

MUSIC PRACTICE HABITS: TEACHER, PARENT, AND STUDENT
PERSPECTIVES

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Music Practice Habits: Teacher, Parent, and Student Perspectives

Music Practice Habits: Teacher, Parent, and Student Perspectives describes a research study that took place at Private Music Academy in Bloomington, Indiana. Participants were piano teachers, their students, and their students' parents. The goal of this study was to better understand current student practice attitudes, strategies, and habits. In addition, the communication between these three groups of individuals was researched. The study was carried out via an online survey, and participants filled out the survey in June and July 2016. There were 10 teacher participants, 42 parent participants, and 35 student participants. Data were analyzed in July and August 2016.

Six research questions were addressed. What are students' reported practice habits and strategies, and how do they relate to teachers' reported practice advice? What do parents report regarding student practice habits and teacher communication regarding practice advice? Do parents' reports corroborate what students report? What do teachers report they communicate to parents and students with regard to practice expectations and parental involvement in practice? Do parents' and students' reports corroborate what teachers report? Based on students' reported practice habits, do students become more self-regulated as they advance in years of piano study?

In general, students reported relatively good practice habits, in terms of sessions per week and minutes per day. There were 16 specific practice strategies listed in the survey, and 15 of the 16 listed strategies were identified by at least half of the 10 teachers

surveyed. Although to different degrees, both teachers and students indicated the use of self-regulatory strategies.

Parent reports were generally consistent with student reports about student practice habits. However, it appears that there could be improved communication between parents and teachers regarding practice advice. For student reports on practice sessions per week and minutes per practice session, parents' reports did indeed corroborate student reports. Parents and students were also consistent when asked whether teachers required students to fill out practice reports/logs. However, when asked about teacher involvement in practice, there were some discrepancies. Teachers and students at Private Music Academy seem to be communicating well with regard to practice strategies, especially those strategies that emphasis self-regulatory behavior. However, with regard to practice expectations, there were some discrepancies between teacher, student, and parent reports. Similarly, students and parents were not in agreement about teachers' communication of practice expectations to parents. Also, teachers and parents do not seem to be communicating effectively. Teachers and students seem to communicate well regarding whether practice logs are required. However, students and teachers are not communicating well regarding practice time expectations. Students were found to have more practice sessions per week as they advanced in number of months/years of piano study.

Based on the findings of this study, it might be beneficial for teachers to reevaluate their means and methods for communication with both students and parents. Another possible practical implication would be for teachers to provide students with more possible practice strategies. Another potential practical implication is that self-

regulatory practice habits could be encouraged by teachers. It would be interesting to survey students on what they do with their teachers' advice on self-regulatory strategies, because in this study, only students' reports of teachers' communication of self-regulatory practice strategies and teachers' reports of what they communicate to students were surveyed. As this study was more interested in getting a broad overview of current practice conditions, it might be interesting to select one family or one teacher and his or her students and their families in order to carry out a case study. In conclusion, this study has generated a general overview of the current state of practice communication and strategies of Private Music Academy.

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Chapter I: Statement of the Problem

Although the old adage, “practice makes perfect,” is widely-known, it is not helpful in and of itself. Most individuals would agree that practice is a necessary part of learning any skill; however, knowing that the need for practice exists is not enough. Even in instances in which teachers give students specific assignments, there is no guarantee that effective practice will take place. It is important that students learn to self-regulate their own practicing. Self-regulated learning is described by Bandura (as cited in in McPherson and Zimmerman, 2002) as “a useful paradigm from which to study how learners acquire the tools necessary to take control of their own learning and thereby learn effectively” (1991). Self-regulated learners become “metacognitively, motivationally, and behaviorally active participants in their own learning process” (Zimmerman, 1986, p. 308). In their 2001 publication, “A longitudinal study of self-regulation in children’s musical practice,” McPherson and Renwick found that “while [students’] instrumental teachers were making them aware of *what* to practise, many had very little idea of *how* to practise” (p. 184).

Kostka’s (2002) study, “Practice Expectations and Attitudes: A Survey of College-Level Music Teachers and Students,” revealed that what teachers thought they were communicating to their students regarding practice expectations and strategies was not always incorporated by students into their practice. While 94% of teachers surveyed stated that they suggested the use of a regular practice routine to their students, only 45% of students responded that they used regular practice routines. Another finding from the questionnaire was that while 100% of teachers stated that techniques for “good practicing” were discussed in lessons, only 69% of students reported that they had

discussed such strategies with their teachers. The results of this study made it clear that teacher-student communication lacked clarity.

“The Development of Practising Strategies in Young People” by Hallam, S., Rinta, T., Varvarigou, M., Creech, A., Papageorgi, I., Gomes, T., and Lanipekun, J. (2012), studied the development of students’ practice strategies and motivation to practice by surveying students at varying levels of expertise. At the end of the article, the authors remark that “[s]ustaining motivation in learners is one of the most important tasks facing the teacher, and, crucially, ensuring that they develop a love of music which will sustain their interest in the long term” (p. 673). While the research described in this article is thorough in exploring the development of practice strategies and motivation to practice as expertise develops over time, it does not make the connection between how teachers’ incorporation of self-regulatory strategies into their teaching affects motivation and sustained interest in music.

Also regarding the relationship between efficient practice and motivation, the findings of Hallam’s (1998) article, “The Predictors of Achievement and Dropouts in Instrumental Tuition,” “indicate that the child’s self-determination is of central importance in relation to motivation to continue to play an instrument” (p. 129). Self-determination theory “examines how social contexts and individual differences facilitate different types of motivation” (Deci & Ryan, 2015). da Costa’s (1999), “An Investigation Into Instrumental Pupils’ Attitudes to Varied, Structured Practice: Two Methods of Approach,” provides an example of how self-determination can impact students’ practice efficiency. da Costa believed that varied, structured, and sequenced practice would be beneficial to students’ technical skills and musicianship. In the study,

students were provided with specific music practice strategies and given choices with regard to which strategies they would incorporate into their practice. In addition to wanting to find out what students would do with the given strategies and how the strategies would change students' practice habits and performance achievement, the researcher was also curious about how being provided with these strategies and having a say in which strategies they chose would affect their overall musicianship and attitude toward practice.

da Costa (1999) concluded that the students were enthusiastic about taking a proactive role in the practicing process when they were given choices and the necessary tools and structure in order to do so. She went on to say that students' abilities to become independent learners must be considered and taken into account when making decisions in teaching music. She suggested that further research comparing students' and teachers' viewpoints about practice strategies and structures would help teachers create student-specific plans for independent learning.

Purpose Statement

The purpose of this study was to examine music practice habits and music teacher-student communication regarding practice. As will be discussed in the Review of Related Literature, there is a lack of existing research on self-regulation and music practice outside of formal educational institutions. As the director of a community music school, it may be helpful for me to learn how this population may be similar to or different from the populations about which there is existing research. In addition, there is not much research that takes young children's and parents' perceptions and interpretations of teachers' instructions into account. If students are to become self-

regulated learners, it is important to learn what information and guidance young children and their parents glean from their instructors.

Research Questions

Six research questions will be addressed. What are students' reported practice habits and strategies, and how do they relate to teachers' reported practice advice? What do parents report regarding student practice habits and teacher communication regarding practice advice? Do parents' reports corroborate what students report? What do teachers report they communicate to parents and students with regard to practice expectations and parental involvement in practice? Do parents' and students' reports corroborate what teachers report? Based on students' reported practice habits, do students become more self-regulated as they advance in years of piano study?

Definition of Terms

Self-regulation is the process by which individuals monitor and consequently alter their behavior and or thinking in order to achieve a desired result. Studies of self-regulated learning look at “how learners acquire the tools necessary to monitor and control their own thoughts, emotions, impulses, performance, and attentional resources to improve their performance” (McPherson & Zimmerman, 2011, p.131).

Varied Practice is making multiple representations of a musical passage (Sloboda, 1985).

Self-determination Theory (SDT) is “a motivational theory of personality, development, and social processes that examines how social contexts and individual differences facilitate different types of motivation, especially autonomous motivation and controlled motivation, and in turn predict learning, performance, experience, and

psychological health. SDT proposes that all human beings have three basic psychological needs – the needs for competence, autonomy, and relatedness – the satisfaction of which are essential nutrients for effective functioning and wellness” (Deci & Ryan, 2015).

Delimitations

A local community music school was selected for the study. This school will be referred to in this study as Private Music Academy. Only piano students at Private Music Academy were surveyed because there are more students studying piano at the academy than any other instrument. Piano students younger than seven years of age were not surveyed due to the nature of the survey; that is, students needed to be able to read fluently so that they could complete the survey on their own. As the focus of this study was children’s practice habits and strategies, piano students older than 18 were not surveyed. Due to the singular nature of the venue and population, the results of this study cannot be generalized to a broad population of students and parents who study instrumental performance.

Chapter II: Review of Related Literature

Musicians need to practice. It does not matter if they are beginning or advanced musicians—independent practice is necessary for musical development at all levels. However, it is important to find out what types and amounts of practice are most beneficial to learners. Music teachers require at-home practice from students; however, communication regarding teachers' expectations needs to be present. Students should have a clear understanding both of how much time they should spend practicing between lessons and what, specifically, they should be doing in their at-home sessions, in order to achieve their goals.

The research on this topic is consistent in stating that teachers need to provide students with information and guidance regarding practice if they want their students to become efficient independent learners. First, it is important to determine what practice strategies are currently being used by students. Second, specific practice strategies that have been found to be helpful to music students will be identified. Third, students' role in the development of practice strategies and goals will be discussed. This review of music education research literature summarizes what is currently known regarding students' practice strategies and attitudes.

Self-regulation and Practice Strategies

If music educators can provide their students with guidance on how to become self-regulated learners, students will have a greater chance of reaching their musical potential. Leon-Guerrero (2008) sought to identify self-regulation strategies that were currently being used by middle school instrumentalists in their individual practice sessions. Part of the motivation for this study was Leon-Guerrero's belief that in music

education, too much emphasis is placed on the outcome rather than the process of learning. Sixteen students participated in the study. Each student was given a new piece of music to learn and was asked to talk out loud to describe what they were doing as they practiced the piece for the first time. These practice sessions were videotaped. Immediately following the session, the student and the researcher viewed the videotape together, and the student described what he or she was doing in the video. Leon-Guerrero (2008) borrowed this threefold method of study from Nielsen's (2001) three sequences of data: "observation of practice behavior, concurrent verbal reports during a practice session, and retrospective debriefing reports following a practice session" (p. 157).

Leon-Guerrero (2008) stated that we, as music educators, expect our students to include individual practice time as part of their music learning experience. However, left unchecked, many students will not use their practice time efficiently, and this will cause them to not be able to reach their musical potential. Leon-Guerrero carried out this study because she believed that in order to help students become better at self-regulation in their practice sessions, one must first identify what strategies they are currently using during their individual preparation time.

Zimmerman (1998) also influenced Leon-Guerrero's study. Leon-Guerrero (2008) used Zimmerman's six key dimensions of academic self-regulation: "motive, method, time, behavior, physical, and social environment" (Zimmerman, 1998, p. 73). Of these six dimensions, her study focused on method and behavior. She stated that methods are those strategies of self-instructions chosen by the student during the study session, and that behaviors include self-monitoring and self-evaluation, both of which are

self-regulatory strategies. In order to code the comments made by students during both their concurrent verbal reports and their retrospective verbal reports, Leon-Guerrero again borrowed from Nielsen (2001): the categories for the comments were identified as “problem recognition, strategy selection, and evaluation of performance” (Leon-Guerrero, 2008, p. 97).

From the verbal reports of the 16 students studied, Leon-Guerrero (2008) found the students to be using several types of self-regulation strategies during their practice sessions. They were as follows: “looking at the music, fingering, vocalizing, kinesthetic, repetition of a measure, restarting a measure, repetition of one beat, repetition of a measure more than one time, restarting a measure more than one time, repeating a measure or group of notes at a slower tempo or a faster tempo, playing a segment backwards, using a pencil, and repeating a segment longer than a measure” (Leon-Guerrero, 2008, p. 99).

She summarizes her findings by saying that music educators need to investigate what students are thinking during music practice and how students evaluate their progress towards attaining expertise of a musical example. She goes on to say that the kind of verbalizing that requires students to describe their self-regulating strategies and musical understanding will better inform educators as to the issues students deal with when they are practicing or struggling during performance (Leon-Guerrero, 2008).

Another article on the subject of self-regulation in music practice is by Miksza (2013). “The Effect of Self-Regulation Instruction on the Performance Achievement, Musical Self-Efficacy, and Practicing of Advanced Wind Players,” is an example of research that looked at how music teachers can help their students become better at

practicing. Miksza cited prior research, stating that “musical achievement is contingent upon the quality of one’s practice and the degree to which an individual is capable of sustaining deliberate and self-regulated practice” (Miksza, 2013, p. 2). Thus, it is the job of music researchers and teachers to work to develop pedagogical approaches for enhancing the quality of students’ practice. Students, even advanced ones, often need guidance on how to practice, since so much of what they do as musicians is done independently from a teacher or ensemble. Thus, Miksza set out to provide an example of how teachers can provide students with resources that will help improve the quality of their practice.

Miksza (2013) sought to “examine the relative effectiveness of two pedagogical interventions on the practice behavior, performance achievement, and musical self-efficacy of advanced wind players” (p. 4). The hypothesis was that the “intervention pertaining to self-regulation activities such as goal-setting, the application of practice behaviors, and self-evaluation, rest and recovery would be more effective than a comparison condition that only included training materials pertaining to the application of practice behaviors” (Miksza, 2013, p.4).

Twenty-eight undergraduate music majors were randomly assigned to one of the experimental conditions. Members of both groups watched videos with instructions that delineated and exemplified specific categories of practice strategies such as slowing and repetition, but the videos watched by the experimental group “also included narratives and demonstrations of the self-regulatory approaches for structuring the practice environment to aid concentration, goal setting based on personal learning tendencies,

planning, self-evaluation, and incorporating rest and reflection periodically during practice” (Miksza, 2013, p. 5).

Miksza (2013) divided the findings of the study into three categories—the intervention’s effects on self-efficacy, performance achievement, and practice behavior.

With regard to self-efficacy, Miksza stated that “although participants in the treatment condition appeared to make larger gains in self-efficacy than those in the comparison condition, no statistically significant difference was detected” (Miksza, 2013, p. 8).

With regard to performance achievement, the participants in the experimental condition made significantly ($p = .02$) greater gains than those in the comparison condition.

Miksza stated that this suggests that the self-regulation instruction helped the participants to be more efficient and effective in their practicing. With regard to practice behavior,

Miksza found that the participants in the treatment condition focused on significantly more nuanced objectives than those in the comparison condition. On day one of the

study, no significant mean differences were found between groups on the basic or

nuanced objectives. However, a statistically “significant difference ($p = .05$) was found between groups on the amount of nuanced objectives observed at day five, indicating

that the participants in the treatment condition focused on significantly more nuanced

objectives than those in the comparison condition” (Miksza, 2013, p. 10). Miksza stated

that these findings appeared to be in line with common assertions of self-regulation

theory in that “an effective learner is one who is able to prioritize and select important

goals, apply behaviors in a strategic manner given the challenges they encounter, and

effectively manage their time and effort” (McPherson & Zimmerman, 2011;

Zimmerman, 1989).

The study may have implications for other students studying instruments. Providing students with explicit instruction about self-regulatory techniques and demonstrating how these activities could be carried out appear, based on Miksza's study, to be valuable educational tools that teachers could easily put into use in private teaching and classroom settings. Miksza (2013) also noted that since both groups of participants made significant advances in performance proficiency during the study, it is also important to consider the value of the behavioral practice strategy instruction.

In a related study, Hallam, S., Rinta, T., Varvarigou, M., Creech, A., Papageorgi, I., Gomes, T., and Lanipekun, J. (2012), sought to explore the development of practicing strategies and motivation to practice as expertise develops over time. Hallam and her colleagues used a large sample of participants at different levels of expertise playing a wide range of different instruments. This was carried out by administering a questionnaire which consisted of a number of statements relating to practicing strategies, organization of practice, and motivation to practice with a seven-point rating scale. Seven factors were found to be key in this study: adoption of systematic practice strategies, organization of practice, use of recordings for listening and feedback and use of the metronome, use of analytic strategies, adoption of ineffective strategies, concentration, and immediate correction of errors (Hallam et al., 2012).

Hallam (1997) described effective practice as that which achieves the desired end-product, in as short a time as possible, without interfering negatively with longer-term goals. Hallam et al. (2012) also referenced Jørgensen (1995) who proposed that musicians need to behave like teachers, taking account of their practice aims, the musical content, available learning media, allocation of time, and specific practice strategies. The

authors stated that research on the quality of practice has tended to focus on the strategies themselves (Hallam et al., 2012). One of the aims of the study was to find out how practice strategies change over time, as expertise develops.

The authors asked five specific research questions in the study.

1. Does the amount of practice increase as expertise develops?
2. Do practicing strategies, organization of practice, and levels of concentration of young people change as they become more expert?
3. Do young people's attitudes toward practicing change as they become more expert, and are these related to the amount of practice undertaken?
4. Does the adoption of effective practicing strategies contribute to attaining high levels of expertise?
5. Does the adoption of effective practicing strategies contribute to the quality of that expertise? (Hallam et al., 2012, p. 656)

The authors went on to state their hypotheses:

1. The amount of practice will increase as expertise develops.
2. Practicing strategies, organization of practice, and levels of concentration will change as learners become more expert.
3. The adoption of effective practicing strategies will contribute to attaining high levels of expertise and to the quality of that expertise. (Hallam et al., 2012, p. 656)

The method for the study was a self-report questionnaire, and it was taken by 3,325 children ranging in level of expertise from beginner through grade eight level. The age range was six to 19 years, and the number of months of prior learning ranged from one to 172. The data were calculated by analysis of variance, with level of expertise as the

independent variable and practice time and the outcomes of two factor analyses as the dependent variables. The questionnaire addressed the length of time students had spent learning to play an instrument and the number and length of practice sessions in a typical week. Other questions addressed students' current practice strategies, the organization and management of practice, and motivation to practice (Hallam et al., 2012).

The findings were not always consistent with the authors' hypotheses. A finding that was consistent was how as expertise increased, so did the amount of daily practice (Hallam et al., 2012). Also, weekly practice increased as students became more advanced. The authors stated that there was a significant ($p < .001$) effect of level of expertise on statements relating to practicing and concentration. Furthermore, as the level of expertise increased, the adoption of systematic practice strategies increased. In addition, as expertise increased, so did the use of recordings for listening and feedback and use of the metronome.

However, there was no statistically linear trend between level of expertise and the organization of practice, in the use of analytic strategies, or in concentration (Hallam et al., 2012). Also surprising was the finding that as expertise increased, enjoyment of practice decreased.

One point Hallam et al. (2012) made was that while we consider practicing strategies of beginning musicians (such as restarting a piece from the beginning any time an error is made) to be inferior and generally ineffective, it is important to note that the pieces beginning students work on tend to be short and customized to students' stage of development (Hallam et al., 2012), and that these strategies, therefore, may very well be appropriate. However, they also noted that as the repertoire became more challenging,

some students cannot or are not sufficiently interested to adapt their practice strategies, and this is what the authors believe led to negative attitudes toward practice in the middle grades. This finding reinforced the commonly-held belief that developing instrumentalists increasingly need support from their instructors on effective practice techniques.

Practice Habits and Attitudes

Hamann and Frost (2000) sought to determine the relationship between practice habits and private lesson study. A questionnaire consisted of 27 items pertaining to practice habits, attitudes, and demographics. The questions about demographics regarded the students' plans after high school graduation—whether or not they intended to attend college, whether they planned to continue music performance in college (such as in an orchestra), and whether they planned to major in music in college. It was administered to 512 sixth through twelfth grade string students in Utah. Most questions used a four-point Likert scale with the possible responses of (1) Never, (2) Sometimes, (3) Often, and (4) Always. The questionnaire was developed in 1991, then revised numerous times in order to achieve adequate reliability. In 1995, test-retest reliability was established: $r = .96$.

With regard to weekly hours spent practicing, it was found that students who studied privately practiced longer than subjects not studying privately. Also, students studying privately more frequently had a plan or goal to achieve during practice sessions than students who were not studying privately. Private lesson students' responses regarding how frequently they had a practice plan were as follows: 21% always had a plan, 37% (2) often had a plan, 40% sometimes had a plan, and 2% never had a plan.

Students who were not in lessons responded as follows: (1) Always: 11%, (2) Often: 18%, (3) Sometimes: 50%, (4) Never: 21% (Hamann & Frost, 2000).

Five questions dealt with students' emotions regarding practicing and/or their perception of how practicing affected their social lives and participation in family activities. Students taking private lessons more frequently felt anxiety, depression, guilt, or irritation when they were not able to practice than their peers who were not in private lessons. Students in private lessons also felt that practicing interfered with their social activities and family activities. They were also found to be more likely to practice even if it interfered with their homework. Of these five questions, the only significant finding had to do with practicing interfering with family activities: only 31% of students in private lessons responded that this never happened, whereas 56% of the students not in private lessons responded that it was never the case (Hamann & Frost, 2000).

Students studying privately found practice to be more emotionally satisfying than students not studying privately. Students' responses regarding practicing for parental approval did not seem to be related to whether or not they took private lessons. However, students studying privately were more likely to express that they practiced in order to receive teacher approval. Students studying privately also enjoyed practicing more than did students not taking lessons. The students in private lessons said they enjoyed practicing when they were in the mood to do so, when they had new music to learn, or when they could focus and get things accomplished. On the other hand, students not enrolled in private lessons said that they practiced for enjoyment, to relax and relieve stress, or to help them escape (Hamann & Frost, 2000).

When asked if they felt good after completing a practice session, students enrolled in private lessons responded that they were more likely do to so. Only three percent of them responded that they (1) *Never* felt good after completing a practice session; 29% (2) *Sometimes* felt good; 34% (3) *Often* felt good; and 34% (4) *Always* felt good. Students not enrolled in private lessons responded as follows: (1) 10% *Never* felt good; (2) 35% *Sometimes* felt good; (3) 29% *Often* felt good; and (4) 26% *Always* felt good (Hamann & Frost, 2000).

In general, students enrolled in private study were more goal-oriented than their peers, not only within their practice sessions but also with regard to going to college and continuing musical participation after high school whether as music majors or non-majors (Hamann & Frost, 2000). They practiced longer and with better focus and efficiency than their peers. Students in private lessons were found to be motivated by both extrinsic and intrinsic goals—this contradicted a finding of a study by the same authors (1999) in which they proposed that teachers de-emphasized the role of extrinsic motivation in practice. The authors suggested that the study should be replicated in other states and that more studies like this one, in which the relationship between private lessons and practicing is studied, should be carried out.

A study that conducted similar but more detailed research was undertaken by da Costa (1999). The purpose of her study was to find out what would happen when students were provided with specific music practice strategies and given choices with regard to which strategies they would incorporate into their practice. The strategies provided were consistent with ideas and concepts found to be effective for music practice in previous studies. These strategies included breaking music up into small sections,

isolating and practicing problematic sections slowly, and paying close attention to details. The researcher sought to determine how students would respond to receiving these strategies. In addition to wanting to find out what students would do with the given strategies and how the strategies would change students' practice habits and performance achievement, the researcher was also curious about how being provided with these strategies and having a say in which strategies they chose would affect their overall musicianship and attitude toward practice. The researcher was also interested in learning about students' perceptions of their own achievements at the end of the study.

da Costa believed that varied, structured, and sequenced practice is beneficial to students' technical skills and musicianship. She mentioned Sloboda's (1985) recognition of the importance of varied practice and Swanwick's (1994) belief that varied practice both encourages students to find new approaches to problems and enhances their expressive capabilities. The idea to give students a degree of choice in which strategies they selected for practice was supported by Mackworth-Young's (1990) research findings that students who actively participated in decisions about how to achieve their goals had more positive attitudes regarding and greater success in their musical study. da Costa (1999) wanted to give students choices within a structured and distributed practice routine. The research hypothesis was that experimenting creatively and musically with repetitions would encourage students to think more about the phrasing and general interpretation of what was printed on the page.

Twenty-eight students participated in the five-week study. Although no formal control group was established, of the 28 participants, 14 had no previous experience with these specific methods of practice, whereas the other half of the students in the study

were either private students of the researcher or students whose teachers were prior students of the researcher. The students were given a letter of introduction, five Method A practice sheets, three Method B practice sheets, instructions for both types of practice sheets, and a questionnaire to be completed at the end of the five-week period. Students were instructed to choose either Method A or Method B, and, if they chose B, they then chose from cards 1B, 2B, and 3B based on what they were trying to achieve with the repertoire of the practice session. Card 1B contained strategies for if they were first learning new music, Card 2B contained strategies for progressing with a piece, and Card 3B contained strategies for achieving fluency. The instructions in both methods required students to perform what they had worked on at the end of their session. Method A required straight repetitions of short phrases of music while Method B provided a list of “Ideas to Try”—in this method, students were to choose a set number of different repetitions from a list of options on the three different cards (1B, 2B, and 3B). Cards 2B and 3B required students to select “Play the phrase from memory” as their fifth repetition. Failure to accurately play the phrase from memory meant that students had to return to repetitions one through four, then attempt the memorized phrase again, repeating this process until memorization was achieved. Both methods provided structure and a fairly rigid framework for varied instrumental music practice (da Costa, 1999).

At the conclusion of the five-week period, all 28 students turned in their questionnaires. Twelve students from the sample were then interviewed to clarify some of their responses. One finding was that more than half of the students taking part in the study expressed that they had never thought of choosing their own practice strategies.

Also, more than half of the students surveyed said they had never thought of playing phrases from their music from memory. Almost half stated that, prior to the study, they had not consciously varied their practice within phrase boundaries, though it is possible that they had done so in their lessons without being told that was what they were doing (da Costa, 1999).

Students generally expressed that they thought they had improved over the course of the study, but the researcher had no way of verifying the accuracy of these statements. Keeping in mind this lack of opportunity for verification, there were four statistically significant findings: students expressed that they were able to play more fluently, learned their music faster, improved their technique, and were able to play more of the music from memory. The researcher stated that most students preferred Method B, but she did not provide any numbers to support this statement. Of the 28 students, 79% of them agreed with the statement, "I have learned some useful ways to practice," and 57% of them said that they enjoyed practicing more, having completed this study. It is significant that none of the students agreed with the statement, "I do not feel that the sheets made much difference." Another interesting finding was that 54% of the students said that they could play their music more fluently after completing the study.

da Costa (1999) concluded that the students were enthusiastic about taking a proactive role in the practicing process when they were given choices and the necessary tools and structure in order to do so. She went on to say that students' abilities to become independent learners must be considered and taken into account when making decisions in teaching music. She suggested that further research comparing students' and teachers'

viewpoints about practice strategies and structures would help teachers create student-specific plans for independent learning.

One way to determine what practice strategies might be useful for students is to compare the techniques of music students and professional musicians. Barry (1991) compared advanced student musicians' and professional musicians' practice attitudes and strategies. The sample consisted of 144 musicians, 120 of which were advanced music students, and 24 were professional musicians. The student participants were either seniors in high school or community college transfer students auditioning for entrance into a school of music at a large southeastern university in the United States. The student participants were given a survey while at the college for their entrance auditions. The professional musicians were members of an orchestra, and they received the questionnaire at a rehearsal. There were 30 questions on the questionnaire, and they fell into the following categories: (a) general attitude about practice, (b) use of specific practice strategies, (c) goal setting, (d) mental practice techniques, (e) analysis/score study, (f) marking music, (g) practice tempo, (h) use of metronome, and (i) use of other sources such as books and recordings (Barry, 1991).

Responses indicated that members of both groups frequently carried out the following practice behaviors: (a) use of systematic, well-planned practice; (b) setting specific practice goals; and (c) making notations on their music. Differences between the two groups' responses were found within the items regarding (a) enjoyment of practice, (b) practice of small sections of a piece, (c) analysis/score study before playing, (d) practice tempo, and (e) use of metronome (Barry, 1991).

Regarding practice attitude, the majority of the members of both groups expressed positive feelings about practicing. No student musicians admitted to rarely or never enjoying practice, and only 8% of the professional musicians made one of these two answer selections. In addition, 76% of students and 79% of professionals indicated that they rarely or never found practice boring (Barry, 1991).

Many items on the questionnaire focused on specific practice strategies. The results that are most relevant to the current study concerned the manner in which the individuals described themselves as practicing. Most students (67%) and professionals (71%) indicated that they always or almost always practice systematically and in a well-planned manner (Barry, 1991). Also relevant is that 70% of students reported that their private teacher always or almost always provided them with practice strategies.

Another study comparing the practice attitudes of advanced student musicians with those of professionals was carried out by Kostka (2002), who surveyed undergraduate and graduate music students ($n = 134$) and college music applied instrument teachers ($n = 127$) at 16 different colleges and universities. The author sought to gather information regarding four topics: (1) attitudes about certain music skills, (2) expectations for use of practice time, (3) expectations for routines and strategies for practicing, and (4) attitudes about practice in general.

One question asked teachers whether they suggested the use of a regular practice routine to their students, and 94% responded yes. However, only 45% of students responded that they used regular practice routines. Another question asked teachers if techniques for “good practicing” were discussed in lessons, and all of the teachers surveyed responded in the affirmative. However, only 69% of students reported that they

had discussed such strategies with their teachers. Because the students were from many different teachers, some of whom were those surveyed and some of whom were not, and vice versa, it is difficult to say definitively how clearly teachers were communicating their expectations for practice routine regularity and strategies to their students. Another finding of Kostka's (2002) study that is relevant to this study was how the teachers surveyed appeared to expect approximately one-third more practice time of their students than what students were reporting in this survey.

In summary, the results of Kostka's (2002) study may indicate that teachers and students are not communicating clearly about practice strategies and expectations. Hallam, et al. (2012), Miksza (2013), and Leon-Guerrero (2008), found that self-regulation strategies are useful for students. da Costa (1999) found that students enjoy having choice in their practice strategies and that provided with practice techniques, some of which are self-regulatory, students are willing to use varied practice strategies and are likely to improve as a result of using said strategies. Although Barry (1991) study had to do with advanced music students and professional musicians, the attitudes expressed therein are informational to this study. Hamann and Frost's (2000) study of string students' practice provided a good model of a research questionnaire that might be carried out in a similar manner with piano students. Based on the relevant and related literature, it is evident that a study that examines what private piano studio teachers expect of their young students with regard to music practice and how they communicate this to their students would be helpful to the music education community.

Chapter III: Methodology

The purpose of this descriptive study was to examine music teacher-student-parent communication regarding piano practice strategies. An online survey was used to collect data from teachers, parents, and students. The survey has a convenience sample of participants who represent instrumental teachers, child students, and parents. The hope of the study was to learn more about the ways these three groups of people understand the purpose and process of practice.

Participants

The study took place at a community music school that shall be referred to as “Private Music Academy.” This academy is located in Bloomington, Indiana, which is a liberal, affluent, college town. The participant pool consisted of all Private Music Academy piano teachers ($n = 11$), all piano students between 7-18 years old ($n = 107$), and at least one parent or guardian of each student. Out of 214 potential parent and student participants for the study, 42 parents and 35 students completed the survey. With regard to rate of completion, 40% of parents responded, 33% of children responded, and 91% of teachers responded. Of the 11 Private Music Academy piano teachers, 10 completed the survey, and eight of these teachers had student/parent pairs who completed the survey.

The age at which teachers began piano study ranged from age 3-4 to 18 or older. The mode responses were age 9-10 and age 18 or older (both responses occurred 3 times). Nine teachers had collegiate piano experience. Of the 9 teachers who had collegiate piano experience, 7 teachers (78%) studied with faculty members, one (11%) studied with a

graduate student, and 4 (44%) took a piano class. Multiple answers were permitted. Piano was the primary instrument of six (60%) teachers.

Next, teachers reported what music degrees they had. Three (30%) had piano performance degrees. Five (50%) had performance degrees on other instruments. Five (50%) stated that they held non-performance music degrees. Teachers who held non-performance degrees were asked to state what music degrees they had. One (10%) had a degree in music theory, one (10%) had a BA in music with an emphasis on piano, one (10%) had a degree in music history, one (10%) had a BA in sacred music, and one (10%) had a BA in music and an MM in music history. The number of years of piano teaching experience ranged from fewer than 6 months to 10 or more years. The mode response was 10 or more years, with three (30%) teachers providing this answer.

The student sample consisted of 35 children, age seven through 17. The mean age was 10.21, and the standard deviation was 2.57. See Table 1 for the frequencies of the different ages of participating children. The range of time playing piano was fewer than six months through five or more years. The mode was one to two years (eight responses), closely followed by five or more years (seven responses) and six to 12 months (seven responses). The options for the amount of time students had spent studying piano with their current teacher ranged from fewer than six months through five or more years. The modes were six to 12 months and one to two years, each having 10 responses. The number of practice sessions per week ranged from fewer than once per week to seven days per week. Seven days per week was the most common answer. Practice time per session ranged from fewer than five minutes to 60 minutes or more, and the mode response was 15-30 minutes. Spearman's rho was used to calculate the correlation

between age and number of practice sessions per week. The correlation coefficient for this statistic was $r_s = .441$, and $p = .01$, which implies a statistically significant correlation. This means that it was found that older students reported completing more practice sessions per week.

Table 1

Age of Student Participants

<i>Age</i>	<i>Frequency</i>	<i>Percentage</i>
7	4	9.5
8	6	14.3
9	6	14.3
10	5	9.5
11	5	9.5
12	4	7.1
13	1	2.4
14	3	7.1
15	1	2.4
17	1	2.4

Of the 42 parents who completed the survey, 30 (71.4%) reported having formal music training. Only four (9.5%) reported sitting in on lessons. See Table 2 for cross-tabulation of parent responses regarding the relationship between parents having formal music training and whether parents sat in on lessons. Eight (19%) parents reported currently playing an instrument and/or singing. Twenty-seven (64.3%) reported supervising students' practice. Twenty-five (59.5%) reported that they felt they had the skills and/or knowledge to help with practicing, and 31 (73.8%) reported that they felt

they had time to do so. Twelve (28.6%) parents reported their children practiced on electronic keyboards, and 30 (71.4%) reported their children practiced on pianos.

Table 2

Cross-tabulation of Parent Responses

	<i>Parents who sit in</i>	<i>Parents who do not sit in</i>
<i>Parents with formal training</i>	0%	100%
<i>Parents without formal training</i>	33.3%	66.7%

Measures

Participants completed online surveys specific to the group to which the participant belonged (i.e., teacher, student, and parent). The surveys were titled, “Practice Survey for Parents and Students,” and “Practice Survey for Teachers” (See Appendix B). A Study Information Sheet appeared at the beginning of each survey. In addition, the “Practice Survey for Parents and Students” included the “Children’s Assent Form.” Consent was given as a function of clicking on the “Next” button on the Study Information Sheets.

One part of the teachers’ and children’s surveys was comprised of specific practice strategies. Some questions came directly from Barry and McArthur (1994), and some came from da Costa (1999). Other questions were designed to find out what communication these two sets of participants reported was happening between teacher, parent, and child. Some of these questions were inspired by Kostka (2002). Although Kostka surveyed college-level music teachers and students, the disparity between what teachers stated they were communicating to their students and what students stated

teachers were communicating to them caused the researcher to wonder what kinds of communication were happening between younger students and their teachers.

Unique anonymous links were given to each teacher as well as to parent/student pairs in order to serve as links between the responses of each teacher and their respective students. IRB approval was acquired before data collection took place.

The survey for teachers asked what they tell their students about practice strategies and expectations. The questions asked if a specific amount of time per session and/or number of sessions per week is requested, whether specific strategies are taught in lessons, and whether practice records are to be completed by students and/or parents. Teachers were also asked whether this information is communicated to parents, and, if so, how it is communicated. Teachers were also surveyed on their expectations for parental involvement in student practice.

Students were asked what their teachers have communicated to them about practice strategies and expectations. Students also answered questions about their practice habits and attitudes. Students were asked where they practice; who completed their practice records, if applicable; and how much they practice, both per day, and the number of practice sessions between lessons. In addition, students made selections from a provided list of practice strategies in order to indicate which strategies they currently used. Space was provided for students to identify any additional practice strategies used.

The third group of participants, parents/guardians, were surveyed to verify student responses about practice habits, including where they practice and how much they practice. Parents/guardians were also asked how involved they were with their children's practice and what, if anything, their children's teachers have communicated to them

directly about practice habits and expectations. Participants' responses were kept confidential and were not shared with members of other groups of participants.

Procedures

First, an email detailing the study was sent to parents of the 107 piano students of the academy (See Appendix A). A separate, different email was sent to the 10 piano teachers of Private Music Academy (See Appendix A). Teachers, parents, and children then filled out the survey online. A waiver of documented consent was obtained as participants clicked on the links to begin the survey.

Confidentiality of responses of parents and students was assured so that students and parents did not feel obligated to answer in a way that would please the children's teachers. Additionally, teachers were not pressured to answer in a way that would please the researcher, who was also owner of the academy. As Private Music Academy teachers were independent contractors and therefore responsible for designing their own lesson plans and selecting their own materials, it was hoped that they did not feel obligated to answer in any particular ways. Additionally, it was hoped that they did not feel the need to change their current practices based on the study.

Analysis

The analysis of data incorporated descriptive statistics and correlational statistics. Descriptive statistics such as measures of central tendency, dispersion, and distributional properties were used to summarize the responses for each group of participants as appropriate. The practice habits of the students were analyzed in relation to how many years of piano study they had undergone. Correlations between responses of teachers, students, and parents were also explored. Spearman's Rank-Order Correlation was

selected because it “measures the strength of association between two ranked variables” (Lund and Lund, 2013).

Timeline

IRB approval was acquired on June 10, 2016. Emails containing unique anonymous links were sent to the parents and teachers over the course of the week of June 13, 2016. Participants had approximately four weeks to complete the surveys. Data collection concluded on July 14, 2016. Analysis of data took place between July 15, 2016, and August 15, 2016.

Chapter IV: Results

What are students' reported practice habits and strategies, and what do students report regarding teacher behaviors?

Regarding practice habits, according to students, the number of practice sessions per week ranged from fewer than once per week to seven days per week. One interesting finding was that seven days per week was the most common answer. Only one student reported practicing one or fewer times per week. Practice time per session ranged from 5-10 minutes per session to 45-60 minutes per session, and the mode response was 15-30 minutes. Only one student reported practicing between 45-60 minutes per session, and only two reported 30-45 minutes per session. Students' reported use of 16 specific practice strategies and teachers' reports of recommending these same 16 strategies can be found in Table 3.

The most commonly-selected response was, "I begin a new piece by playing slowly then gradually increasing the tempo." This response was selected by 29 of the 35 students taking the survey. More than half of students ($n = 26$) reported the use of memorization in their practice. This was the second most-commonly reported strategy. The third most-commonly reported strategy was "I break music into small sections and focus on them one at a time" ($n = 24$). An interesting finding was that more students selected these two strategies than "I practice hands-separately when I begin practicing a new piece" ($n = 22$). Practicing hands-separately was reported to be recommended by all 10 teachers. The least-commonly chosen strategy was "I play individual phrases on one note only," which was selected by only one student. This was also the strategy least-commonly reported by teachers ($n = 3$). Although all 10 teachers indicated that they recommended the use of the metronome, only 19 students indicated use of this strategy.

Similarly, although all 10 teachers reported recommending working on the scale that the phrase is in, only 15 students reported using this strategy.

Table 3

Practice Strategies, as Reported by Students and Teachers

<i>Strategy</i>	<i>Student</i>		<i>Teacher</i>	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
I use a metronome.	19	45.2	10	100
I break music into small sections and focus on them one at a time.	24	57.1	10	100
I change the dynamics of the music.	11	26.2	7	70
I change the rhythms of difficult passages of music.	7	16.7	8	80
I memorize certain passages of music.	26	61.9	9	90
I change the articulations of passages of music.	3	7.1	8	80
I sing the phrase in my head while I silently put my fingers on the keys.	16	38.1	5	50
I sing the phrase and play at the same time.	14	33.3	7	70
I work on the scale that the phrase is in.	15	35.7	10	100
I play individual phrases on one note only.	1	2.4	3	30
I break phrases up and then put them back together.	14	33.3	9	90
I break difficult passages up into small sections of two notes, then gradually add more notes (three notes at a time, four notes at a time, etc)	9	21.4	8	80
I break difficult passages up into small sections—such as playing one measure by itself, then two measures, then three measures, etc.	14	33.3	9	90
I mark my music (for example, fingerings, dynamics, etc.)	20	47.6	10	100
I practice hands-separately when I begin practicing a new piece.	22	52.4	10	100
I begin a new piece by playing slowly then gradually increase the tempo.	29	69.0	10	100

Next, student reports of teacher behaviors were examined. Students answered (1) Never, (2) Rarely, (3) Sometimes, and (4) Always, to 13 questions. The most frequently-reported teacher behavior was, “My teacher helps me see the good things about my playing,” which received 18 “Always” responses and 14 “Sometimes” responses. The second-most frequently-reported teacher behavior was, “My teacher helps me understand what I’m doing right and what I’m doing wrong,” with 28 students reporting, “Always,” and seven reporting, “Sometimes.” No students responded “Never,” or “Rarely,” to this question. Both of these strategies are related to the development of self-regulation. Other strategies relating to the development of self-regulation also were reported frequently by students. Thirty students reported “Always” or “Sometimes” to the item, “My teacher helps me understand how I can learn things on my own,” and 29 students reported “Always” or “Sometimes” to the item, “My teacher helps me find the most important things to practice.” Another self-regulation-related teacher behavior that was frequently-reported by students was “My teacher helps me find the most important things to practice,” with 14 students responding “Always,” and 15 students reporting “Sometimes.” One surprising finding was that only four students reported “Always” and three students reported “Sometimes” regarding the behavior, “My teacher encourages me to listen to recordings as part of my practice.”

Table 4

Student Reports of Teacher Behaviors

<i>Behavior</i>	<i>1^a</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>Mean</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>
My teacher requires me to fill out practice records/logs	20	3	3	9	2.03	1.32	0.68	-1.41
My parents must sign practice my records/logs	33	1	1	0	1.09	0.37	4.65	22.20
My teacher tells me how much he/she expects me to practice in minutes per day and times per week	10	7	13	5	2.37	1.06	-0.03	-1.26
My teacher tells my parents how much he/she expects me to practice in minutes per day and times per week	12	13	9	1	1.97	0.86	0.35	-0.83
My teacher asks me how I practice particular passages of music	5	7	17	6	2.69	0.93	-0.46	-0.50
My teacher provides me with practice strategies during my lessons	1	2	20	12	3.23	0.69	-0.90	1.92
I practice in an area of my home where I can focus and where distractions are limited.	3	6	14	12	3.00	0.94	-0.68	-0.31
My teacher helps me see the good things about my playing.	1	2	14	18	3.40	0.74	-1.28	1.94
My teacher helps me understand what I'm doing right and what I'm doing wrong.	0	0	7	28	3.80	0.41	-1.57	0.48
My teacher helps me understand how I can learn things on my own.	2	3	16	14	3.20	0.83	-1.05	1.00
My teacher helps me plan and set goals for my at-home practicing.	2	7	15	11	3.00	0.87	-0.56	-0.28
My teacher helps me find the most important things to practice.	2	4	15	14	3.17	0.86	-0.94	0.53
My teacher encourages me to listen to recordings as part of my practice.	10	18	3	4	2.03	0.92	0.89	0.31

a = 1, 2, 3, and 4, refer to the categories never, rarely, sometimes, and always; all values in these columns are frequencies (i.e., *n*)

What do parents report regarding student practice habits and teacher communication regarding practice advice?

According to parent reports, the number of practice sessions per week ranged from fewer than once per week to seven days per week. The mode responses were four times per week, five times per week, and six times per week, each receiving nine responses. Practice time per session ranged from fewer than five minutes to 60 minutes or more, and the mode responses were 10-15 minutes and 15-30 minutes, each receiving 15 responses.

Table 5 shows parents' responses to questions regarding teacher communication about practice expectations. The choices for these four questions were (1) Never, (2) Rarely, (3) Sometimes, and (4) Always. With regard to teachers requiring students to fill out practice records/logs, parents were generally on one end of the spectrum or the other—19 parents reported “Always” and 14 reported “Never.” Thirty-seven of the 42 parents filling out the survey reported that their children's teachers never required them to sign practice records. Forty percent ($n = 17$) of the parents surveyed reported that teachers “Sometimes” tell their children how much they expect them to practice. Almost half ($n = 19$) of the parents surveyed reported that teachers “Rarely” tell them how much they expect their students to practice.

Table 5

Parent Reports of Teacher Behaviors

<i>Behavior</i>	<i>1^a</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>Mean</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>
My child's teacher requires my child to fill out practice records/logs	19	6	2	14	2.21	1.39	0.34	-1.65
My child's practice logs must be signed by me or another parent/guardian	37	2	1	1	1.14	0.61	3.35	13.60
My child's teacher tells him/her how much he/she expects him/her to practice in minutes per day and times per week	8	8	17	8	2.61	1.02	-0.31	-0.97
My child's teacher tells me how much he/she expects my child to practice in minutes per day and times per week	9	19	10	4	2.21	0.90	0.40	-0.45

a = 1, 2, 3, and 4, refer to the categories never, rarely, often, and always; all values in these columns are frequencies (i.e., *n*)

Do parents' reports corroborate what students report?

Spearman Rho was used to determine correlation between student and parent reports. For the question regarding number of practice sessions per week, the correlation coefficient was $r_s = .91$, with $p < .001$, indicating that parents' reports corroborated what students reported. For the question regarding amount of time per practice session, the correlation coefficient was $r_s = .96$ with $p < .001$, indicating that again, parents' reports corroborated what students reported. When asked whether students' teachers required them to fill out practice records/logs, there was also a high correlation coefficient, $r_s = .96$ with $p < .001$. The correlation coefficient was $r_s = .300$ with $p = .080$ for the question that asked whether practice records needed to be signed by a parent or guardian. This

indicates a weak correlation; therefore, the corroboration is not strong in this instance. When asked about whether teachers communicate practice expectations to students in minutes per day and times per week, parent and student responses correlated at $r_s = .629$, with $p < .001$. This indicates a moderate correlation; therefore, there seems to be some disagreement between parents and students on this item. When asked about whether teachers communicate practice expectations to students' parents in minutes per day and times per week, parent and student responses correlated at $r_s = .529$, with $p = .001$. Again, this is a moderate correlation, so there is some disagreement present.

What do teachers report they communicate to parents and students with regard to practice expectations and parental involvement in practice?

Teachers answered 15 questions regarding communication to parents and students regarding practice. The choices for these four questions were (1) Never, (2) Rarely, (3) Usually, and (4) Always. One interesting finding was how eight of the teachers answered "Usually" or "Always" when asked whether they tell students' parents how much they expect children to practice. In Table 3, 28 of 42 parents reported that teachers "Rarely" or "Never" tell them how much they expect the students to practice. In Table 4, the majority of students ($n = 23$) reported that their teachers ask them how they practice particular passages of music. In Table 6, all 10 teachers answered "Sometimes" or "Always" when asked whether they ask students how they practice particular passages of music. Therefore, student and teacher reports are moderately consistent on this item. Similarly, in Table 4, the vast majority of students ($n = 32$) reported that teachers provide them with practice strategies during their lessons "Sometimes" or "Always." Again, all 10 teachers reported that they "Sometimes" or "Always" provide students with practice

strategies during lessons. This implies a strong corroboration between teacher and student reports. There was a discrepancy between teacher and student reports regarding whether teachers tell students how much they expect them to practice between lessons. Nine of ten teachers reported that they “Sometimes” or “Always” communicate practice expectations specific to amount of practice; however, student responses on this item were split. Seventeen students answered “Rarely” or “Never” to this question, and 18 answered “Sometimes” or “Always.” Similarly, eight of ten teachers reported that they tell students’ parents how much they expect children to practice “Sometimes” or “Always.” However, the majority of students ($n = 25$) answered that teachers “Rarely” or “Never” communicate practice expectations to their parents.

Table 6
Teacher Reports of Communication

<i>Communication Behavior</i>	<i>I^a</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>M</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>
I require students to fill out practice records/logs	2	2	4	2	2.60	1.07	-0.32	-0.88
I require students' parents to sign practice records/logs	7	3	0	0	1.30	0.48	1.03	-1.22
I tell students how many times I expect them to practice in minutes per day and times per week	0	1	6	3	3.20	0.63	-0.13	0.18
I tell students' parents how much I expect their children to practice in minutes per day and times per week	1	1	4	4	3.10	0.99	-1.09	0.91
I ask students how they practice particular passages of music	0	0	5	5	3.50	0.53	0.00	-2.57
I provide students with practice strategies during their lessons	0	0	4	6	3.60	0.52	-0.48	-2.28
I hold parents accountable for their children's practice.	1	6	3	0	2.20	0.63	-0.13	0.18
I require my students to follow a specific practice format	3	1	5	1	2.40	1.07	-0.35	-1.27
I give my students a written practice format to follow	2	2	5	1	2.50	0.98	-0.45	-0.52
I encourage my students to use different approaches to practice	0	2	5	3	3.10	0.74	-0.17	-0.73
I ask my students to "mentally go through" a new piece before they attempt to play it	0	2	4	4	3.20	0.79	-0.41	-1.07
I teach my students to analyze a new piece	0	2	4	4	3.20	0.79	-0.41	-1.07
I ask my students to set specific goals for each practice session	0	3	4	3	3.00	0.82	0.00	-1.39
I require my students to keep a written record of practice objectives	3	4	3	0	2.00	0.82	0.00	-1.39
I encourage students to listen to recordings as part of their practice	0	4	6	0	2.60	0.52	-0.48	-2.28

a = 1, 2, 3, and 4, refer to the categories never, rarely, usually, and always; all values in these columns are frequencies (i.e., *n*)

Do parents' and students' reports corroborate what teachers report?

Spearman Rho was used to calculate the correlation between teacher reports with the average parent-per-teacher and average student-per-teacher responses. Due to the limited sample size, p values that were less than .100 were considered to be statistically significant in this study.

Table 7 shows that students and teachers seem to be in agreement with regard to what is communicated from teachers to students regarding practice logs. However, the negative correlation between teacher and student reports of communication of practice time expectations implies that students and teachers are not communicating well on this item.

Table 7

Correlations between Teacher and Student Reports

<i>Behavior</i>	<i>r_s</i>	<i>p</i>
I require students to fill out practice records/logs	-.01	.98
I require students' parents to sign practice records/logs	.66*	.08
I tell students how many times I expect them to practice in minutes per day and times per week	-.60	.12
I tell students' parents how much I expect their children to practice in minutes per day and times per week	-.77*	.03

Table 8 shows no statistically significant correlations between teacher and parent reports. Therefore, there seems to be no systematic pattern between teacher and parent reports.

Table 8
Correlations Between Teacher and Parent Reports

<i>Behavior</i>	<i>r_s</i>	<i>p</i>
I require students to fill out practice records/logs	.33	.42
I require students' parents to sign practice records/logs	.43	.28
I tell students how many times I expect them to practice in minutes per day and times per week	-.40	.33
I tell students' parents how much I expect their children to practice in minutes per day and times per week	.13	.76

According to Table 9, students' and parents' responses were generally consistent with each other when reporting teacher instructions regarding practice expectations.

Table 9
Correlations Between Student and Parent Reports

<i>Behavior</i>	<i>r_s</i>	<i>p</i>
My child's teacher requires my child to fill out practice records/logs	.91*	.01
My child's practice logs must be signed by me or another parent/guardian	.66*	.07
My child's teacher tells him/her how much he/she expects him/her to practice in minutes per day and times per week	.84*	.01
My child's teacher tells me how much he/she expects my child to practice in minutes per day and times per week	.71*	.05

Based on students' reported practice habits, do students become more self-regulated as they advance in years of piano study?

A statistically significant correlation ($r_s = .36$ and $p = .03$) was found between students' months/years of piano experience and the number of practice sessions per week. However, there was no significant correlation found between how many months/years of piano experience and how many minutes per session were reported by students. Four practice strategies had significant correlations between months/years of piano study and likeliness to report use of the strategy. These correlations were calculated using Cramer's V. The strategies were, "I work on the scale that the phrase is in," "I break up phrases and then put them back together," "I break difficult passages up into small sections of two notes, then gradually add more notes (three notes at a time, four notes at a time, etc)," and "I break difficult passages up into small sections—such as playing one measure by itself, then two measures, then three measures, etc."

Table 10

Correlations Between Duration of Piano Study and Practice Behaviors

<i>Strategy</i>	χ^2	<i>Cramer's V</i>	<i>p</i>
I use a metronome.	7.87	.47	.25
I break music into small sections and focus on them one at a time.	10.66	.55	.10
I change the dynamics of the music.	4.60	.36	.60
I change the rhythms of difficult passages of music.	9.04	.50	.17
I memorize certain passages of music.	4.32	.35	.63
I change the articulations of passages of music.	6.56	.43	.36
I sing the phrase in my head while I silently put my fingers on the keys.	10.89	.56	.09
I sing the phrase and play at the same time.	6.27	.42	.39
I work on the scale that the phrase is in.	17.58	.71*	<.01
I play individual phrases on one note only.	10.98	.56	.09
I break phrases up and then put them back together.	13.66	.63*	.03
I break difficult passages up into small sections of two notes, then gradually add more notes (three notes at a time, four notes at a time, etc.)	12.17	.59*	.05
I break difficult passages up into small sections—such as playing one measure by itself, then two measures, then three measures, etc.	17.40	.71*	<.01
I mark my music (for example, fingerings, dynamics, etc.)	3.76	.33	.70
I practice hands-separately when I begin practicing a new piece.	10.96	.56	.09
I begin a new piece by playing slowly then gradually increase the tempo.	8.22	.49	.22

Chapter V: Discussion

Many interesting findings have come to light throughout the course of this study. Some of the findings corroborate the findings of previous research on practice habits and strategies as well as studies on parental involvement in students' practice, whereas other findings contradict the previous literature. The interpretations of the results of this study and the relationship thereof to existing literature are presented below, organized by research question.

What are students' reported practice habits and strategies, and how do they relate to teachers' reported practice advice?

In general, students reported relatively good practice habits, in terms of sessions per week and minutes per day. The mode response regarding practice sessions per week was seven, and the mode response regarding minutes per session was 15-30 minutes. With regard to specific strategies, however, it seemed as if teachers were advising students to use more varied strategies than what students identified. There were 16 specific practice strategies listed in the survey, and 15 of the 16 listed strategies were identified by at least half of the 10 teachers surveyed. Twelve of the strategies were identified by fewer than half of the 35 students surveyed. This may indicate that teachers are not advising students to use as many varied practice strategies as they claim they incorporate into their teaching or that students are not taking teachers' advice. Although to different degrees, both teachers and students indicated the use of self-regulatory strategies.

da Costa (1999) found that students enjoyed having varied practice strategies from which to choose. She also found that the students who had a list of strategies from

which to choose and therefore completed more varied practice than the control group learned more quickly and were able to play more fluently. She stated that “[m]usic committed to memory will necessarily be played more fluently than music that has to be read” (da Costa, 1999, pp. 73-74). More than half of the students in this study and all but one of the teachers identified memorization as a strategy they employed in/recommended for practice.

What do parents report regarding student practice habits and teacher communication regarding practice advice?

Parent reports were generally consistent with student reports about student practice habits. However, it appears that there could be improved communication between parents and teachers regarding practice advice. Almost half ($n = 19$) of the parents surveyed reported that teachers rarely communicate practice time expectations to them. This is consistent with Macmillan (2004), who believed that “few instrumental teachers actively encourage and involve the parents of their pupils” (Macmillan, 2004, p. 297). Additionally, Macmillan found that “it is evident that teachers consider themselves more communicative than parents view them” (Macmillan, 2004, p. 298). The research at Private Music Academy seems to corroborate this finding.

Davidson, Howe, Moore, and Sloboda (1996) found that “[t]he most successful children had parents who were involved in lessons, spoke to the teacher at the end of the lesson, took notes, and supervised practice, often for up to 15 years” (Davidson *et al.*, 1996, p. 399). Although the relationship between achievement and parental involvement in practice was not researched in the study at Private Music Academy, the finding that

communication between parents and teachers regarding practice advice was often lacking may indicate that there is room for improvement in this area.

Do parents' reports corroborate what students report?

For student reports on practice sessions per week and minutes per practice session, parents' reports did indeed corroborate student reports. Parents and students were also consistent when asked whether teachers required students to fill out practice reports/logs. However, when asked about teacher involvement in practice, there were some discrepancies. There was only a weak correlation between student and parent responses regarding whether parents must sign student practice reports/logs. Additionally, only moderate correlations were found regarding whether teachers communicate practice expectations both to students and to teachers.

What do teachers report they communicate to parents and students with regard to practice expectations and parental involvement in practice?

Teachers and students at Private Music Academy seem to be communicating well with regard to practice strategies, especially those strategies that emphasis self-regulatory behavior. This contradicts the existing literature, notably Kostka (2002), although her research was carried out at the university level. Kostka's (2002) study, "Practice Expectations and Attitudes: A Survey of College-Level Music Teachers and Students," revealed that what teachers thought they were communicating to their students regarding practice expectations and strategies was not always incorporated by students into their practice. While 94% of teachers surveyed stated that they suggested the use of a regular practice routine to their students, only 45% of students responded that they used regular practice routines. At Private Music Academy, the vast majority of students responded

that their teachers “Sometimes” or “Always” set goals for their at-home practicing and that their teachers help them find the most important things to practice.

Another finding from Kostka’s questionnaire was that while 100% of teachers stated that techniques for “good practicing” were discussed in lessons, only 69% of students reported that they had discussed such strategies with their teachers. At Private Music Academy, all but three students responded “Sometimes” or “Always” when asked if their teachers provide them with practice strategies during their lessons.

However, with regard to practice expectations, there were some discrepancies between teacher, student, and parent reports. Students did not seem to always know what their teachers’ practice expectations were. Similarly, students and parents were not in agreement about teachers’ communication of practice expectations to parents. Also, teachers and parents do not seem to be communicating effectively, as evidenced by Table 6, which shows no statistically significant correlations between teacher and parent reports. Therefore, there seems to be no systematic pattern between teacher and parent reports. The teacher-parent-student relationship would likely be improved by increased clarity of communication between teachers and parents. Macmillan (2004) found that “[m]any parents seem to underestimate their potential ability to help with music practice” (Macmillan, 2004, p. 304). Macmillan (2004) also found that many parents “are unaware that help could be given” (Macmillan, 2004, p. 304). The findings of the study at Private Music Academy may be related to Macmillan’s findings in that if parents and teachers are not communicating well, parents may be unaware of the role they could play in their children’s piano achievement.

Do parents' and students' reports corroborate what teachers report?

Teachers and students seem to communicate well regarding whether practice logs are required. However, students and teachers are not communicating well regarding practice time expectations. This is consistent with Kostka (2002) in that the teachers surveyed in Kostka's study appeared to expect approximately one-third more practice time of their students than what students were reporting. The research at Private Music Academy supports this finding; teachers and students are not communicating well about practice time expectations. There seems to be no systematic pattern between teacher and parent reports. Parents' and students' responses were generally consistent when reporting teacher instructions regarding practice expectations.

Based on students' reported practice habits, do students become more self-regulated as they advance in years of piano study?

Students were found to have more practice sessions per week as they advanced in number of months/years of piano study. Also, there were four strategies that were found to be used more frequently by students who were more advanced in terms of months/years of piano study. These strategies, including working on the scale that the phrase was in or whole-part-whole strategies, were all relatively advanced practice strategies. These are not strategies that would be typically be used by beginner students. While it is not possible to say, based on this information, whether students become more self-regulated as they advance in years of piano study, it appears that students who have been studying for longer are more likely to use more advanced strategies.

Hallam, S., et al. (2012), sought to explore the development of practicing strategies and motivation to practice as expertise develops over time. While weekly

practice increased as students became more advanced both in the current study and in Hallam et al., a finding of Hallam et al. that was not consistent with findings of the study at Private Music Academy was how as expertise increased, so did the amount of daily practice (Hallam et al., 2012). Hallam et al. also found that as the level of expertise increased, the adoption of systematic practice strategies increased. As described above, the results of the study at Private Music Academy may indicate the same relationship between level of expertise and use of more advanced practice strategies.

Practical implications

Based on the findings of this study, it might be beneficial for teachers to reevaluate their means and methods for communication with both students and parents. It might also be helpful if the administration of Private Music Academy were to explore the possibility of distributing teachers' and parents' contact information to relevant parties in order to increase communication possibilities.

Another possible practical implication would be for teachers to provide students with more possible practice strategies. There were 16 piano practice strategies from which students could choose, and while all but one of the strategies were identified by at least half of the teachers as ones that they use in their teachers, only four of the strategies were identified by more than half of the students surveyed. Perhaps something like da Costa's (2002) "Ideas to Try" could be provided by teachers for students' use. It is possible that with more ideas from which to choose, students could become more efficient and self-regulated with their practice.

Another potential practical implication is that self-regulatory practice habits could be encouraged by teachers. Miksza (2013) hypothesized that the "intervention pertaining

to self-regulation activities such as goal-setting, the application of practice behaviors, and self-evaluation, rest and recovery would be more effective than a comparison condition that only included training materials pertaining to the application of practice behaviors” (Miksza, 2013, p.4). Perhaps Private Music Academy could hold an informational session for teachers where they could learn how to incorporate self-regulatory strategies such as those described by Miksza (2013) into their teaching. While it is likely that teachers understand the importance of teaching students how to become better learners, it is possible that teachers are not aware of how to do so, or that they are not aware that they could improve this aspect of their teaching. If teachers are more knowledgeable about the use of self-regulatory strategies in private lessons, this might improve the efficiency of students’ practice time. More efficient practice could lead to increased student satisfaction with and enjoyment of practice. This, in turn, could improve teachers’ experiences with students of all levels of expertise, since frustration with students’ lack of effective practice is likely a common complaint of teachers. More research on this subject would be required, however, in order to determine the potential effectiveness of such a learning opportunity.

Ideas for future research

It would be interesting to survey students on what they do with their teachers’ advice on self-regulatory strategies, because in this study, only students’ reports of teachers’ communication of self-regulatory practice strategies and teachers’ reports of what they communicate to students were surveyed. Ideally, students and teachers would answer the same questions so that potential associations could be examined.

Another idea for future research would be to survey parents, students, and teachers on means of communication that they think might be helpful in order to improve communication between teachers and students and parents. I know from experience that many parents regularly stay in the parking lot in their cars and therefore do not have the opportunity to communicate with teachers on a regular basis. Additionally, as Private Music Academy teachers are Independent Contractors, the owner of an academy does not typically have the authority to tell teachers that they need to communicate with parents. While it is likely that more successful Private Music Academy teachers do at least make an effort to communicate with parents on a somewhat regular basis, some make no effort to do so whatsoever. Also, the Independent Contractor setup means that teachers and parents do not, by default, have each other's contact information, so parents who remain in the parking lot cannot easily be reached. While teachers and parents do occasionally request each other's contact information, and when both parties have given permission for the owner or office manager to provide this information, this does sometimes occur, it does not happen nearly enough, in my opinion. It would be interesting to do research on whether it is a lack of communication and/or understanding that leads to the lessening of enjoyment of lessons by students (and parents with the lesson experience).

It would be interesting to provide teachers and students with a list similar to da Costa's (2002) "Ideas to try" and run an experiment to determine whether students' practice duration, efficiency, frequency, self-regulation, and/or enjoyment increased when given the option to choose how they practice. If students enjoy practicing more, it is possible that they would be more motivated to continue piano study for longer periods of time during their lives.

As this study was more interested in getting a broad overview of current practice conditions, it might be interesting to select one family or one teacher and his or her students and their families in order to carry out a case study. In such a study, the researcher could get a better idea of exactly what the teacher is communicating to the parents and the students and what the students are doing at home. This could lead to more accurate generalizations for the population.

In conclusion, this study has generated a general overview of the current state of practice communication and strategies of Private Music Academy. It is hoped that the information gleaned from this study can inform the academy's teachers on how they might enhance the lesson experience for students and their families. When the lesson experience is more enjoyable for students and their families, this could lead to sustained interest in music which could work to inspire lifelong appreciation of music. In addition, when students and their families are more satisfied with the lesson experience, it is possible that the teaching experience will be improved for the teachers and administrators of the academy as well.

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Appendix A: Emails to Parents and Teachers

Dear [Parent Name],

As you may know, I am currently working to complete my Master of Music Education degree. I will be carrying out the research for my thesis, An Examination of Music Practice Habits, at Stafford Music Academy.

This study will be an online questionnaire surveying Stafford Music Academy piano teachers, piano students, and participating students' parents regarding practice strategies, techniques, and communication. Below is a unique anonymous link to the study, and consent will be given as a function of clicking through the first informational page of the online survey. After the parent questionnaire, there will be a Children's Assent form, which will be followed by the student questionnaire. Parents may assist with children's participation in the questionnaire as needed, though the goal is to accurately record students' perceptions about practice.

Responses will not be shared with other participants; therefore, for example, your child's teacher will not have access to the survey data. Participation in the study is totally voluntary, and I will not know if you have participated or not. The decision to participate or not participate will not have any effect on your child's studies at Stafford Music Academy.

If you and [Child Name] could complete the survey at this link: <https://www.surveymonkey.com/r/39LDK6T>, it would be greatly appreciated. Thank you so much for your consideration.

Sincerely,

Jessica Harris

Owner, Private Music Academy

Appendix B: Study Information Sheet and Practice Survey for Parents and Students; Study Information Sheet and Practice Survey for Teachers

Study Information Sheet

You and your child are invited to participate in a research study of music practice habits. You and your child were selected as possible subjects because your child studies piano at Stafford Music Academy. Please read this form and ask any questions you may have before agreeing to be in the study. The study is being conducted by Jessica Harris and Dr. Peter J. Miksza of Indiana University's Jacobs School of Music's Music Education Department.

STUDY PURPOSE

The purpose of this study is to examine student practice habits and music teacher-student communication regarding practice.

NUMBER OF PEOPLE TAKING PART IN THE STUDY

If you and your child agree to participate, you will be one of approximately 100 individuals taking part in the study. Approximately 10 teachers, 45 students, and 45 parents will be participating in this research.

PROCEDURES FOR THE STUDY

If you and your child agree to be in the study, you will do the following things: You and your child will fill out an online survey regarding practice habits and strategies as well as communication regarding practice. The surveys have three sections, and they should take approximately 15 minutes to complete. You will receive a unique anonymous link to the study via email, and consent will be given as a function of clicking through the first informational page of the online survey.

RISKS OF TAKING PART IN THE STUDY

The risk of taking part in the study is potential loss of confidentiality. In order to ensure confidentiality, this will be an online study. Neither your name nor your child's name will be connected with your responses, and the researcher will not know whether you decided to be in the research study or not. Your child's teacher will not see your or your child's answers to the questions.

BENEFITS OF TAKING PART IN THE STUDY

There are no direct benefits to taking part in the study.

ALTERNATIVES TO TAKING PART IN THE STUDY

The alternative to taking part in the study is to not participate in the study.

CONFIDENTIALITY

Efforts will be made to keep your personal information confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your identity will be held in confidence in reports in which the study may be published. The nature of the study, in that it is an online questionnaire, will ensure anonymity. Unique anonymous links will be given to teachers, parents, and students to serve as links between their responses. Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and his/her research associates, the Indiana University Institutional Review Board or its designees, and (as allowed by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP).

PAYMENT

You will not receive payment for taking part in this study.

CONTACTS FOR QUESTIONS OR PROBLEMS

For questions about the study, contact the researcher, Jessica Harris, at 812-339-2505, or Dr. Miksza, at pmiksza@indiana.edu. For questions about your rights as a research participant, to discuss problems, complaints, or concerns about a research study, or to obtain information or offer input, contact the IU Human Subjects Office at 812-856-4242 or 800-696-2949.

VOLUNTARY NATURE OF THIS STUDY

Taking part in this study is voluntary. You may choose not to take part or may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you are entitled. Your decision whether or not to participate in this study will not affect your current or future relations with Stafford Music Academy.

SUBJECT'S CONSENT

In consideration of all of the above, I give my consent to participate in this research study and I give permission for my child to participate in this study. I have printed off a copy of this informed consent document to keep for my records. I agree to take part in this study.

The first page of the survey is for the parent/guardian, and the second page of the survey is for the student. While parents/guardians are permitted to help students with the survey, it is important for students' own perceptions to be accurately represented by their answers.

Please click "Next" to begin the survey.

1. For how many months/years has your child played the piano?

- Less than 6 months
- 6-12 months
- 1-2 years
- 2-3 years
- 3-4 years
- 4-5 years
- 5+ years

2. For how many months/years has your child taken piano lessons with his/her current teacher?

- Less than 6 months
- 6-12 months
- 1-2 years
- 2-3 years
- 3-4 years
- 4-5 years
- 5+ years

3. Do you sit in on your child's lessons?

- Yes
- No

4. If yes, how frequently?

- N/A
- Every lesson
- Frequently
- Occasionally
- Never

5. How many times per week does your child practice?

- Every day
- Almost every day
- 5 times per week

- 4 times per week
- 3 times per week
- 2 times per week
- 1 or fewer times per week

6. How many minutes does your child usually spend in each practice session?

- 60+ minutes
- 45-60 minutes
- 30-45 minutes
- 15-30 minutes
- 10-15 minutes
- 5-10 minutes
- Fewer than 5 minutes

7. Does your child practice in an area of your home where he/she can focus and where distractions are limited?

- Yes
- No

8. Have you have any formal music training?

- Yes
- No

9. If you have had formal music training, please choose from the following answers

- N/A
- Some lessons in elementary school years
- Lessons/ensemble participation through middle school
- Lessons/ensemble participation through high school
- Post-high school music experience/participation
- Degree in music

10. Do you currently play an instrument or sing?

- No

Yes (please specify)

11. Do you supervise your child's practice?

- Yes
- No

12. Do you feel like you have the skills/knowledge to be able to help with practice?

- Yes
- No

13. Do you feel like you have time to be able to watch/supervise practice?

- Yes
- No

14. Please mark one:

- My child practices on an electronic keyboard at home
- My child practices on a piano at home

15. Please mark how frequently your child's piano teacher performs the following actions

	Never	Rarely	Often	Always
My child's teacher requires my child to fill out practice records/logs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My child's practice logs must be signed by me or another parent/guardian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My child's teacher tells him/her how much he/she expects him/her to practice in minutes per day and times per week	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My child's teacher tells me how much he/she expects my child to practice in minutes per day and times per week	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Children's Assent Form

Indiana University Assent to Participate in Research

An examination of music practice habits

We are doing a research study. A research study is a special way to learn about something. We are doing this research study because we are trying to find out more about music practice. We would like to ask you to be in this research study.

Why am I being asked to be in this research study?

You are being asked to be in this research study because you take piano lessons at Stafford Music Academy.

What will happen during this research study?

We want to tell you about some things that might happen if you are in the study. This study will be an online survey that you fill out at home. You can ask a parent or guardian for help answering the questions. It has three sections, and it should take about 15 minutes to complete.

Are there any bad things that might happen during the research study?

Sometimes bad things happen to people who are in research studies. These bad things are called "risks." The risks of being in this study might be that someone other than the researchers would see your answers to the questions. The researcher will not know whether you decided to be in the research study or not. Your teacher will not see your answers to the questions. Your name will not be connected to your answers.

Not all of these things may happen to you. None of them may happen. Things may happen that the researchers don't know about yet. If they do, we will make sure that you get help to deal with anything bad that might happen.

Are there any good things that might happen during the research study?

Sometimes good things happen to people who are in research studies. These good things are called "benefits." The benefits of being in this study might be that you may learn more about practicing, and you and your teacher might become better at talking about practicing.

We don't know for sure if you will have any benefits. We hope to learn something that will help other people someday.

Will I get money or payment for being in this research study?

You will not get any money for being in this research study.

Who can I ask if I have any questions?

If you have any questions about this study, you can ask your parents or guardians or one of the researchers. Also, if you have any questions that you didn't think of now, you can ask later. You can email Jessica Harris, the researcher, at Jessica.prus@gmail.com, call her at 812-339-2505, or you can ask her the next time you see her. You can also contact Dr. Miksza, who is the main researcher for this study. His email address is pmiksza@indiana.edu.

What if I don't want to be in the study?

If you don't want to be in this study, you don't have to. It's up to you. If you say you want to be in it and then change your mind, that's OK. All you have to do is tell us that you don't want to be in it anymore. No one will be mad at you or upset with you if you don't want to be in it.

If this is all okay by you, please continue to the survey below.

16. For how many months/years have you played the piano?

- Less than 6 months
- 6-12 months
- 1-2 years
- 2-3 years
- 3-4 years
- 4-5 years
- 5+ years

17. For how many months/years have you taken piano lessons with your current

- Less than 6 months
- 6-12 months
- 1-2 years

- 2-3 years
- 3-4 years
- 4-5 years
- 5+ years

18. Please select one:

- I am male
- I am female
- I prefer not to answer

19. How many times per week do you practice?

- Every day
- Almost every day
- 5 times per week
- 4 times per week
- 3 times per week
- 2 times per week
- 1 or fewer times per week

20. How many minutes do you spend in each practice session?

- 60+ minutes
- 45-60 minutes
- 30-45 minutes
- 15-30 minutes
- 10-15 minutes
- 5-10 minutes
- Fewer than 5 minutes

21. How many years old are you?

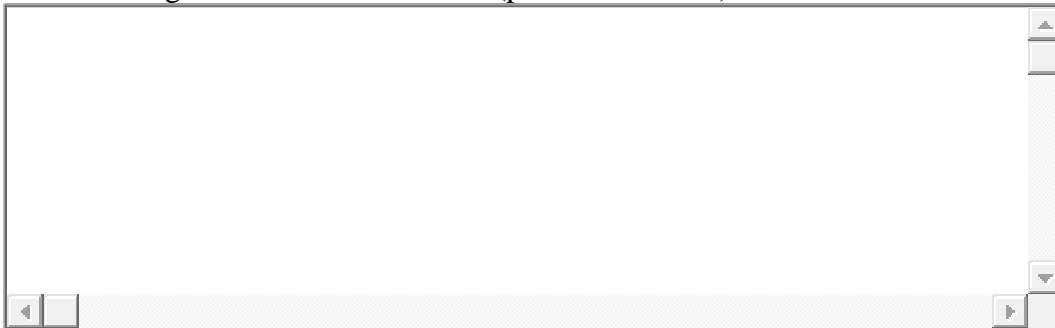
22. Please mark how frequently your piano teacher performs the following actions.

	Never	Rarely	Usually	Always
My teacher requires me to fill out practice records/logs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parents must sign practice my records/logs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My teacher tells me how much he/she expects me to practice in minutes per day and times per week	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My teacher tells my parents how much he/she expects me to practice in minutes per day and times per week	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My teacher asks me how I practice particular passages of music	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My teacher provides me with practice strategies during my lessons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I practice in an area of my home where I can focus and where distractions are limited.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My teacher helps me see the good things about my playing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My teacher helps me understand what I'm doing right and what I'm doing wrong.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My teacher helps me understand how I can learn things on my own.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My teacher helps me plan and set goals for my at-home practicing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My teacher helps me find the most important things to practice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My teacher encourages me to listen to recordings as part of my practice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. What specific practice strategies do you use at home? Please select all that apply.

- I use a metronome.

- I break music into small sections and focus on them one at a time.
- I change the dynamics of the music.
- I change the rhythms of difficult passages of music.
- I memorize certain passages of music.
- I change the articulations of passages of music.
- I sing the phrase in my head while I silently put my fingers on the keys.
- I sing the phrase and play at the same time.
- I work on the scale that the phrase is in.
- I play individual phrases on one note only.
- I break phrases up and then put them back together.
- I break difficult passages up into small sections of two notes, then gradually add more notes (three notes at a time, four notes at a time, etc)
- I break difficult passages up into small sections—such as playing one measure by itself, then two measures, then three measures, etc.
- I mark my music (for example, fingerings, dynamics, etc.)
- I practice hands separately when they begin practicing a new piece.
- I begin a new piece by playing slowly then gradually increase the tempo.
- I do things that are not on this list (please list below)



Study Information Sheet

You are invited to participate in a research study of music practice habits. You were selected as a possible subject because you are a piano teacher at Stafford Music Academy. Please read this form and ask any questions you may have before agreeing to be in the study. The study is being conducted by Jessica Harris and Dr. Peter J. Miksza of Indiana University's Jacobs School of Music's Music Education Department.

STUDY PURPOSE

The purpose of this study is to examine student practice habits and music teacher-student communication regarding practice.

PROCEDURES FOR THE STUDY

If you agree to be in the study, you will do the following things:

You will fill out an online survey regarding practice habits and strategies, as well as communication regarding practice. The surveys have three sections, and they should take approximately 15 minutes to complete.

RISKS OF TAKING PART IN THE STUDY

The risk of taking part in the study is potential loss of confidentiality.

In order to ensure confidentiality, this will be an online study. Your name will not be connected with your responses, and the researcher will not know whether you decided to be in the research study or not.

BENEFITS OF TAKING PART IN THE STUDY

There are no direct benefits to taking part in the study.

CONFIDENTIALITY

Efforts will be made to keep your personal information confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your identity will be held in confidence in reports in which the study may be published. The nature of the study, in that it is an online questionnaire, will ensure anonymity. Unique anonymous links will be given to teachers, parents, and students to serve as links between their responses. Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and his/her research associates, the Indiana University Institutional

Review Board or its designees, and (as allowed by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP).

PAYMENT

You will not receive payment for taking part in this study

CONTACTS FOR QUESTIONS OR PROBLEMS

For questions about the study contact the researcher, Jessica Harris, at 812-339-2505 or Peter Miksza, pmiksza@indiana.edu or by telephone at 812-855-7253. For questions about your rights as a research participant, to discuss problems, complaints, or concerns about a research study, or to obtain information or offer input, contact the IU Human Subjects Office at 812-856-4242 or 800-696-2949.

VOLUNTARY NATURE OF THIS STUDY

Taking part in this study is voluntary. You may choose not to take part or may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you are entitled. Your decision whether or not to participate in this study will not affect your current or future relations with Stafford Music Academy.

Please click "Next" to begin the survey.

1. At what age did you begin formal piano study?

- Age 3-4
- Age 5-6
- Age 7-8
- Age 9-10
- Age 11-17
- Age 18+

2. How many years of formal piano study have you had?

- None
- Less than one year
- 1-2 years
- 2-4 years
- 4-6 years
- 6-8 years
- 8-10 years
- 10-12 years
- More than 12 years

3. Have you had any piano training at the collegiate level? (Select all that apply)

- No
- Yes--private lessons with a faculty member
- Yes--private lessons with a graduate student
- Yes--group piano class
- Other

4. Is piano your primary instrument?

- Yes
- No

5. What music degrees do you hold? (select all that apply)

- Music Performance--Piano
- Music Performance--Other

Other (please specify)

6. For how many years have you taught piano lessons?

- Fewer than one year
- 1-2 years
- 2-4 years
- 4-6 years
- 6-8 years
- 8-10 years
- 10+ years

7. Were you taught how to practice? Please explain

8. Please mark how frequently you perform the following actions with your *piano* students.

	Never	Rarely	Usually	Always
I require students to fill out practice records/logs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I require students' parents to sign practice records/logs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tell students how many times I expect them to practice in minutes per day and times per week	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tell students' parents how much I expect their children to practice in minutes per day and times per week	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I ask students how they practice particular passages of music	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I provide students with practice strategies during their lessons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I hold parents accountable for their children's practice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Never	Rarely	Usually	Always
I require my students to follow a specific practice format	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I give my students a written practice format to follow	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I encourage my students to use different approaches to practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I ask my students to “mentally go through” a new piece before they attempt to play it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I teach my students to analyze a new piece before playing it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I ask my students to set specific goals for each practice session	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I require my students to keep a written record of practice objectives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I encourage students to listen to recordings as part of their practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. What specific practice strategies do you teach your students? Please select all that apply.

- Use a metronome.
- Break music into small sections and focus on them one at a time.
- Change the dynamics of the music.
- Change the rhythms of difficult passages of music.
- Memorize certain passages of music.
- Change the articulations of passages of music.
- Sing the phrase in your head while you silently put your fingers on the keys.
- Sing the phrase and play at the same time
- Work on the scale that the phrase is in
- Play individual phrases on one note only.
- Break phrases up and then put them back together
- Break difficult passages up into small sections of two notes, then gradually add more notes (three notes at a time, four notes at a time, etc)

- Break difficult passages up into small sections—such as playing one measure by itself, then two measures, then three measures, etc.
- Mark your music (for example, fingerings, dynamics, etc.)
- Practice hands separately when beginning to practice a new piece.
- Begin a new piece by playing slowly then gradually increase the tempo.

Other strategies not on this list (please specify)

A large empty rectangular box with a scroll bar on the right side, intended for specifying other practice strategies. The box is currently empty and has a light gray background.