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Acquiring Competency in Music, Teaching, and Personal Skill Areas: A Survey of In-service Teachers

The researchers investigated music teachers' perceptions of the sources and difficulty of competency acquisition for music teaching. Participants ($N = 338$) were music teachers in Arizona, Texas, and Washington. Using categorized competencies for music teaching (music, teaching, or personal skills/knowledge), the researchers divided participants into three experience levels: novice, experienced, and veteran music educators. Participants viewed teaching competencies as the most difficult to acquire and personal competencies as the least difficult to acquire. Novice music educators perceived both teaching and music competencies as more difficult to acquire than veteran music educators, while veteran educators perceived personal competencies to be less difficult to acquire than both novice and experienced music educators. The majority of participants (77.5%) attributed teaching competency acquisition to job experience. The researchers found no significant differences regarding music teachers' perceptions of competency category acquisition difficulty related to teaching specialization, although item-level differences emerged.

Keywords: music teacher education, competency acquisition, music teacher experience

Introduction

Preparing undergraduate music education students to successfully transition into the workforce is a complex undertaking (Ballantyne & Packer, 2004; Davis, 2006; Denis, 2019; Legette & McCord, 2014; MacLeod & Walter, 2011; Roulston et al., 2005). Previous research regarding the skills/knowledge necessary for effective teaching, such as studies by Teachout (1997), Millican (2009, 2017), and Miksza et al. (2010), may inform music teacher educators' decisions regarding

university curricula or in-service professional development. While these researchers have addressed the importance of individual skills/knowledge components, exploration into the nature of acquiring skills/knowledge among in-service teachers has been less common in music education (Denis, 2019; Miksza et al., 2010). Such exploration may also prove meaningful for music teacher education.

Conceptual Framework

Researchers have investigated the acquisition of the skills/knowledge necessary for effective music teaching through the lens of three common frameworks: core practices (Abramo, 2016; Forzani, 2014; Grossman et al., 2009; Millican & Forrester, 2018), pedagogical content knowledge (e.g., Ballantyne & Packer, 2004; Millican, 2017; Shulman, 1987), and competencies for music teaching (Denis, 2019), which was derived from skills/knowledge research (Miksza et al., 2010; Teachout, 1997). Core practices are routine, research-based aspects of instruction that are limited to skills/knowledge that novice teachers “can begin to master” (Millican & Forrester, 2018, p. 157). Pedagogical content knowledge is the understanding of the intersections between subject matter and teaching (Millican, 2017; Shulman, 1987).

We used competencies for music teaching as the conceptual framework for this study. While similar to both core practices and pedagogical content knowledge frameworks, competencies for music teaching differs in key characteristics. The competencies framework includes skills/knowledge related to professional responsibilities such as navigating non-musical duties and communicating effectively with colleagues, items that may not fit well within the skill mastery emphasized in the core practices framework. Furthermore, the core practices framework is inherently hierarchical, giving preference to practices that novices can master (Abramo 2016; Grossman et al., 2009), and may leave necessary skills and knowledge competencies underrepresented in preservice teacher education. Similarly, the pedagogical content knowledge framework lacks a category dedicated to social skills such as cooperation with colleagues and parents, which Johnson (2014) argued may be needed for effective music teaching. In contrast, the competencies framework retains both a broad scope of essential aspects of music teaching and necessary personal components absent in core practices and pedagogical content knowledge frameworks, respectively. In this study, we used the term *competencies* to include skills/knowledge for music teaching.

In previous research, scholars divided competency items of interest into music, teaching, and personal categories in both methodology (Davis, 2006; Miksza et al., 2010; Rohwer & Henry, 2004; Teachout, 1997) and discussion (Kelly,

2010). Teaching competencies such as classroom management and motivating students have been addressed by researchers in the field (Miksza et al., 2010; Rohwer & Henry, 2004; Teachout, 1997). Music competencies included items such as maintaining high musical standards and demonstrating knowledge in the content area, and personal competencies encompassed subjects such as displaying confidence and organization (Davis, 2006; Miksza et al., 2010).

Literature Review

Researchers have documented variety in novice music teachers' perceptions of teaching acquisition sources (Ballantyne & Packer, 2004; Bauer & Berg, 2001; Conway, 2002; Moss, 2007). Novice teachers across specializations have attributed teaching competency acquisition to student teaching experiences (Conway, 2002; Denis, 2019; Roulston et al., 2005) and university coursework (Joseph, 2011; Roulston et al., 2005); however, they have also reported dissatisfaction related to the acquisition of competencies through completing coursework (Ballantyne & Packer, 2004; Conway, 2002; Denis, 2019; Roulston et al., 2005). Ballantyne and Packer (2004) noted that early-career music teachers perceived many aspects of teaching—including assessing student progress and communicating with colleagues, students, and parents—to be important yet under-addressed by university coursework. In contrast, Roulston et al. (2005) reported that beginning music teachers expressed positive perceptions of coursework when it was in alignment with work experiences. Additionally, Bauer and Berg (2001) found a stronger connection between student teaching experiences and teaching practices among novice instrumental music teachers than among experienced instrumental music teachers. Due to the variety of novice music teachers' perceptions of teaching acquisition sources, further research may be beneficial to music teacher education.

Like novice music teachers, experienced music teachers' perceptions of teaching competency acquisition sources have also been shown to vary (Bauer & Berg, 2001; Conway, 2012; Frady, 2011; Moss, 2007). Experienced music teacher participants in Bauer and Berg's (2001) study reported a mixture of influences on their music teaching, including personal experience, college ensemble directors, and professional development. Similarly, Conway's (2012) participants reported competency acquisition in student teaching as well as during employment. Conversely, music teachers in Frady (2011) selected professional development as the source of all pedagogical competencies with the exception of classroom management. Teachers reported teaching experience, defined as time working with students in authentic settings, as the source of classroom management competence acquisition.

When comparing novice and experienced music educators' perceptions of the source of acquisition of teaching competencies, Moss (2007) found no statistically significant differences between groups. Both novice and experienced teachers reported acquiring most teaching skills through classroom teaching experience; however, nominal differences occurred between the two groups. When novice and experienced teachers disagreed over the source of teaching acquisition novice teachers chose either teacher training or personal development as the source of competency acquisition, while experienced teachers chose teaching experience.

However, when Conway (2012) followed-up with the same participants from her previous study (Conway, 2002) to re-examine their earlier perceptions through the lens of ten years of teaching experience, participants agreed with their prior statements. Consistent with their responses in 2002, these same participants reported learning the most from student teaching and preservice fieldwork, while they claimed to have learned the least from College of Education coursework. Conway (2012) found that the stability of participant perceptions across the ten-year period contrasted with previous literature that revealed experience level differences concerning perceptions of student teaching (Bauer & Berg, 2001) and methods courses (Brophy, 2002). The variety in perceptions of teaching competency acquisition sources and findings related to experience level may warrant further research into experienced teachers' perceptions of the sources of teaching competencies.

In addition, competencies in the teaching category have emerged as difficult to acquire in a review of literature of first-year music teachers' experiences (Conway, 2015), in comparison to competencies in the musical and personal categories (Denis, 2019), and in examinations of beginning music teachers' transitions from preservice teacher education to in-service teaching (Joseph, 2011; Roulston et al., 2005). A number of competencies commonly cited by novice teachers as challenging to acquire have included classroom management (Barnes, 2010; Denis, 2019; Jones, 1978; Joseph, 2011; Legette, 2013; Legette & McCord, 2014; Roulston, et al., 2005) and non-instructional responsibilities (Ballantyne, 2007; Denis, 2019; Legette, 2013; Roulston et al., 2005).

Music teacher perceptions of the acquisition source of competencies from the musical category were largely consistent across teaching specialization and experience level throughout the research literature. Band (Conway, 2002, 2012; Denis, 2019; Moss, 2007), orchestra (Conway, 2002; Moss, 2007), choir (Conway, 2002), and elementary/general music teachers (Conway, 2002, 2012; Frady, 2011; Joseph, 2011) reported university coursework as the primary source of music competencies. Similarly, studies of novice music teachers (Conway, 2002; Denis, 2019; Joseph, 2011), experienced music teachers (Conway, 2012), and teachers of all levels

of experience (Frady, 2011; Moss, 2007) reported university coursework as the perceived source of music competencies. Music competency acquisition difficulty is relatively absent from the literature (Denis, 2019).

Few published studies have investigated experienced music teachers' perceptions of personal competency acquisition, perhaps because personal competencies are challenging to investigate (Johnson, 2014) and less commonly discussed in music teacher preparation than music and teaching competencies (Moss, 2007). In one investigation of the sources of personal competency acquisition (Moss, 2007), novice and experienced instrumental music teachers reported acquiring competencies through personal development and in relationships with family and friends. In a study of novice band directors, participants reported personal competencies as easier to acquire than musical and teaching competencies (Denis, 2019). Participants also rated professionalism as easier to acquire, perhaps because professionalism was part of their university experiences. Organization, a personal competency, has emerged as difficult to acquire in studies of elementary/general music (Joseph, 2011) and novice band directors (Denis, 2019).

A central aim of music teacher education and in-service professional development is music teachers' successful acquisition of teaching, music, and personal competencies. The areas of competency acquisition difficulty and personal competency acquisition source remain gaps in the literature. Additionally, the inconsistencies in the literature necessitate further inquiry into in-service teachers' perceptions of the sources and difficulty of teaching, music, and personal competencies. Findings may yield beneficial implications regarding undergraduate music education course and curriculum design and evaluation as well as the advancement of effective professional development for music educators.

The purpose of this study was to investigate music teachers' perceptions of competency acquisition for music teaching across experience levels and teaching specialization. The specific research questions were: (a) What were music teachers' perceptions of competency acquisition difficulty for competency categories and individual competencies?, (b) What were the perceived primary acquisition source of teaching, music, and personal competencies?, (c) Were there differences regarding perceptions of acquisition difficulty among teaching specializations?, and (d) Were there any differences regarding perceptions of acquisition difficulty between music teachers of varying levels of experience?

Method

We modified a previously constructed questionnaire that held high internal consistency in each competency category (musical $\alpha = .84$, teaching $\alpha = .85$, and

personal $\alpha = .83$) (Denis, 2019) for this study. The final version contained 38 Likert items divided into musical (13 items), teaching (15 items), and personal (10 items) competency categories. We asked participants to rate the difficulty of acquiring each competency item on a 5-point scale (ranging from 1–*not difficult* to 5–*entirely difficult*). Additionally, we asked participants to select the primary source of teaching competency acquisition from four options: university coursework, student teaching, professional development, and on-the-job experience. Finally, we included six demographic questions to document participant teaching specialization, age, experience, ethnicity, gender identity, and contact information for compensation.

Prior to survey administration, three content validity panelists (music teachers with a mean of 19 years of experience) examined the questionnaire. We adjusted the questions based on panel recommendations, including the rewording of one response option and the addition of an item addressing multiculturalism in the classroom to the teaching category. In addition, we conducted a brief field test with preservice and in-service music educators not part of the study for questionnaire clarity prior to pilot testing.

We assessed internal consistency and test-retest reliability through a pilot test ($N = 81$) with preservice and novice music educators not included in this study. Of the 47 potential items, we removed nine for internal consistency concerns. Only five individual items met or surpassed the test-retest reliability cutoff of $\alpha > 0.70$ for individual analysis (Cho & Kim, 2015; Nunnally & Bernstein, 1994; Raykov, 2008). The five items were “possess proficient piano skills,” “possess excellent singing skills,” “work with students of different ethnicities and cultures,” “display confidence,” and “be patient.” Supplementary materials for the reliability of summed categories and reliability of the five individual items can be found in Tables 1 and 2, respectively (Appendix A). Items representing the perceived primary sources of teaching, music, and personal competencies were included in the pilot. Only the item addressing acquisition source for teaching competencies was reliable ($\alpha = .77$) and included in the main study.

Once we received Institutional Review Board approval, we randomly selected 300 individual campuses (elementary and secondary combined) in each state from master lists obtained from state organizations (AZ = 2,281; TX = 8,317; WA = 1,926). Due to privacy concerns, we were not able to obtain any lists of individual music educators; therefore, we chose to develop the campus-level list based on publicly available information. The number of campuses selected was determined a priori in an attempt to recruit an adequate number of participants for group analysis (Cohen, 1992). The researchers then created a list of contact information for all music educators ($N = 1,542$) employed at the randomly selected campuses

using publicly available information. Time served as a limiting factor in sampling due to the necessity of generating a list manually. We attempted to verify the accuracy of the publicly available information for each campus individually; however, some staffing changes occurred between our examinations of individual campuses and the administration of the questionnaire.

After completing random sampling procedures, we contacted potential participants via email with a link to the informed consent form and questionnaire. Once participants with invalid contact information ($n = 91$) or those that did not meet the parameters of the study ($n = 2$) were removed, the total sample was $N = 1,449$. One week after initial responses ($n = 201$) were collected, we implemented follow-up procedures that yielded an additional 137 respondents through a first reminder email ($n = 99$) in the second week of data collection, randomly selected phone calls ($n = 15$), and a final reminder email ($n = 23$) 24 days after original contact.

Participants ($N = 338$) that began and completed this descriptive survey study were music teachers in Arizona, Texas, and Washington, consisting of 142 males (42.01%), 189 females (55.92%), three who did not identify with either gender (0.89%), and four who chose to withhold gender identification (1.18%). Survey participant ages ranged from 22 to 73 ($M = 41.76$, $SD = 13.10$), and reported ethnicities consisted of Caucasian ($n = 268$), Latinx ($n = 27$), African-American ($n = 12$), and Asian ($n = 15$). Twelve participants preferred not to declare their ethnicity, and four chose not to answer.

Following Bauer and Berg's (2001) protocol, we divided participants into three experience levels: novice music teachers (0-5 years teaching experience), experienced teachers (6-15 years teaching experience), and veteran teachers (16 or more years teaching experience). Novice participants made up 27.2% of the respondents ($n = 92$), experienced participants made up 33.1% of the respondents ($n = 112$), and veteran participants made up 39.6% of the respondents ($n = 134$). Regarding primary teaching specialization, 40.20% of participants selected band ($n = 136$), 21% selected choir ($n = 71$), 13.90% selected orchestra/strings, and 24.90% selected elementary/general music ($n = 84$).

Overall, 338 respondents completed the questionnaire for a response rate of 23.33%. Following the completion of data collection, we entered data into SPSS for demographic comparison. We compared early and late respondent demographic means to identify potential non-response biases in age ($\chi^2(2, N = 307) = 38.81, p = .83, \phi_c = .36$), gender identity ($\chi^2(2, N = 334) = .19, p = .91, \phi_c = .02$), ethnicity ($\chi^2(2, N = 334) = 3.44, p = .49, \phi_c = .10$), teaching area ($\chi^2(2, N = 338) = 1.13, p = .77, \phi_c = .06$), and experience ($\chi^2(2, N = 334) = 3.33, p = .19, \phi_c = .10$) and found no significant differences.

We used listwise deletion for respondents who failed to complete the majority of items in any category prior to calculating means and standard deviations for the three competency categories (teaching, music, and personal) based on both teaching area and level of respondent experience. Using previously identified competency items with high reliability, we calculated means and standard deviations for further analysis. Finally, we calculated response percentages to address acquisition sources for the teaching competency category. We examined data for normality prior to analysis, and due to positive skewness, we selected non-parametric statistical analyses when appropriate.

Results

Competency Acquisition Difficulty and Primary Sources

To address the first research question regarding music educators' perceptions of competency category acquisition difficulty, we calculated means and standard deviations for each summed competency category (teaching, musical, and personal). Higher scores represented greater difficulty. Summed means indicated participants rated teaching competencies ($M = 30.04$, $SD = 9.71$, range: 15-60) as the most difficult to acquire, followed by music competencies ($M = 27.59$, $SD = 8.43$, range: 13-49), and personal competencies ($M = 16.96$, $SD = 5.31$, range 10-38).

To answer the second research question regarding the perceived primary acquisition source of teaching competencies (or competencies directly related to delivering instruction), we asked participants to select university coursework, on-the-job experience, student teaching, or professional development as the primary source of teaching competency acquisition. The majority (77.5%) of participants attributed teaching competency acquisition primarily to on-the-job experience, followed by student teaching (10.7%), professional development (6.5%), and university coursework (5.3%).

Teaching Specialization and Acquisition

We calculated means and standard deviations for the competency difficulty items according to category (teaching, music, and personal) to answer the third research question regarding differences in perceptions of acquisition difficulty among teaching specializations. Due to failure to meet assumptions of normality and homogeneity of variance, we chose a nonparametric analysis and conducted a Kruskal-Wallis test to determine median rank differences between teaching specializations (band, choir, orchestra/strings, and elementary/general) with a cutoff of $p < .025$ to avoid type I error. We found no significant differences in musical

($\chi^2 = 7.51$, $df = 3$, $p = .06$, $\eta^2 = .02$), teaching ($\chi^2 = 1.19$, $df = 3$, $p = .76$, $\eta^2 = .01$), or personal ($\chi^2 = 8.90$, $df = 3$, $p = .03$, $\eta^2 = .026$) competency acquisition difficulty for teaching specialization. Furthermore, effect sizes were small.

Additionally, the competency items “possess proficient piano skills” ($F(3, 334) = 3.99$, $p = .01$, partial $\eta = .04$), “work with students of different ethnicities and cultures” ($F(3, 334) = .61$, $p = .61$, partial $\eta^2 = .01$), and “display confidence” ($F(3, 334) = .45$, $p = .72$, partial $\eta^2 < .01$) met the necessary assumptions of normality and homogeneity of variance; therefore, we analyzed responses to these questions using a one-way ANOVA. A post-hoc Tukey HSD test showed that band teachers ($M = 3.06$, $SD = 1.29$) found acquiring the item “possess proficient piano skills” significantly more difficult ($p = .01$) than elementary/general music teachers ($M = 2.45$, $SD = 1.33$).

We used a Kruskal-Wallis test for the specific competency items “possess excellent singing skills” ($\chi^2 = 32.93$, $df = 3$, $p < .01$, $\eta^2 = .10$), and “be patient” ($\chi^2 = 7.55$, $df = 3$, $p = .06$, $\eta^2 = .02$) due to a violation of the assumption of homogeneity of the variances necessary for analysis using ANOVA, and we found significant differences for the item “possess excellent singing skills” with a medium effect size. Dunn-Bonferroni post-hoc tests revealed that orchestra teachers found singing skills significantly more difficult to acquire ($p = .01$) than choir teachers, and band teachers found singing skills significantly more difficult to acquire than choir teachers ($p < .01$) and elementary/general teachers ($p < .01$). We found no significant differences in how teachers of all three specialties responded to the item “be patient.”

Experience Level and Acquisition

To answer the fourth research question regarding differences in perceptions of acquisition difficulty between music teachers of varying experience levels, we calculated means and standard deviations for competency acquisition by experience level. Because data for the experience groups did not meet assumptions of normality and homogeneity of variance, we conducted a Kruskal-Wallis test to determine median rank differences between experience groups (novice, 0-5 years; experienced, 6-15 years; veteran, 16 or more years) with an alpha level of .025 to avoid type I error. We found significant differences in mean participant responses regarding competency acquisition for teaching ($\chi^2 = 8.79$, $df = 3$, $p = .01$, $\eta^2 = .03$), musical ($\chi^2 = 7.99$, $df = 3$, $p = .02$, $\eta^2 = .02$), and personal ($\chi^2 = 13.86$, $df = 3$, $p < .01$, $\eta^2 = .04$) competency categories between the three teaching experience levels. For musical competencies, a Dunn-Bonferroni post-hoc analysis revealed a significant difference ($p = .02$) between novice and veteran teachers' responses, with novice

teachers expressing more difficulty in musical competency acquisition. Similarly, post-hoc analysis identified a significant difference ($p = .01$) between novice and veteran teachers' responses with respect to teaching competencies, also with novice teachers expressing more difficulty in acquiring teaching competencies. Finally, post-hoc analyses for personal competencies identified significant differences between novice and veteran teachers ($p < .01$) and between experienced and veteran teachers ($p = .03$), with veteran teachers indicating less difficulty in acquiring personal competencies than either novice or experienced teachers.

The competency items "possess proficient piano skills" ($F(2, 335) = 2.26$, $p = .11$, partial $\eta^2 = .01$), "possess excellent singing skills" ($F(2, 335) = .23$, $p = .80$, partial $\eta^2 < .01$), "work with students of different ethnicities and cultures" ($F(2, 335) = 2.82$, $p = .06$, partial $\eta^2 = .02$), and "display confidence" ($F(2, 335) = 1.04$, $p = .35$, partial $\eta^2 = .06$) met the necessary statistical assumptions and we analyzed the means utilizing a one-way ANOVA. We found no significant differences for acquisition responses based on teaching experience. Because the data representing the item "be patient" violated the assumption of homogeneity of variance, we used a Kruskal-Wallis test for analysis ($\chi^2 = 7.64$, $df = 3$, $p = .02$, $\eta^2 = .02$). A Dunn-Bonferroni post-hoc test revealed a significant difference ($p = .02$) between experienced and veteran teachers' responses for these questions, with experienced teachers expressing more difficulty in acquiring the patience competency.

Discussion

The complexity of successful competency acquisition for music teaching, which may affect music student learning, may make decisions regarding university curricula and district-level professional development difficult to navigate. To incorporate the dimension of perceived competency difficulty into the discussion, we investigated in-service music teachers' perceptions of the sources and difficulty of competency acquisition for music teaching. We found that music teachers viewed teaching competencies as the most difficult to acquire and personal competencies as the least difficult to acquire. The majority of participants (77.5%) attributed teaching competency acquisition primarily to job experience, and educational experiences (university coursework and professional development) only accounted for 11.8% of acquisition sources. Educational leaders, such as music education professors and administrators, may wish to examine educational content in light of these results to shape courses and professional development that in-service teachers perceive as related to competency acquisition. We found no significant differences regarding music teachers' perceptions of competency category (teaching, music, and personal) acquisition difficulty related to teaching

specialization, although item-level differences emerged. Item differences involved piano proficiency and singing skills.

In addition, we found significant differences regarding perceptions of acquisition difficulty according to level of music teaching experience. Novice music teachers (0-5 years) perceived both teaching and music competencies as more difficult to acquire than veteran music teachers (16 or more years), which aligns with previous research that indicated new teachers perceived learning to teach as difficult (Conway, 2015; Denis, 2019; Joseph, 2011; Roulston et al., 2005). Notable in these results was the lack of a significant difference between novice (0-5 years) and experienced (6-15 years) music teachers' perceptions of the difficulty of teaching, which suggests that music teachers with intermediate levels of experience may benefit from a continuation of the mentorship often provided to new teachers. Moreover, veteran music teachers in this study perceived personal competencies to be less difficult to acquire than both novice and experienced music teachers. This may indicate that music teachers with moderate levels of experience may benefit from professional development and support in personal competencies such as leadership, time management, organization, goal setting, and confidence building as they enter the middle phases of their careers. In contrast, these results may be indicative of attrition among novice and intermediate music educators.

Music teachers across all specializations and experience levels in this study perceived teaching competencies as the most difficult to acquire followed by music competencies. Personal competencies were perceived as least difficult to acquire, in alignment with prior research (Denis, 2019). This finding may indicate that balancing the levels of teaching and music coursework in music teacher education toward teaching instruction and field experiences may benefit music teachers across their careers. In addition, band teachers, who perhaps do not enter college with piano proficiency or use the piano in teaching, perceived piano skills as more difficult to acquire than elementary/general music teachers for whom piano may be seen as a more integral part of instruction. Similarly, band teachers perceived singing skills as more difficult to acquire than choir and elementary/general music teachers. Orchestra directors also perceived singing skills as more difficult to acquire than choir teachers. This result involved a moderate effect size. Thus, the alteration of piano and singing instruction and requirements may benefit band and orchestra music education majors because reducing the difficulty in music competency acquisition may create space for undergraduates to acquire teaching competencies. Furthermore, preservice music teachers seeking to enter band or orchestra settings may benefit from curricular restructuring to emphasize other secondary instruments (Denis, 2019) rather than the heavy emphasis on piano that currently exists in many higher education curricula.

When asked to attribute teaching competency acquisition to job experience, student teaching, professional development, or university coursework, 77.5% of the participants in this study selected on-the-job experience. However, the necessary condensation of all educational and contextual experiences into a forced single-selection to achieve generalizability in this study may have reduced the variation and context found in other studies (Bauer & Berg, 2001; Brophy, 2002; Conway, 2002, 2012; Frady, 2011; Joseph, 2011; Moss, 2007; Roulston et al., 2005). Therefore, the primacy of job experience as a source of teaching competencies found in this study must be interpreted alongside other studies with open-ended questions in which music teachers listed a variety of acquisition sources (Conway, 2002, 2012; Frady, 2011; Roulston et al., 2005) or studies in which participants could select multiple sources of acquisition (Bauer & Berg, 2001).

With this context in mind, the finding that 77.5% of participants selected job experience as the source of teaching competencies highlights the importance of classroom teaching experience found in previous research (Denis, 2019; Bauer & Berg, 2001; Brophy, 2002; Conway, 2002, 2012; Moss, 2007; Roulston et al., 2005) with the distinction that classroom teaching experiences may include preservice field teaching, student teaching, and/or on-the-job experience as long as they involve authentic interactions with students. Furthermore, 68.5% of novice teachers selected job experience as the primary source of acquisition, despite having less on-the-job opportunities than their more experienced colleagues and being closer to their university coursework. Research exploring the differences and similarities between teaching competency acquisition among different levels and types of teaching experience may provide important implications for music teacher education.

Additionally, recall may influence experienced teachers' perceptions of competency acquisition. As greater time has passed between completing coursework and participating in this study, experienced teachers may downplay the role coursework played in competency acquisition. Similarly, novice teachers are closer temporally to their coursework, and may give inordinate weight to the role of coursework in competency acquisition.

Finally, changes in music teacher education programs in the 21st century may contribute to the difference between novice and veteran teachers regarding perceived difficulty in acquiring competencies. Benedict and Schmidt (2014) noted that calls for more rigor in addressing competency acquisition in music teacher education programs were common in the early 21st century and suggested that undergraduate degrees should foster both an increase in student understanding to meet increasingly rigorous credential requirements as well as flexibility in order to successfully adapt to the complex contexts of modern schools. This approach contrasts, according to Benedict and Schmidt, with approaches built upon solving

specific problems. Veteran teachers, in contrast, may have experienced more narrow instruction regarding specific competencies and thus may develop less holistic and rigorous conceptualizations of competence acquisition leading to lowered perceptions of acquisition difficulty.

Because we conducted random selection at the campus level, there may be limitations in the generalizability of this study due to a lack of controls for teacher-level demographics. The difficulty of obtaining an official, accurate list may also have contributed to the low response rate and therefore limited generalizability of the results. Likewise, the small percentage of participants that self-identified as orchestra/string teachers (13.90%) may prove an impediment to generalizability regarding teaching area results. Future research may address perceptions of orchestra/string teachers in greater depth in addition to the acquisition process of specific competencies. The vast majority (80%) of respondents identified as Caucasian, which may further influence results, and future studies should use more diverse samples.

This study bears two central implications for music teacher education and professional development. First, participants within a wide range of experience (0-15 years) viewed teaching competencies as difficult to acquire. Music teachers are often high-achieving individuals, with high expectations of themselves and their students. They may benefit from being prepared to take a long view of teaching mastery by being patient and compassionate with themselves and by realizing they are not alone in viewing music teaching as difficult. Second, teachers of moderate levels of experience (6-15 years) may be surprised to find personal competencies such as time management, patience, and organization as more difficult to acquire than expected. This intermediate period of teaching careers may coincide with mid-life experiences, such as raising young children and caring for aging parents, which may decrease one's availability to allot the same level of attention to music teaching as in the first years of one's career. Again, music teachers may be encouraged to know they are not alone in this experience and that they may benefit from seeking mentorship and professional development in these areas beyond the first few years of teaching. Attending conferences, hiring clinicians, and taking time to re-focus one's perspective may provide the energy and ideas needed to maintain excellence in music teaching while managing mid-life stressors.

School district administrators and music education conference planners may use these implications by extending mentorship to mid-career music teachers and including topics such as time management, organization, and stress reduction in curating conference sessions. Application of these findings may benefit music teacher education and professional development and may encourage music teachers and reduce stress, thereby improving music teaching and learning.

Future researchers may wish to track teachers' perceptions longitudinally over 10 or more years to gain greater insight into the acquisition of teaching competencies. Additionally, participants in this study primarily identified as Caucasian, and further research highlighting diverse ethnicities may be helpful. Comparing university course content and novice teacher perceptions of content may also give insight into the accuracy of perceptions regarding competency acquisition and further inform curricular discussions in higher education. Investigating any relationship between urbanicity and teacher perceptions of competency acquisition may also prove helpful. Finally, studies examining the efficacy of varying competency acquisition strategies may provide actionable data for structuring preservice experiences.

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Appendix A

Table 1

Coefficient Alpha for Competency Subcategories

Subcategory	α
Musical competency acquisition	.85
Teaching competency acquisition	.92
Personal competency acquisition	.81

Table 2

Coefficient Alpha for Individual Competency Items

Competency	α
Possess proficient piano skills	.78
Possess proficient singing skills	.76
Work with students of different ethnicities and cultures	.88
Display confidence	.81
Be patient	.73