty-five respondents (25.5%) participated in more than one performance ensemble. The average amount of time that participants indicated they have been played and instrument or sung was 7.9 years with a standard deviation of 2.6 years. The average amount of time that participants indicated they participated in performance-based music classes/ensembles in school (including elementary, middle, and high school) was 7.6 years, with a standard deviation of 2.2 years.

Respondents were asked about their plans for life after graduation. One hundred ninety-seven respondents (91.2%) indicated they were planning on pursuing higher education at a college, university, or community college. Two respondents (0.9%) planned to attend a technical college or trade school. Four respondents (1.9%) planned to directly enter the workforce. Six respondents (2.8%) planned on entering the military. Two respondents (0.9%) were unsure of a

plan after graduation. Three respondents (1.4%) indicated they would be going on a church mission after graduation. One respondent (0.5%) planned to work full-time while going to college. One student (0.5%) indicated plans to take a gap year before pursuing higher education. Of the students who planned to matriculate into a college, university, or community college, 169 students (85.8%) anticipated attending a 4-year college or university, while 28 students (14.2%) anticipated attending a community college. Respondents were asked to report their grade point average. An A-range (3.7–4.0) was reported by 158 participants (73.1%). A B-range (2.7–3.3) was reported by 49 participants (22.7%). A C-range (1.7–2.3) was reported by seven participants (3.2%). A D-range (0.7–1.3) was reported by one participant (0.5%).

Measures

I utilized existing self-report measures to assess the domains of expectancy-value theory and the intention to continue participation in music performance experiences beyond high school graduation. Participants will be asked to respond to the New General Self-Efficacy Scale (Chen et al., 2001) and the Instrument to Assess Subjective Task Value Beliefs Regarding the Decision to Pursue Postgraduate Training (Hagemeier & Murawski, 2014). Participants were asked to provide demographic information. All individuals were asked about the type(s) of ensembles they would be most interested in joining beyond high school.

Self-Efficacy Scale

Self-efficacy has received considerable attention within the realm of behavioral sciences. To assess individuals' beliefs of expectancy in music performance experiences, I administered a modified New General Self-Efficacy Scale created by Chen et al. (2001) (see Appendices A and B for the original and modified instruments, respectively). Chen et al., spurred by the recognition of the prominence of general self-efficacy as a psychological construct and potential problems

with existing measures, created and validated the New General Self-Efficacy Scale (hereafter referred to as N-GSES). Chen et al. noted that the General Self-Efficacy Scale developed by Sherer et al. (1982) was, at the time of publication of the N-GSES, the most commonly employed instrument available to assess individuals' beliefs regarding their ability to control and influence outcomes in various situations. However, Chen et al. contended that notable issues with test-retest reliability, construct validity (stemming from multidimensionality), and the potential to confound self-esteem (i.e., an overall rating of one's worth) and self-efficacy (i.e., one's beliefs of expectancy of success) warranted the development of an improved instrument. The researchers validated the measure, in part, by examining the relation of task-specific measures of efficacy and the New General Self-Efficacy Scale. Chen et al. concluded that the New General Self-Efficacy Scale represented a notable improvement over existing measures and was situated to contribute to behavioral research examining motivation and performance. The modified New General Self-Efficacy Scale directed participants to consider prompts regarding their anticipated ability to control the outcome of potential music performance experiences in the future. The scale consists of eight items. Participants responded to the prompts using a seven-point Likert scale. I modified the instrument to prompt participants to consider music performance experiences when responding to prompts regarding self-efficacy. This measure was modified to adhere to Bandura's (2012) statement on methodological considerations for self-efficacy scales: "I *can* is a statement of efficacy. I *will* is a statement of intention... A statement of intention should not be included in a self-efficacy scale" (p. 16). The measure was also modified to reflect Bandura's consideration of the use of I *can* as opposed to I *will*. A reliability observer reviewed the modification to ensure that while the focus of the prompts was shifted, the substance of the prompts remained unchanged.

Subjective Task Value

To assess the subjective value that individuals place on music performance experiences beyond high school, I utilized a modified scale based on Hagemeyer and Murawski's (2014) Instrument to Assess Subjective Task Value Beliefs Regarding the Decision to Pursue Postgraduate Training (hereafter referred to as IASTVB) (see Appendix C and D for original and modified instruments, respectively). Hagemeyer et al. (2014) developed the instrument to measure the subjective task value individuals placed on pursuing postgraduate pharmaceutical training. With the goal of constructing and validating a measure that adhered to the framework of expectancy-value theory, the researchers created subscales for each subconstruct of subjective task value: intrinsic value, attainment value, utility value, and perceived cost. Hagemeyer et al. noted that because individuals' assessments of subjective value of tasks are often collected *A Priori* to model future behavior, effort to develop a valid and reliable measure of subjective task value was warranted. Hagemeyer et al. concluded that the instrument demonstrated ample construct validity and reliability.

The instrument consisted of four subscales to assess subjective task values in the following domains: intrinsic value (seven items), affirmation value (13 items), utility value (12 items), and cost (eight items). The domain of cost included four negatively worded prompts that were, accordingly, reverse scored. Participants responded to the prompts using a seven-point Likert scale. The instrument was modified to prompt participants to consider music performance experiences when responding to the prompts about value. A reliability observer again reviewed the modifications.

This study followed Ruybalid's (2016) use of a single prompt to assess individuals' intention to continue with music. Participants were also asked about the type of class/ensemble/group in which they intended to participate (see Appendix E).

Procedures

Prior to beginning the study, I received an IRB determination that this study qualified for an exemption (see Appendix G). I contacted state-level music education association representatives (e.g., executive officers) from each of the 50 states to ascertain whether they were willing to share information with their membership. Table 2 shows the responses from the respective state organizations. If the representative was non-responsive, I sent two follow-ups after initial contact. Instructors were provided with information regarding the study and were invited to facilitate this research. If instructors were willing to facilitate research, they acted as intermediaries between the researcher and grade 12 students by sharing the research invitation with their students. The research invitation contained select information about the study, as well as a link and QR code for students to access the questionnaire. The correspondence with directors and the research invitation for students is shown in Appendix I.

Table 2

Responses from State Music Educators Associations

State music educators association	Outcome
Alabama	No response after three communication attempts
Alaska	No response after three communication attempts
Arizona	No response after three communication attempts
Arkansas	Distributed research invitation to membership
California	Does not disseminate research invitations
Colorado	Distributed research invitation to Tri-M Music Honor Society
Connecticut	No response after three communication attempts
Delaware	Distributed research invitation via monthly newsletter

Table 2, continued

State music educators association	Outcome
Florida	No response after three communication attempts
Georgia	Does not disseminate research invitations
Hawaii	Does not disseminate research invitations
Idaho	No response after three communication attempts
Illinois	No response after three communication attempts
Indiana	No response after three communication attempts
Iowa	Distributed research invitation to membership
Kansas	Distributed research invitation to membership
Louisiana	Distributed research invitation to select schools
Maine	Distributed research invitation to membership
Maryland	No response after three communication attempts
Massachusetts	No response after three communication attempts
Michigan	No response after three communication attempts
Minnesota	No response after three communication attempts
Mississippi	No response after three communication attempts
Missouri	Does not disseminate research invitations for non-members
Montana	No response after three communication attempts
Nebraska	Distributed research invitation to membership
Nevada	No response after three communication attempts
New Hampshire	Distributed research invitation to membership
New Jersey	Distributed research invitation to membership
New Mexico	No response after three communication attempts
New York	No response after three communication attempts
North Carolina	No response after three communication attempts
North Dakota	No response after three communication attempts
Ohio	No response after three communication attempts
Oklahoma	No response after three communication attempts
Oregon	Distributed research invitation to membership via monthly newsletter
Pennsylvania	Posted research invitation on state music educators association research webpage
Rhode Island	Distributed research invitation to membership
South Carolina	No response after three communication attempts
South Dakota	No response after three communication attempts
Tennessee	Distributed research invitation to membership
Texas	Not distributed; association sells member contact information to association members

Table 2, continued

State music educators association	Outcome
Utah	No response after three communication attempts
Vermont	Distributed research invitation to membership
Virginia	Distributed research invitation to membership
Washington	Does not disseminate research invitations
West Virginia	No response after three communication attempts
Wisconsin	Distributed research invitation to membership via monthly newsletter
Wyoming	No response after three communication attempts

To increase the reach of the research invitation, I applied to the National Association for Music Education (NAfME) Research Survey Assistance program. Applications are reviewed by an expert panel to determine the extent to which the proposal aligns with NAfME's goals. The proposal was accepted and I chose to disseminate the research invitation to high school instructors who taught band, orchestra, and/or chorus. I also opted to have a follow-up email sent one week after the first transmission. The first transmission was sent to 17,543 recipients; 692 emails returned as undeliverable. The portion of recipients who opened the email was 43.0% (7,231 recipients) and the click rate on the embedded link was 0.4% (61 clicks). The second transmission was sent to 17,517 recipients; 597 emails returned as undeliverable. The portion of recipients who opened the follow-up email was 42.7% (7,222 recipients) and the click rate on the embedded link was 0.3% (43 clicks).

I surveyed participants using online survey software Qualtrics. The IRB approved a procedure that allowed students under the age of 18 to provide assent to participate after viewing pertinent information regarding the study. Participants over the age of 18 were asked to provide informed consent after reviewing pertinent information. Individuals indicated their willingness to participate in the study by advancing beyond the informed consent/assent document.

Pilot Study

I conducted a pilot study ($N = 24$) prior to full-scale data collection. Johanson and Brook (2010) maintained that conducting a pilot study provides an opportunity to assess item difficulty, internal consistency, and response rates before collecting data from the full sample population. The researchers noted that while power analysis indicates the sample size needed for specific methods of analyzing the full data set, the nature of the pilot (i.e., a fraction of the full sample population) makes the decision about pilot sample size rather ambiguous. Johanson and Brook concluded that a pilot study sample consisting of between 24 and 36 individuals is not only consistent with recommendations from relevant literature, but also is a reasonable sample based on the nonlinear shape of confidence intervals.

Breen (2006) discussed the suitability of collecting feedback from participants to check for meaning among participants. Information collected individually and asynchronously in the questionnaire's debriefing section allowed me to address any issues with clarity regarding the format of the questionnaire, the electronic interface, and/or wording of the prompts/questions. Embedding the collection of feedback in the anonymous survey circumvented potential issues associated with focus groups, including participants' reticence to share openly. Furthermore, electronic collection allowed all respondents to provide feedback and removed the potential for select individuals to dominate the discussion (Masadeh, 2012). Meta-analyses of the use of focus groups by Nyumba et al. (2018) and Carlsen and Glenton (2011) indicated that while the practice of collecting respondent feedback was widespread (i.e., focus groups), gaps in reporting were prevalent, with many studies neglecting to report aspects of methodology (e.g., size of focus group, duration of focus group, rationale behind the use of a focus group).

The sample size for this pilot study was 24. Only completed responses were retained for analysis. The reliability of each subscale was analyzed separately (Field, 2018). Table 3 shows Chronbach's alpha values and the number of items in each subscale.

Table 3

Reliability Analysis of Subscales

Subscale	Cronbach's α	Number of items
Expectancy	.845	8
Intrinsic value	.961	7
Attainment value	.967	13
Utility value	.957	12
Cost	.901	8

I conducted an item-total analysis to ascertain the adjusted Cronbach's α if individual items were deleted from each subscale. Tables 4–8 show the item-total analysis for each subscale. Records that represent an elevated Cronbach's α if that item is deleted—compared to the α of the respective subscale—are bolded. Of the 48 items in the five subscales, there were six items that, if deleted, would increase the α of the subscale. However, α would increase by a mean of 0.0035 if all six items were deleted. The standard deviation of the Δ between the original α of each subscale and the elevated α if all six items were deleted is 0.000707. Thus, all items were retained.

Table 4***Item-Total Analysis: Expectancy Subscale***

Item	Cronbach's α if item deleted (Subscale's Cronbach's $\alpha = .845$)
1	.836
2	.820
3	.840
4	.806
5	.817
6	.841
7	.837
8	.816

Table 5***Item-Total Analysis: Intrinsic Value Subscale***

Item	Cronbach's α if item deleted (Subscale's Cronbach's $\alpha = .961$)
1	.955
2	.953
3	.965
4	.952
5	.953
6	.956

Table 5, continued

Item	Cronbach's α if item deleted (Subscale's Cronbach's α = .961)
7	.952

Table 6***Item-Total Analysis: Attainment Value Subscale***

Item	Cronbach's α if item deleted (Subscale's Cronbach's α = .967)
1	.964
2	.962
3	.963
4	.963
5	.963
6	.962
7	.966
8	.963
9	.968
10	.962
11	.965
12	.975
13	.963

Table 7***Item-Total Analysis: Utility Value Subscale***

Item	Cronbach's α if item deleted (Subscale's Cronbach's α = .957)
1	.952
2	.951
3	.951
4	.960
5	.956
6	.952
7	.953
8	.952
9	.954
10	.954
11	.958
12	.951

Table 8***Item-Total Analysis: Cost Subscale***

Item	Cronbach's α if item deleted (Subscale's Cronbach's α = .901)
1	.884
2	.864

Table 8, continued

Item	Cronbach's α if item deleted (Subscale's Cronbach's $\alpha = .901$)
3	.888
4	.882
5	.898
6	.901
7	.904
8	.881

I followed the coding conventions outlined by Saldaña (2009) to analyze participant feedback regarding the pilot. Participants were asked to provide feedback on the prompt/question clarity, ease of navigation and response, and whether they had other comments. For first round coding, I relied most prominently on “InVivo” (i.e., verbatim coding) (p. 79) and “themeing [sic] the data” (i.e., assigning a phrase to responses) (p. 140). For second round coding, I applied pattern coding to identify emergent themes. Peer examination of the interpretations undertaken by external experts was employed to corroborate the findings of emergent themes (Creswell & Miller, 2000).

In response to the prompt “Did you find any of the questions or prompts confusing or unclear?” 95.8% of respondents ($n = 23$) replied “no.” The sole respondent to reply “yes” provided additional information regarding their perception of the prompts: “These questions are mostly the same but reworded.” This perhaps indicates that the individual prompts were not confusing or unclear, but when taken together, the similarity among prompts was perplexing. In

reply to the prompt “Is there anything else you want me to know about your experience responding to this questionnaire?” the sole respondent indicated that they felt that the opportunity to share their career plans (i.e., pursuing music education) would illuminate their responses. To address this comment, the following prompt was added for the full data collection phase: “Please indicate your agreement with the following statement: I am planning to pursue a career involving music (e.g., music education, music technology, music performance, etc.).” The following prompt: "Is there any other information you would like to share regarding your plans of whether or not to continue participation in music performance after high school? If you are still undecided, what factors might influence your decision?" was split into two separate prompts to provide additional structure for responses.

Second rounding coding illuminated several themes, including respondents' interests in pursuing music as a hobby and emotional outlet as a non music major. Others indicated that they would be pursuing music education or wanted to pursue music but were unsure about a major. Respondents who indicated that they would not pursue music performance activities after graduation cited financial and time costs, burn out, and negative music competition experiences.

Statistical Methods

To address the first research question (i.e., to what extent do grade 12 music performance students value continued involvement in music performance experiences beyond high school graduation?) and second research question (i.e., to what extent do grade 12 music performance students hold positive views of self-efficacy in music performance experiences beyond graduation?), I calculated descriptive statistics relating to the Likert-type scale responses. This type of analysis had the potential to reveal the extent to which students valued music involvement and their personal beliefs of expectancy in music.

I employed linear regression to investigate the third research question (i.e., which of the constructs discussed in the expectancy-value theory of motivation—expectancy, intrinsic value, affirmation value, utility value, cost—are salient predictors of grade 12 music performance students' intentions to persist in music beyond high school graduation?). In part due the prevalence of Likert-scales in the medical field (e.g., trainee feedback, pain scale, etc.), and the contention of using ordinal data for statistical procedures, Sullivan and Artino (2013) justified and endorsed the use of Likert-scale data for parametric tests. Norman (2010) weighed in on the controversy regarding Likert-scale data and levels of data and empirically demonstrated that Likert-scale data (i.e., ordinal data) can be reliably analyzed using parametric tests. Norman concluded by stating “The controversy can cease (but likely won’t)” (p. 631). Field (2018) discussed the suitability of using linear regression with forced (i.e., simultaneous) entry of independent variables to examine the extent to which the selected variables predict the outcome variable (i.e., intention to continue in music beyond graduation).

Chiang et al. (2015) discussed the suitability of employing multiple regression when analyzing data from correlational studies with multiple predictor variables. Multiple regression is perhaps preferable to a correlation matrix due to the potential for multiple regression to reveal the impact of the predictor variables in the overall model. The results from forced entry multiple regression have the potential to indicate which predictor variables most impact the decisions of grade 12 students to persist in music beyond graduation. For example, researchers have previously demonstrated that students who participate in concert bands, wind ensembles, etc., are more likely to cite the intrinsic value of music when asked why they participate in music in higher education. On the other hand, students who participate in athletic bands (e.g., marching bands, basketball bands), are more likely to cite the social value when asked about motivations to

participate in music activities in higher education. In addition to being asked about intention to continue in music beyond high school graduation, the questionnaire will collect information about the types of ensembles students plan to participate in.

IV. Results

The purpose of this study was to examine (1) the extent to which grade 12 music performance students valued continued involvement in music performance experiences beyond graduation, (2) the extent to which grade 12 music performance students held positive views of self-efficacy in music performance experiences beyond graduation, and (3) the extent to which the constructs discussed in the expectancy-value theory of motivation (i.e., expectancy, intrinsic value, affirmation value, utility value, and cost) were salient predictors of individuals' intentions to persist in music performance beyond graduation. Participants responded to a modified New General Self Efficacy Scale (N-GSES) to measure expectancy and a modified Instrument to Assess Subjective Task Value Beliefs Regarding the Decision to Pursue Postgraduate Training (IASTVB). Participants also indicated the extent to which they intended to persist in music beyond graduation. Participants also responded to two open-ended prompts regarding persistence in music performance beyond graduation. Only responses with completed N-GSES and IASTVB instruments were retained for analysis.

Quantitative Results

The item frequencies, percentages, means, and standard deviations of responses to each item on the N-GSES are shown in Table 9. The item frequencies, percentages, means, and standard deviations of responses to each item on the IASTVB subscales (i.e., intrinsic value subscale, attainment value subscale, utility value subscale, cost subscale) are shown in tables 10–14, respectively. The item frequencies, percentages, mean, and standard deviation to the item which measures intent to continue involvement in music beyond graduation are shown in Table 14.

Table 9***NGSES—Item Frequencies, Percentages, Means, and Standard Deviations***

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean (Standard deviation)
In music performance situations, I can achieve most of the goals that I have set for myself.	<i>n</i> = 0 0%	<i>n</i> = 0 0%	<i>n</i> = 5 2.3%	<i>n</i> = 8 3.7%	<i>n</i> = 31 14.4%	<i>n</i> = 133 61.6%	<i>n</i> = 39 18.1%	5.89 (0.82)
When facing difficult music performance related activities, I am certain that I can accomplish them.	<i>n</i> = 0 0%	<i>n</i> = 1 0.5%	<i>n</i> = 7 3.2%	<i>n</i> = 10 4.6%	<i>n</i> = 53 24.5%	<i>n</i> = 110 50.9%	<i>n</i> = 35 16.2%	5.71 (0.94)
In general, I think that I can obtain outcomes that are important to me in music performance situations.	<i>n</i> = 0 0%	<i>n</i> = 1 0.5%	<i>n</i> = 4 1.9%	<i>n</i> = 4 1.9%	<i>n</i> = 33 15.3%	<i>n</i> = 117 54.2%	<i>n</i> = 57 26.4%	6.00 (0.86)
I believe I can succeed at most any music performance endeavor to which I set my mind.	<i>n</i> = 0 0%	<i>n</i> = 4 1.9%	<i>n</i> = 9 4.2%	<i>n</i> = 9 4.2%	<i>n</i> = 38 17.6%	<i>n</i> = 96 <i>n</i> = 44.4%	<i>n</i> = 60 27.8%	5.82 (1.13)
I can successfully overcome many challenges in music performance situations.	<i>n</i> = 0 0%	<i>n</i> = 2 0.9%	<i>n</i> = 4 1.9%	<i>n</i> = 11 5.1%	<i>n</i> = 42 19.4%	<i>n</i> = 119 55.1%	<i>n</i> = 38 17.6%	5.79 (0.92)
I am confident that I can perform effectively on many different tasks in music performance situations.	<i>n</i> = 1 0.5%	<i>n</i> = 2 0.9%	<i>n</i> = 8 3.7%	<i>n</i> = 9 4.2%	<i>n</i> = 43 19.9%	<i>n</i> = 111 51.4%	<i>n</i> = 42 19.4%	5.74 (1.05)

Table 9, continued

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean (Standard deviation)
Compared to other people in my ensemble, I can do most music performance activities very well.	<i>n</i> = 0 0%	<i>n</i> = 5 2.3%	<i>n</i> = 6 2.8%	<i>n</i> = 20 9.3%	<i>n</i> = 34 15.7%	<i>n</i> = 91 42.1%	<i>n</i> = 60 27.8%	5.76 (1.17)
Even when the musical situation is tough, I can perform quite well.	<i>n</i> = 0 0%	<i>n</i> = 3 1.4%	<i>n</i> = 8 3.7%	<i>n</i> = 12 5.6%	<i>n</i> = 67 31.0%	<i>n</i> = 95 44.0%	<i>n</i> = 31 14.4%	5.56 (1.02)

Table 10***IASTVB: Intrinsic Value Subscale—Item Frequencies, Percentages, Means, and Standard Deviations***

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean (Standard deviation)
Pursuing music performance experiences after high school is very appealing to me.	<i>n</i> = 6 2.8%	<i>n</i> = 7 3.2%	<i>n</i> = 8 3.7%	<i>n</i> = 11 5.1%	<i>n</i> = 38 17.6%	<i>n</i> = 51 23.6%	<i>n</i> = 95 44.0%	5.78 (1.53)
I would enjoy advancing my knowledge by exploring new and challenging music performance experiences after high school.	<i>n</i> = 3 1.4%	<i>n</i> = 7 3.2%	<i>n</i> = 7 3.2%	<i>n</i> = 19 8.8%	<i>n</i> = 33 15.3%	<i>n</i> = 58 26.9%	<i>n</i> = 89 41.2%	5.79 (1.43)
The challenges of music performance experiences after high school excite me.	<i>n</i> = 3 1.4%	<i>n</i> = 12 5.6%	<i>n</i> = 12 5.6%	<i>n</i> = 20 9.3%	<i>n</i> = 45 20.8%	<i>n</i> = 51 23.6%	<i>n</i> = 73 33.8%	5.49 (1.55)

Table 10, continued

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean (Standard deviation)
I would like the challenge of doing the work required to participate in music performance experiences after high school.	<i>n</i> = 5 2.3	<i>n</i> = 12 5.6%	<i>n</i> = 18 8.3%	<i>n</i> = 18 8.3%	<i>n</i> = 55 25.5%	<i>n</i> = 49 22.7%	<i>n</i> = 59 27.3%	5.26 (1.60)
Increasing my musical knowledge through music performance experiences after high school excites me.	<i>n</i> = 3 1.4%	<i>n</i> = 6 2.8%	<i>n</i> = 7 3.2%	<i>n</i> = 15 6.9%	<i>n</i> = 37 17.1%	<i>n</i> = 73 33.8%	<i>n</i> = 75 34.7%	5.76 (1.35)
I would enjoy learning from experts in music during music performance experiences after high school.	<i>n</i> = 4 1.9%	<i>n</i> = 5 2.3%	<i>n</i> = 8 3.7%	<i>n</i> = 17 7.9%	<i>n</i> = 27 12.5%	<i>n</i> = 70 32.4%	<i>n</i> = 85 39.4%	5.81 (1.41)
I am excited about the idea of participating in music performance experiences after high school.	<i>n</i> = 3 1.4%	<i>n</i> = 4 1.9%	<i>n</i> = 6 2.8%	<i>n</i> = 14 6.5%	<i>n</i> = 35 16.2%	<i>n</i> = 68 31.5%	<i>n</i> = 86 39.8%	5.88 (1.31)

Table 11***IASTVB: Attainment Value Subscale—Item Frequencies, Percentages, Means, and Standard Deviations***

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean (Standard deviation)
I value the prestige that would come with participation in music performance experiences after high school.	<i>n</i> = 3 1.4%	<i>n</i> = 9 4.2%	<i>n</i> = 14 6.5%	<i>n</i> = 36 16.7%	<i>n</i> = 42 19.4%	<i>n</i> = 61 28.2%	<i>n</i> = 51 23.6%	5.28 (1.48)

Table 11, continued

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean (Standard deviation)
Participating in music performance experiences after high school is important in enabling me to feel successful.	<i>n</i> = 13 6.0%	<i>n</i> = 23 10.6%	<i>n</i> = 18 8.3%	<i>n</i> = 38 17.6%	<i>n</i> = 40 18.5%	<i>n</i> = 40 18.5%	<i>n</i> = 44 20.4%	4.69 (1.83)
I feel that I have something to prove to myself by pursuing music performance experiences after high school.	<i>n</i> = 14 6.5%	<i>n</i> = 39 18.1%	<i>n</i> = 18 8.3%	<i>n</i> = 26 12.0%	<i>n</i> = 44 20.4%	<i>n</i> = 31 14.4%	<i>n</i> = 44 20.4%	4.46 (1.95)
I feel that participating in music performance experiences after high school is a necessary part of what would make me feel good about myself in the future.	<i>n</i> = 11 5.1%	<i>n</i> = 29 13.4%	<i>n</i> = 21 9.7%	<i>n</i> = 25 11.6%	<i>n</i> = 31 14.4%	<i>n</i> = 44 20.4%	<i>n</i> = 55 25.5%	4.80 (1.93)
I would be upset if I was not able to participate in music performance experiences after high school.	<i>n</i> = 6 2.8%	<i>n</i> = 14 6.5%	<i>n</i> = 8 3.7%	<i>n</i> = 20 9.3%	<i>n</i> = 42 19.4%	<i>n</i> = 48 22.2%	<i>n</i> = 78 36.1%	5.47 (1.65)
Participating in music performance experiences after high school is important in allowing me to show that I am capable.	<i>n</i> = 13 6.0%	<i>n</i> = 32 14.8%	<i>n</i> = 17 7.9%	<i>n</i> = 26 12.0%	<i>n</i> = 46 21.3%	<i>n</i> = 46 21.3%	<i>n</i> = 36 16.7%	4.58 (1.86)
I think that participating in music performance experiences will allow me to attain a high sense of self-worth.	<i>n</i> = 10 4.6%	<i>n</i> = 22 10.2%	<i>n</i> = 15 6.9%	<i>n</i> = 32 14.8%	<i>n</i> = 48 22.2%	<i>n</i> = 47 21.8%	<i>n</i> = 42 19.4%	4.83 (1.75)

Table 11, continued

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean (Standard deviation)
I would feel like a failure if I did not participate in music performance experiences after high school.	<i>n</i> = 51 23.6%	<i>n</i> = 38 17.6%	<i>n</i> = 21 9.7%	<i>n</i> = 23 10.6%	<i>n</i> = 34 15.7%	<i>n</i> = 23 10.6%	<i>n</i> = 26 12.0%	3.57 (2.11)
I would participate in music performance experiences after high school if I thought I would gain confidence in my music-related abilities.	<i>n</i> = 1 0.5%	<i>n</i> = 9 4.2%	<i>n</i> = 10 4.6%	<i>n</i> = 29 13.4%	<i>n</i> = 45 20.8%	<i>n</i> = 75 34.7%	<i>n</i> = 47 21.8%	5.41 (1.35)
I need to participate in music performance experiences after high school to fulfill my potential.	<i>n</i> = 14 6.5%	<i>n</i> = 29 13.4%	<i>n</i> = 22 10.2%	<i>n</i> = 31 14.4%	<i>n</i> = 43 19.9%	<i>n</i> = 48 22.2%	<i>n</i> = 29 13.4%	4.48 (1.82)
Completing the work necessary to participate in music performance experiences after high school would make me feel good about myself.	<i>n</i> = 4 1.9%	<i>n</i> = 11 5.1%	<i>n</i> = 12 5.6%	<i>n</i> = 32 14.8%	<i>n</i> = 45 20.8%	<i>n</i> = 73 33.8%	<i>n</i> = 39 18.1%	5.21 (1.47)
My family would be disappointed in me if I did not participate in music performance experiences after high school.	<i>n</i> = 62 28.7%	<i>n</i> = 44 20.4%	<i>n</i> = 23 10.6%	<i>n</i> = 30 13.9%	<i>n</i> = 33 15.3%	<i>n</i> = 14 6.5%	<i>n</i> = 10 4.6%	3.05 (1.86)
Music performance experiences after high school are of great personal value to me.	<i>n</i> = 6 2.8%	<i>n</i> = 12 5.6%	<i>n</i> = 7 3.2%	<i>n</i> = 26 12.0%	<i>n</i> = 44 20.4%	<i>n</i> = 57 26.4%	<i>n</i> = 64 29.6%	5.39 (1.58)

Table 12

IASTVB: Utility Value Subscale—Item Frequencies, Percentages, Means, and Standard Deviations

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean (Standard deviation)
My life goals cannot be met without participating in music performance experiences after high school.	<i>n</i> = 62 28.7%	<i>n</i> = 41 19.0%	<i>n</i> = 15 6.9%	<i>n</i> = 22 10.2%	<i>n</i> = 30 13.9%	<i>n</i> = 17 7.9%	<i>n</i> = 29 13.4%	3.39 (2.17)
Participating in music performance experiences after high school would be an asset for a career I want to pursue.	<i>n</i> = 31 14.4%	<i>n</i> = 54 25%	<i>n</i> = 11 5.1%	<i>n</i> = 24 11.1%	<i>n</i> = 24 11.1%	<i>n</i> = 24 11.1%	<i>n</i> = 48 22.2%	4.02 (2.22)
Participating in music performance experiences after high school will allow me to pursue a career that fits my values.	<i>n</i> = 24 11.1%	<i>n</i> = 52 24.1%	<i>n</i> = 13 6.0%	<i>n</i> = 35 16.2%	<i>n</i> = 24 11.1%	<i>n</i> = 22 10.2%	<i>n</i> = 46 21.3%	4.08 (2.12)
I want to participate in music performance experiences after high school for financial reasons.	<i>n</i> = 45 20.8%	<i>n</i> = 73 33.8%	<i>n</i> = 13 6.0%	<i>n</i> = 46 21.3%	<i>n</i> = 21 9.7%	<i>n</i> = 6 2.8%	<i>n</i> = 12 5.6%	2.96 (1.71)
I want to participate in music performance experiences after high school because I have a desire to specialize in a specific musical style.	<i>n</i> = 28 13.0%	<i>n</i> = 50 23.1%	<i>n</i> = 16 7.4%	<i>n</i> = 50 23.1%	<i>n</i> = 27 12.5%	<i>n</i> = 26 12.0%	<i>n</i> = 19 8.8%	3.70 (1.87)
Music performance experiences after high school are integral for what I want to do in the future.	<i>n</i> = 32 14.8%	<i>n</i> = 54 25.0%	<i>n</i> = 15 6.9%	<i>n</i> = 33 15.3%	<i>n</i> = 23 10.6%	<i>n</i> = 26 12.0%	<i>n</i> = 33 15.3%	3.79 (2.08)
I would participate in music performance experiences after high school to develop skills that will allow me to make music that interests me.	<i>n</i> = 8 3.7%	<i>n</i> = 22 10.2%	<i>n</i> = 11 5.1%	<i>n</i> = 28 13.0%	<i>n</i> = 37 17.1%	<i>n</i> = 64 29.6%	<i>n</i> = 46 21.3%	5.04 (1.73)

Table 12, continued

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean (Standard deviation)
Participating in music performance experiences after high school is necessary to differentiate myself from others.	<i>n</i> = 25 11.6%	<i>n</i> = 38 17.6%	<i>n</i> = 26 12.0%	<i>n</i> = 46 21.3%	<i>n</i> = 43 19.9%	<i>n</i> = 21 9.7%	<i>n</i> = 17 7.9%	3.81 (1.77)
I would participate in music performance experiences after high school to gain music-related knowledge and experience.	<i>n</i> = 5 2.3%	<i>n</i> = 10 4.6%	<i>n</i> = 4 1.9%	<i>n</i> = 20 9.3%	<i>n</i> = 37 17.1%	<i>n</i> = 76 35.2%	<i>n</i> = 64 29.6%	5.58 (1.47)
I would participate in music performance experiences after high school because I would be more satisfied with my social life.	<i>n</i> = 12 5.6%	<i>n</i> = 20 9.3%	<i>n</i> = 9 4.2%	<i>n</i> = 25 11.6%	<i>n</i> = 50 23.1%	<i>n</i> = 72 33.3%	<i>n</i> = 28 13.0%	4.89 (1.69)
Participating in music performance experiences after high school is important because it would provide me with better social opportunities.	<i>n</i> = 6 2.8%	<i>n</i> = 14 6.5%	<i>n</i> = 4 1.9%	<i>n</i> = 22 10.2%	<i>n</i> = 72 33.3%	<i>n</i> = 63 29.2%	<i>n</i> = 35 16.2%	5.17 (1.46)
Participating in music performance experiences after high school will help assure me of what to do with my life.	<i>n</i> = 15 6.9%	<i>n</i> = 30 13.9%	<i>n</i> = 23 10.6%	<i>n</i> = 45 20.8%	<i>n</i> = 36 16.7%	<i>n</i> = 36 16.7%	<i>n</i> = 31 14.4%	4.34 (1.82)

Table 13***IASTVB: Cost Subscale—Item Frequencies, Percentages, Means, and Standard Deviations***

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean (Standard deviation)
I am worried that spending time participating in music performance experiences after high school would take time away from other activities I want to pursue. (Reverse scored for analysis.)	<i>n</i> = 25 11.6%	<i>n</i> = 48 22.2%	<i>n</i> = 25 11.6%	<i>n</i> = 21 9.7%	<i>n</i> = 50 23.1%	<i>n</i> = 33 15.3%	<i>n</i> = 14 6.5%	3.82 (1.86)
Participating in music performance experiences after high school is worth it regardless of financial costs I may face while participating.	<i>n</i> = 9 4.2%	<i>n</i> = 19 8.8%	<i>n</i> = 27 12.5%	<i>n</i> = 31 14.4%	<i>n</i> = 55 25.5%	<i>n</i> = 45 20.8%	<i>n</i> = 30 13.9%	4.66 (1.66)
Participating in music performance experiences after high school is worth it, even if I earn less money than if I spent that time working.	<i>n</i> = 12 5.6%	<i>n</i> = 17 7.9%	<i>n</i> = 23 10.6%	<i>n</i> = 36 16.7%	<i>n</i> = 50 23.1%	<i>n</i> = 52 24.1%	<i>n</i> = 26 12.0%	4.64 (1.67)
Participating in music performance experiences after high school will be worth it in the end, considering all the work and effort that goes into it.	<i>n</i> = 5 2.3%	<i>n</i> = 7 3.2%	<i>n</i> = 8 3.7%	<i>n</i> = 22 10.2%	<i>n</i> = 49 22.7%	<i>n</i> = 74 34.3%	<i>n</i> = 51 23.6%	5.45 (1.42)
I am concerned that, considering what I want to do with my life, participating in music performance experiences after high school would not be worth the effort. (Reverse scored for analysis.)	<i>n</i> = 33 15.3%	<i>n</i> = 50 23.1%	<i>n</i> = 28 13.0%	<i>n</i> = 28 13.0%	<i>n</i> = 43 19.9%	<i>n</i> = 27 12.5%	<i>n</i> = 7 3.2%	3.50 (1.78)

Table 13, continued

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	Mean (Standard deviation)
I am concerned that participating in music performance experiences after high school will prevent me from being able to focus on my social and home life. (Reverse scored for analysis.)	<i>n</i> = 30 13.9%	<i>n</i> = 64 29.6%	<i>n</i> = 31 14.4%	<i>n</i> = 34 15.7%	<i>n</i> = 36 16.7%	<i>n</i> = 17 7.9%	<i>n</i> = 4 1.9%	3.23 (1.63)
I am worried that I would waste a lot of time and money participating in music performance experiences after high school. (Reverse scored for analysis.)	<i>n</i> = 24 11.1%	<i>n</i> = 62 28.7%	<i>n</i> = 33 15.3%	<i>n</i> = 25 11.6%	<i>n</i> = 48 22.2%	<i>n</i> = 17 7.9%	<i>n</i> = 7 3.2%	3.42 (1.67)
Participating in music performance experiences after high school will not be worth it if it causes me additional stress. (Reverse scored for analysis.)	<i>n</i> = 28 13.0%	<i>n</i> = 35 16.2%	<i>n</i> = 26 12.0%	<i>n</i> = 35 16.2%	<i>n</i> = 50 23.1%	<i>n</i> = 24 11.1%	<i>n</i> = 18 8.3%	3.87 (1.83)

Table 14***Intent to continue—Item Frequencies, Percentages, Mean, and Standard Deviation***

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)	<i>Mean (Standard deviation)</i>
I am planning to continue involvement in music performance after high school graduation. (This could include involvement in a college ensemble as a non major or music major, a community ensemble, a church ensemble, jazz group, rock band, pit orchestra, etc.)	<i>n</i> = 6 2.8%	<i>n</i> = 11 5.1%	<i>n</i> = 6 2.8%	<i>n</i> = 13 6.0%	<i>n</i> = 27 12.5%	<i>n</i> = 53 24.5%	<i>n</i> = 100 46.3%	5.79 (1.60)

Descriptive statistics for respondents' mean scores on the expectancy scale and the subjective value subscales are reported in Table 15. (Higher scores indicated higher levels of each scale.)

Table 15***Means, Standard Deviations, and Ranges for Expectancy Scale and Subjective Value******Subscales***

	<i>Mean (Standard deviation)</i>	<i>Minimum, Maximum</i>
Expectancy	5.57 (0.79)	3.00, 7.00
Intrinsic Value	5.68 (1.31)	1.00, 7.00
Attainment Value	4.71 (1.36)	1.38, 7.00
Utility Value	4.23 (1.40)	1.00, 7.00
Cost Value	4.62 (1.20)	1.38, 7.00

Table 15, continued

	<i>Mean (Standard deviation)</i>	<i>Minimum, Maximum</i>
Value Overall	4.72 (1.18)	1.45, 6.85

The reliability of each subscale was analyzed separately (Field, 2018). Table 16 shows Chronbach's alpha values and the number of items in each subscale. The bivariate Pearson correlations of scales and subscales are shown in Table 17.

Table 16***Reliability Analysis of Modified NGSES and Modified IASTVB***

Subscale	Cronbach's α	Number of items
Expectancy	.895	8
Intrinsic value	.960	7
Attainment value	.944	13
Utility value	.931	12
Cost	.857	8

Table 17***Bivariate Pearson Correlations of Scales and Subscales***

		Intent to continue	Expectancy	Intrinsic value	Attainment value	Utility value	Value Cost overall
Intent to continue	Pearson Correlation	1					
Expectancy	Pearson Correlation	.385**	1				
	Sig. (2-tailed)	<.001					
Intrinsic value	Pearson Correlation	.715**	.592**	1			
	Sig. (2-tailed)	<.001	<.001				

Table 17, continued

		Intent to continue	Expectancy	Intrinsic value	Attainment value	Utility value	Cost	Value overall
Attainment value	Pearson Correlation	.524**	.513**	.767**	1			
	Sig. (2-tailed)	<.001	<.001	<.001				
Utility value	Pearson Correlation	.453**	.531**	.742**	.867**	1		
	Sig. (2-tailed)	<.001	<.001	<.001	<.001			
Cost	Pearson Correlation	.448**	.548**	.626**	.536**	.558**	1	
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001		
Value overall	Pearson Correlation	.586**	.607**	.871**	.940**	.937**	.723**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	<.001	

**Correlation is significant at the 0.01 level (2-tailed)

Individuals were also grouped by their intention to persist in music beyond graduation. That is, individuals who responded that they “somewhat agree,” “agree,” or “strongly agree” with the statement regarding intention to persist in music performance beyond graduation were included in the “persisting individuals” group. Individuals who responded “neither agree nor disagree” with the aforementioned prompt were included in the “unsure individuals” group. Individuals who responded “somewhat disagree,” “disagree,” or “strongly disagree” were included in the “desisting individuals” group. The means and standard deviations for each scale, grouped by intention to persist in music, are shown in Table 18. The means and standard deviations for expectancy by gender identity are shown in Table 19.

Table 18

Means and Standard Deviations of Constructs/Subconstructs by Intent to Persist Grouping

	Persisting individuals <i>Mean</i> (<i>Standard deviation</i>)	Unsure individuals <i>Mean</i> (<i>Standard deviation</i>)	Desisting individuals <i>Mean</i> (<i>Standard deviation</i>)
Expectancy	5.67 (0.74)	5.18 (0.77)	5.00 (0.95)
Intrinsic value	6.03 (0.91)	4.63 (0.84)	3.57 (1.83)

Table 18, continued

	Persisting individuals <i>Mean</i> (<i>Standard deviation</i>)	Unsure individuals <i>Mean</i> (<i>Standard deviation</i>)	Desisting individuals <i>Mean</i> (<i>Standard deviation</i>)
Attainment value	4.96 (1.21)	3.91 (1.12)	3.24 (1.50)
Utility value	4.45 (1.28)	3.61 (1.41)	2.89 (1.51)
Cost	4.78 (1.11)	4.01 (1.00)	3.64 (1.40)
All value	4.96 (1.00)	3.97 (0.99)	3.27 (1.40)

Table 19***Expectancy Means and Standard Deviations by Gender Identity***

	<i>Number of respondents</i> <i>Mean</i> (<i>Standard deviation</i>)
Female	<i>n = 129</i> 5.58 (0.83)
Male	<i>n = 70</i> 5.62 (0.78)
Other	<i>n = 11</i> 5.11 (0.62)

Participants ($N = 216$) were asked to indicate which type of ensemble they would be particularly interested in participating in beyond high school. Individuals who planned to desist in music performance ensembles beyond graduation also responded to this item. Respondents were given the opportunity to select more than one ensemble if applicable. Band-area ensembles

(e.g., wind ensemble, concert band, marching band, jazz band, percussion ensemble, etc.) were of interest to 110 respondents (50.9%). Chorus-area ensembles (e.g., chorus, choir, jazz choir, show choir, chamber choir, barbershop quartet, etc.) were of interest to 73 respondents (33.8%). Orchestra-area ensembles (e.g., orchestra, string quartet, string chamber group, etc.) were of interest to 74 respondents (34.3%). Rock, metal, punk, indie, or pop bands were of interest to 59 respondents (27.3%). Latin ensembles (e.g., mariachi, salsa, cumbia, samba, etc.) were of interest to seven respondents (3.2%). Rap, hip-hop, etc. was of interest to 11 respondents (5.1%). Country, Americana, or bluegrass was of interest to eight respondents (3.7%). Musical theater or pit ensembles was of interest to five respondents (2.3%). Electronic music was of interest to one respondent (0.5%). Participating in more than one ensemble was of interest to 97 respondents (44.9%).

The third research question addressed the extent to which the constructs discussed in the expectancy-value theory of motivation (i.e., expectancy, intrinsic value, affirmation value, utility value, and cost) are salient predictors of individuals' intentions to persist in music performance beyond graduation. To investigate this matter a multiple linear regression model was created. Intent to continue was regressed on the expectancy scale and the subjective value subscales (i.e., intrinsic value, attainment value, utility value, and cost). The data were explored to address the assumptions of multiple linear regression before performing the analysis. A Kolmogorov-Smirnov test of the standardized residuals indicated a non-normal distribution. Schmidt and Finan (2018) contended that linear regression is robust to violations of the normality assumption when the sample size is sufficiently large (e.g., more than 10 observations per variable). They maintained that data transformations undertaken to achieve normality are often problematic due to the potential to unnecessarily introduce bias to point estimates. Lumley et al. (2002) also

contributed to the discussion on violations of normality in large data sets and demonstrated that regression is robust to violations of normality. They added that while violations to homoscedasticity can potentially be problematic, the prudent researcher will consider their aims when considering specific statistical methods and adherence to assumptions. A Modified Breusch-Pagan Test for Heteroskedasticity—a procedure robust to non-Gaussian distributions of residuals—indicated that the data was homoscedastic, $\chi^2(1, N = 216) = .016, p = .899$ (Koenker & Bassett, 1982). The data met the assumption of independence of observations (Durbin-Watson value = 2.04, $p = <.001$). Collinearity was deemed to be acceptable through observation of suitable variance inflation factors (James et al., 2021) and tolerance values (Field, 2018). The dependent variable (i.e., intent to continue) demonstrated a linear relationship with each of the subscales. The dependent variable also demonstrated a linear relationship with the *IASTVB* overall (i.e., the meaned value-subscales).

A forced entry multiple linear regression was performed to predict individuals' intent to continue in music beyond graduation based on expectancy, intrinsic value, attainment value, utility value, and cost. The results of the multiple linear regression indicated that the overall model significantly predicted scores of students' intent to continue in music beyond graduation ($F(5,210) = 47.386, p = <.001$), with an adjusted R^2 of .519. See Table 20 for a review of the model summary. The model summary indicated that intrinsic value and utility value were significant predictors of individuals' intentions to persist in music beyond graduation. The model summary indicated that expectancy, attainment value, and cost were not significant predictors of individuals' intentions to persist in music beyond graduation.

Table 20***Forced Entry Multiple Linear Regression Model Summary***

	Model	<i>B</i>	<i>B SE</i>	β	<i>t</i>	<i>p</i>
1	(Constant)	.959	.547		1.752	.081
	Expectancy	-.092	.124	-.046	-.738	.461
	Intrinsic value	.988	.102	.808	9.648	<.001
	Attainment value	.152	.121	.129	1.256	.210
	Utility value	-.295	.113	-.259	-2.602	.010
	Cost	.058	.085	.043	.676	.500

Note: $R^2_{adj} = .519$

Qualitative Findings

After responding to the modified NGSES and modified IASTVB, participants had the option to provide an open-ended response to two prompts regarding their decision whether to persist in music beyond graduation. I used Saldaña's (2009) conventions to analyze open responses provided by respondents in the full-data collection phase. Following the protocol established in the analysis of the pilot, I analyzed open responses by utilizing *InVivo* coding and themeing [sic] the data for first round coding, and pattern coding for second round coding.

The first open-ended prompt asked participants whether there was additional information they would like to share about their decision whether to persist in music beyond graduation. Five themes regarding the prompt emerged throughout the process of coding and subsequent analysis.

1. Specific expectations of ensemble experiences were a significant driver of individuals' decisions whether to persist.
2. Concerns, future costs (e.g., time, stress, financial, opportunity costs, etc.), uncertainty, and/or perceived incompatibility with individuals' intended major dehorted individuals from persisting in music beyond graduation.

3. Intrinsic value was a significant driver of individuals' decisions to persist in music beyond graduation.
4. Utility value was a significant driver of individuals' decisions to persist in music beyond graduation.
5. Music as an amateur pursuit was cited as a desirable approach to integrating music into individuals' lives beyond high school.

Finding 1: Specific expectations of ensemble experiences were a significant driver of individuals' decisions whether to persist

Individuals offered a variety of commentary regarding the relation of their ensemble expectations and their intention to persist. One respondent stated that they did not plan on participating in music in “college unless [an ensemble] really stands out.” Another respondent indicated that they would be “more inclined to pursue” music if there were “low key performance options.” Multiple respondents specified they wanted to participate in music but did not wish to compete. Of these, one individual mentioned that they were pursuing education and felt that education and competition were “at odds with each other.” One student replied that they wanted to participate in a “no pressure, no commitment ensemble” after high school so they could decide if it was worth the effort. One respondent who did not plan on pursuing music as a career wanted to continue in concert band, but was looking for a different experience than the one they experienced in high school. They mentioned that they were “mentally drained” from a year in high school band and wanted to have a different band experience to see if they enjoyed it more than the preceding band experience.

Finding 2: Concerns, costs (e.g., time, stress, financial, opportunity costs, etc.), uncertainty, perceived incompatibility with individuals' intended major or career goals, and/or social dissuasion dehorned individuals from persisting in music beyond graduation

One respondent indicated that while they had originally planned to pursue composition and performance they were convinced to “pursue a lucrative job.” They did not indicate who had dissuaded them from their original intention. Several individuals simultaneously expressed interest in persisting in music and doubt about music opportunities. One student responded that they “really want to participate in music performance after high school, but where I’m going there aren’t any opportunities for someone that doesn’t want to do it full time.” Other respondents echoed this sentiment. Another student—who was considering music as a major—expressed concern: “I play euphonium, so my potential gigs are limited.”

Perceived costs (e.g., time, stress, financial, opportunity costs, etc.) were an oft-cited factor mentioned by respondents when asked if there was anything else they would like to share about their intention to persist in music performance. Time cost was cited several times as the main source of concern regarding participating in music performance beyond graduation. Some individuals indicated simultaneous concerns regarding more than facet of cost (e.g., time and stress cost). For example, one respondent indicated that music was significant to them as a hobby, but would only continue involvement in music if it was not too stressful and time consuming. Stress costs emerged as a prominent factor impacting individuals’ thinking about persistence in music performance. One participant—who indicated they were not considering music as a career because the salary was too low—mentioned that they did not want “additional stress during college.” This individual was also dissuaded from participation by their parents. Multiple individuals factored in the financial costs associated with continuing involvement in

music performance when deciding whether to participate. One student confided the following: “My family is stuck in the lower class, and I have this nagging fear that I will never escape that, especially in our current economy.” However, the student also reported concern that if they did not pursue music, they would struggle to find social opportunities. Another respondent revealed serious concerns but also resolved to follow their musical aspirations.

I am scared of the amount of work it will take. I am scared of being poor. I am scared that I will not be good enough, that I will not make a good teacher or performer. However, if I did anything else with my life I would be incredibly sad. I might be exhausted, broke, and not the best but I know I will be happy if I spend every day playing, teaching, learning, and performing music. I am not the best musician but I work harder than anyone I know because I love music with everything I am.

Individuals expressed concerns regarding opportunity costs; some respondents simultaneously expressed a perception that their majors were incompatible with participating in music performance ensembles, even as a non major. One individual offered the perspective that music “doesn’t go along with the degree I want to pursue and I’m afraid that it would take some experiences away from me even though I love to sing.” One respondent indicated that while they were originally planning to pursue a minor degree in music alongside a major degree in education, they had been dissuaded from doing so by a representative of the education department. The student was told that minoring in music “would be near impossible.” The student still planned to participate in music without pursuing the minor degree in music in order to maintain scheduling flexibility. One individual was interested in participating in marching band but was concerned that, due to the demands of their major focus on nursing, they would be unable to either participate in marching band or unable to enjoy the experience. Individuals also

cited general concerns about the transition to music performance experiences beyond high school and trepidation about new ensemble experiences. One student stated: I enjoyed singing very much in high school, I just don't know if the talent I have is worth carrying into a whole new experience.” Another reported, “I’m afraid I’m not good enough to be in college level groups.”

Finding 3: Intrinsic value was a significant driver of individuals’ decisions to persist in music beyond graduation

The innate joy that individuals experienced in the course of participation in music performance was a major driver for individuals’ intentions to persist. One individual declared “My love for music transcends cost of secondary education or event.” Another respondent indicated that they would participate in music regardless of its impact on their social life because it was an activity that they enjoyed. Several individuals who planned a divergent career from music commented that they would join an ensemble for fun during their time in higher education. Of the aforementioned individuals, one indicated a desire to continue singing and playing their instrument because it made them “feel good.” Another respondent indicated that having fun throughout the course of an ensemble experience was their goal, rather than improving their musical skills. One respondent, while unsure of the role music would play in their life after graduation, commented that they would still like to “pick up the instrument from time to time, and remember the joy that it brings me.” While some individuals expressed concern, they declared that their love of music impelled their plans to pursue music. Some respondents acknowledged that while they were unsure of how music would fit into their lives beyond high school, they enjoyed participation and wanted to continue to keep the door open for involvement throughout life by participating music performance in college. A respondent who intended to pursue a music major with a focus on audio production intended to continue involvement in a

diverse range of music performance areas for the intrinsic value, stating that while they were “an okay ish [sic] singer, I more sing for fun.”

Finding 4: Utility value was a significant driver of individuals’ decisions to persist in music beyond graduation

Responses from individuals revealed varied facets of utility value as a motivating factor for individuals’ persistence in music performance. The positive social impact of involvement in music performance ensembles, music as a coping mechanism, and music as a livelihood emerged as salient trends. Interpersonal opportunities derived from participation in music ensembles were of significant value for multiple individuals, with one student stating that their primary goal was to participate in music to be part of a “community, rather than to get better.” Another student recognized that the effort required to participate in a music performance ensemble was justified by the social experiences afforded by participation, stating, “I mainly wish to keep up the work due to the social part of it.” The same individual reported that they were “on the rocks” regarding a plan for their future career and stay involved in music in case they decided to pursue music as a career.

Several respondents indicated that music was an effective coping mechanism for stress and mental health conditions (e.g., anxiety, depression). One student confided that “music also calms me down, so whenever I feel stressed, I turn to music for help.” Another reported that music helps to keep their “mind off of anxiety and depression.” The utility of involvement in a music performance ensemble was evident not only for individuals planning careers in music, but also individuals who sought involvement for financial considerations. For example, one student planned to join the Iowa Army Band to help pay for college. Another planned to pursue a

position in the Marine Band to help pay for college, where they planned to pursue music composition.

Finding 5: Music as an amateur pursuit was cited as a desirable approach to integrating music into individuals' lives beyond high school

Many respondents indicated that while they planned to pursue careers diverging from music, they wished to persist in music performance ensembles as amateurs. One individual stated that while they were not pursuing music as a career, they “plan on keeping it as a regular part of my life, regardless of where I end up.” Another participant offered their personal rationale for their intention to participate in music as an amateur: “When I have to play music it's not fun anymore, so I want it to remain a hobby of mine.” Others indicated a desire to continue involvement in music, but not in the context of a group or ensemble. One participant responded that they “would like to continue playing as a hobby, however, I would not play professionally or with others.” Several individuals indicated their intention to pursue music as an amateur in either community, non-competitive, or non-auditioned ensembles. These individuals conceptualized their involvement in community groups as a way to balance life goals and their interest in music. Several individuals suggested that while they were not pursuing music as a career, music was an important part of their life that they would like to maintain. While the social aspect of a music performance ensemble appealed to some individuals who intended to pursue music as an amateur, it was of little to no importance for others. For these students, involvement in music as an amateur was based on innate gratification. Others still indicated that their desire to persist in music as an amateur was driven by myriad factors.

I love music and I love performing, but do not intend to continue at a high/career level. I am interested in continuing in community or school ensembles where the focus is on

growing musical ability, learning, and enjoying the process. I no longer want music to take up so much of my life or cause me so much stress. I would much rather continue what I love about it—the community, the experience, and the joy playing music brings. Several individuals expressed confidence regarding their decision to persist as an amateur after high school. One student declared “the instability and uncertainty of the career for little financial security affirms my decision to want to keep it a hobby/passion.”

The second open-ended prompt asked students who were undecided about persistence in music beyond graduation about potential factors that might influence their decision. Three themes emerged throughout the coding and subsequent analysis.

1. Respondents expected that positive facets of the ensemble experience (e.g., social environment, fit in ensemble, ease of entry, level of enjoyment, etc.) would impact their decision of whether to persist.
2. The extent of potential costs (e.g., time, financial, stress, opportunity, etc.) associated with participation in an ensemble experience emerged as a potential motivational driver.
3. Respondents indicated that individual musical growth, musical opportunities, and ancillary opportunities/benefits associated with ensemble participation might impact their persistence in performance ensembles.

Finding 1: Respondents expected that positive facets of the ensemble experience (e.g., social environment, fit in ensemble, ease of entry, level of enjoyment, etc.) would impact their decision of whether to persist.

Many respondents who were undecided about persistence in music performance ensembles suggested that persistence would be impacted by the extent to which they anticipated or experienced positive results related to involvement in the ensemble. The individuals’

assessment of fit in the ensemble, social environment, success, ease of entry, level of enjoyment, and the quality of available equipment were mentioned as factors which might impact persistence. An individuals' fit in an ensemble was the most cited potential factor which could impact persistence. One respondent conceptualized persistence based on how their "current skill level and set" fit into the ensemble. One individual expressly mentioned the audition process as a potential barrier which might dissuade them from persistence. Others wished to find a "no-pressure" ensemble through which they could figure out whether the ensemble experience was something they wanted to further pursue. Regarding social environment, one individual who was considering musical involvement as a non major reported "I feel like the people I meet would definitely influence my decision." The individual stated that while they were not interested in music as a career, they held the belief that music could bring them joy. Another participant cited the desire for acceptance as a potential driver of persistence: "Music has always been a safe place for me. It has always been a place where I feel accepted and find friends."

Finding 2: The extent of potential costs (e.g., time, financial, stress, opportunity, etc.) associated with participation in an ensemble experience emerged as a potential motivational driver.

Participants referenced specific cost areas related to the potential of persisting in music beyond graduation. For several individuals time and opportunity cost emerged as a main concern of continued involvement in music performance ensembles. One participant stated they would participate in a performance ensemble "if I was able to still reach my main goal, and just do music without it taking up all my time." Another individual echoed that sentiment: "I will only choose to participate in music after school if it is accessible to me and does not impose upon my other pursuits." Time cost was a primary factor in the decision of whether to persist in music

ensembles with one individual sharing “if I have the time I would definitely continue with music performance.” Several respondents considered the impact that music might have on their desired balance of activities beyond high school. One individual offered that their decision of participation in performance ensembles would be informed by “whether or not I will have time to continue participating while balancing college and work life.” Some respondents referenced the relation between stress, time, and opportunity costs with one student commenting that “it depends on if marching band will take up too much time and I will just be stressed instead of enjoying college.” Even some individuals who were planning on pursuing music in higher education expressed concern about balancing various areas within music. One student confided “I am worried that music performance may take away time from my main focus: composition.” Several respondents also indicated that financial costs were a significant factor that could influence their decision of whether to persist in music performance ensembles. One individual replied tersely that “money stuff” might be a primary barrier. One student indicated that the primary driver would be interpersonal experiences but that the “cost of participation might also be a slight influence.”

Finding 3: Respondents indicated that individual musical growth, musical opportunities, and ancillary opportunities/benefits associated with ensemble participation might impact their persistence in performance ensembles.

Outcomes connected to participation in music performance ensembles emerged as a potential driver of persistence beyond graduation. One respondent stated that “the track of my improvement in music/playing” would impact the decision of whether to persist in music ensembles long term. Several respondents indicated that musical opportunities had the potential to impact persistence in music ensembles. One student reported that “if there’s nowhere for me

to participate in music where I'm living, I'm not sure I would be inclined to travel for it."

Another student declared that "future opportunities that pop up for music performance" could factor into their musical life beyond graduation. Respondents also indicated that ancillary opportunities or benefits associated with music ensemble participation (e.g., scholarships) could impact their decision of whether to persist. One student stated that their decision could be impacted by "how much I can get in scholarships from the college I plan to attend." Another student replied "If I got some scholarships :) [sic]." Others were less specific with the types of ancillary opportunities that might impact their decisions. One individual shared that their decision might be impacted by "the opportunities that go along with going into music." Another student who was unsure about their decision of whether to persist in music performance ensembles stated that "opportunities that come will change my decision."

V. Discussion

Overview of Findings

Philosophical inquires and applied research efforts alike have contributed to the discourse on involvement and persistence in music across the life cycle. Seminal colloquia (e.g., Housewright Symposium on the Future of Music Education, Tanglewood Symposia) have contributed to dialogue on strategies and initiatives to support individuals' engagement in music at all ages. Accordingly, music educators have attempted to address barriers to engagement (e.g., financial and scheduling barriers, limited access, etc.). These efforts have been spurred in part by demonstrable trends regarding attrition in music across the life cycle, in particular during transition points fraught with desistence (e.g., Mantie & Dorfman, 2014). Furthermore, considerable efforts have been made by music education researchers to examine motivation and persistence in music (e.g., Corenblum & Marshall, 1998; Delano & Royse, 1987; Freer & Evans, 2019; Kinney, 2010; Yoo, 2021). The goal of this study was to expand upon music education research concerning motivation and persistence during a transitory period (i.e., the transition beyond high school). Specifically, the purpose of this study was to examine grade 12 students' intentions to persist in music performance ensembles beyond graduation using the expectancy-value theory of motivation. The following questions guided the research: (1) To what extent do grade 12 music performance students value continued involvement in music performance experiences beyond high school graduation?; (2) To what extent do grade 12 music performance students hold positive views of self-efficacy in music performance experiences beyond graduation?; and (3) Which of the constructs discussed in the expectancy-value theory of motivation (i.e., expectancy, intrinsic value, affirmation value, utility value, cost) are salient predictors of grade 12 music performance students' intentions to persist in music beyond high

school graduation? To assess the construct of subjective task value, participants responded to a modified Instrument to Assess Subjective Task Value Beliefs Regarding the Decision to Pursue Postgraduate Training (IASTVB). To assess the construct of expectancy, participants responded to a modified New General Self Efficacy Scale (N-GSES). Participants also responded to a single-item measure of intent to continue in music performance beyond graduation. Each instrument utilized seven-point Likert scales with anchors of strongly disagree and strongly agree. Participants also had the option to respond to two open-ended questions regarding their decision of whether to persist in music performance ensembles beyond graduation.

The expectancy-value theory of motivation holds that motivation is governed by the relation of the subjective value an individual places on a task and their expectancy of successfully accomplishing the task. The IASTVB contains subscales—one for each of the four domains of value discussed in the expectancy-value theory of motivation: intrinsic, attainment, utility, and cost value. The mean for combined value subscales (i.e., value overall) was 4.72 (standard deviation of 1.18). The mean of the intrinsic value subscale was 5.68 (standard deviation of 1.31). The mean of the attainment value subscale was 4.71 (standard deviation of 1.36). The mean of the utility value subscale was 4.23 (standard deviation of 1.40). The mean of the cost subscale was 4.62 (standard deviation of 1.20). The mean of the expectancy subscale was 5.57 (standard deviation of 0.79). Overall, students held rather positive views of expectancy in music performance settings. For example, 79.7% ($n = 173$) of respondents agreed or strongly agreed with the following statement: “In music performance situations, I can achieve most of the goals that I have set for myself.”

A forced entry multiple linear regression model was utilized to examine the extent to which constructs discussed in expectancy-value theory were salient predictors of persistence in

music performance ensembles beyond graduation. Accordingly, intention to persist in music performance beyond graduation was selected as the outcome variable. Expectancy and the subconstructs of subjective task value (intrinsic value, attainment value, utility value, cost) were selected as predictor variables. The forced entry linear regression model utilized the domains of expectancy-value theory and explained 51.9% of variance in the model. The linear regression model indicated that intrinsic value and utility value were significant predictors of intention to persist in music beyond graduation. Expectancy, attainment value, and cost were not significant predictors of intention to persist in music beyond graduation.

Expectancy

The construct of expectancy has received significant attention in the literature of motivation. The current study found that expectancy was not a salient predictor of individuals' intentions to persist in music beyond graduation. Examination of expectancy by group (i.e., persisting individuals, unsure individuals, and desisting individuals) seems to indicate a rather narrow spread between scores for the three groups. The mean expectancy among persisting individuals was 5.67 (standard deviation of 0.74). The mean expectancy among unsure individuals was 5.18 (standard deviation of 0.77). The mean expectancy among desisting individuals was 5.00 (standard deviation of 0.95). The mean score of each group seemed to indicate that individuals conceptualized their ability to succeed in music performance experiences beyond high school in a positive light.

It is perhaps the case that the non significance of expectancy as a predictor is due to several factors. One factor might be related to individuals' ostensible self-selection to persist in music ensembles as grade 12 students. That is, the individuals who participated in the survey are members of music performance ensembles/classes and, as such, often have considerable

music/ensemble experience and have spent a notable duration of time in a performance-based class or ensemble. The mean duration of involvement in a music performance-based class or ensemble among study participants was 7.62 years (standard deviation of 2.17 years). It might be the case that grade 12 music students conceptualized expectancy based on past music ensemble/class experiences. These students have presumably experienced success (i.e., they have satisfactorily assimilated into an ensemble/class and met the associated expectations). One might consider the transitory period and the associated social upheaval as a backdrop to the decision of whether to persist in performance music experiences. While an individual might be reasonably confident of their ability to succeed in a music performance experience beyond high school based on their past experiences, it might be the case that subjective task value becomes the prominent driver, rather than expectancy. The rather narrow spread of expectancy scores seems to indicate that persisting, unsure, and desisting individuals alike have a positive view of their ability to succeed in music performance experiences beyond high school. Strickland (2010) qualitatively observed that an individual's perceptions of the locus of control related to their decisions regarding persistence in music. An internal locus of control seemed more likely to accompany decisions to persist in music, while an external locus of control seemed more likely to accompany decisions to desist in music. Considering the current study's findings in the context of locus of control perhaps elucidates the expectancy results. While only minor differences in means emerged among persisters, unsure individuals, and desisters, the increased expectancy mean exhibited by persisters indicated that they anticipated success in music performance activities. This finding perhaps suggests that respondents, overall, feel in control of their abilities to succeed if they pursue music performance activities. However, it might be the

case that the transitory period incites individuals to reconsider the ways in which they spend their limited time.

McPherson and O'Neill (2010) measured the extent to which individuals believed that they would be successful in their music experiences. They found that females had significantly higher competence beliefs than males. This contrasts with the findings of the current study regarding expectancy. In the current study, the mean expectancy among females ($n = 129$) was 5.62 (standard deviation 0.78). The mean expectancy among males ($n = 70$) was 5.58 (standard deviation 0.83). The mean expectancy among individuals who identified neither as male or female ($n = 11$) was 5.11 (standard deviation 0.62). This inconsistency might be attributable to multiple factors, including differences in populations (i.e., McPherson and O'Neill included students from eight countries), different ages (i.e., McPherson and O'Neill included students in elementary and secondary school), and self-selection bias in the current study. Future research in this area might focus on examining the relation of the constructs of perceived competence and expectancy in music performance ensembles and music overall.

Subjective Task Value

Intrinsic Value

Subjective task value (i.e., the value an individual places on an activity or pursuit) has received significant attention among researchers interested in motivation and persistence in scholastic music. The multiple linear regression model indicated that intrinsic value and utility value were salient predictors of intent to persist in music performance ensembles beyond graduation. Attainment value and cost were not significant predictors of intent to persist. The emergence of intrinsic value and utility value as salient predictors of intention to persist in music warranted additional scrutiny into these constructs. Select statistics of these constructs by

outcome grouping (i.e., persisting, unsure, and desisting individuals) perhaps sheds light on individuals' perceptions of these constructs. The mean intrinsic score of persisting individuals was 6.03 (standard deviation of 0.91), the intrinsic mean score of unsure individuals was 4.63 (standard deviation of 0.84), and the mean intrinsic score of desisting individuals was 3.57 (standard deviation of 1.83). These scores indicated that individuals intending to persist in music performance held considerably positive views of the inherent value of being involved in music performance activities. Individuals who were unsure about involvement in music performance ensembles beyond graduation held slightly positive views of the inherent value of being involved in music performance activities. Individuals who were planned to desist, overall, held negative views of the inherent value of being involved in music performance activities beyond graduation.

This study's finding that individuals' perceptions of the intrinsic value of involvement in music performance ensembles was a salient predictor of intention to persist in music beyond graduation corroborates other studies (Holster, 2023; Moder, 2018; Sichivista, 2007; Snyder, 2021). In a 2022 study on motivation in music, Holster concluded that further examination of subjective task value in music was warranted. The current study addressed the call for additional research in this area and provided insight into subconstructs that constitute subjective task value within the framework of expectancy-value theory.

The findings of the current study should perhaps spur high school music instructors to consider pertinent research literature related to intrinsic motivation. The construct of intrinsic value has received considerable attention in the social sciences. Prudent music educators might consume pertinent research and make transfers to their respective educational and musical settings. Lekes et al. (2011) studied the impact of family environment influences on adolescents' endorsement of values preferred by their mothers. The researchers found a relation between the

extent to which adolescents experienced needs satisfaction (i.e., autonomy, relatedness, and competence satisfaction) at home and the congruence of child/mother values. Music instructors might consider the implications of the research when structuring their ensembles and activities embedded in the experience. Instructors might seek to create opportunities which engender autonomy, relatedness, and competence. A meta-analysis of autonomy support interventions led Su and Reeve (2011) to conclude that the best practices for supporting the developing of autonomy included using non-controlling language and providing blended in-person and follow-up learning activities. For example, implementation of non-controlling language in music ensembles might include encouraging exploration of timbre to find one's own musical voice on an instrument. This concept might also be applied when directors are articulating feedback to an ensemble. For example, rather than saying "I need the ritardando to more pronounced," the instructor might say "We might try a more pronounced ritardando to let the music breathe." Another example might be found in the jazz ensemble. Rather than telling a student what ride cymbal to use, an instructor might ask the student to listen to seminal jazz recordings and then choose one cymbal out of three options selected by the instructor. An example of blended in-person and follow-up learning activities might be illustrated by following up a lesson on improvisation with assigning students to improvise with a different peer for five minutes each day for a week. This strategy has the potential to engage students and might simultaneously lead to (1) increased perceptions of intrinsic value as they enjoy the process of improvisatory music making, (2) increased perceptions of attainment value as they embody active musical improvisation, (3) increased perceptions of utility value as they conceptualize the role of music in socializing and developing relationships, and (4) decreased perceptions of cost as students experience meaningful music making without an onerous time commitment. Competence

satisfaction might be supported through careful programming and scaffolding of skills so that students experience competence or perhaps mastery.

For high school music directors who are committed to supporting lifelong musicianship, this perhaps raises questions regarding the priorities of classes and ensembles and how the limited asset of time is to be spent. For example, directors might consider an integrated perspective when contemplating the value placed upon externalized awards. While it is outside of the scope of this manuscript to expound this topic, it bears mentioning in this document—as a study of motivation beyond graduation—that a focus on external accolades warrants further philosophical and applied examination. However, at the same time it would be reductionist to overlook the potential benefits of involvement in music competition. For example, some individuals might, through the process of pursuing external honors, undergo a musical experience that ultimately supports involvement in the long run. Further examination of motivation and its relation to competition is a topic that merits careful study. Researchers and practitioners alike should recognize the personal nature of a musical experience. Observation of attrition in music across scholastic music sequences seems to suggest there is not a “one-size-fits-all” music curriculum that meets the needs of all students. Future research might include longitudinal studies and pointed efforts to represent different individuals from different geographic, racial, ethnic, socioeconomic, and/or academic achievement groups. For example, future research has the potential to inform motivation drivers impacting the disparity of musical participation among different geographic regions in the United States. As Elpus and Abril (2011) demonstrated, 25.7% of seniors in the Midwestern United States participated in music ensembles compared to 17.7% of seniors in the Western states. Additionally, researchers might examine the relation of involvement in music ensembles and family demographics. Elpus and Abril’s analysis

indicated that 79.4% of senior music students had two parents living at home. Correspondingly, Kinney's (2019) examination of band enrollment indicated that 10th grade students with two parents/guardians living at home were 21% more likely to enroll in band. Researchers might consider exploration of the aforementioned trends using the construct of cost as a lens. Financial cost, opportunity cost, stress cost, scheduling demands/costs, etc.—not only for the students, but also for parents/guardians—stand to impact enrollment and persistence among students from different family living situations.

The narrative information enriched the motivational profile shaped by quantifiable data in the current study. Multiple participants indicated that while they were planning to pursue a career divergent from music, they were committed to involvement in music beyond graduation as amateurs. I have chosen to frame individuals on the aforementioned path as amateurs based on the etymology of the word amateur—from the Latin *amātor*, meaning lover or devotee. The qualitative data revealed that for multiple individuals, music was a pursuit of paramount personal importance. While these individuals did not conceptualize music as a part of their future livelihoods, they wanted it to remain a part of their lives. These individuals' intense conceptualization of the intrinsic value of music was illustrated by their dedication to music as they conceptualized the transition out of high school, and in many cases out of their homes, as they looked forward to the next phase of their lives, which for most are markedly different. This commitment to persistence in music is perhaps especially remarkable when one considers the profound changes—social, academic, living arrangements, geographic, etc.—these individuals are soon to undergo.

Utility Value

The construct of utility value was a significant predictor of intent to persist and was examined by outcome group (i.e., persisting, unsure, and desisting individuals). The mean utility value score among individuals who intended to persist in music performance ensembles was 4.45 (standard deviation of 1.28). The mean utility value score among individuals who were unsure whether to persist in music performance ensembles was 3.61 (standard deviation of 1.41). The mean utility value score among individuals who intended to desist from music performance ensembles was 2.89 (standard deviation of 1.51). The data indicated that (1) individuals who planned to persist had a somewhat positive view of the utility value of involvement in music performance activities, (2) unsure individuals also had a positive view of involvement in music performance activities, albeit to a lesser extent, and (3) individuals who did not intend to persist in music performance activities beyond graduation did not prize the utility value associated with music performance beyond high school. The qualitative data provided insight into the potential tangible outcomes that participants associated with involvement in music performance activities beyond graduation. The range of outcomes associated with utility value included social opportunities, music as a coping mechanism, and music as part of a primary or secondary vocation. The potential for music to support social networking opportunities was apparent for many individuals. Respondents commented that music was an effective way to meet other people, socialize, and enter a community.

The construct of utility value should be considered in the context of contemporary digital social mechanisms and platforms (e.g., social media). These contemporary digital, remote folkways through which young adults are currently socializing represent a remarkable upheaval compared to life before digital social media (Dijck, 2013). In 2021, 84% of American individuals

aged 18–29 reported using social media (Auxier & Anderson, 2021). This accorded with Cumberledge’s (2020) study and the observation that 89.9% of college freshman participating in marching band utilized Instagram. Additionally, Cumberledge found that YouTube videos were an important driver of participation in marching band, second only to face-to-face contact with college band directors. Consideration of these figures propound interesting connections to utility value. That is, social media has the ability to highlight potential social value and communities of musicians that students matriculating into higher education might experience. However, at the same time, YouTube videos—either posted by music departments or unaffiliated individuals—have the potential to underscore potential musical value separate from social value. The findings in the current study that both utility value and intrinsic value are significant predictors of persistence in music beyond high school perhaps elucidates the mechanisms through which digital social media impact persistence in music across a complicated social transition. The finding that utility value is a significant predictor of intention to persist in music perhaps lends credence to efforts undertaken by high school music teachers and music departments to showcase social aspects of music. One avenue for future research is an examination of the role of social media in individuals’ intentions to become involved in community music.

The utility value of involvement in music extended, for some individuals, into the realm of wellness. The finding that individuals utilized and valued music as a strategy to mediate anxiety and depression echoes pertinent literature regarding music as a coping mechanism (e.g., Miranda, 2019; Nucup & Lobo, 2022; Ramesh, 2020; Reybrouck et al., 2020). One participant in the current study confided that their involvement in music helped to keep their “mind off of anxiety and depression.” This finding aligns with prior research on music as a coping mechanism and raises questions regarding the exact circumstances (e.g., ensemble experiences, applied

lessons, etc.) in which music functions as a utilitarian coping mechanism. One avenue for future research is a pointed examination of music performance and music practice as a coping mechanism (i.e., a utility of music). While there is an abundance of research literature on listening to music as a coping mechanism and performance anxiety in music—and associated strategies for addressing that performance anxiety—there seems to be a dearth of literature related to the act of music performance or practice as the mechanism itself for addressing anxiety. Understanding the utility of music will perhaps better situate scholars to understand individuals' perceptions of the utility value of music. Furthermore, examinations of utility of music performance and its relation to mental illness such as depression stand to benefit sizeable populations considering the prevalence of depression among individuals in America. In 2020, 21.0 million adults (8.4%) in the United States experienced at least one episode of major depression. Adults aged 18–25 and children aged 12–17 both experienced depression at the rate of 17.0%. The latter figure represents 4.1 million individuals in the 12–17 age range (National Institute of Mental Health). Given the prevalence of major depression among both adolescents and adults in the United States, further research on the utilitarian role of music performance and practice in mediating mental illness is warranted. One possible research question might include the following: In what settings (e.g., music practice, ensemble rehearsal, etc.) is music functioning as a coping mechanism? Addressing the relation of music performance participation and depression stands to highlight the utility value of music and has the potential to significantly contribute to the discourse on music education and its role in contemporary society.

Conceptualizing Intrinsic and Utility Value Through Prominent Philosophical Viewpoints

The finding that intrinsic and utility values are significant predictors of persistence in music performance experiences raises interesting implications regarding two historically

prominent philosophies of the value of music education—the Aesthetic and Utilitarian schools of thought. One reading is that intrinsic value, as understood in the context of expectancy-value theory, corresponds to the Aesthetic philosophy of music education articulated first by Allen Britton (Mark, 1982) and then developed by Bennet Reimer (1989). Reimer maintained that “One important characteristic of aesthetic experience is ‘intrinsicity.’ This indicates that the value of the experiences comes from its own, intrinsic, self-sufficient nature” (p.103). Reimer continued on to assert that aesthetic experience serves no utilitarian purpose. This concept corresponds with Wigfield and Eccles description of intrinsic value: “the enjoyment one gains from doing the task” (2000, p. 72). In that way, the expectancy-value framework dovetails with Reimer’s philosophy to tease out the value that individuals place on distinct domains of music performance experience. The alignment of this construct between expectancy-value and the aesthetic philosophy of music education buttresses the argument for the applicability of expectancy-value theory in the context of music education. Reimer asserted that “music and the arts are unique in the values they offer, and these values are so fundamental to any notion of the good life as to be unquestionable in their necessity” (p. 9). If this perspective is to be venerated, an attending priority should be to investigate the motivational drivers that promote involvement in music and the arts. The findings from the current study that intrinsic value—which might be viewed as an analog to aesthetic experience—is a salient predictor of persistence in music performance activities beyond high school graduation underscores the connection between the musical experience and motivation to persist in music. This association might inform music teachers’ approaches to supporting musical motivation and persistence. For example, ensemble directors might consider the balance of focus they put upon different facets of a music program. In his discussion of the relation of music and emotion, Reimer calls on educators to “remember

that we are dealing with an issue that strikes to the very heart of the mystery of human consciousness” (p. 131). Accordingly, the incredible diversity of human experiences necessitates intense reflection on how a music program will serve the needs of its population. Furthermore, teachers in the current educational milieu are called upon to incorporate culturally responsive pedagogy and curricula that reflect the cultures and interests of the populations they serve (e.g., Ladson-Billings, 1995; Markowitz, 2023). Developing and implementing a coherent philosophy of music education that drives a culturally responsive curriculum might more effectively allow music teachers to cultivate intrinsic value in music for individuals, and through this, perceptions of the intrinsic value of music.

The second subconstruct of value that served as a salient predictor of persistence in the current study (i.e., utility value) seems to be a conspicuous analog to the Utilitarian philosophy of music education. Mark (1982) noted that while the Utilitarian philosophy of music education has maintained a prominent place in the discourse on the value of music in society since at least the time of ancient Greece, it began to lose ground to the Aesthetic philosophy of music education. The vigorous discussion on the priorities of public education spurred by the societal backdrop of the Cold War, Sputnik, and the space race energized music educators’ efforts to formulate a quintessential articulation of the role and value of music education. While the Utilitarian philosophy of music education has been largely displaced by the Aesthetic philosophy of music education, the results from the current study can perhaps contribute to the discourse on the relation between the two philosophies in the current cultural milieu.

While the Utilitarian philosophy has classically been focused on the development of the individual, perhaps in the current age one could consider another facet of the utility value of music. One crucial dimension of utility value associated with involvement in music, rather than

development of the individual, is the capacity for music performance involvement to foster interpersonal connection. While digital technologies have tremendous potential to support communication among individuals, researchers have demonstrated a significant prevalence of social isolation and loneliness. For example, Victor and Yang (2012) found that social isolation among individuals above 15 years of age in the United Kingdom exhibited a U-shaped distribution indicating that individuals under age 25 and over age 65 experienced the highest levels of loneliness. The researchers noted the significant relation of depression and loneliness among individuals in all age groups. The data indicated that quantity of social engagement was a protective factor against loneliness for young adults. Primack et al. (2017) observed a significant positive relation between perceived social isolation and social media use among young adults. While the researchers recognized that the directionality of the association was ambiguous, they suggested several mechanisms that might explain the relation. For example, they suggested that increased social media use might displace in-person social experiences. However, they also recognized the possibility that individuals who experienced greater social isolation dedicated more time to social media use. They concluded that given the association of social isolation and negative health outcomes (e.g., harmful cortisol levels, gene expression leading to impaired vascular and mental health), additional study of social isolation is warranted. A utilitarian reading of these findings perhaps suggests that music involvement might support positive physical outcomes for individuals.

Music educators might consider the potential for the development of in-person social networks through involvement in music performance ensembles. These social networks have the potential to positively impact individuals' social lives and should be considered in the context of Child and Lawton's (2019) finding that both young adults (i.e., aged 21–30) and late middle-age

adults (i.e., 50–70) who reported elevated social network satisfaction experienced fewer days of loneliness and perceived social isolation. Beam and Kim (2020) recognized the prevalence of social isolation among both adolescents and young adults and called for group-based experiences to combat social isolation, particularly after the lockdowns and social distancing associated with Covid-19. Furthermore, researchers have demonstrated that individuals in high school bands experienced belonging to a greater extent in their ensembles than in their schools outside of band (Siegal, 2023). The potential for music ensembles to support interpersonal relationships for individuals across the life cycle should be considered within the realm of utility value. This focus on the social value of music as a utility of musical involvement perhaps begins to blur the lines with the Praxial philosophy of music education. Elliott's recognition of music as process and product and an inherently social activity might spur consideration of the relation of the Utilitarian and Praxial philosophies of music education. And to a point, it might be a semantic distinction—Should the social processes embedded in music be considered the value/outcome of the undertaking, or is it the case that the social processes are an elementary component through which music derives its value as an art form? Paul's (2000) disquisition on the sociological foundation of Elliott's Praxial philosophy traced the essence of Elliott's ideas to George Herbert Mead's discussion of an *act* as an element, that when perceived, is the basis for meaning. That is, meaning is socially constructed. Paul pointed out that the root of praxial—*act*—intimates the concept that, according to Elliott's philosophy, music is a socially mediated process. Consequently, it seems that arguments could be made for the suitability of considering utility value in the Praxial or Utilitarian schools of thought.

While analysis is warranted, it might be the case that allowing utility value to remain in an ambiguous philosophical territory does not detract from the potential to implement the

findings of the current study. That is, it seems that the social utility value is a salient predictor of persistence in music beyond high school graduation. Music instructors at the secondary and tertiary levels might consider supporting social experiences and highlighting the role of music for interpersonal experiences to encourage involvement. While this approach might not influence the decision-making of all students, some individuals might find encouragement through the promotion of the social value of music. Music instructors in higher education might also consider the literature regarding motivation in relation to specific performance genres. For example, Moder (2018) observed that social value was more commonly cited by college non music majors who were involved in athletic bands while the intrinsic value of music was more commonly cited by college non music majors involved in wind ensembles or jazz ensembles. Ultimately, the value of intrinsic and utility aspects of music performance will be unique to every individual. William D. Revelli's (1937, p. 33) discourse on the social role of music, even after the remarkable changes seen in American society over the past 86 years, maintains the same applicability and gravity.

Music in the future will play an important part in the building of community life, and, in so doing, it will become more and more an expression of community aspiration, and of home life and spirit. Through the musical organizations in the community, we shall have the privilege of making music an instrument of friendship, as well as an instrument of unity of purpose. And, through this development of music in the schools and in the community, we shall become more concerned with what music does for all our people rather than with what the few do to music.

Revelli's words should serve to remind music educators of the multiple ways in which music can improve lives (i.e., aesthetic experience, social value, etc.). These words dovetail with Reimer's

(1989) argument regarding the importance of understanding the role of music in the lives of individuals.

To the degree we can present a convincing explanation of the nature of the art of music and the value of music in the lives of people, to that degree we can present a convincing picture of the nature of music education and its value for human life. (p. 1)

Attainment Value

Attainment value was not a significant predictor of individuals' intention to persist in music performance beyond graduation. This result seemed to indicate that the role of music performance in affirming the identity of individuals was inconsistent. This finding should be considered in the context of Erikson's (1982) discussion of the struggle between individuals' sense of identity and role confusion that individuals experience during adolescence. Further, Klimstra et. al (2010) observed in a longitudinal study of adolescents' identity formation that for males, there was a slight temporary increase in their proclivity for reconsideration of activities and interests during the ages of 16 to 18. The researchers noted that this time period coincides with many individuals' transition to higher education. The researchers also found that, overall, females tended to experience identity formation earlier than males. The data suggested that while females outpaced males regarding identity formation during early to middle adolescence, males rejoined females regarding identity formation in middle to late adolescence.

Data from the current study demonstrate that female-identifying individuals reported placing a higher attainment value on music performance activities than did male-identifying individuals. The mean attainment value for females was 4.82 (standard deviation of 1.33), the mean attainment value for males was 4.50 (standard deviation of 1.41), and the mean attainment value for individuals who did not identify as male or female was 4.57 (standard deviation of

1.49). It might be the case that the lower attainment value that males placed on music performance activities is attributable to the phenomenon regarding reconsideration identified by Klimstra et al. (2010). Future music education research might focus on the identity formation of adolescents involved in music. Particularly, researchers might try to tease out the extent to which individuals' identities regarding music are stable, particularly during transitory periods.

The descriptive information provided by several respondents touched on the role of music and musicianship in their perceptions of self. When asked whether there was anything else they would like to share regarding their intention to persist in music beyond graduation, one respondent declared "I am a trumpet player and I want to join the Marine Band." Li and Deng (2019) discussed the function of personal writing statements in the construction of identity. This *I am* statement potentially indicates the individual's fundamental self-identification as a musician. The individual's statement of musicianship as an identity, along with the avenue through which they intend to persist in music, suggests their commitment to persisting in music. This commitment making can be considered in Luyckx et al.'s (2006) model of identity formation. The validated model demonstrated that commitment making was one domain in a tetrad of constructs representing identity formation. Luyckx et al. demonstrated that identification with commitment—another domain in the tetrad—predicted positive social adjustment factors and a reduction in depression symptoms. A future area of research might entail the application of Luyckx et al.'s model of identity formation in the area of music. This research stream has the potential to elucidate the relation of music and identity formation. The application of this theory in music is warranted given Luyckx et al.'s finding of the model's capability to significantly predict positive adjustment factors (e.g., academic adjustment) and

negative adjustment factors (e.g., substance abuse, depressive symptoms) based on the tetrad of constructs constituting identity formation.

Another emergent theme regarding self-identification as a musician related to individuals' duration of involvement in music. Several respondents indicated that they recognized the importance of music and their commitment to the art form for a significant period of time. One individual stated, "I knew from the first moment I had my first choir rehearsal in 4th grade that I wanted to pursue music as a career." Another respondent shared that "I have known that I have wanted to be a pianist professionally since middle school." These comments seem to convey respondents' longtime self-identification as a musician and commitment to music as they proceed to life beyond high school. Rather than sharing their perceptions of considerations relating to intrinsic or utility value, they mentioned their unwavering commitment. It seems that, for these individuals, they have positively internalized musicianship as a core facet of identity. Another respondent confided the following:

I am scared of the amount of work it will take. I am scared of being poor. I am scared that I will not be good enough, that I will not make a good teacher or performer. However, if I did anything else with my life I would be incredibly sad. I might be exhausted, broke, and not the best but I know I will be happy if I spend every day playing, teaching, learning, and performing music. I am not the best musician but I work harder than anyone I know because I love music with everything I am.

While it is perhaps more difficult to attribute these emotions to a domain within the expectancy-value framework, the comment "if I did anything else with my life I would be incredibly sad," perhaps speaks to the individual's identity as a musician. That is, it seems that the sadness forecasted by the individual would not be caused by pursuing another field, but rather by *not*

pursuing music. The individual's comment did not exclude the possibility for music to produce intrinsic or utility value in their life, but rather the comment focuses on the potential for the individual to lose the centrality of music in their life. The individual seemed to be expressing the fear that not following music will result in a fundamental disconnect between themselves and their driving passion. The individual's declaration that "I love music with everything I am" seemed to indicate their recognition of their deep identification with music and the potential for persistence in music to affirm that identity. Music education researchers might consider the further examination of formation of identity and its relation to music. This research stream has the potential to illuminate the impact of different components of a scholastic music program (e.g., composition, performance, competition, social elements, music-related travel, etc.) on participants' development of musical identity. This research can contribute to the discourse on the role of music education to support identity formation with prosocial activities.

Cost

This research which utilized the expectancy-value theory of motivation contributed to the discourse on prior investigative efforts into motivation and persistence in music education. This research corroborated Hash's (2022) finding that practical scheduling considerations acted as a driver of individuals' decisions to desist in music. The meta-analysis of 42 studies using the MUSICSM Model of Academic Motivation (Parkes et al., 2017) led to Hash's conclusion that while some motivational factors might be influenced by the instructor (e.g., relationship with instructor), there was routinely a distinct lack of control regarding practical considerations like scheduling and financial cost. This finding was echoed by the current study in both the quantitative and qualitative data. Ninety-seven participants (44.9%) somewhat agreed, agreed, or strongly agreed that "spending time participating in music performance experiences after high

school would take time away from other activities I want to pursue.” Financial costs incurred during participation in music performance represented a potential barrier for 55 respondents (25.5%). Isbell and Stanley (2011) likewise concluded that the extent to which an ensemble was accessible was a significant driver of persistence among non music majors.

Qualitative analyses revealed participants’ concerns regarding financial costs related to music ensembles experiences during higher education. While some institutions might be able to offer financial assistance to support involvement, others may not. Also, the matriculating student conceivably has to learn how to navigate a new system (e.g., music department, financial aid, etc.) and might not be familiar with opportunities to access financial aid. Noting the impact of financial considerations on students transitioning beyond graduation, college music faculty might support the transition by communicating opportunities for financial support (e.g., scholarships, instrument rental support, etc.). Prudent directors might reference Cumberledge’s (2020) findings regarding the respective impact of different forms of communication. Face-to-face conversations with college directors were most impactful, followed by YouTube videos, email contact from college director, and high school visits from a college director. A focus on communicating financial opportunities and protocols regarding instrument rentals could potentially support the transition by preparing matriculating students to effectively negotiate a new environment. Kinney (2010) noted that while students from diverse socioeconomic statuses enrolled in middle school instrumental tracks at similar rates, students from lower socioeconomic statuses desisted at a higher rate than peers from higher socioeconomic statuses. While the ages and level of education are dissimilar, prudent educators at the higher education levels will consider the impact of financial costs on students.

The results of the current study regarding perceived costs associated with participation in music performance ensembles corroborated and extended previous research. Gibson (2016) studied music students' transition from middle school to high school and found that time cost, social considerations, and repertoire were causes of concern. Likewise, this study, found similar trends relating to the aforementioned areas. One potential application of this research centers on communication of musical opportunities beyond high school (e.g., higher education, community music, etc.). In addition to sharing concerns about time cost, opportunity cost, and scheduling, some respondents in the current study shared that they were burnt out from band in high school. While intense music performance ensembles might be available and of interest to some students, there could also be more relaxed settings for involvement in performance music ensembles available to individuals beyond high school. The results indicated that in addition to harboring concerns about time costs, individuals were concerned about finding an ensemble that fit them well in terms of musical skills and social considerations. If high school students become aware of available performance ensembles available to them, they will be able to make more informed decisions regarding the way in which music performance might fit into their schedules. It might be the case that while a student matriculating into higher education is not interested in an ensemble that rehearses multiple times a week, they would be interested in a non-auditioned ensemble that meets once a week. (The converse might be true as well.) When one considers the quantity of students matriculating into higher education and music attrition among those students, the potential to support persistence in music by communicating the availability of ensembles that fit the varied needs of diverse groups of students should be of interest to educators seeking to bolster performance ensemble involvement among non music majors.

Transition and Social Upheaval

This study's findings regarding expectancy and value should be considered in the unique context of transition beyond graduation. The transition to life after high school (e.g., higher education, workforce, military, etc.) is perhaps the most significant social upheaval that many individuals have faced up to that point in their lives. Erikson's analysis of the transition from adolescence to early adulthood suggested that individuals are grappling with identity vs. role confusion and intimacy vs. isolation (Sawyer et al., 2018). As incoming students in higher education are navigating new academic roles and environments, they are often simultaneously making new social connections, assimilating into a new milieu, and experimenting with new—sometimes risky—behaviors (Dworkin, 2005). Freer (2012) contended that this type of social disturbance was a significant driver of desistance in music involvement. While Freer discussed social disturbance and potential strategies to minimize the phenomenon during the transition from middle school to high school among middle school choir students, the concepts might be applied to transitions to life beyond high school as well. However, this transition might be viewed as even more fraught and challenging to address due to the intense social dispersion experienced in many communities (e.g., college bound students, joining the military, etc.). Freer suggested that providing an opportunity for transitioning students to work with the instructors of the groups that students have the option of joining has the potential to support persistence. The results from the current study corroborated Freer's finding regarding the prevalence of social disturbance during transitory periods for music students.

Data from the current study seemed to indicate that intrinsic and social value are salient predictors of individuals' intent to persist beyond graduation. In the face of intense social disturbance, shrewd directors might consider Freer's conclusions in conjunction with the

findings of the current study. That is, music directors at the high school and college level might be able to support persistence during the transition by collaborating to diminish social disturbance to the greatest extent possible. High school and college instructors might work together to find opportunities for the college instructor to guest conduct in high school ensembles. Higher education music departments can organize opportunities for high school students to rehearse or perform with a college ensemble and tour the music facility. These efforts have the potential to bridge the social gap between high school and college. Furthermore, directors at the both the college and high school level might contemplate how students experience value in music and their cognition of this value.

The transition to life beyond high school is fraught with uncertainty for many, if not most, individuals. Social networks, routines, responsibilities, and other facets of life are potentially in upheaval as many individuals are navigating new paradigms in higher education, the workforce, military, etc. Faber (2010) discussed the shift of music—for non music majors—as changing from a curricular activity in high school to an extracurricular activity in higher education. The finding of the current study that utility value is a significant predictor of intent to continue corroborates Mantie's (2018) conclusion that the social experiences afforded by involvement in music are important to participants. Mantie found that while individuals (in this case college-level non music majors) were interested in music beyond graduation from higher education, their ideas regarding music performance opportunities after graduation were vague.

Limitations

There are several limitations associated with the current study. One limitation is the limited sample size ($N = 216$). While this sample represents students from a total of 27 states, it is but a small fraction of grade 12 students involved in music performance activities.

Furthermore, self-selection potentially contributed to bias in the study. While this observational study serves to corroborate and expand prior research, it cannot effectively demonstrate causality. Another cause of concern—ever-present in the social sciences—is the efficacy of the instruments employed to measure constructs. While the instruments used in this study were carefully vetted, there remains the possibility that the measurement of constructs and subconstructs examined in this study (i.e., expectancy, intrinsic value, attainment value, utility value, cost, and intent to persist in music) was flawed.

Prudent consumers of this research will also consider the impact of random error on the data collected arising from attempting to quantify human perceptions, experiences, and emotions. Podsakoff et al. (2003) discussed the effect of several sources of random error, including positive and negative affectivity, acquiesce, social desirability, consistency motif, and transient mood state. The last-mentioned phenomenon should be considered in the context of the often fraught nature of the transitory period that begins as students near the end of their high school careers. It is a significant possibility that individuals' ephemeral sentiments and emotions are represented in the data. In light of this, longitudinal research on the topic is warranted.

Future research

Future research has the potential to provide further insight into factors impacting persistence and attrition in music for grade 12 students as they enter the next chapter of their lives. The significant rate of attrition in music during the transition to life beyond high school warrants the further examination of factors pertaining to attitudes and behaviors regarding persistence in music. Longitudinal research regarding the value that students place on music throughout primary, secondary, and tertiary education has the potential to support lifelong musicianship. The inclusion of students entering higher education, joining the workforce, and

pursuing other paths beyond high school graduation (e.g., military, etc.) recognizes that the youth of today have diverse trajectories. Kinney (2010) demonstrated that middle school students from lower socioeconomic statuses desisted from instrumental music at a higher rate than their peers from higher socioeconomic statuses. Future research might examine the relation of socioeconomic status and persistence in music as music majors and/or non majors. An examination of the relation of persistence and financial aid, scholarships, and instrument rental support, etc., could potentially elucidate the decision-making process regarding persistence in music performance beyond high school, perhaps particularly among non majors. Research in this area also has the potential to provide insight into trends regarding persistence in different types of music performance ensembles. Kinney found that socioeconomic diversity is more apparent in middle school chorus classes compared to instrumental ensembles, ostensibly due to fewer related costs (e.g., instrument rental fees). Future researchers might determine whether this trend carries through to performance music ensembles in higher education. A related branch of future research might entail an examination of parents'/guardians' perceptions of costs relating to participation in music performance activities. Analysis of the views of parents and guardians has the potential to reveal factors inhibiting enrollment in performance music activities among individuals throughout the socioeconomic spectrum. This course of action might be particularly impactful for music performance experiences at the high school level. The considerable fees in place for many ensembles (Fieldman, 2011) often represent a significant barrier for families. While scholarships or financial aid might be available, stigma related to financial aid might lead to the reticence to apply for available resources for individuals for whom the financial aid might help.

Researchers might consider examining racial representation in music performance ensembles beyond graduation. Elpus and Abril (2011) found that, among high school seniors, white students were significantly overrepresented in music ensembles, black students were overrepresented to a non statistically significant degree, and Hispanic students were significantly underrepresented. One avenue for future research is to examine representation in different streams of music performance beyond graduation and relevant motivational correlates. These research streams might include involvement in music performance ensembles in higher education as non majors, community music ensembles, military music ensembles, participatory music ensembles, world music ensembles, etc.

Given the current study's finding of the relation of the intrinsic and utilitarian value of music and individuals' intentions to persist in music, future examination of bolstering individuals' sense of the value in music is warranted. van Tuin [sic] et al. (2021) concluded that the interrogation of practices which support perceptions of the intrinsic value had the potential to impact engagement and leadership—two qualities that can be readily related to music. Future research might examine the interaction of extrinsic and intrinsic value as they relate to performance activities and competition. That is, how does the act of framing a successful competitive performance as a winning result (i.e., extrinsic value) impact individuals' perceptions of the intrinsic value of the activity? Following this, future studies might examine the extent to which a focus on competitive music in high school impacts persistence in music beyond high school.

Future researchers might also examine persistence in music performance activities among non college bound students. Studies in this area are warranted given the large portion of young adults not involved in higher education. For example, among individuals aged 18 to 24, 44.8%—

16.7 million people—were not enrolled in college (U.S. Bureau of Labor Statistics, 2021). This population has been referred to as the “forgotten half” by Blustein et al. given the lack of attention received by this group in social science research (2002, p. 311). Future research might examine the extent to which non college bound individuals are familiar with music performance opportunities beyond graduation. Furthermore, future research might identify the extent to which music performance opportunities are available for someone who did not participate in music performance classes or ensembles in college but may wish to become involved in music after a hiatus. Developing motivational profiles in accordance with divergent theories and frameworks of motivations will provide insight in supporting music across the life cycle. Furthermore, efforts to cross-reference motivational frameworks and associated behavioral outcomes will allow researchers to streamline and simultaneously increase the power of motivational models in the field of music.

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Appendix A

New General Self-Efficacy Scale (Chen et al., 2001)

1. I will be able to achieve most of the goals that I have set for myself.
2. When facing difficult tasks, I am certain that I will accomplish them.
3. In general, I think that I can obtain outcomes that are important to me.
4. I believe I can succeed at most any endeavor to which I set my mind.
5. I will be able to successfully overcome many challenges.
6. I am confident that I can perform effectively on many different tasks.
7. Compared to other people, I can do most tasks very well.
8. Even when things are tough, I can perform quite well.

Appendix B

Modified New General Self-Efficacy Scale for Music Performance

1. In music performance situations, I can achieve most of the goals that I have set for myself.
2. When facing difficult music performance related activities, I am certain that I can accomplish them.
3. In general, I think that I can obtain outcomes that are important to me in music performance situations.
4. I believe I can succeed at most any music performance endeavor to which I set my mind.
5. I can successfully overcome many challenges in music performance situations.
6. I am confident that I can perform effectively on many different tasks in music performance situations.
7. Compared to other people in my grade, I can do most music performance activities very well.
8. Even when the musical situation is demanding, I can perform quite well.

Appendix C

Instrument to Assess Subjective Task Value Beliefs Regarding the Decision to Pursue Postgraduate Training. (Hagemeier & Murawski, 2014).

Intrinsic Value

1. Pursuing postgraduate training was very appealing to me.
2. I enjoyed advancing my knowledge by exploring new and challenging ideas in postgraduate training.
3. The challenge of postgraduate work was exciting.
4. I liked the challenge of doing the work required to complete postgraduate training.
5. Increasing my knowledge through completion of postgraduate training was exciting to me.
6. I enjoyed learning from individuals who were experts in their field during postgraduate training.
7. I was excited about the idea of completing postgraduate training.

Attainment Value

8. I valued the prestige that came with completion of postgraduate training.
9. Completing postgraduate training was important in enabling me to feel successful.
10. I felt that I had something to prove to myself by completing postgraduate training.
11. I felt that completing postgraduate training was a necessary part of what would make me feel good about myself in the future.
12. I would have been very upset had I not been able to complete postgraduate training.
13. Completing postgraduate training was important in allowing me to show that I was competent.

14. I thought that completing postgraduate training would allow me to attain a high sense of self-worth.
15. I would have felt like a failure had I not completed postgraduate training.
16. I completed postgraduate training because I thought I would gain confidence in my pharmacy-related abilities.
17. I needed postgraduate training to fulfill my potential.
18. Completing all the work necessary to meet postgraduate training requirements made me feel good about myself.
19. My family would have been disappointed in me had I not completed postgraduate training.
20. Postgraduate training was of great personal value to me.

Utility Value

21. My life goals could have been met without postgraduate training.
22. I completed postgraduate training because it was required for certain careers I wanted to pursue.
23. Completing postgraduate training allowed me to pursue a career that fit my values.
24. I wanted to complete postgraduate training so I could make more money.
25. I completed postgraduate training because I had a desire to specialize in a specific area.
26. I thought postgraduate training was integral for what I wanted to do in the future.
27. I completed postgraduate training because I thought I would be more satisfied with a job that required the training.
28. Completing postgraduate training was necessary to differentiate myself from others.
29. I completed postgraduate training because I wanted to gain pharmacy-related knowledge and experience.

30. I wanted to complete postgraduate training so that I could support myself financially.

31. Completing postgraduate education was important because it provided me better job opportunities.

32. I thought postgraduate training would help assure me of what to do with my life.

Cost

33. I am worried that spending time completing postgraduate training would take time away from other activities I want to pursue.

34. Completing postgraduate training was worth it regardless of financial barriers I may have faced while completing it.

35. Completing postgraduate training was worth it even if, while completing training, I earned less money than I could have in another pharmacy position.

36. Completing postgraduate training was worth it in the end, despite all the work and heartache required to get through it.

37. Prior to postgraduate training, I was concerned that, considering what I wanted to do with my life, completing postgraduate training would not be worth the effort.

38. I was concerned that completing postgraduate training would prevent me from being able to focus on marriage and family as soon as I'd like to.

39. I worried that I would waste a lot of time and money before I found out that I didn't want to continue in postgraduate training.

40. Completing postgraduate training would not have been worth it if completing it caused my family relationships to suffer.

Appendix D

Modified Instrument to Assess Subjective Task Value Beliefs Regarding the Decision to Pursue Music Performance Experiences After High School Graduation.

Intrinsic Value

1. Pursuing music performance experiences after high school is very appealing to me.
2. I would enjoy advancing my knowledge by exploring new and challenging music performance experiences after high school.
3. The challenges of music performance experiences after high school excite me.
4. I would like the challenge of doing the work required to participate in music performance experiences after high school.
5. Increasing my musical knowledge through music performance experiences after high school excites me.
6. I would enjoy learning from individuals who are experts in their musical field during music performance experiences after high school.
7. I am excited about the idea of participating in music performance experiences after high school.

Attainment Value

8. I value the prestige that would come with participation in music performance experiences after high school.
9. Participating in music performance experiences after high school is important in enabling me to feel successful.
10. I feel that I have something to prove to myself by pursuing music performance experiences after high school.

11. I feel that participating in music performance experiences after school is a necessary part of what would make me feel good about myself in the future.
12. I would be upset if I was not able to participate in music performance experiences after high school.
13. Participating in music performance experiences after high school is important in allowing me to show that I am skilled.
14. I think that participating in music performance experiences will allow me to attain a high sense of self-worth.
15. I would feel like a failure if I did not participate in music performance experiences after high school.
16. I would participate in music performance experiences after high school if I thought I would gain confidence in my music-related abilities.
17. I need to participate in music performance experiences after high school to fulfill my potential.
18. Completing the work necessary to participate in music performance experiences after high school would make me feel good about myself.
19. My family would be disappointed in me if I did not participate in music performance experiences after high school.
20. Music performance experiences after high school are of great personal value to me.

Utility Value

21. My life goals **cannot** be met without participating in music performance experiences after high school.

22. Participating in music performance experiences after high school would be an asset for a career I want to pursue.
23. Participating in music performance experiences after high school will allow me to pursue a career that fits my values.
24. I want to participate in music performance experiences after high school for financial reasons.
25. I want to participate in music performance experiences after high school because I have a desire to specialize in a specific musical style.
26. Music performance experiences after high school are integral for what I want to do in the future.
27. I would participate in music performance experiences after high school to develop skills that will allow me to make music that interests me.
28. Participating in music performance experiences after high school is necessary to differentiate myself from others.
29. I would participate in music performance experiences after high school to gain music-related knowledge and experience.
30. I would participate in music performance experiences after high school because I would be more satisfied with my social life.
31. Participating in music performance experiences after high school is important because it will provide me with better social opportunities.
32. Participating in music performance experiences after high school will help assure me of what to do with my life.

Perceived Cost

33. I am worried that spending time participating in music performance experiences after high school would take time away from other activities I want to pursue.
34. Participating in music performance experiences after high school is worth it regardless of financial costs I may face while participating. (Reverse scored.)
35. Participating in music performance experiences after high school is worth it, even if I earn less money than if I spent that time working. (Reverse scored.)
36. Participating in music performance experiences after high school will be worth it in the end, considering all the work and effort that goes into it. (Reverse scored.)
37. I am concerned that, considering what I want to do with my life, participating in music performance experiences after high school would not be worth the effort.
38. I am concerned that participating in music performance experiences after high school will prevent me from being able to focus on my social and home life.
39. I am worried that I would waste a lot of time and money participating in music performance experiences after high school.
40. Participating in music performance experiences after high school will not be worth it if it causes me additional stress.

Appendix E

Intention to Persist in Music Instrument

1. Do you intend to participate in music performance experiences after high school graduation?

Music performance experiences include ensembles, solo performance, home performance, instrument/voice lessons, community ensembles, etc.

2. If so, what ensembles do you intend to participate in?

A. Ensemble in four-year college/university/two-year college

i. What ensemble do you intend to participate in? (e.g., concert band, athletic band, world music ensemble, etc.)

B. Lessons in a four-year college/university/two-year college

C. Community ensemble (e.g., community band, church choir, etc.)

D. Small ensemble (e.g., funk, rock, folk, pop, mariachi group, etc.)

D. Home music involvement/leisure music (e.g., playing for your own enjoyment at home)

Appendix F

Demographic Information

1. What is your age?
2. What is your gender?
3. What state do you live in?
4. Do you plan on entering higher education next year? Higher education includes colleges, universities, two-year colleges, etc.
5. In which instrument family do you specialize? If more than one instrument family is applicable, choose the instrument family you are most interested in.
6. How many years of formal music training do you have? This includes music classes and ensembles at school, private lessons, etc.
7. What genre of music do you listen to most often?

Appendix G

IRB Approval



EXEMPT DETERMINATION

March 22, 2022

Cameron Siegal
csiegal@uoregon.edu

Dear Cameron Siegal:

The following research was reviewed and determined to qualify for exemption.

Type of Review:	Initial Study
Study Title:	Grade 12 Students' Intentions to Persist in Music Beyond Graduation Using Expectancy-Value Theory
Principal Investigator:	Cameron Siegal
Parent Study ID:	STUDY00000476
Transaction ID:	STUDY00000476
Funding Source:	None
IND, IDE, or HDE:	None
Documents Reviewed:	<ul style="list-style-type: none"> • Exempt Application, Category: IRB Protocol; • Exempt worksheet 1, Category: IRB Protocol; • Informed Consent, Category: Consent Form; • Research Plan, Category: IRB Protocol;
Approval Date:	3/18/2022
Effective Date:	3/22/2022
Expiration Date:	5/15/2023

For this research, the following determinations have been made:

- This study has been reviewed under **the 2018 Common Rule** and determined to qualify for exemption under Title 45 CFR 46.104(d)(1) Educational settings.

The research is approved to be conducted as described in the approved protocol using the approved materials. Approved materials can be accessed in the protocol workspace in the IRB module of the research administration portal (RAP).

All changes to this research must be assessed to ensure the study continues to qualify for exemption. Research Compliance Services has developed [specific guidance](#) to help you understand when a modification is required before a change can be implemented. It is your

responsibility to ensure modifications are submitted when required and approval secured before implementing changes to the protocol


Continuing Review is not required for this study. **An institutional approval period has been established based on your application materials.** If you anticipate the research will continue beyond the approval period, you must submit a **Continuing Review Application** at least 45-days prior to the expiration date. A closure report must be submitted once human subject research activities are complete. Failure to maintain current approval or properly close the protocol constitutes non-compliance.

With the submission of your request, you agreed to uphold the responsibilities of the Principal Investigator and have agreed to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB module of the RAP.

If you have any questions regarding your protocol or the review process, please contact Research Compliance Services at ResearchCompliance@uoregon.edu or (541)346-2510. The University of Oregon and Research Compliance Services appreciate your commitment to the ethical and responsible conduct of research with human subjects.

Please consider completing our [user satisfaction survey](#). It only takes a few minutes, and we would like to hear about your experience working with our office!

Sincerely,



Lizzy Utterback
Research Compliance Administrator
on behalf of the Committee for Protection of Human Subjects

Appendix H

Pilot Debrief

You have completed the questionnaire. The following questions will ask you to provide feedback about your experience responding to this questionnaire. Your honest feedback is welcome so I can improve the survey experience for future respondents.

1. Did you find any of the questions or prompts confusing or unclear?
 - a. Which questions or prompts did you find confusing or unclear?
 - b. How could I improve the clarity of the confusing questions/prompts?
 - c. Is there anything else you want me to know about your experience responding to this questionnaire?

Appendix I

Correspondence to Directors with Research Invitation for Students

[Subject:] Research Study—Grade 12 Students’ Intentions to Persist in Music Beyond High School

Secondary Music Educator,

My name is Cameron Siegal and I am a music education PhD candidate at the University of Oregon and a teacher in the Dartmouth, Massachusetts, public schools. I am currently recruiting participants for a study examining **grade 12** students’ intentions to persist in music beyond high school using the expectancy-value theory of motivation. This study has the potential to provide insight into promoting persistence in music. I am writing to ask for your help distributing this research invitation to your **grade 12** students.

The University of Oregon Institutional Review Board has approved this study. The online questionnaire takes roughly **15 minutes to complete** and can be accessed on **a computer or mobile device at school or home**. Participants will remain anonymous. **Please distribute the research invitation below my signature to all grade 12 students in band, orchestra, or choir.**

Thanks in advance for your support of this study which will allow music educators to support lifelong musical involvement more effectively. Your assistance will amplify the voices of your students. (I know it is a busy time of year, but if you can provide time for students to respond in class, that can support participation.)

Please share this information with other secondary music educators to support representation of a broad range of experiences. You can reach me at csiegal@uoregon.edu with any questions.

Sincerely,

Cameron Siegal
 Music Education PhD Candidate
 University of Oregon
 Music Teacher
 Dartmouth, Massachusetts, Public Schools

Research Invitation—Grade 12 Students’ Intentions to Persist in Music Beyond High School using Expectancy-Value Theory of Motivation

Grade 12 Music Student,

My name is Cameron Siegal and I am a music education PhD candidate at the University of Oregon. I am currently recruiting **grade 12 music students** for a study examining persistence in

music beyond graduation using the expectancy-value theory of motivation. I invite you to participate in this anonymous study so your voice can be represented in this research.

The online questionnaire takes roughly **15 minutes to complete** and can be accessed on a **mobile device or computer at school or home**. Participants will remain **anonymous**. The University of Oregon Institutional Review Board has approved this study.

You can learn more about this research and respond to the survey by clicking on the following link or scanning the QR code:

https://oregon.qualtrics.com/jfe/form/SV_2aVmW256w0aAdDg



If you have questions or comments, please contact csiegal@uoregon.edu. Thanks for making your voice heard in this research that can inform approaches to music education!

Sincerely,

Cameron Siegal
Music Education PhD Candidate
University of Oregon
Music Teacher
Dartmouth, Massachusetts, Public Schools