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Motivation in Music: A Comparison of Popular Music Course Students and Traditional Large Ensemble Participants in High School

The purpose of this study was to determine whether students who elect to enroll in popular music courses are influenced by different motivational factors than traditional large ensemble participants. A Musical Motivation Questionnaire was distributed to music students attending six high schools that offered both traditional large ensembles and popular music courses. The results from a principal components analysis indicated the presence of eight motivational factors that influenced students' choices to participate in high school music. Statistical analyses revealed that certain motivation factors influenced students enrolled in popular music courses differently than large ensemble participants which suggests that expanding curricula to include popular music courses may motivate a new or different population of students to engage in the music learning opportunities offered in high schools.

Keywords: motivation, popular music, high school music participation

Introduction

In music education, motivation plays an essential role in teaching, learning, and engagement. Motivation ignites and nurtures musical curiosity, sustains dedication and drive after frustration and failure in music, and fosters growth as musicians pursue higher levels of proficiency. The influence of motivation is further evident when students choose to enroll and remain in elective music courses (Smith, 2011).

Music students' motivation should be viewed as a dense, interwoven blanket of influences impacting decisions and choices. Motivation directly impacts how long and how intensely students will engage in music-learning and performing. Motivational influences can be classified as either long-term or situational influences (Smith, 2011). Additionally, motivational influences can be classified as either intrinsic or extrinsic depending on whether they originate from within or from outside student musicians (Asmus, 1994).

Early in students' lives, their relationships with parents, teachers, and peers serve as strong influences on motivation. Parents (caregivers) can support student motivation in music by creating musical home environments (Brand, 1986), providing access to lessons, and encouraging practice (Davidson, Sloboda, & Howe, 1995). In educational settings, music teachers foster student motivation by creating positive, supportive relationships with students (Sloboda & Howe, 1991) and further influence motivation, both positively and negatively, by providing feedback and criticism (Atlas, Taggart, & Goodell, 2004; Duke & Henniger, 1998). Students can also be motivated by the social benefits that music-making offers, which helps to explain why many peers choose to participate and continue in musical activities together (Hewitt & Allan, 2012; MacIntyre, Potter, & Burns, 2012). While peers are often a positive motivating force behind participation, they can also influence others to discontinue music instruction (Driscoll, 2009).

Self-efficacy can also play a critical role in music student motivation because students use self-efficacy beliefs to determine whether they might be able to succeed at musical tasks. Researchers have found a strong relationship between successful performance and high self-efficacy beliefs among music students (McCormick & McPherson, 2003; Zelenak, 2015). High self-efficacy beliefs can also motivate musicians to continue learning and improving (Sichivista, 2007). Students primarily increase self-efficacy by successfully accomplishing musical tasks and receiving formal musical training (Ritchie & Williamon, 2011).

Researchers have also examined *attribution theory* as it relates to motivation in music education. Attribution theorists suggest that student motivation can be impacted in different ways when students attribute the causes of their successes and failures to factors within and outside of their control. Generally, young music students with little musical training attribute musical success and failure to internal factors such as cognition and inherent ability. As they age and gain experience, students tend to place greater importance on effort (Asmus, 1986; Asmus & Harrison, 1990; Martin, 2012), but they may not attribute the same causal factors to both success and failure (Austin & Vispoel, 1998).

Closely related to *attribution theory* is achievement goal theory which refers to the belief that student motivation is guided by two types of goals: *intrinsic mastery*

goals (i.e., personal desires to develop skills and acquire knowledge) and *extrinsic performance goals* (i.e., motivation generated through social comparisons). Schmidt (2005) surveyed 300 band students in grades 7-12 using a questionnaire adapted from previous motivation measurement tools (Asmus & Harrison, 1990; Marsh, Craven, Hinkley & Debus, 2003) that was designed to measure students' commitment to band, self-concept in instrumental music, and various known motivation orientations. The motivation variables examined using the two-factor model (Marsh et al., 2003) included: mastery, intrinsic motivation, individual achievement, cooperation, competition, ego, success, and failure. Using Pearson correlations and factor analysis, Schmidt (2005) found that instrumental music students often attribute success to hard work, the pursuit of musical goals, and cooperation with other student musicians. Conversely, they placed less importance on competing against peer musicians or feeding their egos through competition. Schmidt, Zdzinski, and Ballard (2006) further examined these motivation variables in undergraduate music education majors, and found that they were often motivated by mastery, cooperation, and intrinsic motivation which were linked directly to their views of success and achievement. In other words, music education majors evaluated their own success by achieving personal goals, mastering challenging tasks, and collaborating with others.

Markus and Nurius (1986) theorized that people possess multiple possible selves or thoughts and visions of what they might become, what they hope to become, and what they fear becoming. Markus and Nurius suggested that *possible selves* can influence motivation to engage in various activities in the present. Campbell (2009) identified strong relationships between music participation and *music possible selves*, and suggested that *music possible self beliefs* explain the "conceptual link between cognition and motivation" (p. 2) in music learning. She investigated the relationships between participation in music electives, gender, and *musical possible self beliefs* in middle school students enrolled in large ensembles and general music courses. According to Campbell, if teachers are able to connect school music curricula with student engagement with music outside of schools, and connect the curricula to students' visions of their future musical engagement, adolescents may view music learning as more relevant in their everyday lives and, as a result, increase participation in music.

In a separate investigation of musical *possible selves*, Schnare, MacIntyre, and Doucette (2012) found that adult musicians (i.e., performed on at least one instrument including the voice) hoped for and expected futures in which they improved musically, continued learning through formal lessons and post-secondary training, made social connections through music, acquired success as musicians, and enjoyed the musical experiences in which they were engaged.

When envisioning future musical engagement, musicians simultaneously expressed fears including: losing facility due to age, injury, or illness; being too busy to practice; being unable to make a living solely as a musician or experiencing financial difficulties as a musician; and being considered a poor musician by others. Schnare et al. concluded that most musicians' *musical possible selves* are comprised of a balance between positive hopes and negative fears. In general, musicians set goals and construct plans to pursue the musical futures they hope to achieve while simultaneously working to avoid obstacles that would result in outcomes they fear. The goals and outcomes musicians and music students expect to achieve, hope to achieve, and try to avoid directly influence their motivation to engage in music learning and music making.

Finally, by using *expectancy-value theory* to investigate motivation, researchers have found that the subjective task value students assign to music learning and musical activities can be one of the strongest influences on whether they decide to engage with music. According to Smith (2011), subjective task value is what individuals use when attempting to answer the questions "Do I want to do this task and why?" (p. 282). Wigfield and Eccles (2000) suggested that task (or achievement) value is multifaceted containing several distinct components. The first component, attainment value, refers to the importance students place on tasks. Intrinsic value is generated from the enjoyment they receive from those tasks or activities. Utility value refers to how students envision tasks fitting into both short- and long-term goals. Finally, cost refers to how decisions might limit or impact other activities, the amount of effort and energy needed to engage in an activity, and any emotional expenditure that may occur as the result of an activity or decision. Students possess different self- and task-perceptions associated with various activities including music (Eccles, Wigfield, Harold, & Blumenfeld, 1993). Often, the activities students engage in (e.g., curricular music) are those in which they have high expectations for success. In fact, researchers found that more successful musicians may possess stronger motivation to continue with music learning and participation (Denissen, Zarrett, & Eccles, 2007).

Gates (1991) described how *expectancy-value theory* can be observed in school music programs while describing various types of music participants. According to Gates, music participants can be divided into six classifications (e.g., professional musicians, apprentice musicians, amateurs, hobbyists, recreationists, dabblers), and each group of participants will sustain costs over benefits for different periods of time. Professionals and apprentices sustain costs over benefits as long as it is economically feasible because they view music as work. Amateurs and hobbyists sustain costs over benefits over long periods of time because they consider music to

be a serious leisure activity. Recreationists and dabblers sustain costs over benefits only as long as music remains entertaining. Therefore, depending on the role music plays in students' lives, some students will naturally dropout over a given period of time, while others will become involved and sustain participation for much longer. To ensure continued music participation in schools, Gates recommended diversifying curricular music offerings to appeal to and retain the different classes of music participants. The same types of courses (e.g., large performing ensembles) that attract and retain highly skilled musicians such as apprentices are not necessarily the same types of courses that appeal to amateurs, hobbyists, and certainly not recreationists or dabblers. This is especially true if music courses are designed as though all students are apprentices rigorously working towards becoming professional musicians.

Popular Music Courses

In the United States, approximately 34% of students take at least one music course during high school (Elpus, 2014). Although 90% of U.S. high schools offer music instruction, less than 20% of those schools require students to take a music course making music instruction an elective choice for the majority of students (Abril & Gault, 2008; Parsad & Spiegelman, 2012). High school students who do wish to study music often must choose from a short list of performing ensembles (e.g., concert band, choir, orchestra) which are the most common music courses offered in secondary schools (Abril & Gault, 2008; Stewart, 1991).

Some scholars have suggested that the majority of students exhibit a lack of interest in curricular music because large performing ensembles lack relevance in their lives and fail to reflect the music of local cultures and ethnicities (Kratus, 2007; Williams, 2011). In recent years, courses in popular music, song writing, and music technology (among others) have started to emerge in school music curricula across the United States (Abramo, 2010; Abril & Gault, 2008; Dammers, 2012; Tobias, 2010). Researchers have found that music instruction using popular music styles and instruments (e.g., guitars, computers) can provide students with meaningful music learning experiences, but only when the music is approached in a manner that is authentic to the music learning that exists outside of schools. Learning popular music becomes more authentic when students have opportunities to explore musical interests independently and experiment with music collectively, make independent and group musical decisions (Allsup, 2003; Woody, 2007), participate regardless of prior experience or ability level (Abramo, 2010), and relate musical experiences to musical engagement outside of school (Tobias, 2010). While some teacher influence, guidance, or oversight is necessary within

school settings, students desire opportunities to learn “their music” in ways that are authentic and representative of the music learning that occurs outside of schools. If approached in an authentic manner, popular music courses may inspire and fuel student motivation, help students envision future engagement with music, and help draw new students into music programs (Abramo, 2010; Dammers, 2012; Tobias, 2010). In addition, the inclusion of popular music courses in schools may decrease student attrition in music programs (Driscoll, 2009).

Purpose and Research Questions

Historically, researchers have examined student motivation in traditional, classical music settings. As popular music courses begin to emerge in school curricula, it is unclear whether popular music students’ motivation to engage with music differs from students enrolled in large performance ensembles. Investigating the motivation of this emerging population of music students could help music teachers better understand how curricular popular music courses impact student engagement, enrollment, and sustained participation in school music programs.

The purpose of this study was to determine whether students who elect to enroll in popular music courses are influenced by different motivational factors than traditional large ensemble participants. The research questions used in this study were:

1. What motivational factors influence high school students’ choices to enroll in and sustain participation in curricular music courses?
2. Do specific motivational factors influence students in popular music courses differently than students enrolled in traditional large ensemble courses?

Method

To answer the stated research questions, survey data was collected from sampled participants using a single, researcher-designed measurement tool named the *Musical Motivation Questionnaire* (MMQ). The MMQ was designed to measure the influence of different motivation variables on participants’ choices to enroll and sustain participation in curricular music courses. MMQ items were adapted from established and reliable quantitative measures of motivation (Asmus & Harrison, 1990; Campbell, 2009; Schmidt, 2005; Svengalis, 1978) each representing a variety of motivational influences. Included on the MMQ were 60 randomly ordered motivation variables representing 13 previously established categories

of motivational influence and three items used to obtain demographic information (sex, age, and music class enrollment) from participants. Non-demographic MMQ items were measured using a six-point Likert-type scale ranging from *strongly disagree* to *strongly agree*. There were no neutral responses (e.g., *neither agree or disagree*) included on the MMQ to minimize the social desirability bias and several items contained reversed (i.e., negative) wording to reduce response bias.

Following full Institutional Review Board (IRB) approval, a sample of potential participants from a rural high school in Minnesota pilot-tested the MMQ ($N = 113$, $M = 15.6$ years, $SD = 1.15$). The participating high school was used solely for pilot testing, and none of the participants' responses were included in the main research study. Students were enrolled in a large instrumental ensemble, a large choral ensemble, a popular music (i.e., guitar) course, both large instrumental and choral ensembles, and popular music and large ensemble courses concurrently (instrumental ensemble, $n = 24$; choral ensemble, $n = 44$; popular music, $n = 7$; instrumental and choral, $n = 28$; popular music and large ensemble, $n = 9$). In addition to completing the MMQ, pilot test participants provided feedback on questionnaire items that were difficult to understand. An independent music education expert also evaluated the MMQ to strengthen the content validity of the measurement instrument.

When viewed as a single, comprehensive measure of musical motivation, the pilot tested MMQ was determined to have high internal consistency (Cronbach's $\alpha = .924$). Principal components analysis (PCA) and a subsequent parallel analysis of the pilot test data revealed that six components had eigenvalues exceeding the corresponding criterion values for a randomly generated data matrix of the same size. This six-component solution explained a total of 58.5% of the variance. The results from the pilot test PCA gave me confidence that the MMQ could be used in the primary research study to successfully identify the larger underlying motivational factors that influence students' participation in music courses.

Following pilot testing and external expert review, slight modifications were made to the MMQ. First, the list of possible music courses that participants could select from was alphabetized to reduce any perceptions of researcher bias for certain music courses. Second, four questionnaire items were replaced. Pilot test participants identified two of the original motivation statements as duplicate or very similar to other questionnaire items, and they were subsequently replaced. Two additional items were replaced to balance the representation of the 13 motivation categories represented on the MMQ. The revised MMQ contained the same number of variables and represented the same 13 motivation categories

as the pilot test MMQ, but now each category was represented with at least four and no more than five motivation statements.

Results

During a two-month period, cross-sectional data was collected, in-person during a single visit to each of six participating high schools. Music teachers served as gate-keepers allowing all consenting participants to complete paper copies of the MMQ, by hand, with either a pen or pencil during scheduled class meetings. Music students from six participating high schools in Minnesota that offered both popular music and traditional large ensemble music courses were invited to participate in this study ($N = 2,059$). All participants were enrolled in traditional, large ensemble courses, and/or popular music courses. The large performance ensembles represented in this sample included concert bands, string orchestras, an all-male chorus, three all-female choruses, and multiple mixed-voice choruses. The popular music courses represented in this sample included guitar classes, music technology courses focused on sampling and creating electronic music through computer software (e.g., *GarageBand*) and electronic instruments (e.g., keyboards), and a vocal music course that focused on learning and performing popular music.

Of the potential participants, 1,714 completed the MMQ resulting in a response rate of 83.24% ($n = 687$ males; $n = 1,000$ females; $n = 27$ sex not identified). Participants ranged in age from 13 to 19 years old ($M = 15.9$ years, $SD = 1.22$). The sample included 916 students enrolled in a large instrumental performance ensemble, 448 students enrolled in a large vocal performance ensemble, 150 students enrolled in large instrumental and vocal performance ensembles concurrently, 116 students enrolled in a popular music course, and 84 students enrolled in both a large performance ensemble (either instrumental or vocal) and a popular music course concurrently.

Prior to data analysis, all Likert-type scale responses were converted to numerical values ranging from one to six (1 = *strongly disagree*; 6 = *strongly agree*). All negatively worded items were reverse scored. To answer research question one, the 60 Likert-type scale items on the MMQ were subjected to principal components analysis (PCA). Because PCA is sensitive to missing data, all participant questionnaires with missing Likert-type scale data were eliminated prior to analysis to avoid creating false factors (Tabachnick & Fidell, 2013). The internal consistency reliability of the MMQ was acceptable ($\alpha = .858$). Additionally, Bartlett's test of sphericity was found to be statistically significant ($\chi^2 = 55,599.815$; $df = 1770$; $p < .001$), and the KMO measure was determined to be suitable (KMO = .932)

which indicated that use of this data set would result in reliable principal components (Pallant, 2010).

Although Kaiser's criterion and Catell's scree test are frequently used in PCA, Pallant (2010) suggested that these statistical procedures often overestimate the number of principal components to be extracted in the final solution. Therefore, *Monte Carlo Parallel Analysis Software* (Watkins, 2000) was used to conduct the more conservative Horn's (1965) parallel analysis which compared the size of the eigenvalues from the collected data set with randomly generated eigenvalues from 100 replications of random data sets of equal sizes. When using a parallel analysis, a researcher only retains principal components with eigenvalues that exceed the corresponding values from the random data sets. Horn's parallel analysis indicated the presence of nine principal components (PC) that accounted for 59.02% of the total variance in MMQ responses [19.75% (PC1), 11.25% (PC2), 8.91% (PC3), 5.39% (PC4), 4.18% (PC5), 2.70% (PC6), 2.49% (PC7), 2.26% (PC8), and 2.07% (PC9)]. Prior to extracting a final solution from the data set, a second PCA was conducted with oblimin rotation using a fixed number of nine principal components so that all variables would either be included in the solution or removed from further analysis. The *Pattern Matrix* shows a simple structure in which each variable loads strongest on only one principal component (see Table 1).

Table 1

<i>Principal Components Analysis Loadings Pattern Matrix</i>									
PRINCIPAL COMPONENT LOADINGS PATTERN MATRIX									
<i>PC1: Music Making Pleasure and Future Musical Engagement</i>	(Q8) .747	(Q54) .719	(Q44) .705	(Q48) .580	(Q30) .535	(Q31) .482	(Q52) .457	(Q7) .439	(Q56) .386
<i>PC2: Approach Musical Success and Avoid Musical Failure</i>	(Q17) .860	(Q23) .822	(Q10) .813	(Q37) .779	(Q11) .763	(Q9) .743	(Q16) .733	(Q6) .641	
<i>PC3: Peer Musical Engagement and Social Interaction</i>	(Q46) .839	(Q5) .772	(Q27) .750	(Q20) .712	(Q19) -.634	(Q18) -.621	(Q21) .562	(Q53) -.546	(Q3) -.391
<i>PC4: Musical Self-Concept</i>	(Q41) .727	(Q25) .704	(Q12) .623	(Q45) .605	(Q38) .562	(Q35) .552	(Q42) .500		
<i>PC5: Musical Competition and Ego</i>	(Q1) -.779	(Q15) -.765	(Q4) -.764	(Q24) -.759	(Q29) -.747	(Q14) -.725	(Q36) -.696	(Q49) -.609	(Q55) -.556
<i>PC6: Musical Mastery and Affect</i>	(Q47) -.716	(Q50) -.694	(Q60) -.666	(Q26) -.638	(Q34) -.616	(Q39) -.444	(Q58) -.425		
<i>PC7: Music Teacher Relationships and Course Content</i>	(Q13) -.715	(Q59) -.670	(Q2) -.523	(Q33) -.428					
<i>PC8: Musical Background and Home Environment</i>	(Q43) .951	(Q51) .949	(Q22) .449						
<i>PC9: Removed from further analysis due to unacceptable internal consistency reliability ($\alpha = .339$)</i>	(Q57) -.485	(Q40) -.416							
<i>No Strong Loading</i>	(Q32)								

*MMQ Item Presented in Parentheses

**Simple Structure Presented in Bolded Loadings

The Cronbach's alpha coefficients for principal components one through eight (PC1, $\alpha = .870$; PC2, $\alpha = .900$; PC3, $\alpha = .857$; PC4, $\alpha = .870$; PC5, $\alpha = .890$; PC6, $\alpha = .822$; PC7, $\alpha = .799$; PC8, $\alpha = .709$) indicated an acceptable internal consistency reliability. The Cronbach's alpha value for principal component nine ($\alpha = .339$) was unacceptable, and following statistical testing, PC9 was removed from further analysis.

After determining how the variables fit together conceptually, the following names or labels were assigned to each principal component: (PC1) *Musical Enjoyment and Future Musical Engagement*; (PC2) *Approach Musical Success and Avoid Musical Failure*; (PC3) *Peer Musical Engagement and Social Interaction*; (PC4) *Musical Self-Concept*; (PC5) *Musical Competition and Ego*; (PC6) *Musical Mastery and Affect*; (PC7) *Music Teacher Relationships and Course Content*; (PC8) *Musical Background and Home Environment*. A sample of MMQ motivation variables, grouped by principal component loadings, are represented in Figure 1.

Figure 1. Sample Variables Grouped by Principal Component Loadings

Principal Component 1 – Music Making Pleasure and Future Musical Engagement

- *When I am an adult, I hope to have a career in music.*
- *In the future, I will be a great musician.*
- *Making music is enjoyable.*

Principal Component 2 – Approach Musical Success and Avoid Musical Failure

- *I do my work in music class because I want my teacher to think that I am smart.*
- *I do my work in music class because I want my teacher to be pleased with me.*
- *I do my work in music class because I want to get good grades from my teacher.*

Principal Component 3 – Peer Musical Engagement and Social Interaction

- *I like to work with other students in music.*
- *I do my best work in music when I work on my own.***
- *I enjoy being with my friends in music class.*

Principal Component 4 – Musical Self-Concept

- *My classmates think I do well in music class.*
- *I think I am one of the best musicians in my class.*
- *I am not very good at writing or reading music.**

Principal Component 5 – Musical Competition and Ego

- *I feel most successful in music when I do better than other students.*
- *I like trying to do better than other students in music.*
- *I work harder when I try to do better than other students in music.*

Principal Component 6 – Musical Mastery and Affect

- *I feel most successful in music when I reach my own goals.*
- *I feel most successful in music when I really improve.*
- *I am able to feel the emotion in music.*

Principal Component 7 – Music Teacher Relationships and Course Content

- *I really like my music teacher(s).*
- *I do my assigned work in music because the music we learn is really interesting.*
- *I do my assigned work in music because I like learning new things about music.*

Principal Component 8 – Musical Background and Home Environment

- *Musical ability runs in my family.*
- *My parents are very musical.*
- *I started learning music at a very young age.*

*Indicates reverse scoring occurred prior to conducting the PCA

**Indicates reverse scoring occurred prior to post-hoc analysis

Composite factor scores were generated by grouping the variables (MMQ items) by principal component and summing each participant's scores for all variables loaded within each factor (Tabachnick & Fidell, 2013). Using student course enrollment as an independent variable and summed factor scores as dependent variables, a multivariate analysis of variance (MANOVA) was used to determine whether significant differences existed between the motivational influences of students enrolled in the following music course classifications: large instrumental ensemble, large choral ensemble, both instrumental and choral ensemble, popular music course, large ensemble and popular music course. MANOVA results indicated that the eight motivational factors identified by the PCA influenced students differently in all music course groupings [Pillai's Trace = .202, $F(32, 6604) = 10.989$, $p < .001$, partial $\eta^2 = .051$]. An examination of between-subject effects and revealed significant differences in the mean scores between groups of participants for each principal component (see Table 2).

Table 2

Multivariate Course Enrollment Effects

Dependent Variable	<i>df</i>	<i>df error</i>	M^2	Partial η^2	Sig.
PC1	4	1655	1336.728	.046	< .001
PC2	4	1655	249.913	.010	.002
PC3	4	1655	1147.811	.055	< .001
PC4	4	1655	597.572	.028	< .001
PC5	4	1655	248.969	.010	.002
PC6	4	1655	226.031	.028	< .001
PC7	4	1655	230.523	.041	< .001
PC8	4	1655	118.984	.022	< .001

Note. Results significant at $p < .01$

To further explore the nature of the observed significant differences, follow-up one-way analysis of variances (ANOVAs) with Tukey honestly significant difference (HSD) post-hoc tests were conducted using course enrollment as an independent variable and summed factor scores as dependent variables for each principal component. A Bonferroni adjusted $\alpha = .006$ was used to reduce the likelihood of committing a Type 1 error. Using post-hoc analyses, all significant, between-group differences ($\alpha = .01$) identified through MANOVA testing were confirmed with the exception of *Musical Competition and Ego* motivation (PC5). No PC5 between-group differences were truly significant using the Bonferroni adjusted alpha level.

Post-hoc testing showed that specific motivational factors do influence students in popular music differently than students enrolled in traditional large ensemble courses. Popular music participants were less influenced by *Approaching Musical Success and Avoiding Musical Failure* (PC2) motivation ($M = 29.64$, $SD = 9.02$, $p < .001$) than participants enrolled in large instrumental ensembles ($M = 33.37$,

$SD = 7.25$), large vocal ensembles ($M = 33.63$, $SD = 7.59$), and large instrumental and vocal ensembles concurrently ($M = 34.45$, $SD = 8.35$). *Peer Musical Engagement and Social Interaction* (PC3) motivation ($M = 32.27$, $SD = 7.38$, $p < .001$) was also less influential on popular music students than instrumental ensemble members ($M = 37.84$, $SD = 6.69$), vocal ensemble members ($M = 39.29$, $SD = 7.03$), instrumental and vocal ensemble students ($M = 39.22$, $SD = 6.88$), and students enrolled in both a large ensemble and popular music course ($M = 35.92$, $SD = 7.25$, $p = .002$).

Students enrolled solely in popular music courses were influenced less by *Musical Self-Concept* (PC4) motivation ($M = 29.52$, $SD = 6.35$, $p < .001$) than instrumental ensemble students ($M = 38.36$, $SD = 7.72$), students enrolled in large instrumental and vocal ensemble concurrently ($M = 35.02$, $SD = 7.30$, $p < .001$) and students enrolled in large ensemble and popular music courses concurrently ($M = 34.50$, $SD = 7.40$, $p < .001$). Additionally, *Musical Background and Home Environment* (PC8) served as a weaker motivational influence for popular music students ($M = 9.84$, $SD = 3.73$). This difference, however, was only statistically significant when compared with students enrolled in a large instrumental ensemble and a large vocal ensemble concurrently ($M = 12.46$, $SD = 3.59$, $p < .001$).

Of all eight motivational factors examined in the present study, *Music Teacher Relationships and Course Content* (PC7) motivation appeared to have the strongest influence on popular music students ($M = 18.35$, $SD = 2.99$, $p < .001$) and students enrolled concurrently in popular music and large ensemble courses ($M = 18.32$, $SD = 3.13$, $p < .001$) who reported mean PC7 scores significantly higher than instrumental ensemble students ($M = 16.83$, $SD = 3.45$) and large vocal ensemble students ($M = 16.66$, $SD = 4.21$). Additionally, students enrolled in both popular music courses and large ensembles were more strongly influenced by *Music Making Pleasure and Future Musical Engagement* (PC1) motivation ($M = 39.08$, $SD = 7.67$, $p < .001$) than participants enrolled in a large instrumental ensemble ($M = 33.18$, $SD = 8.03$) or large vocal ensemble ($M = 34.54$, $SD = 8.84$).

Discussion

The purpose of this study was to determine whether students who elect popular music courses are influenced by different motivational factors than traditional large ensemble participants. To best interpret the results of this study, it is important to understand how music students' motivation was measured using the MMQ. On the MMQ, participants were asked to rate their levels of agreement/disagreement with 60 music motivation statements adapted from the related literature. The significant differences found in this study did not necessarily represent the presence or absence of motivational factors, but instead, represented differ-

ences in the strength of influence eight motivational factors had on high school music students' choices to begin and sustain participation in curricular music.

Data analysis indicated that students enrolled in popular music courses, either as their sole elective music course or in conjunction with another music elective, were influenced differently than students enrolled solely in large performance ensemble classes by certain motivational factors. Popular music course participants were influenced less by *Approaching Musical Success and Avoiding Musical Failure* (PC2), *Peer Musical Engagement and Social Interaction* (PC3), and *Musical Self-Concept* (PC4) motivations than students enrolled in traditional large ensembles. Schmidt (2005) reported that Performance/Ego Orientation, including *Approaching Musical Success and Avoiding Musical Failure*, may not act as strong motivation to instrumental (band) students. While PC2 was not found to be a strong motivational influence on popular music students in the present study, it was found to be a strong motivator for large ensemble participants (including band students), contradicting Schmidt's earlier findings. Although it is uncertain what caused results in the present study to vary from previous research, it is possible that the overall instrumental music students' group PC2 motivation scores increased because orchestra (string) students were included in the sample.

Within the context of music motivation research, *Approaching Musical Success and Avoiding Musical Failure* generally refers to students obtaining music teacher approval/avoiding teacher disapproval and receiving high academic marks/avoiding poor grades in music classes. Secondary ensemble directors often grade students heavily using non-achievement criteria such as attendance and attitude (Russell & Austin, 2010), but researchers have yet to document the prevalent grading practices in popular music classrooms. Regardless of the grading practices employed by the teachers in the present study, neither academic grades or teacher approval strongly motivated popular music students to begin or sustain participation in school music.

Musical Self-Concept Motivation was also not a strong influence on popular music students, especially when compared to instrumental music students and students enrolled in multiple music courses, supporting previous research by Cohen and Roudabush (2010) who found that popular music students often self-identified as "nonmusicians" (p. 77). Self-concept and feelings of self-efficacy in music are derived largely from previous experiences with music learning, participation in music lessons, and successful past music performances (McCormick & McPherson, 2003; Ritchie & Williamon, 2011; Sichivista, 2007; Zelenak, 2015). In the present study, data on students' socio-economic status or living arrangements were not collected, but it is possible that, when compared to large ensemble students, a greater percentage of popular music students were unable to rent or

purchase instruments, afford additional music lessons, or lived in home environments (e.g., apartment complexes) that were not conducive to musical practice due to noise restrictions. Such living arrangements would not be considered musically influential home environments and could explain some of the variance in both *Musical Self-Concept Motivation* scores and *Musical Background and Home Environment Motivation* scores.

It is also probable that popular music students possess a lower musical self-concept than instrumental ensemble students because they lack opportunities to enroll in continuous, sequential music courses like their peers. Although most high school large ensemble students have participated in music since joining band, choir, or orchestra, several popular music students' likely experienced a gap in their formal music education after leaving the general music classroom in elementary school. Within their respective schools, popular music students were enrolled in the sole popular music course offered, and there were not sequential, curricular options for students wanting to continue learning beyond introductory courses. Gardner (2010) investigated a high school rock band program, and found that multiple sections of the course, divided by student ability, were necessary for popular music students to receive appropriately challenging and musically rewarding experiences they desire. Multiple course sections grouped by ability would allow students to continue participation and grow over multiple years like their peers in traditional large ensembles. Sequential instruction would also allow popular music students to interact through music and develop social (musical) identities over time which researchers have documented as positively influencing student self-concept (North & Hargreaves, 1999; Tarrant, North, & Hargreaves, 2001). Although additional self-concept motivation research is needed, it is reasonable to hypothesize that popular music students' musical self-concept would increase over time with continued instruction and performing opportunities.

The most significant and unexpected finding involving popular music course participants was that they were influenced less by *Peer Musical Engagement and Social Interaction* (PC3) motivation than all other groups of students sampled. Researchers have previously demonstrated that friendship and social relationships can be significant influences impacting students' initial and sustained music participation (Hewitt & Allan, 2012; MacIntyre, Potter, & Burns, 2012). In the genre of popular music, social interaction can be even more important than musical skill for young musicians looking to create music and form music groups together (Clawson, 1999). Therefore, it was surprising to find sampled popular music students were less influenced by PC3 than all large ensemble participants.

Prior to further discussion, it should be acknowledged that no longitudinal course observations occurred. Additionally, music teachers did not provide de-

tailed information (e.g., syllabi, lesson plans, unit plans) on course curricula and learning activities during this study. The suitability of popular music students for participation in this study was determined after discussions with course instructors about the general content of their respective popular music courses. From those conversations and observations made at the time of data collection, it was determined that the majority of the popular music course students sampled in the present study were engaged with music-learning and music-making as predominantly individualized activities in school. Students were playing guitars or keyboards individually (through group instruction) or creating music on computers and listening to their compositions through headphones while music teachers provided instructions and guidance.

Dammers (2010, 2012) reported that continued advancements in technology have opened the door for students to participate in school music without being members of traditional, large ensembles. It is possible that the evolution of technology and increased access to computers and music software has made music-learning and music-making an individualized activity for a portion of students interested in pursuing popular music. If some of the sampled popular music students viewed music as a non-social activity, this could account for some of the variance in their responses to PC3 variables on the MMQ. It also possible that popular music students were so strongly motivated by the course content that social motivation played a relatively insignificant role in their course enrollment choices. This possibility is supported by additional findings from the present study which indicated *Music Teacher Relationships and Course Content* (PC7) motivation to be the strongest influence over popular music students.

Perhaps the most likely explanation as to why popular music students were influenced less by *Peer Musical Engagement and Social Interaction* than their musical peers is that, at least within the schools participating in the present study, there was some disconnect between the music making in popular music courses and students' engagement with popular music outside of schools, a finding consistent with previous research. Allsup (2003) described the disconnect between school music and a student's "hidden or private musical world...[as] a false dichotomy between so-called opposing cultures" (p. 25) during his investigation of democratic music learning in an instrumental music classroom. Campbell (1995) suggested that any "rock music that 'makes it' into a school program is...often antiseptic, a pale imitation of its true colours" (p. 13) after studying the music learning that occurs during adolescent garage band rehearsals. According to Woody (2007), teachers and course design both detract from the authenticity of popular music learning, because outside of schools, students learn popular music "just by getting in there and doing it" (p. 34). Popular musicians most often learn aurally from

recordings or through imitation, experimentation, conversation, and peer observation (Abramo, 2010; Campbell, 1995; Green, 2002) rather than through formal, teacher-guided, sequential instruction in which all students learn the same skills or songs at the same time. If students perceived available popular music course options to lack authenticity, it is very likely that there is still a population of prospective popular musicians in the sampled schools who have forgone and who will continue to avoid school music programs until they are able to explore the music opportunities and genres they desire while learning music with their friends through experimentation, imitation, and other informal processes (Abramo, 2010; Tobias, 2010).

Conclusions and Implications for the Music Education Profession

This study took place at a time when music educators across the United States were working, perhaps harder than ever before, to realize NAFME's vision of providing all students access to a meaningful, quality music education (National Association for Music Education, 2011) by including popular music courses and musical genres that students may consider more relevant in the school curriculum. However, liking or listening to music takes less effort than studying music in an academic setting, and it is unreasonable to assume that simply adding popular music courses to school curricula would cause masses of students to instantly enroll in school music programs (Hope, 2004). The sample in the present study included six Minnesota high schools of varying sizes and socioeconomic compositions that offered popular music courses in addition to traditional large ensemble offerings, and approximately only 29% of students in these schools were enrolled in music at the time of data collection. It would seem, at least within sampled schools, that high school students were indeed not flocking to newly designed, popular music courses in unprecedented numbers. However, if popular music courses are intended to increase public school student access to music instruction or make music education more accessible to a different population of high school students, then curricular reform efforts might be proving successful.

High school students' choices to enroll in school music courses are influenced by various motivational factors. The strongest influences for students enrolled in band, choir, and orchestra were found to differ from students enrolled in popular music courses. As Gates (1991) suggested, there are different types of music participants seeking different outcomes from their engagement with music. Not all high school students are created alike, and a limited menu of large performance ensemble courses will never meet all of their disparate musical needs.

According to Miksza (2013), “no one will benefit from throwing the baby out with the bathwater when it comes to [music] curricular reform” (p. 49) across the United States. Large performance ensembles continue to be places where students engage in powerful music learning and music making experiences. However, receiving a music education should not be a privilege reserved for the fortunate minority of students motivated to participate in the large performance ensembles traditionally offered in schools. As long as music education remains an elective choice in high schools, music educators may never realize the goal of a quality music education for all students. However, failure to expand high school music curricula to attract students not motivated to participate in traditional music learning experiences will most certainly result in the profession never reaching this goal.

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