

PARTING WAYS WITH PIANO LESSONS:  
predictors, invoked reasons, and motivation  
related to piano student dropouts

Karen King

Thesis

Presented in partial fulfillment for the requirements of the degree

Master of Arts in Music

University of Ottawa

June, 2016

© Karen King, Ottawa, Canada, 2016

## TABLE OF CONTENTS

Abstract	iv
Acknowledgements	v
Dedication	vi
List of Figures	vii
List of Tables	viii
Introduction	1
Definition	1
Statistics	3
Teachers' Opinions on Piano Student Dropout	6
Predictors	6
Invoked Reasons.	7
Motivation	7
Closing	8
Chapter One: Review of Literature	10
Predictors of Student Dropout	11
Invoked Reasons for Student Dropout	19
Motivation in Music Students	22
Research Problem and Further Questions	26
Chapter Two: Methodology	34
Motivational Theory of Deci and Ryan	34
Design	41
Measurement	42
Participants	46
Procedure and Setting	48
Dependent and Independent Variables	49
Analysis	50
Chapter Three: Results	52
Predictors of Piano Student Dropouts	52
Invoked Reasons for Piano Student Dropouts	60
Motivation in Piano Student Dropouts	68
Motivation in Continuing and Dropout Piano Students	71

Chapter Four: Discussion	76
Predictors of Dropout	76
Invoked Reasons	85
Motivation	89
Chapter Five: Conclusion	96
Limitations	100
Future Research	101
Bibliography	103
Appendix 1	110
Appendix 2	123
Appendix 3	150
Appendix 4	152
Appendix 5	153
Appendix 6	155
Appendix 7	157
Appendix 8	158

## **Abstract**

Parting Ways with Piano Lessons:  
predictors, invoked reasons, and motivation related to piano student dropouts

Karen King

Piano teachers believe that dropping out before reaching a moderate mastery of the piano is a common problem among students. This study uses Self-Determination Theory to examine three issues related to the high dropout rate from private piano lessons: whether there are predictors associated with dropout, whether low levels of motivation correlate with dropping out, and the primary reasons invoked for stopping lessons. Using the Survey of Musical Interests, 55 former piano students who quit lessons completed a questionnaire with Likert-scale, multiple choice, and open-ended questions, and their parents also filled out a complementary questionnaire. These participants were compared to 153 students and parents who were still involved with piano lessons. Results showed important predictor differences in parental backgrounds, musical ability, and practice habits, and significant differences between the groups' autonomous motivation. The main reasons invoked for stopping lessons included lack of practice, preferring other instruments, and loss of interest.

*Keywords:* piano students, motivation, dropout, self-determination theory

## Acknowledgements

This thesis was only possible with the help and input of many, many people. First, thank you to my supervisor and mentor Prof. Gilles Comeau. Your introduction to research, direction in the art of scientific writing, moderation of my flowery use of synonyms, and willingness to do this all at a distance is truly appreciated. I feel as if you had envisioned a study regarding the problem of piano student dropouts for a long time and I am so fortunate that you guided me towards this very important topic. My utmost thanks to Mikael Swirp for spending weeks coordinating the statistical analysis for this thesis, answering my many questions about the data, and doing it all so patiently. I will make sure your name is included with the authors of this study when it goes to publication. Thanks to the volunteers in the Piano Pedagogy Research Laboratory who helped with the hours and hours of manual data entry. My sincere thanks go to the 33 piano teachers across Alberta and Saskatchewan who embraced this somewhat awkward topic and helped connect me with their former students. You are truly excellent educators and your students had glowing things to say about your personalities and teaching styles. Thank you to my dad for letting me quit piano at age 14: while this was a major setback in my musical development, I personally understand both halves of the dropout story. Thank you to my mom for being my first piano teacher, being the first to recognize my musical ability and for the endless enthusiasm at my many – sometimes unpredictable – endeavors. I would not be where I am without the impromptu quizzes on Handel the night before history exams, having such support in the front row of every recital, and the infinite excitement at my musical and academic journey. Thank you to my darling partner, Mark, for not only supporting my work but putting up with neglected house duties, nodding and smiling through findings I passionately rambled on about, and trying to encourage me towards increased balance. Finally, my greatest thanks to my piano teacher, Lynn, who taught me that “you can never be too rich, too thin, or have too many initials behind your name”. Here are two more for the collection. Thank you to all of the above and the many more not included in this short list for seeing my potential in the field of piano pedagogy.

## **Dedication**

This thesis research is dedicated to my mom, Noreen Wensley, who suddenly and tragically passed away only six weeks before this thesis was to be defended. While she never got to read the final document, she heard about the results every step of the way. She was an expert piano teacher, world adventurer, and fiercely loving mother who changed the world for the better because she changed people for the better. She is the reason I am what I am, and all of my successes in life have been because of her, including this thesis.

## List of Figures

Figure 1. <i>The Six Stages of Piano Study</i> , Chen (2011)	4
Figure 2. <i>Pupil Numbers – All Ages Grouped</i> , Cathcart (2015)	5
Figure 3. <i>Age at Which Piano Lessons Began</i> , Dyal (1991)	5
Figure 4. <i>Number of Years of Piano Study</i> , Dyal (1991)	6
Figure 5. <i>The Self-Determination Continuum Showing Types of Motivation with their Regulatory Styles, Loci of Causality, and Corresponding Processes</i>	36
Figure 6. <i>Primary Reasons for Dropping Out of Piano Lessons</i>	62
Figure 7. <i>Other Reasons for Dropping Out of Piano Lessons</i>	63
Figure 8. <i>Infrequent Reasons for Dropping Out</i>	64
Figure 9. <i>Reasons Lessons Could Have Been More Fun</i>	65
Figure 10. <i>Reasons Which May Have Led to Continuing</i>	67
Figure 11. <i>Relationship Between Age and Autonomous Motivation in Dropouts</i>	75
Figure 12. <i>Autonomous Motivation by Age in Continuing and Dropout Groups</i>	75

## List of Tables

Table 1. <i>Examples of questions from Section One of the Survey of Musical Interests</i>	43
Table 2. <i>Questions from Section Two of the Survey of Musical Interests</i>	44
Table 3. <i>Questions from Section Three of the Survey of Musical Interests</i>	45
Table 4. <i>Ethnicity of Dropout Participants' Mothers</i>	47
Table 5. <i>Ethnicity of Dropout Participants' Fathers</i>	47
Table 6. <i>Descriptive Statistics of Piano Student Dropouts</i>	47
Table 7. <i>Descriptive Statistics of Continuing Piano Students</i>	48
Table 8. <i>Parental Occupations in Continuing and Dropout Groups</i>	52
Table 9. <i>Comparison of Stay-at-Home Mothers in Continuing and Dropout Groups</i>	53
Table 10. <i>Comparison of Academic Degrees in Continuing and Dropout Groups</i>	53
Table 11. <i>Grade Level of Students at Time of Dropout or Survey</i>	54
Table 12. <i>Parent and Student Responses of Musical Ability and Achievement</i>	55
Table 13. <i>Opinions of Musical Ability as Nature or Nurture</i>	55
Table 14. <i>Musical Achievement Viewed Through Exam Participation</i>	55
Table 15. <i>Parent Ratings of Children's Academic Ability</i>	56
Table 16. <i>Comparison of Parental Involvement in Continuing and Dropout Groups</i>	57
Table 17. <i>Comparison of Musical Environments in Continuing and Dropout Groups</i>	57
Table 18. <i>Comparison of Parental Music Backgrounds in Continuing and Dropout Groups</i>	58
Table 19. <i>Sibling Involvement in Music Lessons in Continuing and Dropout Groups</i>	58
Table 20. <i>Comparison of Practice in Continuing and Dropout Students</i>	59
Table 21. <i>Lesson Longevity in Continuing and Dropout Students</i>	59
Table 22. <i>Average Values of Dropouts' Types of Motivation</i>	68
Table 23. <i>Examples of Amotivation Response Transformation</i>	69
Table 24. <i>Comparison of Female and Male Dropout Students' Motivation</i>	70
Table 25. <i>Comparison of Switching Instruments and Dropping Out Groups' Motivation</i>	71
Table 26. <i>Comparison of Gender and Age in Continuing and Dropout Groups</i>	72
Table 27. <i>Comparison of Ethnicity Between Continuing and Dropout Groups</i>	72
Table 28. <i>Age of Students Upon Beginning Piano Lessons</i>	73
Table 29. <i>Comparison of Continuing and Dropout Students' Motivation</i>	73
Table 30. <i>Correlations Between Age, Practice Time, Parental Involvement and Motivation</i>	75

Parting Ways with Piano Lessons:  
predictors, invoked reasons, and motivation related to piano student dropouts

### **Introduction**

It seems that every year, children all over the world begin piano lessons only to give up a short time later. For some students, the initial excitement of learning an instrument is often met with a great deal of resistance as students realize that it takes years of time and effort to reach instrumental mastery (McPherson, 2000), others have uninterested or unsupportive parents (Govel, 2004), many students find that their effort outweighs the benefits received (Daniel & Bowden, 2013), or peer influences suggest that the activity is unpopular (Fredricks, Alfeld-Liro, Hruda, Eccles, Patrick, & Ryan, 2002). Many piano students abandon their endeavours long before reaching a moderate mastery and piano student dropouts are a widespread occurrence in private teaching studios (Chen, 2011; Robertson, 2015; Cathcart, 2015). This introduction will define a piano student dropout, present statistics on *when* piano students typically leave lessons, cite informal sources which show that piano student dropouts are a common problem, and display how frequently the topic of piano student dropouts is discussed informally among private studio teachers before exploring, in the following chapter, how this topic has been studied in the scientific literature.

### **Definition**

It is difficult to find an official definition of a piano student dropout. In public school settings, a dropout is defined as one not actively enrolled in any collegiate and has not earned a high school diploma or equivalent (Morrow, 1987). In music, however, not all students are formally enrolled in a structured conservatory system and proceed to earn a music diploma.

Throughout the literature, a clear definition of a piano student dropout has not been provided. Govel's (2004) study mentions students stopping lessons before "reaching their full potential" (p. 12) but dropout is not further clarified and this definition is too vague to be used in a research context. In Graziano's (1991) study, she asked what exactly constituted a dropout, but instead of answering her own question, she suggested that "the term 'dropout' be changed or eradicated from the vocabulary of music educators" (p. 2). In Costa-Giomi's (2004) study with ten-year-old beginner piano students, a dropout was defined as someone ceasing piano lessons during their first three years of lessons, regardless of the student's achievement or ability. While Pitts, Davidson, and McPherson (2000) examined dropouts as those who ceased lessons during their first 20 months of learning, these time constraints are too narrow to understand a student's development and musicianship and accurately define a dropout. Daniel and Bowden (2013) discuss a high dropout rate at the intermediate stage, and while they imply that the intermediate stage leaves more to be learned, they do not provide a clear point where leaving lessons would no longer be considered dropping out. These studies either provide an incomplete definition (Govel, 2004), describe a very narrow scope in the life of a music student (Costa-Giomi, 2004; Pitts, Davidson, & McPherson, 2000), or do not provide a definitive end-point (Daniel & Bowden, 2013).

For the purposes of this thesis, a dropout will be defined as a student who fails to reach a moderate mastery of the piano and - more concretely - this will be viewed as the Grade 8 standard set by the Canadian conservatory systems. Whereas school dropouts are those ceasing instruction before Grade 12, and a Grade 8 piano certificate may be transferred for Grade 12 high school credit (Canadian Federation of Music Teachers' Associations, 2015), ceasing instruction before reaching this level misses the equivalent end point. The late-intermediate, Grade 8 level of

playing requires a sense of personal expression, a greater command of texture, increased stylistic refinement, and encounters with repertoire from four historical periods (Royal Conservatory of Music, 2008). At this level, students are introduced to simple Baroque counterpoint, short Classical sonata movements, and smaller preludes and dances of the Romantic era. Failing to reach this level overlooks the technical and interpretive challenges which are necessary when learning to play the piano and lacks an understanding of the great keyboard composers. Students who cease instruction after the late-intermediate, Grade 8 level may not consider themselves dropouts because they have passed this major milestone, and have a good grasp of piano literature, technique, history, and theory. For the purposes of this study, students who cease piano instruction before reaching this moderate mastery level – even if they continue lessons on another instrument – will be considered to have dropped out.

## **Statistics**

While it is recognized that many piano students quit lessons before mastering the skill of playing the piano, the exact percentage and major point of dropout is unclear. It is most often estimated that the dropout rate for reading-based piano lessons in the U.S. is 80% after two to three years of study (Comeau, 1998; Biggs, 2010). However, another evaluation estimated that 85% of people gave up in the beginning stages of their lessons due to frustration at learning the basics (CMUSE, 2014). Further, an online article claimed that the dropout rate for beginner piano lessons is 95%, although the author admits that there are no formal studies to support this number (Pingel, 2011). While these fabled statistics appear frequently in informal pedagogical discussions, there is very little data to support these opinions. Even among researchers, statistics regarding dropouts are often simply based on impressions. Sloboda and Howe (1991) estimated that a substantial portion of students who begin piano lessons give up 18 months later and long

before reaching a modest mastery of the instrument. The same authors cite that only a minority of the original beginners will achieve high levels of musical competence, however they admit that there is “a remarkable lack of such evidence” (p. 3). Researchers acknowledge that music student dropouts are a problem worth studying, but have yet to confirm when the most significant attrition rate occurs.

Although many piano teachers believe that most piano students quit lessons after only two years, others seem to concur that there is a sharp decline in students’ interest in the pre-teen years. Australian composer Elissa Milne (2015) writes on her blog that “so many students drop out after Grade Two”. In an online article, American piano teacher Theresa Chen (2011) discusses the six stages of piano study in which stage five – between the ages of 12 and 14 – is where most students quit (see Figure 1). The early teenage years are the period where piano “takes away from the student’s free time, it is hard work to learn the music concepts, and requires a lot of hard work that the child does not have diligence for” (Chen, 2011).

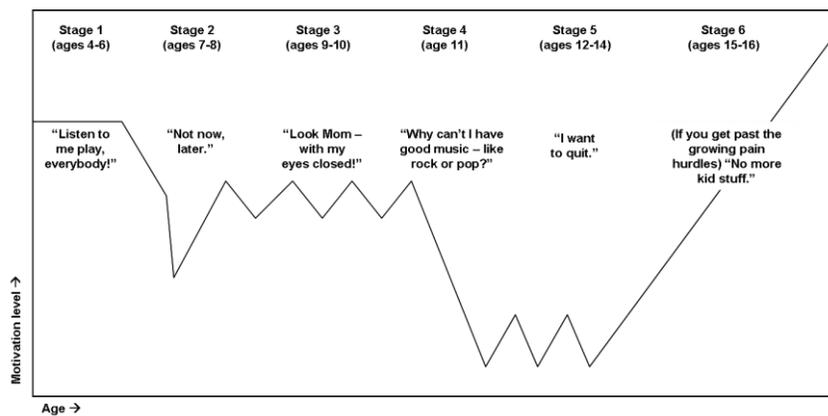


Figure 1. *The Six Stages of Piano Study*, Chen (2011)

Teacher Sally Cathcart administered an informal survey to British piano teachers in 2010 and again in 2015 to find a sharp dropout rate around age 10 (see Figure 2). In her analysis, she was "quite startled by the big drop in pupil numbers before they reached the Grade 1 level" during

both rounds of interviews and explains that by the time Grade 2-3 at age 12-14 was reached, the original number of students had dropped by over half.

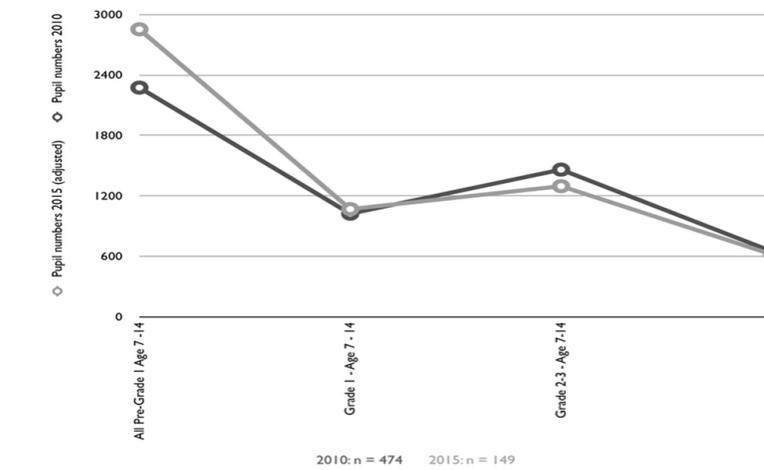


Figure 2. *Pupil Numbers – All Ages Grouped*, Cathcart (2015)

In an early study on piano student dropouts, Lawrence and Dachinger (1967) cited that music teachers often claim that the majority of students drop music lessons between the ages of twelve and fourteen, and their results found that “fourteen seems to be the age beyond which the student must pass” if they are to play long term (p. 28). Studies by Daniel and Bowden (2013) or Fredricks et al. (2002) have shown that dropouts largely occur during the early teenage years. Dyal (1991) found in her doctoral dissertation that students begin lessons largely between the ages of six and eight (see Figure 3) and take piano lessons for an average of one to four years (see Figure 4). These numbers are consistent with the informal, practical experience of studio teachers.

Age	Number	Percentage
Five Years or Less	44	8.8
Six through Eight Years	276	55.1
Nine through Twelve Years	146	29.1
Thirteen through Eighteen	35	7.0
TOTAL	501	100.00

Figure 3. *Age at Which Piano Lessons Began*, Dyal (1991)

Years Studied	Number	Percentage
One Year or Less	28	5.9
One to Four Years	200	39.9
Five to Eight Years	148	29.5
Nine to Twelve Years	95	19.0
Thirteen to Twenty-Five Years	58	11.6
TOTAL	501	100.00

Figure 4. *Number of Years of Piano Study*, Dyal (1991)

In summary, it seems that teachers who base their opinions of dropouts primarily on practical experience reach the same conclusion as researchers: a significant percentage of piano students quit lessons after only two years, or in the early teenage years.

### **Teachers' Opinions on Piano Student Dropout**

As the main focus of this thesis project will be to determine why students drop out of piano lessons, it seems interesting to first explore teachers' opinions on the topic and discover their thoughts on the potential reasons behind piano student dropout. These informal sources have been compiled from music teachers' online discussion groups, blogs, websites, and articles from teaching magazines. The reasons behind piano student dropouts cited below are based on practical experience from teachers who work with individual students in private studio settings.

**Predictors.** When studio teachers are asked the causes of student dropout, the lack of predictive factors, such as parental involvement, are largely cited. In an article published in the *American String Teacher* journal, private violin teacher Margaret Keith (2004) asserts that by taking time to explain the learning process and educate parents before violin students begin private lessons, student dropouts are mitigated. In discussions online, Sarah Robertson (2015) observes that parents do not encourage their children to play in order to build long-term character, and instead pander to the child's passing will and allow them to quit easily. Similarly, teacher Andrea Gerber (2015) writes in the online group *Piano Teacher Central* that she used to

cite lack of interest as responsible for student dropouts but now loses students due to parents who will not take initiative, follow through, and establish continuity. Finally, in an ironic article titled *Top Ten Reasons for Letting Your Child Quit Piano* (2014) published in *Clavier Companion*, Kathy Merwin suggests to parents that quitting piano lessons and “failing to persevere is a habit you want to develop in your child” (p. 9). When discussing causes which lead to piano student dropout, parents are one of the most frequently cited predictors among piano teachers. We will later examine scientific literature and show that the amount and quality of parental involvement – among other predictors – impacts music student dropout.

**Invoked Reasons.** There are many reasons cited by teachers as the primary cause of student dropout which may directly or indirectly relate to predictors. In an online discussion group, teachers invoked three primary reasons why students leave lessons: parents who will not follow through with disciplined practice, overscheduled lives, and a general lack of desire and effort to consistently work hard at a challenging task (Piano Teacher Central, 2015). In an online article, teacher Karen Queen similarly believes that “the real problem often is too many activities, so many that a child can’t focus on and excel at one or two things” (Queen, 2010). Barbara Kreader (2003) also recounted scheduling problems where a student needed to quit lessons due to over-commitment with swimming and the tutoring for possible entrance, as a fourth grader, into a high school math program. This very brief overview of invoked reasons shows that there are many possible reasons why students leave piano lessons, which may be linked back to predictors, but may also be more closely related to motivation.

**Motivation.** The informal discussion in pedagogy circles often centres on the role of motivation in piano student dropouts. Theresa Chen has tracked motivation within her own experience and found that “young students start out extremely enthusiastic about music, then lose

interest, then go through a zig-zag of motivation, gain interest again, then quit” (Chen, 2011). In her discussion, she assures readers that changes in motivation are normal and not to give up due to growing pain hurdles. Joy Morin (2012) writes on her blog *Colour in My Piano* that students often quit when they feel that the effort required to play well outweighs the benefit received, and students may be deterred from dropping out if they feel a sense of accomplishment, recognize their achievements and display ability at the piano with less demanding material. She advises that with unmotivated teens, teachers should assign one piece below the level students usually play to increase feelings of competency. Kent Moore (2012) writes online that “the motivation needed to drive a student to continue music instruction must come from the teacher”. Likewise on the website *Teach Piano Today*, Andrea Dow (2012) writes that teachers should consider every student in their studio a potential “quitter” and encourages teachers to continuously operate in “piano student rescue mode” to deter students from dropping out at such high volumes. Whether motivation comes inwardly from students or external teaching methods, it is evident that maintaining of motivation is an important issue in private piano teaching. The same topic will be explored later in the academic literature, but we will see that the academic literature does not frequently explore the connection between motivation and students who quit piano lessons.

## **Closing**

According to the overview of teachers’ opinions presented above, it seems that a very high number of students begin lessons only to drop out within a few years, although it is surprising that an evidence-based understanding of whether a piano student continues to advanced music or ceases lessons is scarce (Daniel & Bowden, 2013). While the question of *when* students leave lessons is important, this thesis will focus on *why*. As we have seen, predictors such as lack of quality parental involvement, and a variety of invoked reasons such as

interfering activities and scheduling contribute to dropping out, but many informal discussions around piano student dropouts include motivational challenges. Piano student dropouts are a common occurrence and although frequently discussed informally in pedagogical settings, the subject is just beginning to be explored in academic studies. Carrying forward, the review of literature will examine the same topics of predictors, invoked reasons, and motivation to provide an overview of how scientific studies have addressed the issue of why students drop out of piano lessons before reaching a moderate mastery of the instrument.

## **Chapter One: Review of Literature**

This review of literature will begin by reviewing studies which examine elements that predict the success or failure of music students. Predictors such as socioeconomic status, academic achievement, musical ability, musical achievement, parental involvement, practice time, and the lack of long-term intention to study music will be shown to predict dropout in students. In order to create a balanced account, predictors in relation to continuing piano students will also be examined. We will review certain studies which directly asked participants to invoke their primary reasons for dropping out, which reveals that competing interests in sports, issues with repertoire, or a poor teacher relationship contribute to dropping out. Finally, we will examine a small number of studies which focus on motivation in music students. Research will show that fostering the three psychological needs of competency, relatedness, and autonomy is critical for building motivation, and music students showing deficiencies in any one of these three areas of motivation are likely to drop out. Again, we will compare autonomous motivational trends of both successful and unsuccessful music students to get a well-rounded picture of motivation. This review of literature will examine scientific research primarily done with classroom band students and individual instrumental students, with intermittent references to private piano students. For consistency and brevity, studies included in this review have been conducted within the settings of children's instrumental lessons. While some studies reviewed will include adult perspectives from both parents and teachers, the main subject of discussion will surround children's learning. The purpose of this review of literature is to consolidate for researchers in music education what study has already been conducted on the topic of music student dropouts, synthesize recent peer-reviewed articles and theses, highlight the key findings and themes, determine gaps or limitations with this research, and offer a starting point for our

research. The review of literature will conclude by identifying the research problem and research questions for this thesis study.

### **Predictors of Student Dropout**

There is a long-standing body of literature which has examined students' retention or attrition rate based on measurable predictors in school band and orchestra programs. Studies conducted in school group instrumental environments have identified that socioeconomic status and academic achievement, as seen through reading level, can predict students' continuation or dropout in music programs. Young's (1971) study involved 709 fifth grade music students who completed the Iowa Tests of Basic Skills, Music Aptitude Profile, and the Lorge-Thorndike Intelligence Test to predict retention in their elementary school music program. A group of dropout instrumentalists was compared to the continuing students to find a marked difference between the groups' intelligence and academic achievement: the group of students who dropped out of the program were not as high in academic achievement as the group who remained. In conclusion, he found that the "role of musical aptitude in determining the musical attainment of elementary school instrumental students after their first year of instruction appears to be important, but is less influential on most kinds of musical achievement than is academic achievement" (p. 12). In McCarthy's (1980) study of 1199 fifth and sixth grade students, where 23% were later identified as dropouts, found that students' reading grade level and socioeconomic status were significantly associated with student dropout. Finally, Frakes (1984) found that academic achievement was a significant predictor of dropout and students who remained in school music programs "scored significantly higher on ITBS [Iowa Test of Basic Skills] at the sixth-grade level than those who dropped out of music" (p. 100). These studies all

report that the predictors of academic achievement and socioeconomic status gave a valid forecast of music student retention or dropout.

While measurable socioeconomic status, reading skill, and academic ability are all important predictors of retention or dropout, Mawbey's (1973) survey of 330 primary and 118 secondary school students found musical ability was the most important predictor. After administering the Bentley Measures of Musical Abilities test, Mawbey divided students into abilities groups and found that 84% of "below average" primary students and 75% of "below average" secondary students had dropped out. His study found three main generalizations: first, that students who lacked musical ability were the most likely to quit lessons, that students were allowed to begin instrumental lessons who had little intention of attaining a worthwhile level of skill, and finally, these students demonstrated their unsuitability for music lessons by failing to continue long enough to benefit from the training. His results found that "at the secondary level, attitudes towards music in general are such that only pupils who are highly motivated are likely to undertake instrumental lessons at all" (p. 41) and those with struggles in musical ability, parental support, reading level, and general cognitive facility were likely to drop out. He suggests that a rigorous initial selection process including a subjective assessment of musical ability and identification of parental interest should be administered before beginning lessons to avoid later dropouts.

More recently, Klinedinst (1991) conducted research which examined retention of school band students and identified academic achievement as an important predictor. In his study, 205 participants who were enrolled in a beginning instrumental music program in Pennsylvania participated in a 32-week study involving questionnaires and performance evaluations. Research consisted of 12 measurement scales, including the Stanford Achievement Test to assess student

academic ability, the Attitude Towards Music Scale to measure students' perceptions of their own musicality, the Two-Factor Index of Social Position to establish socioeconomic status, and a researcher-designed Likert-type scale in which classroom music teachers were asked to rate their students' potential for success. At the conclusion of the study, teacher records revealed that of the original 205 study participants, 155 students (76%) were still playing, while 50 students (24%) had dropped out. Socioeconomic status, academic achievement, reading ability, and math achievement proved to be significant predictors of student retention and these findings confirm the results of the previously mentioned studies by Young (1971), Mawbey (1973), McCarthy (1980), and Frakes (1984). Klinedinst concludes by recommending that recruitment of high-interest, strong potential students who will persist with music should begin by identifying those who have high academic achievement test results and facilitated by consulting school records.

Building from the studies reviewed in the section, Corenblum and Marshall (1998) found that socioeconomic level was a better predictor of instrumental music student retention than were measures of academic competency or musical aptitude. In their study, researchers interviewed 253 Grade Nine band students, and this grade was selected based on Timmerman's research (1977) which found that the largest decrease in band enrollment occurs when students enter high school. The authors' primary hypothesis was that socioeconomic status should predict students' intentions to continue in the band program. A questionnaire was given assessing student attitudes toward the band program, their outside musical interests, parental attitudes toward band, and their perception of band teachers, as well as indicating their current grades and whether they intended to take band the following year. The authors predicted and found that socioeconomic level, teacher evaluations, perceived attitudes of parents and teachers, and the school's attitude towards the music program gave insight to band students' intentions to continue with the

program. In agreement with previously discussed studies, socioeconomic level played a large part in predicting students' intentions to continue with music and it is unsurprising that students from advantaged backgrounds both attended schools that supported band and other liberal arts programs, and had parental support of instrumental instruction. The authors concluded that socioeconomic status is not simply about level of income, but can be viewed as a variable that represents norms, beliefs, and values about education as a whole. Those beliefs and values "facilitate and support continued interest in and study of music by providing the financial means and home environment by which this can be done, and by creating and fostering the development of an ideology and worldview in which such activities are seen as valued and desirable" (p. 136).

Researchers Flowers, Sasaki, and Costa-Giomi (2005) examined children's observable behaviours in early piano lessons and made associations between musical achievement and dropout within the first three years of lessons. In their study, 14 children who had completed 3 years of piano lessons were compared to 14 children who had discontinued lessons during the first 2 years of instruction. The age, school, socioeconomic level, piano teacher, prior musical experience, initial pianistic ability and achievement, cognitive abilities, motor proficiency, self-esteem, and academic achievement of the students who continued and dropped out of piano lessons were the same or undistinguishable. Sample piano lessons were videotaped and each lesson was reviewed by researchers to document time spent playing, student self-correction, teacher verbal approval and disapproval, and lesson progress. The comparison of the behaviors of the children who dropped out of piano instruction and those who completed the 3 years of lessons suggests that the former group needed more support from their teachers and achieved less during the first year of piano instruction than did the latter. The research documented that children who ultimately discontinued lessons exhibited about three times as many approval-

seeking looks to the teacher as did children who continued. In contrast, the children who persevered with lessons showed greater concentration on the task by listening and responding but without stopping playing the piano to look up at the teacher, and their lessons were typified by a quicker pace of musical, non-verbal interchange. The 14 children who continued with lessons seemed to be more musically or socially independent, while dropouts elicited verbal cues, received fewer actual approvals from teachers, tended to accomplish the goals set by the teachers less often during the lessons, and obtained lower marks in the final piano exam. Fewer approvals, more teacher cues, a lower percentage of progress-forward intervals, and lower exam scores “served as indicators of students’ decisions to eventually drop out of the lessons” (p. 244). These findings imply that variables related to achievement differentiated the students who dropped out from those who continued participation in music instruction, and also supports other research which demonstrates that low musical achievement is a valid predictor of student dropout (Costa-Giomi, 2004).

Parental involvement in music lessons, viewed through both quantity and quality, is a major predictor of student dropout. In a doctoral study by Govel (2004), a 95-item Piano Lesson Questionnaire used multiple choice, Likert scale, and open ended questions measuring reasons of student dropout, parental involvement, and how teachers could uphold student interest levels. The questionnaire was administered to 228 middle schools students who were enrolled in private piano lessons in California. Since Govel felt that piano dropouts should be sought out without the piano teachers involved, she interviewed choral classes given that many choir participants have also taken piano lessons. Lessons had ended for 78% of respondents, and participants indicated that the duration of private piano lessons ranged from 0 months to 10 years, with 2 years and 10 months being the average. The participants reported that only 8% of their parents “always”

assisted with their piano practice and only 6% of parents “always” listened to their child practice. Further, 25% of respondents felt that “Neither” parent ever asked about their progress. Govel’s results suggested that respondents “did not receive adequate parental involvement needed for motivation, efforts in practicing, and continued interest in piano lessons” (p. 61). Govel confirmed that the majority of dropouts had parents who were not directly involved in their lessons or home practice, did not support practice scheduling, did not listen to them practice, and did not reward practice efforts. Her study concluded that “parental involvement is essential in keeping a student in private piano lessons” (p. 50) and results show that parents who were supportive of their children’s efforts influenced continuation. In a similar study regarding parents of piano student dropouts, Chardos-Camilli (2010) explored quality of parental involvement – rather than just the quantity – which led to dropout. She found that types of parental involvement may predict the length of piano students' study and her results showed that months of piano study were negatively correlated with a demanding parenting style. She writes that, "a demanding parenting style was not conducive to students' motivation to continue music study" (p. 99). The author asserts that while close supervision could improve performance standards, this may have detrimental effects on motivation.

Forming solid practice habits early in lessons is a major predictor of whether students continue or drop out of piano lessons, and significant research has investigated the link between poor practice habits and drop out. In her doctoral dissertation, Dyal (1991) administered a questionnaire to 506 participants, most of whom were adults having taken piano lessons prior to 1970 for an average of 6.8 years. In her brief analysis of student dropouts, the answers for discontinuing lessons included pursuing other activities, changing to another instrument, repertoire options, lack of practice, lack of encouragement, or disliking the teacher, but this

study's foremost conclusion was that solid practice procedures are of vital importance if piano lessons are to have a successful outcome. In another doctoral dissertation, Graziano (1991) collected data by conducting unstructured, in-depth interviews with 12 different families. In her results, she found that parents "were also deeply concerned about the prospect of their children's dropping out, and therefore, continued to pay for piano lessons even when it appeared that no progress was being made" (p. 165). She reported in her conclusion that the children's piano practice was a recurrent theme and the most frequently mentioned concern of the parents who were interviewed. In support of this conclusion, another study found that mothers who reported that they were worried about practice before their child commenced lessons were more likely to have children who ceased instruction (McPherson & Davidson, 2002). In a series of qualitative interviews with teachers, Van Cleave (2010) found that students who "do not show progression in building strong practice habits often drop out of lessons after a short period of time" (p. 78). Finally, Costa-Giomi (2004) found that dropouts missed more lessons, practiced less, and completed less piano homework than did their continuing peers. It seems that well-established practice procedures are vital to the continuation of music students and those without consistent practice efforts are anticipated to drop out.

McPherson (2000) sought to examine students' commitment to learning before beginning lessons to predict student achievement and the longevity of music lessons. Although there were initially 157 aged seven to nine children who took part in the research, this had diminished by about fifteen percent to 78 girls and 55 boys who were still playing their instrument by the end of the first academic year. McPherson's study examined how children's attitudes and initial motivation for studying an instrument influenced their subsequent desire to practice which might relate to their achievement and value of the activity nine months later. Immediately before

commencing formal instruction, children completed an extensive interview and were asked open ended questions concerning how long they thought lessons might last on their new instrument, which also sought to predict their later learning. Answers revealed that 26% expressed short-term commitment to learning their instrument (end of primary school), 45% expressed medium-term commitment (throughout high school), and 29% expressed long-term commitment (into adulthood). The children's mothers were interviewed at approximately one, three, and nine month intervals after their child commenced instruction and researchers gathered each child's average weekly practice based on the frequency and duration of home practice sessions. The most striking finding was that children were able to indicate how long they thought they would learn their instrument, and this aspect of their initial motivation interacted with their practice to produce significant gains in achievement after the first nine months of learning. Further, all high scoring students were continuing to learn their instrument 12 months later and all expected to be playing as adults. In sharp contrast, McPherson showed that “students who displayed short-term commitment to learning their instrument scored lowest on the Watkins-Farnum Performance Scale, irrespective of whether they were undertaking low, moderate or high levels of musical practice” (p. 126). The eight lowest scoring students stated that they only intended to learn for a couple of years and of this group, five had ceased instruction within the following 12 months. When asked to define the specific elements that sparked their interest in learning music, “the lowest achieving students tended to focus on extrinsic reasons” (p. 124), such as being part of the school band because their friends were involved, while the highest achieving students cited more intrinsic reasons, such as enjoying the sounds of varied instruments and the rhythm of music. The results of this study reveal that the initial intention to study music over a long period of time can predict high levels of practice, achievement, and longevity in music learning.

In summary, the research has shown that predictors of academic achievement, socioeconomic status, and musical ability show valid projections of music student retention or dropout (Young, 1971, Mawbey, 1973, McCarthy, 1980, Frakes, 1984, Klinedinst, 1991). Research showed that the approval-seeking students who required frequent, external positive feedback and validation from teachers were likely to drop out and suggests that insecure behavioral differences related to low achievement can identify dropouts (Flowers, Sasaki & Costa-Giomi, 2005). It seems that piano students who had distant, demanding, or disinterested parents also dropped out (Govel, 2004; Chardos-Camilli, 2010). Students without a practice commitment in place before beginning lessons, or solidly developed within the first year of lessons, are predicted to drop out (Dyal, 1991; Graziano, 1991; Govel, 2004; Costa-Giomi, 2004; Van Cleave, 2010, McPherson & Davidson, 2002). Finally, students who do not acknowledge a long-term commitment to playing their instrument are likely to drop out (McPherson, 2000). It seems that the proper predictors in place before lessons begin, or soon after starting, such as the capacity to afford lessons or instruments, positive parental involvement, natural musical ability, musical achievement, sufficient practice time to make progress, and a long-term commitment to learning are necessary to prevent dropout. Despite these clear predictors of music student dropouts, fewer studies have asked students directly for their primary reasons in dropping out.

### **Invoked Reasons for Student Dropout**

In a review of literature on piano student dropouts, it is important to consider the students' and parents' invoked reasons for why they left music lessons. In a series of case-studies, Williams (2002) presents three interviews with former music students who invoked reasons which resulted in discontinuing lessons. In this review, the first and third interviews are particularly relevant because of their involvement with piano lessons. The first participant, Beth,

had studied piano for five years before dropping out. Beth recounts that her sports activities resulted in teacher frustration, that she was never able to meet her teacher's expectations, and her teacher treated her like a child. Further, she was generally not allowed to choose her own repertoire and wished to play popular music as well as Classical. Beth reflected that she received more recognition from sports than from piano and felt better about herself, but playing the piano and her teacher were "dragging her down" (p. 3). Her primary reasons for quitting included an inability to get along with her teacher and dissatisfaction with the music she studied. In the researcher's analysis, he reports that Beth had obvious negative feelings towards lessons even long after discontinuing lessons, but strongly positive feelings about making music in general. The third participant, Joan, took piano lessons for eight years which included a change in teachers. Her decision to quit lessons is attributed to poor experiences with her second teacher who did not relate well to adolescent girls and Joan emphasized this teacher's "bad temper and meanness" (p. 5). Unlike many students, Joan was satisfied with her repertoire but dropped out primarily because of personal interactions with her second teacher. She added that other interests and activities began to compete for her time, including a job, boyfriend, and sports activities, although she still maintained five hours of practice per week. As the researcher explains, the "students did not suddenly develop negative feelings towards studying the instrument; they simply placed higher value on other activities" (p. 2).

In a study by Fredricks and colleagues (2002), researchers sought to understand the dropout phenomenon of adolescents who were involved in athletics and the arts. What makes this study unique is that the researchers "listened to adolescents' own words about both their sense of themselves and their perceptions of the contextual factors that account for patterns of engagement and disengagement within an activity over time" (p. 91). Researchers gathered semi-

structured qualitative data from 41 adolescents, and interviews were organized into six categories: life changes over the past few years, participants' general plans for the future, the history of involvement and accomplishment in the activity, hopes and concerns about the activity, the impact of the activity on other aspects of life, and hopes and plans for involvement in the future. Participants had been highly involved in extracurricular athletics or arts programs since middle childhood and researchers sought to define the factors which supported or hindered their continued involvement. The two most common reasons adolescents reported participating in their activity is that they were good at it and that their friends were involved. These results support motivational theories that stress an individual's psychological needs of competency and relatedness. However, these were also some of the primary reasons why students dropped out. Highly competent adolescents decided to quit was that they believed they had the ability but that they were not being given enough opportunity to demonstrate their skills. For example, a violinist bluntly reported that "orchestra stinks... I was the best one, I swear, in the city. Because the kids just don't care anymore. They do it because they think it's going to be an easy grade and they don't really care. They don't practice. They don't know anything." (p. 83). Interviews revealed that students who decided to cease their activity perceived the cost of being involved to be much greater than the benefits, and adolescents reported that to be successful, they must be consumed by the activity but were not willing to make this sacrifice. Researchers found a major turning point emerged during adolescence as the stakes of involvement were raised: some individuals became more involved at this point whereas others chose to cease their involvement or switch to another activity.

There have been surprisingly few studies which have directly asked participants what they felt was the primary reason for dropping out, or ask about conditions which might have

helped students continue lessons. Dyal (1991) reported that students invoked reasons such as “boredom; others mentioned lack of interest, lack of time, or the absence of motivation to practice.” (p. 101). Similarly, Govel (2004) found that students invoked reasons such as “loss of interest, other after-school activities, sports, wanting to play other instruments, too much homework, and scheduling conflicts, as the main reasons for quitting” (p. ix). Finally, Frakes (1984) found that almost one-third of participants who had dropped out negatively mentioned the teacher when answering the open-ended questions. These studies (Frakes, 1984; Dyal, 1991; Govel, 2004) which have directly asked students for their primary reasons for ending lessons have not spent more than a few sentences investigating or discussing this data. While the literature is beginning to show that the invoked reasons could relate to predictors in anticipating student dropout, the invoked reasons also speak to low levels of motivation which may be connected with dropout. The invoked reasons such as lack of time to practice or scheduling other activities seem to align with predictor of practice time. However, the invoked reasons of repertoire, teacher relationship, loss of interest, and boredom seem to align with low levels of motivation. Part of this thesis research will ask students and parents directly for their primary reasons for dropping out, and their invoked reasons could connect back to predisposed predictors, or may be more in line with the topic of motivation.

### **Motivation in Music Students**

In a study by Evans, McPherson, and Davidson (2013), researchers took the basic psychological needs required for meaningful motivation, developed by Deci and Ryan, and applied it to music learning. This theory proposes that humans are motivated towards activities which satisfy the basic human needs of competence, relatedness, and autonomy which allow intrinsic motivation to flourish while they move away from extrinsically motivated activities in

which they feel those needs are undermined. In a longitudinal study, 157 beginning instrumentalists were followed throughout their playing career. The study followed up with those participants 10 years after beginning to find that 87% of participants had ceased playing their instruments. The study evaluated the extent to which psychological needs provided an explanation for why the children and adolescents ceased or continued playing musical instruments, and researchers saw the basic psychological needs as “potential explanations for why individuals are motivated to continue or move away from music activities” (p. 603). The data was collected online using Gagne’s (2003) Basic Psychological Needs scale as adapted to music to measure competency, relatedness, and autonomy. The results found that many students cited competence as why they had dropped out, and students perceived music as boring or frustrating due to destabilized feelings of competency. Next, as participants entered high school, the relatedness of music to their personal goals or outward image became incongruent, and participants observed that their peer group membership was threatened by belonging to the school band. Additionally, participants felt that teachers who could not relate to their students were a major cause of dropout. Finally, participants described activities in which there was no autonomous direction, as one participant in particular described that he or she was forced to play, and then forced to practice, music that was not of their choosing, which left the student feeling restricted and oppressed. The three psychological needs of competency, autonomy, and relatedness are interrelated and fulfillment cannot be expressed if one is missing: competence can determine one’s status in a relevant social group, while relevant social groups may foster feelings of autonomy, and autonomy is required for the self-regulatory behaviours that foster competence. Interestingly, one participant was deprived of all three of the psychological needs which undermined her intrinsic motivation as she recounted that “I quit the trombone in year 8

(2002) because the music we were playing was not challenging and crap along with the fact I wasn't noticed for my skill, didn't have many friends doing it and the instrument wasn't used in the music I listened to at my leisure" (p. 610). The researchers make a direct connection between impaired the psychological needs required for motivation and music student dropout, finding that "in the time leading up to when they finally made the decisions to cease music instruction, they felt greater feelings of needs inhibition and fewer feelings of need fulfillment" (p. 612). This is one of the few studies which addresses the theoretical structure of motivation to assess music students, and connects levels of motivation with dropout.

In a series of case studies, researchers Pitts, Davidson and McPherson (2000) investigated the motivations of young instrumentalists in their first 20 months of learning. Comparisons were made between children who maintained and lost motivation over that period, and between those who quit lessons and those who continued. Using questionnaires and interviews, parents, teachers, and children were asked to monitor the amount of practice being completed and the way in which their attitudes to learning and practicing changed. A combination of very brief and more detailed interview schedules was used, covering areas such as the amount of practice, whether or not the child had to be reminded, how much the child enjoyed practice, and how the parents thought the child was developing and improving as a musician. This study's main finding was that the children who had "maintained motivation after 20 months of learning are more self-critical, reflective, and conscientious in their practice" (p. 64). Beginning with students Amelia, Andrew, and Claire, these three students showed a level of commitment that is indicative of a strong personal interest in learning an instrument, even when this is supported by external rewards or sanctions. Their inner value placed on music was evident such that Claire concluded that "It's an advantage to play music" and despite the three children's fluctuating motivation

levels, they all demonstrated long-term commitment. These highly motivated children became aware that simply timing their practice sessions is an unreliable way of gauging their effectiveness, and their inner self-regulation of completing assignments to the best of their capability is seen through the “ability to make decisions and sustain motivation for themselves” (p. 57). The children who maintained interest and enthusiasm for music lessons in this study reported enjoying the sound of their instruments, displayed high levels of enjoyment and personal satisfaction in performing and practice, and had plans to study music long after the 20 month period of research concluded. In contrast, researchers also interviewed Elaine, Thomas, and Caroline who had stopped playing within the same 20 month period. Motivation for beginning music lessons for these students largely centered around peer-group and social reasons, rather than a great passion for music. While these children were initially carried along by the involvement of their peer group, they “lose interest at the point at which independent learning and effort are required” (p. 62). The children who stopped lessons had never really engaged with the music itself and became frustrated by their limited success. Elaine, Thomas, and Caroline all showed very low self-regulation and practiced with little sense of purpose or progress. Their reported practice strategies were superficial and inconsistent, and were often reported as “my teacher tells me to...,” showing low levels of initiative and high levels of dependency. These children who dropped out of lessons started their learning with very low expectations – both low performance expectations from themselves and low expectations of personal pleasure. Their parents had reinforced this dispassionate attitude and contributed “little to the children’s motivation” (p. 64). In conclusion, the capacity for self-regulation seems to be entirely lacking for those who dropped out of lessons, while it flourished with those who continued. The children who stopped lessons showed dependence on others to correct mistakes

or provide encouragement and “gained little intrinsic pleasure from their playing, affording it low status among other interests” (p. 64).

In summary, we have seen that the research completed on the topic of motivation and music students has been done with instrumentalists rather than piano students, and neither of the above studies directly sought to measure the relationship between motivation and dropout: the studies were equally interested to measure the motivation of students who continued. The literature makes conclusions that “intrinsic motivation and a genuine desire to learn and progress associated much more strongly with effective and successful learning” (Pitts, Davidson & McPherson, 2000), while extrinsically motivated students often drop out. As we have seen, the three psychological needs of competency, relatedness, and autonomy are required to foster the intrinsic motivation required to continue with music lessons, and students who felt these needs restricted dropped out (Evans, McPherson & Davidson, 2013). Children who were unable to arrive at their own intrinsic reasons for taking music lessons and gained little intrinsic pleasure from playing music have also been shown to drop out (Pitts, Davidson & McPherson, 2000). Overall, the literature suggests that unless a student can determine intrinsic reasons as motivation for playing music, and the environment is supportive of competency, autonomy, and relatedness, there is a high chance of dropout.

### **Research Problem and Further Questions**

Piano teachers seem to agree that piano student dropouts are a common problem among students, and the topic of piano student dropouts is often discussed informally (Kreader, 2003; Queen, 2010; Chen, 2011; Milne, 2015; Cathcart, 2015). Considering the frequency at which children study the piano and the seemingly high volumes at which they drop out, it is surprising that more scientific study has not been undertaken. The high dropout rate seems to be confirmed

by the literature. The statistics suggest that there are two main points at which music students leave lessons: after approximately two years (Pitts, Davidson & McPherson, 2000; Govel, 2004; Flowers, Sasaki & Costa-Giomi, 2005), or in the preteen years (Lawrence & Dachinger, 1964; Dyal 1991; Corenblum & Marshall, 1998; Fredricks et al., 2002). Upon following up with study participants ten years after they had started music lessons, research found that 87% of students had stopped playing their instruments (Evans, McPherson, Davidson, 2012). Understanding the complexities behind the decision to drop out, and particularly the role of motivation in dropping out, is still unclear.

After exploring literature written on the topic of music student dropouts, we have divided the research into three main sections: predictors, invoked reasons, and motivation. First, the review of literature found that there are certain predisposed predictors which can lead to dropping out of music lessons, such as socioeconomic status (McCarthy, 1980; Corenblum & Marshall, 1998), low academic achievement (Young, 1971; Frakes, 1984; Klinedinst, 1991), lack of musical ability (Mawbey, 1973), musical achievement (Flowers, Sasaki & Costa-Giomi, 2005), insufficient parental support (Govel, 2004; Chardos-Camilli, 2010), poor practice habits (Dyal, 1991; Graziano, 1991; Govel, 2004; Costa-Giomi, 2004; Van Cleave, 2010, McPherson & Davidson, 2002), and no long-term commitment to playing (McPherson, 2000). Next, students themselves invoke many reasons for dropping out such as disliking the repertoire (Williams, 2002), poor teacher relationship (Frakes, 1984), interest in sports or other activities (Govel, 2004), lack of time for continued commitment (Fredricks et al., 2002), or no desire to practice (Dyal, 1991). Finally, the review of literature sought to determine if low levels of motivation resulted in music student dropout. Based on the two studies reviewed, low levels of motivation, or a lack of the associated psychological needs of competency, relatedness, and autonomy which

provide motivation, have been shown to result in dropout (Evans, McPherson & Davidson, 2013; Pitts, Davidson, McPherson, 2000). Unfortunately, specific correlation between motivation and dropping out has not been well addressed by the literature, and it seems that while predictors and invoked reasons have been well-documented in the literature, the possibility of a connection between motivation and dropping out has not. Exploring these three interrelated areas will give a well-rounded perspective on the topic of piano student dropouts.

The largest section of the review of literature on music student dropouts concerns predictors. Articles included in this review have shown that socioeconomic status plays a significant role in the discontinuation of music lessons and studies conducted over the past 50 years all agree that socioeconomic status largely outweighs musical aptitude in predicting music student retention rates (Young, 1971; McCarthy, 1980; Klinedinst, 1991; Corenblum & Marshall, 1998). However, Mawbey (1973) found that the predictors of musical ability and academic achievement were all valid anticipators of successful music students while dropouts lacked these attributes. Research showed that low achievement as seen through apprehensive behaviour identified dropouts (Flowers, Saskai & Costa-Giomi, 2005). Further, Govel (2004) and Chardos-Camilli (2015) showed that piano students who discontinued lessons lacked parental involvement and encouragement: their findings display that students' efforts in practicing were not positively supported by parents, as seen by demands or distance. Graziano (1991) showed that practicing was the foremost concern among parents in her study; Costa-Giomi (2004) reported that the dropouts in her study practiced and achieved less during the first six weeks of study than those who continued; Pitts, Davidson, and McPherson (2000) found that students who quit exhibited minimum amounts of practice, negligible use of practice strategies, and little understanding as to the purpose of practice; and Dyal's (1991) foremost conclusion was

that good practice habits are imperative to piano lessons with a successful outcome. Finally, McPherson (2000) showed that students who have little initial intention to pursue music for more than a short time are likely to drop out. While it can be deduced that high levels of these seven predictors create thriving students, this thesis research hopes to understand if low levels of the same predictors have an inverse effect and impact dropping out.

Invoked reasons for dropping out may or may not be connected to the categories of predictors or motivation. Research showed that students reported discontinuing lessons due to lack of interest, boredom, dislike of the repertoire, or poor teacher relationship which could have negatively impacted motivation. The research also showed that students discontinued lessons due to interest in other activities or scheduling which could relate to predictors such as practice time. There were further brief mentions in the academic literature about the primary reasons students invoked for dropping out (Frakes, 1984; Dyal 1991; Govel 2004) but this important question was generally not well expanded upon and less attention was given to discussing these results. We expect to strengthen these results, ask students directly about their primary invoked reasons for leaving piano lessons, and solidify all of the invoked reasons of why students leave piano lessons. Further, we are interested to discover if the invoked reasons will support the predictors, will be related to motivation, or if they fit into neither category.

Looking at the predictors and invoked reasons, it seems that motivation may be impacted by these previous two categories. Alternatively, low levels of motivation could singularly account for student dropout. However, very few studies have measured the possible correlation between motivation and dropping out. The literature seems to describe that students who are intrinsically motivated display interest, gratification, and inherent satisfaction and continue with music lessons. Research has shown that students who are intrinsically motivated place value on

playing an instrument such as enjoying the sound, engaging with the music itself, or playing as a vehicle of personal pleasure and are less likely to drop out (Evans, McPherson & Davidson, 2013; Pitts, Davidson, McPherson, 2000). In contrast, those students who prematurely quit lessons often participated in music because of extrinsic motivators such as peer approval. Based on the studies reviewed, it seems probable that low levels of motivation can be correlated with dropping out. Exploring the possible link between motivation and dropout is what this study primarily intends to explore.

The research completed in orchestral and band settings provides a good base for the topic of music student dropouts, but more study is needed specific to private piano lessons. The research focused on dropouts with orchestral instrument students is not sufficient to be generalized to piano students because individual lessons provide different motivational challenges than in extrinsically-motivated group settings. Private piano lessons are very different than school band, not only due to factors such as solo repertoire and close teacher relationship, but the lack of a social group aspect which surely has an impact on motivation. Compared to classroom music education, “the population of children who study piano privately has been the topic of few research investigations, and relatively little is known about the students who participate in piano lessons” (Duke, Flowers, & Wolfe, 1997, p. 51). The author of this review of literature discovered only two studies which focus specifically on the topic of piano student dropouts that have been conducted within the last ten years (Chardos-Camilli, 2010; Daniel & Bowden, 2013). These two recent studies with piano students were completed in the United States and Australia, and neither provide an account of Canadian piano student dropouts. Given the infrequency of research on this important topic compared to the frequency at which piano students begin lessons only to quit a short time later, it is surprising that more research has not

been undertaken. The justification for this thesis research is three-fold: first, a high number of piano students quit lessons before mastering the instrument, second, it is not clear if the predictors and invoked reasons of why band students drop out also apply to piano students, and third, we need to investigate whether a correlation can be found between motivation and dropping out.

In order to understand the landscape of piano student dropouts, we will focus on three categories of questions surrounding predictors, invoked reasons, and motivation. First, this thesis will search to identify certain predictors that could impact student dropout. We want to discover if there is a relationship between specific predictors and dropping out, and investigate if certain predictors seem to play a larger role than others. Next, this thesis seeks to determine the primary reasons which students and parents invoke in their decision to leave lessons. While it is presumed that the majority of dropouts exhibit low levels of motivation or might be influenced by certain predictors, the decision to dropout may have little to do with either of those previous questions. By asking open-ended questions, such as “why have you stopped taking piano lessons?”, students and parents’ invoked reasons will likely confirm the lack of motivation or predictors. However, they may also share unrelated reasons such as moving away, a learning disability, or a parent’s sudden job loss as the primary reason for leaving lessons. Finally, can a correlation be found between low levels of motivation and dropping out? The review of literature does not strongly point in that direction, and this thesis will investigate if former piano students habitually demonstrate a certain types of motivation and exhibit overall lower levels of motivation than continuing students.

Based on the research reviewed, our hypotheses anticipate that students with specific, predictive characteristics of low socioeconomic status, inferior academic achievement, a lack of

natural musical ability, low musical achievement, insufficient parental involvement, inconsistent practice habits, and little intention to continue music long-term drop out of piano lessons. Further, we want to explore the primary reasons students and parents invoked for dropping out. Finally, students who display low levels of motivation are likely to dropout well before reaching a moderate mastery of the piano.

In summary, this research study will ask three distinct but related research questions and hypotheses.

1. QUESTION: *Is there a correlation between predictors of socioeconomic status, musical ability, academic achievement, musical achievement, parental involvement, practice time, and lack of long-term commitment and students who drop out of piano lessons?*

HYPOTHESIS: Absent or the inconsistent presence of predictors may be connected with students dropping out before reaching a moderate mastery of the piano.

2. QUESTION: *What are the primary reasons students and parents invoked in their decision to drop out?*

HYPOTHESIS: We want to directly ask students and parents what they felt their primary reason was for leaving piano lessons, and these will likely confirm the predictors or low levels of motivation. However, there could be reasons aside from motivation or predictors which led to piano student dropouts such as moving away, teacher retirement, or illness.

3. QUESTION: *Is there a correlation between low levels of motivation and students who drop out of piano lessons?*

HYPOTHESIS: Low levels of motivation seem to be connected to students dropping out before reaching a moderate mastery of the piano.

In order to investigate these research questions, the next chapter will outline the measuring tool used to answer these questions, identify the dependent and independent variables which defined this study, explain where we found survey participants, and describe the analytical process.

## **Chapter Two: Methodology**

As previously stated, this thesis seeks to understand the various angles involved in the decision to quit piano lessons. Since the foundation of this thesis is motivation, we have adopted as our theoretical framework the motivational theory of Deci and Ryan (2000a; 2000b), which has been used in recent studies concerning motivation and music learning (Renwick, 2008; Renwick & McPherson, 2009; Evans, McPherson & Davidson, 2013; Kupers, van Dijk, McPherson & van Geert, 2014; Comeau, Huta & Liu, 2015). This theory of motivation has never been used in the context of piano student dropouts, and is the root of the questionnaire we selected to gather data for this study.

### **Motivational Theory of Deci and Ryan**

The basis for this thesis research is taken from *Self-Determination Theory* or *SDT* (1985, 1987, 2000a, 2000b, 2000c, 2000d, 2008) which was pioneered by psychologists Edward Deci and Richard Ryan. Their work in understanding motivation is important because it is at the core of all biological, cognitive, and social wellbeing. Deci and Ryan acknowledge that motivation is a combination of innate human desire and appropriate environmental conditions and SDT takes into account how external social and cultural factors facilitate or undermine one's sense of inner success and outward achievement. As the authors describe (2008), SDT focuses on the type, rather than just amount, of motivation while associating autonomous motivation, controlled motivation, and amotivation with performance and wellbeing outcomes. At the same time, SDT also contextualizes the social conditions which promote versus extinguish these types of motivation. The authors have found that the degree to which basic psychological needs for autonomy, competence, and relatedness are supported versus thwarted affect both the type and strength of motivation. Deci and Ryan assert that people are active organisms, continuously

evolving and growing, mastering situational challenges, and integrating new experiences into a unified sense of self, however these developmental patterns do not operate automatically, but instead require ongoing, external social support. In other words, the extrinsic-intrinsic dichotomy is far too simple to describe the rich and complex process of human motivation.

SDT proposes that extrinsic motivation can vary greatly in its relative autonomy. Deci and Ryan (1985, 1987) introduced the *General Causality Orientations Scale* which characterizes the source of initiation, and thus the degree of self-determination, of one's behavior and motivation. Their work discusses the differences between autonomy orientation, where people have unlimited choice with initiation and regulation of their own behaviour, and control orientation, where one's behaviour is controlled and organized, they do things because they "ought to", and rely on deadlines or surveillance for motivation. Deci and Ryan (2000c) offer the example of a student highly motivated to complete homework out of personal interest and curiosity, compared to a student equally motivated to complete homework but instead aims to secure the approval of a teacher or parent. Since their research is used often in educational contexts, Rigby, Deci, Patrick, and Ryan (1992) assert that relative autonomy of students' motivated actions is more useful for characterizing the motivational basis of learning than is the undifferentiated intrinsic-extrinsic dichotomy.

To illustrate their work, the researchers developed the Self-Determination Continuum which shows types of motivation with their regulatory styles, loci of causality, and corresponding processes (Ryan & Deci, 2000a). This scale is arranged from left to right in terms of the degree to which motivation originates from within (see Figure 5). At the far left side of the scale, we find amotivation in which a person lacks the intention to act: either they do not act at all, or they act by simply going through the habitual motions without a sense of purpose.

Amotivation results from not valuing an activity, not feeling competent to perform it successfully, or not expecting it to provide a beneficial outcome. In contrast, at the far right side of the spectrum is the archetypal description of autonomous motivation: behaviour is highly autonomous, and includes the relevancy and competency of self-determination. In the centre, extrinsically motivated actions cover the scale between amotivation and autonomous motivation, with varying degrees of autonomous regulation in the processes. Detailing the different forms of extrinsic motivation and the contextual factors that either support or suppress the internalization and integration of behaviour is important in a well-rounded understanding of motivation.

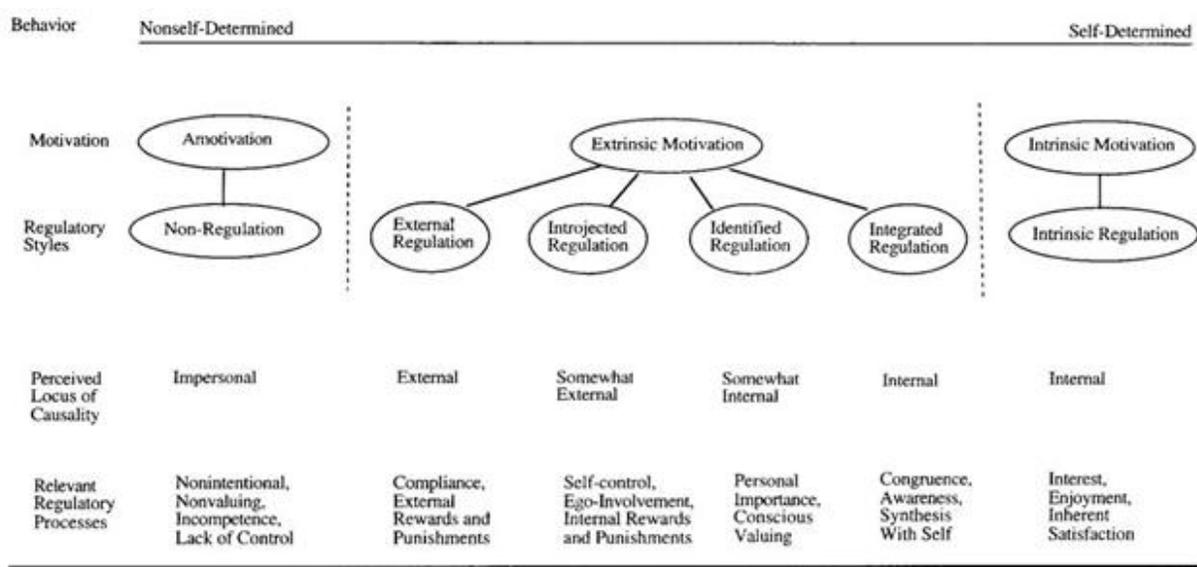


Figure 5. *The Self-Determination Continuum Showing Types of Motivation with their Regulatory Styles, Loci of Causality, and Corresponding Processes*, Ryan & Deci (2000a)

Along this central portion of the extrinsic motivation scale, we see variations of ranging from straightforward compliance to a synthesis with one's self. Beginning on the left, the extrinsically motivated behaviours that are least autonomous can be defined as *externally regulated* and are typically performed to satisfy an external demand, such as avoiding punishment or gaining a reward. Behaviours in this part of the spectrum are perceived as being

onset by others, individuals regard externally regulated behaviour as being controlled, and as such show personal feelings of alienation. Following this, *introjected regulation* involves taking directives but not fully accepting it as originating from within. While it is less controlled than external regulation, there is still some external control, and behaviours are not perceived as being self-directed. Behaviours display extrinsically motivated gains of ego enhancement or avoidance of personal guilt and anxiety, and people are motivated to display ability or avoid failure in order to maintain feelings of worth. Next, *identified regulation* reflects a conscious valuing of a goal or regulation, such that the action is accepted or owned as personally important. Here, behaviours may be externally encouraged, but draw out a personal desire for autonomous activity. Finally, *integrated regulation* occurs when extrinsic regulations are fully identified with one's self and display congruence with one's other personal values and needs. Although this level of integrated regulation shares many qualities with autonomous motivation, it is still included on the extrinsic spectrum because behaviours are done to attain separable outcomes rather than for their inherent enjoyment.

Ryan and Deci (2000a) clarify that this is not a developmental spectrum in which behaviours migrate from extrinsic to autonomous. Rather, behaviours and skills enter at any part of the scale based on previous life experiences and current situational factors. However, if behaviours can be internalized over time, this will be incorporated with one's self and greater internalization appears to produce "behavioural effectiveness, greater volitional persistence, enhanced subjective wellbeing, and better assimilation of the individual within his or her social group" (p. 73). There is evidence that motivation shifts along the spectrum occur over time, and particularly children's generalized regulatory style does tend to become more internalized or self-regulated as they mature (Chandler & Connell, 1987). In a study by Ryan and Connell

(1989), research showed that differences in the type of extrinsic motivation were associated with different experiences and outcomes in educational settings. Their results showed that school students who were extrinsically regulated showed less interest, value, and effort towards achievement, and did not show ownership for negative outcomes but instead placed blame for failure on the person who originally imposed the directive. Introjected regulation was positively related to applying more effort but was also related to feeling more anxiety and coping poorly with failure. Finally, identified regulation was associated with personal interest and enjoyment, more positive coping mechanisms, and expending more effort overall. Given the many benefits of internalization, educators must strive to promote autonomous regulation for extrinsically motivated behaviours because of its association with better scholastic performance (Miserandino, 1996), and lower dropout rates (Vallerand & Bissonnette, 1992).

Deci and Ryan (2000a) acknowledge that much of what humans do on daily basis is extrinsically motivated, particularly after early childhood when the freedom of autonomously motivated interests is restricted to activities and responsibilities which are age, gender, and socially appropriate. However, the researchers have compared the autonomously motivated and those who are externally controlled and have shown that authentic, self-authored motivation results in greater “interest, excitement, and confidence, which in turn is manifest both as enhanced performance, persistence, creativity, and as heightened vitality, self-esteem, and general well-being.” (p. 69). Despite the societal prevalence of extrinsic motivation, Deci and Ryan’s research shows that externally regulated, controlled behaviour impairs high quality conceptual learning (1992), that gaining extrinsic aspirations such as wealth and fame may produce short-term happiness but not eudemonic wellbeing (2000d), and most importantly, extrinsic motivation generally undermines autonomous motivation (1987). Further, even when

extrinsically and autonomously motivated groups have the level of perceived competence for an activity, the autonomously motivated individuals are those who benefit from the many positive traits of interest, excitement, and confidence (2000a). Deci and Ryan have identified three psychological needs – competence, relatedness, and autonomy – which are essential for moving extrinsic motivation along the spectrum towards autonomously motivated behaviour, which optimises personal growth and wellbeing.

The environments and individual personalities that support and fulfill competency, relatedness and autonomy facilitate natural growth processes, including autonomously motivated behavior and incorporation of extrinsic motivations, while those environments and personalities that prevent development of competence, relatedness, and autonomy are associated with poorer motivation, performance, and wellbeing (Deci & Ryan, 2000b). To demonstrate the need for the three psychological needs of autonomy, competence, and relatedness, Ryan and Deci (2000a) show their equal importance in the context of the *Self-Determination Continuum*. The experience of autonomy is essential for internalization and is a critical element for external regulation to be integrated. Contexts which are autonomy supportive allow individuals to actively transform extrinsically-encouraged values into their own. To integrate a regulation, people must grasp its meaning and synthesize that meaning with respect to their other established goals and values. Next, the internalization of extrinsically motivated behaviours functions as a perception of competence. People are more likely to adopt behaviours that their external influences value based on feelings of effectiveness and capability. The *Self-Determination Continuum* suggests that supports for competency should facilitate internalization and the authors illustrate that children who are directed to perform skills before they are developmentally ready to master them would be predicted to only partially internalize the regulations and remain within external or

introjected regulation. Finally, individuals undertake activities because they are prompted or valued by role models to which the individual feels attached or related. This suggests that relatedness is centrally important for internalization and moving across the *Self-Determination Continuum* to internalized motivation is more likely when supports for feelings of relatedness are in place.

To summarize, Deci and Ryan's research has looked at how externally-controlling versus autonomy-supportive environments impact one's placement on the *Self-Determination Continuum*. Their proposed metatheory states that humans are assumed to be active, continuously developing individuals who are naturally inclined to establish internal integration and social integration and require three supports from their social environment to do so. The fundamental psychological needs for competence, autonomy, and relatedness result in growth and wellbeing, however if absent result in displacement, resistance, and negative mental health consequences. Self-Determination Theory promotes involvement in – or encouragement towards – autonomously motivated activities such that wellbeing is enhanced by the attainment of intrinsic goals because, contrastingly, extrinsic goals provide little benefit to one's long term wellbeing.

We used Deci and Ryan's theory in the context of a questionnaire to study piano students' motivation. Based on their graduated scale of motivation – rather than a simple bivariate intrinsic-extrinsic dichotomy – and its previous applicability to many different areas of study such as medicine, education, or sports, we thought that SDT would be more representative of the motivational complexities related to studying the piano. We wanted to investigate how certain types of motivation would pertain to piano student dropouts. We opted for a questionnaire designed around SDT to discover where piano students' motivation would be

centered on the scale of motivation. Using a questionnaire rooted in SDT presents the opportunity to gather the individuals' perspectives on the locus of causality, which takes into account the origins of motivation rather than simply the outcomes. The questionnaire using SDT as a framework considers reasons for engaging in a particular behaviors, but can later be easily presented as group averages to glean generalized information.

## **Design**

A survey in questionnaire format is the most widely used procedure for obtaining information in educational research. Questionnaires are “relatively economical, respondents in distant locations can be reached, the questions are standardised, anonymity can be assured, and questions can be written for specific purposes” (Opie, 2004). This method of examination allows the researcher to “survey a population of subjects ... with the aim of establishing a broad impression of their experiences or views” (Clough & Nutbrown, 2012). While questionnaires are not as in-depth as interviews or case studies, for this study they allowed the researcher to develop “a representative picture of the attitudes and characteristics” (Check & Schutt, 2012) of piano student dropouts. Questionnaires provided structured data which answered the research questions in a straightforward style. This thesis did not attempt to design an original questionnaire, but used the *Survey of Musical Interests* (2005) developed by researchers in the Piano Pedagogy Research Laboratory at the University of Ottawa. Given its use over the past decade (Comeau, Huta & Liu, 2015; Desrochers, Comeau, Jardaneh & Green-Demers, 2006) and questions developed in accordance with Deci and Ryan's motivational theory, this was the ideal measuring tool to discover why students had dropped out of piano lessons.

## Measurement

The measurement design was similar to Govel's (2004) study where she developed a 95-item Piano Lesson Questionnaire using multiple choice, Likert-scale, and open-ended questions measuring reasons of student dropout. But, unlike Govel's study, the *Survey of Musical Interests* (2005) was administered to both students and parents. The parent portion measured various predictors that could be connected to dropping out to address Research Question One, an addendum was added to both student and parent surveys in the form of open-ended and multiple choice questions to gather their invoked reasons for dropping out to answer Research Question Two, and the student portion of this survey measured types of motivation to answer Research Question Three.

The parent questionnaire from the *Survey of Musical Interests* (2005) answered Research Question One by addressing components which may predict dropout such as socioeconomic status, academic achievement, musical ability, musical achievement, parental involvement, practice, and long-term intention to study the piano (see Appendix 1). Section One began by identifying parental ethnicity, and both mothers' and fathers' educational background and occupations to examine the predictor of socioeconomic status. Next, it asked the parent's opinion of their child's academic ability to address the predictor of academic achievement. Section Two inquired about the student's musical history including books used, pieces played, exam participation, rate of progress, and to assess how long they originally thought their child would continue with lessons. This section explored the predictors of musical ability, musical achievement, and lesson longevity. Sections Three, Four, and Five asked about the parents' own musical background, how often they attended lessons and recitals, and how often parents helped with home practice. This examined the predictor of parental involvement. Section Five also

asked about the duration and regularity of home practice which investigated the predictor of practice time and frequency.

Researchers added ten open-ended and multiple choice questions to the original questionnaire to investigate Research Question Two and the invoked reasons for dropping out of lessons (see Appendix 1 & 2). As research methodology confirms, “this type of question is usually used when there is little knowledge about a particular topic, and you want to learn as much as possible without limiting the responses” (Check & Schutt, 2012). These additional questions sought to gather the most diverse amount of data and the primary reasons for quitting lessons, which might have included cost of lessons, interfering interests such as sports or homework, or a poor teacher relationship. We also wanted to investigate if there was anything which could have changed participants’ minds from dropping out or if students might ever return to lessons in the future. Questions were taken from studies by Dyal (1991, p.127) and Govel (2004, p. 91 – 93) although the wording was slightly modified to better suit the needs of this research. The same questions – although worded differently for age-appropriateness – were asked to both students and parents and sought to measure their invoked reasons which lead to dropping out which may have confirmed motivation or predictors, but may also have been unrelated to these two categories (see Appendix 3).

There were four main sections in the student survey (see Appendix 2). The first part contained 67 questions measuring five types of motivation to address Research Question Three (see Table 1). In this first section, students chose how applicable these statements were to their experience playing the piano by circling a Likert-scale number from one to seven.

Table 1 - Examples of questions from Section One of the *Survey of Musical Interests* (2005)

Type of Motivation	Type of Regulation	Example of Questions
		"I learned to play the piano..."

<i>Amotivation</i>	None	but I didn't know why I was doing it."
		but it was a waste of my time."
		but I was not interested in it."
<i>Controlled</i>	External	because I would have let down my parents if I stopped."
		because I did not want to disappoint my teacher if I stopped playing."
	Introjected	because I pressured myself to do it."
		because I would have felt bad if I didn't learn to play the piano."
<i>Autonomous</i>	Identified	because it helped me with school."
		because it made me a more interesting person."
	Integrated	because I wanted to be able to play the piano every day."
		because I saw myself as a musician."
	Intrinsic	because I enjoyed learning new things about music."
because playing the piano is a lot of fun."		

The next section addressed students' perception and enjoyment of various musical activities and the same one through seven Likert-scale system was used. This continued to answer Research Question Three and address autonomous motivation seen through interest in piano performance, hard work, or creativity (see Table 2).

Table 2 - Questions from Section Two of the *Survey of Musical Interests* (2005)

Interest in Piano Performance	Interest in Piano Hard Work	Interest in Piano Creativity
When I listened to piano music on CDs or on the radio	Practicing a piece I already knew	Composing a piece of music
When I went to music camp	Repeating a certain bar that needed practicing	When I played piano duets
When my parents were in the room during my piano lesson	When I had my parents help me with practice at home	When I learned a new piece
When I went to concerts	When I practiced a piece slowly	Improvising
When I went to my piano	When I played the piano	Composing music

lessons	along with the metronome	
When I performed at a recital	Counting out loud when I played	When I played familiar songs by ear
When I played for my piano teacher	Sight reading	When I played along with a CD or disc accompaniment
When I played for my family or friends	Practicing scales	When I played with other instruments or in a band (such as rock band or any type of ensemble)
When I took a piano exam	When I worked on a hard piece of music	When I used a computer to make my own music
	When I learned a piece on my own	

The third section concentrated on various actions piano students undertook when they were taking lessons and were again rated along the one to seven Likert-scale. This continued to answer Research Question Three and address autonomous motivation seen through internalized or natural activities, external or unnatural activities, and a combination of both (see Table 3).

Table 3 - Questions from Section Three of the *Survey of Musical Interests* (2005)

External, Unnatural	Combination	Internalized, Natural
I practiced piano only when my parents made me	I often had to be reminded to practice piano	I played pieces I knew just for the fun of it
I forced myself to practice the piano	I never practiced longer than I was supposed to	I would have rather played the piano than do any other activity
I often skipped practice	I often watched the clock when I practiced	When I was away from home I looked for a piano I could play
I was too busy to practice	Most of the time I got to my piano lesson on time	I made up my own music
I often found excuses not to practice		I made sure I practiced before going out with my friends
I sometimes skipped my		I would have played the piano all

piano lesson	day if I could
My parents made me go to my piano lessons	I often played my pieces for my friends I made a point of making some time for music every day  I tried to make friends with other music students  I often spent free time playing around on the piano

Finally, five multiple choice questions were used to discover opinions about the student's own musical ability and how long they originally thought they would be involved with piano lessons. For example, we asked "When I do well in music, it is because a) I am talented, b) I work hard, or c) I am lucky", to gain insight into the student's view of their own musical ability. We also asked students to assess that upon beginning lessons, if they intended to stop soon after they started, play until the end of elementary school, the end of high school, or even after high school. This was the only portion of the student questionnaire which answered part of Research Question One and addressed the predictors of musical ability and lesson longevity.

### **Participants**

Participants consisted of 56 former piano students and their parents, although one participant was removed from the analysis due to stopping piano lessons at the rare recommendation of a psychiatrist. Of the 55 participants included in analysis, there were 34 female and 21 male students, most of whom were Canadian Caucasian (see Tables 4 & 5). Ages ranged between 8 and 17.5 years old, with an average of 13.1 years old (see Table 6). Students in this group began lessons, on average, at 7 years old and took lessons for an average of 5 years until age 12. Their piano lessons ended an average of 1 year prior to taking the survey.

Table 4 – *Ethnicity of Dropout Participants' Mothers*

Ethnicity	Frequency	Percent
Caucasian	44	80.0
Hispanic	1	1.8
Asian (e.g. Chinese, Japanese)	6	10.9
Middle-Eastern	1	1.8
East Indian, Pakistani	1	1.8
Other	2	3.6
Total	55	100.0

Table 5 – *Ethnicity of Dropout Participants' Fathers*

Ethnicity	Frequency	Percent
Caucasian	41	74.5
African American/Black	1	1.8
Hispanic	2	3.6
Asian (e.g. Chinese, Japanese)	8	14.5
East Indian, Pakistani	1	1.8
Other	2	3.6
Total	55	100.0

Table 6 – *Descriptive Statistics of Piano Student Dropouts*

Descriptive	Number	Minimum	Maximum	Mean	Standard Deviation
Age Started Lessons	55	3.0	13.5	6.96	2.10961
Age Stopped Lessons	54	8.0	17.5	12.04	2.33817
Years Total	54	1.0	10.0	4.93	2.25507
Current Age	55	8.0	17.6	13.11	2.45211

The dropout group was compared with a group of students still taking piano lessons and planning to continue. This data was gathered in previous years by researchers in the Piano Pedagogy Research Laboratory using the same questionnaire with the same inclusion criteria, and permission to use secondary data had been granted before beginning the study. There were 153 participants in the continuing group of which 100 were female and 53 were male. Participants ranged in age between 6 and 20 years old with an average of 11 years old (see Table

7). Students in this group began lessons, on average, at 6.3 years old and had taken lessons for an average of 4.76 years at the time they completed the survey.

Table 7 - *Descriptive Statistics of Continuing Piano Students*

Descriptive	N	Minimum	Maximum	Mean	Std. Deviation
Age Started Lessons	153	3.0	13.0	6.30	2.06495
Years Total	153	0.2	13.5	4.76	2.71818
Current Age	153	6.0	20.0	11.00	2.88714

### **Procedure and Setting**

This study was approved by the University of Ottawa Research Ethics Board prior to beginning data collection (see Appendix 4). Participants were recruited by contacting their former piano teachers (see Appendix 5) who were members of the Alberta Registered Music Teachers' Association, Saskatchewan Registered Music Teachers' Association, and the Alberta Piano Teachers' Association. Teachers were asked to contact former students, distribute invitation letters (see Appendix 6), and gain permission to forward the parents' contact information to the researcher. Qualifying former students must have taken formal piano lessons with a professional teacher for at least one academic year, did not reach a moderate mastery of the instrument as characterized by the failure to reach a Grade 8 playing standard, discontinued lessons within the previous five years, and now be between the ages of 9 to 17 years old. In total, 210 teachers were contacted individually by email but only 33 were able to connect the researcher with eligible participants. Although teachers were assured that connecting the researcher with former students would not reflect poorly on their teaching efforts, teachers were generally hesitant to follow through.

Students and parents began by signing a consent form, but were assured that personal information would be kept confidential and only group averages would be published. Using the

*Survey of Musical Interests*, students and parents were asked to simultaneously fill out traditional pen-and-paper questionnaires. Typically, the researcher visited the families' homes where one parent would be stationed in the living room while the student and researcher went through questions together in the kitchen. Some families agreed to meet at public libraries, coffee shops, or even shopping malls but were always stationed separately such that parents could not influence students' answers. Participants were informed that there were no right or wrong answers; they were asked to simply express their own views by circling the appropriate numbers or filling in the appropriate blanks. The questionnaire was administered by the same researcher and was explained in the same way each time using a point-form script (see Appendix 7) which gave all participants an equal description and produced the fewest differences possible. Questionnaires took an average of 35 minutes in total to complete.

### **Dependent and Independent Variables**

The independent variable was the result of dropping out of piano lessons, and the dependent variables stemmed from the research questions. Predictors which may have impacted student dropout included socioeconomic status (McCarthy, 1980; Corenblum & Marshall, 1998), musical ability (Mawbey, 1973), academic achievement (Young, 1971; Frakes, 1984; Klinedinst, 1991), musical achievement (Flowers, Sasaki & Costa-Giomi, 2005), parental support (Govel, 2004; Chardos-Camilli, 2010), practice habits (Dyal, 1991; Graziano, 1991; Govel, 2004; Costa-Giomi, 2004; Van Cleave, 2010, McPherson & Davidson, 2002), and commitment to playing (McPherson, 2000). These seven areas of predictors were considered to be dependent variables. Other dependent variables were examined as open-ended, invoked reasons, and we anticipated that these might confirm the predictors as the reasons for dropping out, or be related to motivation. The review of literature outlined that students with low levels of autonomous

motivation did not demonstrate self-motivation in their learning and those who lost motivation lacked the self-efficacy to persevere (Pitts, Davidson & McPherson, 2000). Unmotivated students also displayed deficiencies in at least one of the three psychological needs of competency, relatedness, and autonomy required for meaningful motivation (Evans, McPherson & Davidson, 2013). These areas of influence on motivation were also considered to be dependent variables.

### **Analysis**

The data from each student and parent survey was manually entered into the Statistical Package for the Social Science (SPSS) computer program as part of the Piano Pedagogy Research Laboratory at the University of Ottawa. SPSS is the most widely used program for research and statistical analysis in the social sciences. Used by many students in education, humanities, music, and social sciences, SPSS is a program which can perform highly complex data manipulation and analysis but with a simple architecture and instructions, similar to Microsoft Excel. Consistent with the previous data entries from the *Survey of Musical Interests*, a coding sheet had been developed which assigned a specific number to each answer in the questionnaire, and only numeric figures were entered to SPSS. After each survey response was entered, the SPSS system allowed researchers to perform statistical analysis of descriptive and multivariate statistics, using the independent samples T-test and chi-squared contingency test. The Independent Samples T-test allowed researchers to compare two different groups on a continuous dependent variable and determine if there is a measurable difference between the two groups. The chi-square test, which tests the null hypothesis that the variables are in fact related to one another, was used to compare expected data with what was actually collected and shows any

discrepancies between the expected results and the actual results. Tables and graphs presenting findings from the statistical analysis will be presented in the results section.

## Chapter Three: Results

### Predictors of Piano Student Dropouts

Research Question One asked about the predictors which might influence dropout in piano students, and researchers investigated socioeconomic status, musical ability, academic achievement, musical achievement, parental involvement, practice time, and the length of time students anticipated taking music lessons. The combined annual family income was not asked, but socioeconomic status was deduced by combining the level of parental academic degree with occupation. While socioeconomic status represented a significant place in the literature, it seems to not play as strong a financial role with private piano lessons, but a significant cultural role. Private lessons are costly and typically only accessible to those with a strong financial status. The overall careers between the continuing group and dropout group were not significant (see Table 8), and most parents pursued academic careers such as nursing, education, law, or business. Within the mothers' group, researchers noticed some discrepancy with occupation, and found that there was a statistically significant difference such that the dropout group had much higher instances of stay-at-home mothers (see Table 9). There were also important findings between the mothers' academic degrees, such that the dropout group's mothers were overall less educated and the continuing group scored higher in educational background (see Table 10).

Table 8 – *Parental Occupations in Continuing and Dropout Groups*

Occupation	Father		Mother		$\chi^2$ Contingency Results Father			$\chi^2$ Contingency Results Mother		
	Continuing (n)	Drop out (n)	Continuing (n)	Drop out (n)	df	$\chi^2$	p	df	$\chi^2$	p
Academic "white collar"	115	42	107	34						
Trades or Diploma	21	10	29	18						

"blue collar"										
Total	136	52	136	52	1	0.39	0.531	1	3.54	0.060

Table 9 – Comparison of Stay-at-Home Mothers in Continuing and Dropout Groups

Stay-at-Home Mother	Continuing (n)	Dropout (n)	$\chi^2$ Contingency Results		
Yes	17	13	df	$\chi^2$	p
No	136	42	1	5.14	0.023

Table 10 – Comparison of Academic Degrees in Continuing and Dropout Groups

Academic Degree	Scale range	Mean		SD		Statistical results		
		Continuing	Drop out	Continuing	Drop out	t	df	p
Mother	1 to 6	3.11	2.75	1.02	0.82	2.387	206	0.018
Father	1 to 6	3.12	2.87	1.14	1.11	1.381	205	0.169

Low levels of musical ability and musical achievement were shown to be a predictor of student dropout in band and school music settings, and is significant in piano settings as well. While we did not administer a standardized musical competency test, researchers measured musical ability and achievement by asking questions regarding rate of progress, parental rating of piano their child's piano playing ability, amount of effort required for success, and their involvement in piano exams. There was a significant difference in the students' rate of progress either at the time of dropping out or upon taking the survey (see Table 11). It seems that students who dropped out had reached significantly lower playing level, despite taking lessons for slightly more time. After an average of 4.76 years of lessons, the continuing students on average were playing at a Grade 4 conservatory level, while after an average of 4.9 years of lessons, the dropout students were playing at an average of Grade 2 conservatory level. We asked the student's opinion of their own – or the parent's opinion of their child's – overall musical ability

and there was a statistically significant difference between responses (see Table 12). The dropout students acknowledged that their musical ability was not as strong as the continuing students, but their responses still placed them slightly “above average” despite dropping out. Parents answering this same question rated their children even higher than the children themselves and the answers between groups of parents proved also statistically significant. Next, we measured musical ability by the effort required to succeed at playing the piano. Both parents and students within the dropout group responded that they would have to work about the same as most other students to be successful. Meanwhile, parents and students in the continuing group responded that they would need to work about the same, or even somewhat harder, in order to be successful. These results all proved significant. We asked participants’ opinions regarding whether musical ability was something one is born with, can be developed by working on it, or a combination of both (see Table 13), and parents and students of both groups strongly responded that musical ability was a mixture of nature and nurture. Finally, musical achievement was measured by asking about students’ involvement in piano exams and the dropout group reported achieving these milestones less often than their continuing peers (see Table 14). While these results are not as strong as others reported, they approached acceptable levels of statistical significance.

Table 11 – *Grade Level of Students at Time of Dropout or Survey*

Conservatory Grade Level	Continuing (n)	Dropouts (n)	$\chi^2$ contingency results		
			DF	$\chi^2$	p
0 to 1	23	20	3	15.76	0.001
2 to 4	32	20			
5 to 7	27	6			
8 to ARCT	25	2			

Table 12 – Parent and Student Responses of Musical Ability and Achievement

Rating of Piano Playing Ability	Scale range	Mean		SD		Statistical results		
		Continuing	Drop out	Continuing	Drop out	t	df	p
Child	1 to 5	3.61	3.15	0.80	0.78	3.739	98.17	0.000
	Parent	1 to 5	3.59	3.40	0.74	0.53	2.106	125.62
Required Effort to Succeed at Piano	Scale range	Mean		SD		Statistical results		
		Continuing	Drop out	Continuing	Drop out	t	df	p
Child	1 to 3	2.46	2.16	0.57	0.54	3.497	101.50	0.001
	Parent	1 to 3	2.31	2.05	0.57	0.40	3.544	135.17

Table 13 – Opinions of Musical Ability as Nature or Nurture

Children's Opinions	Musical Ability	Continuing (n)	Dropouts (n)	$\chi^2$ contingency results		
	Born with	13	4	DF	$\chi^2$	p
	Develop by working on it	54	24	2	1.20	0.548
	Both	86	27			
Parents' Opinions	Musical Ability	Continuing (n)	Dropouts (n)	$\chi^2$ contingency results		
	Born with	5	1	DF	$\chi^2$	p
	Develop by working on it	31	8	2	1.31	0.519
	Both	116	46			

Table 14 – Musical Achievement Viewed Through Exam Participation

Exam Participation	Continuing (n)	Dropouts (n)	$\chi^2$ contingency results		
No	83	38	DF	$\chi^2$	p
Yes	70	17	1	3.66	0.056

The next predictor, academic ability, proved to be non-significant. The researchers did not have access to participants' academic records from school, but parents were asked to assess their children's overall academic abilities. The groups of continuing and dropout parent responses proved similar (see Table 15). All parents from both groups responded that their

children's academic abilities were generally higher than average. While low academic ability was previously shown to be a predictor of music student dropout, it seems that very few students were reported to have low academic abilities, and that academic ability had no effect on the decision to discontinue piano lessons.

Table 15 – *Parent Ratings of Children's Academic Ability*

Academic Ability	Scale range	Mean		SD		Statistical results		
		Continuing	Drop out	Continuing	Drop out	t	df	p
Parent	1 to 5	4.16	4.13	0.81	0.64	0.334	119.48	0.739

Parental involvement was anticipated to be a major predictor of student dropouts, however almost none of the initial results proved significant (see Table 16). The rate at which parents attended piano lessons alongside their children, contacted the piano teacher outside of lessons, or helped with practice at home was similar between continuing and dropout groups. Additionally, researchers inquired about praise and rewards given for home practice or major piano milestones, such as completing a piano book or taking an exam. Most answers were again similar between the two groups, with the exception of rewards given for milestones where the continuing group parents scored significantly higher in this area. Since parents primarily determine the daily musical environment, researchers also asked what types of music the family listened to and their attendance at professional classical concerts (see Table 17). Here, there was a significant difference between the two groups. The dropout students spent more time listening to pop or country, less time listening to classical, and had fewer attendances at concerts. The continuing students were exactly the inverse. Researchers asked about the parents' music background (see Table 18). We found a surprising difference: while the fathers were similar in both groups, the mothers of dropout students had a significantly higher proportion of music

backgrounds themselves compared to the continuing mothers. Finally, the home musical environment and family culture seemed to have an impact all children, since results reveal that the dropout group also has a significantly higher instances of siblings who had started but stopped music lessons, and the continuing group had significantly higher instances of siblings who were currently involved in music lessons (see Table 19).

Table 16 – *Comparison of Parental Involvement in Continuing and Dropout Groups*

	Scale range	Mean		SD		Statistical results		
		Continuing	Drop out	Continuing	Drop out	t	df	p
Parent Attends Piano Lesson	1 to 5	2.92	2.53	1.56	1.44	1.616	206	0.108
Contact with Piano Teacher	1 to 5	3.94	3.48	1.12	1.12	1.682	100	0.096
Help with Practice at Home	1 to 5	2.99	3.11	1.25	1.11	-0.610	205	0.543
Praise for Practice at Home	1 to 5	3.76	4.00	0.90	0.84	-1.707	205	0.089
Rewards for Practice at Home	1 to 5	1.86	1.91	0.98	0.90	-0.337	205	0.737
Praise for Milestones and Achievements	1 to 5	4.36	4.24	0.86	0.79	0.948	205	0.344
Rewards for Milestones and Achievements	1 to 5	2.58	1.93	1.30	0.95	3.944	126.63	0.000

Table 17 - *Comparison of Musical Environments in Continuing and Dropout Groups*

	Scale range	Mean		SD		Statistical results		
		Continuing	Drop out	Continuing	Drop out	t	df	p
Listen to Classical Music	1 to 5	2.59	2.00	1.05	1.00	3.596	206	0.000
Listen to Pop Music	1 to 5	3.44	3.84	1.12	0.74	-2.906	145	0.004
Listen to Country or World Music	1 to 5	2.37	2.71	0.93	1.10	-2.188	206	0.030
Listen to Jazz Music	1 to 5	1.97	2.00	0.91	1.11	-0.172	206	0.863
Attend Professional Concerts	1 to 5	2.10	1.78	1.01	0.81	2.364	118.71	0.020

Table 18 - *Comparison of Parental Music Backgrounds in Continuing and Dropout Groups*

Mother Taken Music Lessons	Continuing (n)	Dropout (n)	$\chi^2$ Contingency Results		
Yes	86	45	df	$\chi^2$	p
No	67	10	1	11.38	0.001
Father Taken Music Lessons	Continuing (n)	Dropout (n)	$\chi^2$ Contingency Results		
Yes	66	32	df	$\chi^2$	p
No	86	23	1	3.53	0.060

Table 19 – *Sibling Involvement in Music Lessons in Continuing and Dropout Groups*

Siblings in Music Lessons	Continuing (n)	Dropout (n)	$\chi^2$ Contingency Results		
Yes	101	18	df	$\chi^2$	p
No	12	2	2	53.04	0.000
Started but Stopped	12	32			

Practicing was outlined in the literature to be one of the strongest predictors which leads to successful or unsuccessful piano lessons. In our results, we discovered that while there was not a clear difference between minutes in each practice session, but there was a strong difference between days practiced per week (see Table 20). The statistics show that dropout students practiced about the same number of minutes per session as the continuing students: about 20 to 25 minutes for beginner and grade one, and 25 to 30 minutes for grades two to four. The significant difference was discovered in the days of practice per week, where continuing beginner students practiced one more session per week than those at the same level who dropped out, and continuing grades two to four students practiced almost two more sessions per week than the same level dropout students. When multiplying the number of minutes per practice by days per week, there is a noticeable difference. Continuing students in beginning and grade one levels practiced a total of 108 minutes per week, compared to dropouts who practiced 69 minutes per week; continuing students in grades two to four practiced a total of 155 minutes per week,

compared to dropouts who practiced 81 minutes per week. There was not enough data in the more advanced grade levels to make accurate comparisons between both groups.

Table 20 - *Comparison of Practice in Continuing and Dropout Students*

Conservatory Grades	Days per week	Mean		SD		Statistical results		
		Continuing	Drop Out	Continuing	Drop Out	t	df	p
Beginner - 1	1 to 7	4.54	3.43	1.39	1.65	2.415	41	0.020
2 - 4	1 to 7	5.03	3.30	1.28	1.34	4.667	50	0.000
Conservatory Grades	Minutes per day	Mean		SD		Statistical results		
		Continuing	Drop Out	Continuing	Drop Out	t	df	p
Beginner - 1	1 to 30	23.70	20.10	11.52	10.47	1.064	41.00	0.293
2 - 4	1 to 45	31.00	24.58	12.94	10.05	1.853	49.00	0.070

Lesson longevity asked parents and students to think back to when they first began piano lessons and estimate how long they had expected to continue. Our results found that both students and parents in the dropout group showed significantly lower mean values than the continuing students. Dropout parents and students responded that lessons would take lessons until the end of elementary or middle school, but continuing parents and students responded that lessons would continue until the end of high school or even beyond. Longevity can also be viewed through the interest of continuing to play as an adult, and we discovered that continuing parents thought their children would “probably” or “most likely” play the piano as an adult, while the dropout parents thought their children would only “maybe” or “probably” continue to play as an adult, and this difference proved statistically significant (see Table 21).

Table 21 – *Lesson Longevity in Continuing and Dropout Students*

Length of Time Lessons Would Continue	Scale range	Mean		SD		Statistical results		
		Continuing	Drop Out	Continuing	Drop Out	t	df	p
Child	1 to 4	3.25	2.09	0.86	0.82	8.653	206	0.000
Parent	1 to 4	3.66	2.78	1.43	1.05	4.657	118.95	0.000

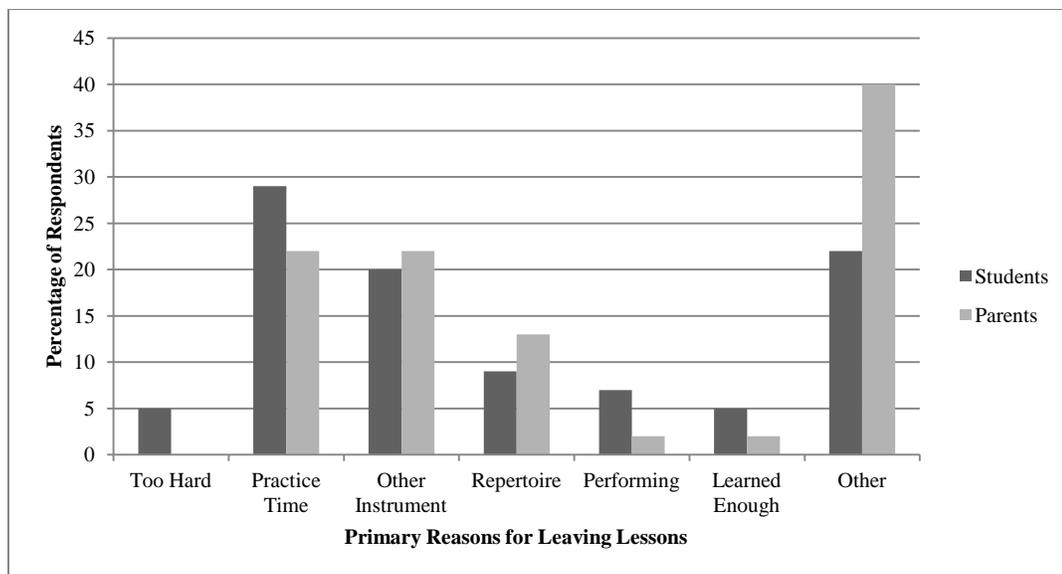
Piano Playing as An Adult	Scale range	Mean		SD		Statistical results		
		Continuing	Drop Out	Continuing	Drop Out	t	df	p
Parent	1 to 5	3.60	2.75	0.09	0.18	4.665	78.23	0.000

### Invoked Reasons for Piano Student Dropouts

To answer Research Question Two, we wanted to directly ask students and parents their primary, invoked reasons which led to leaving piano lessons. While we expected that most invoked reasons would align with predictors, or be impacted by low levels of motivation, the decision to leave lessons may have had little to do with either of those previous questions. We were also searching for irregular circumstances which may have explained the discontinuation of piano lessons, and these invoked reasons may have illuminated a gap in the literature. Answers to the open-ended and multiple choice questions were analysed and grouped based on themes which examined the “presence of key concepts in the text and evaluate[d] the frequency with which particular words occurred” (Hamilton & Corbett-Whittier, 2013, p. 139). The first step was to read all responses in sequence noting patterns and themes, next create general categories of meaning, then go through the responses one by one to identify the overall theme of each participant’s response, and finally cluster each response into the previously labeled categories. Answers were coded and grouped into larger, overarching topics for ease of explanation and analysis and as researchers in educational methods confirm, “the data analysis here is almost inevitably interpretive” (Cohen, Morrison, & Manion, 2005, p. 282). Participants’ answers were categorized based on the overall sense, rather than taking in every minute detail, and this reduction of information was necessary to present generalized data.

We asked both students and parents what they thought their main reason was for dropping out (see Figure 6). Students most frequently (29%) cited that they dropped out of piano

lessons because they did not have enough time to practice, and (20%) that they wanted to play another instrument. However, many students (22%) answered “other” and simply cited a general lack of interest. Students wrote that they were generally “not interested” in piano lessons any longer or became “bored of it”, but could not identify the precise cause of these feelings. Two students wrote that they were “tired of playing the same songs over and over” or “didn't enjoy playing scales” and disinterest with the lesson content was the main reason they dropped out (see Appendix 8). Similarly, a large group of parents (22%) answered that they did not have enough time to practice or (22%) that their child wanted to play another instrument. The most common response from parents (40%) was “other” and these have been categorized into three topics: a general lack of interest, extra-musical reasons, and practice problems. First, many parents echoed their student’s comments about generally losing “interest in playing piano music”, but parents gave slightly more depth, for example, as one claimed that dropping out was because her daughter “didn't love it and wasn't born with interest.” Second, the extra-musical reasons given were quite diverse and included mental health issues, cost, a dissatisfactory relationship with the teacher, the amount of schoolwork, or moving away, but this group of parents was clear that leaving piano lessons was a difficult decision which had nothing to do with a lack of interest or motivation. Finally, not only did parents feel practice problems were the main reason for leaving lessons and added comments such as “she did not enjoy practicing and chose to stop lessons”, these parents expressed that the process of practicing was unbearable and the word “fight” appears in the comments twice (see Appendix 8).



*Figure 6.* Primary Reasons for Leaving Piano Lessons

In other questions throughout the survey, the results showed that interfering school homework, preferring a different instrument, and involvement in sports were also strong reasons of why students chose to discontinue lessons (see Figure 7). About one quarter (24%) of students and approximately the same amount of parents (22%) answered that interfering homework from school was indeed a factor in leaving piano lessons. Building on what was shown above, one-third (33%) of students and almost the same number of parents (27%) confirmed that their piano lessons ended in order to play another instrument, and by far the most commonly referenced instrument in both the parent and student answers was guitar. While school band instruments such as clarinet, drums, and baritone appeared in the answers, and string instruments such as violin and cello were mentioned, the combined total of all these instruments was still less than guitar. Finally, the largest group of students (42%) and almost one-third of parents (29%) responded that interest in sports was a factor in dropping out. Team sports such as hockey were the most popular response, individual sports such as skiing and equestrian were mentioned, and finally, dance appeared twice in the answers.

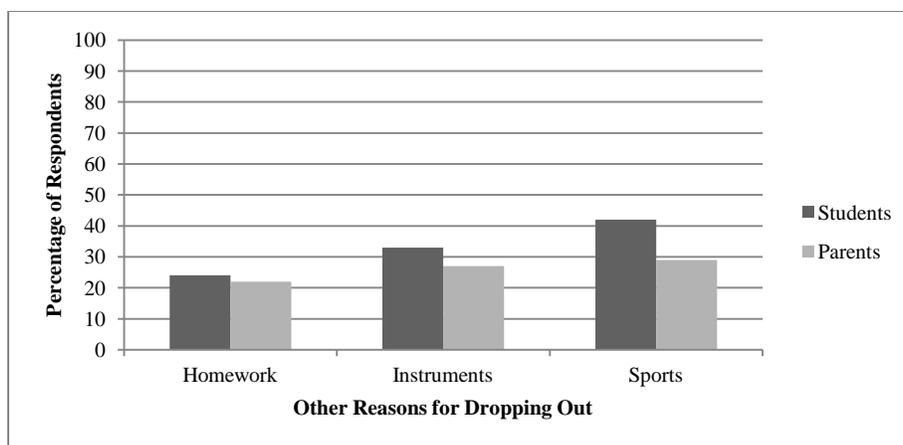
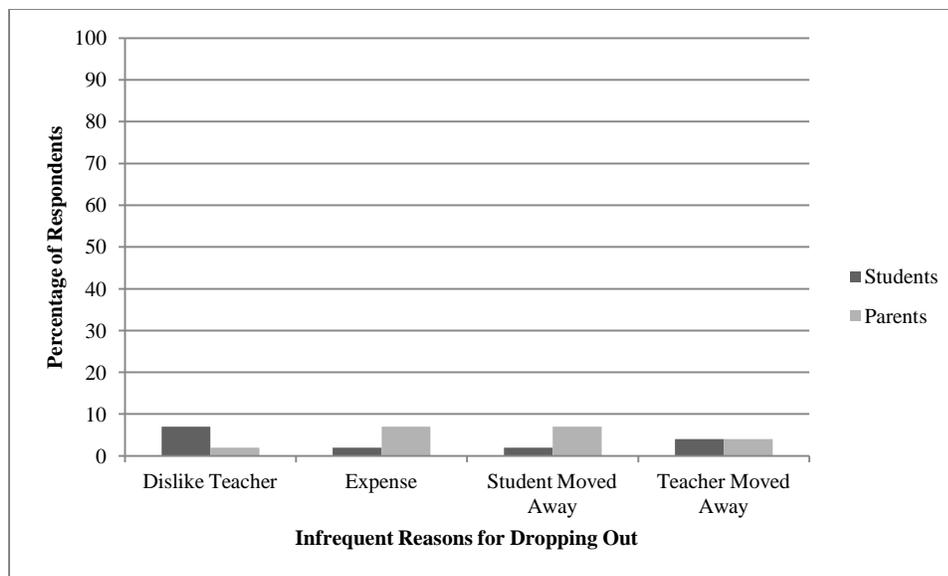


Figure 7. Other Reasons for Dropping Out of Piano Lessons

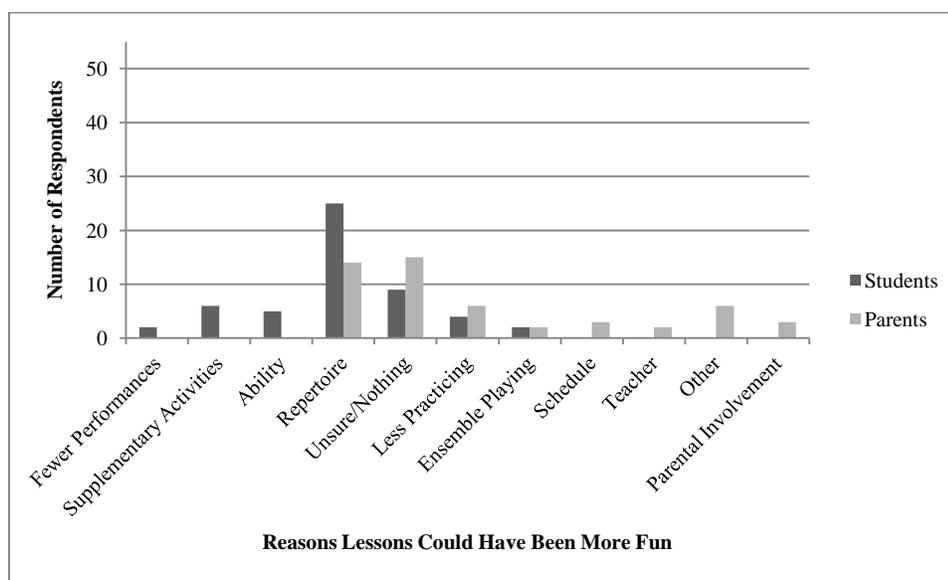
In contrast, results showed that sudden or uncontrollable circumstances such as disliking the teacher, cost, and moving away, were in fact not determining reasons for dropping out (see Figure 8). Very few participants (7% of students; 2% of parents) responded that lessons ended due to disliking their piano teacher. Students remembered that their former teacher was “very flexible and worked with [them] to find what worked/helped...”, or that the teacher “was dedicated, funny, caring, and wanted [them] to succeed...”. The most commonly used words by students regarding their teacher were *nice*, *kind*, or *helpful*. Similarly, parents appreciated their former teacher’s ability to balance high expectations and structured lessons with an ability to relate to students, such that one parent wrote that their former teacher was “talented, easy to connect with, [and] geared lessons to child's ability and interests.” Next, very few participants (2% of students; 7% of parents) thought that lesson costs were a factor in their decision to leave piano lessons. Finally, only four parents and one student identified their moving away as the main reason for stopping lessons, and only two parents and their two children identified their teacher’s departure as a reason for stopping piano lessons.



*Figure 8.* Infrequent Reasons for Dropping Out

It is possible that the reasons for dropping out of piano lessons were not because of a certain factor, but due to the lack of a certain factor, and both parents and students were asked what would have made piano lessons more fun (see Figure 9). The overlapping categories for both parents and students included different repertoire, less practice time, ensemble playing, and no changes. Almost half of students (45%) felt very strongly – and parents (25%) somewhat agreed – that a wider variety of repertoire, more choices in their pieces, and the ability to play by ear would have made lessons more fun. One student wished that she was able “to choose some music to play as well as the vital things” and one parent echoed that “learning music meaningful to [my daughter] versus grades or specific programs” would have made lessons more fun. To a much lesser extent, parents (11%) and students (7%) agreed that less practice time would have made lessons more fun, and while parents recognised that this was not a realistic solution, certain students were quite determined that “not having to practice every day” would have made lessons more fun. Ensemble playing or group lessons was not a strong sentiment, but they did appear twice in both parent and student responses. Finally, there was a significant amount of students

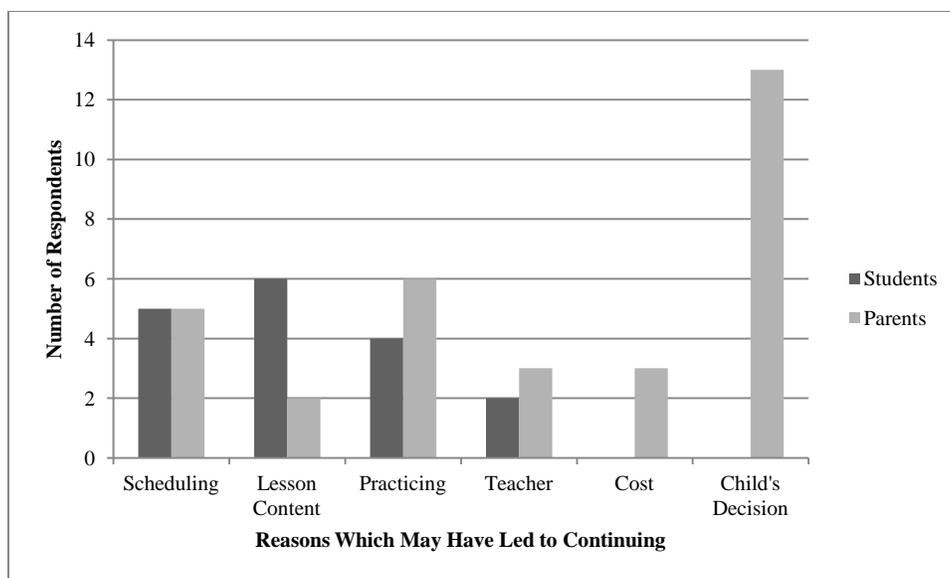
(16%) and far more parents (27%) who explained that nothing would have made their lessons more enjoyable. As one parent explained, their former teacher’s studio “was a perfect match for [her daughter’s] goals and personality” and one student reported that she “liked [her] piano lessons the way they were.” The categories above represent the greatest amount of responses, however students uniquely identified certain areas such as increased overall ability, more supplementary activities such as theory or music games, less technique, or fewer performances which would have made lessons more enjoyable. In contrast, parents uniquely identified different areas such as scheduling, more parental involvement on their part, teacher issues, and other reasons such as peer involvement that would have made lessons more fun.



*Figure 9.* Reasons Lessons Could Have Been More Fun

Despite these invoked reasons for dropping out, or elements missing from lessons, students and parents were asked if anything could have changed their minds from leaving piano lessons (see Figure 10). The students (31%) and parents (58%) who responded yes to this question created overlapping themes of scheduling, lesson content, practicing, and teacher. The five students and five parents who referred to scheduling often wrote that if their “schoolwork

were less rigorous” or if they generally had “more time”, this may have changed their minds from dropping out. Lesson content may have led to continuing, for example as one student wrote that “perhaps if [she] was given more freedom in the songs [she] played” and one parent echoed that “if [her daughter] were creatively challenged or engaged” they may not have dropped out. The students who cited practicing as being able to change their minds wished for generally “less practicing”, while parents would have changed their minds if there was “less complaining about the practicing” or if their student “wouldn't have fought with [them] around practicing”. Differences in teacher may have led to a few participants continuing and one parent wrote that “... finding a teacher who makes it more meaningful to the individual” would have changed their minds. Parents uniquely identified other areas such as cost or the decision to leave piano lessons being primarily their child’s decision. The most common words cited in the parent responses were “interest” and “continue”, which generally give the sense that piano lessons would have continued if the student was simply interested. Thirteen parents – by far the largest group – wrote that their children were set on the decision to leave lessons and nothing would have changed their minds. For example, some parents wrote that they “would have loved for [their child] to continue...” or that they “did not want [their child] to drop out”, but other parents plainly wrote that “if [her] daughter would have wanted to continue, [they] would have continued.” The tone of parents’ responses was somewhat defeated as they had already, unsuccessfully, tried to change their child’s mind from leaving piano lessons. Finally, a small group of students and parents cited that nothing really could have changed their minds from dropping out, for example, as one student wrote that she “still felt like that her teacher had more to teach her, but she wouldn't be motivated enough to appreciate [the teacher’s] efforts.”



*Figure 10.* Reasons Which May Have Led to Continuing

In closing, both students and parents were asked if they would ever consider returning to piano lessons in the future. Most students (65%) were quite determined that they would not return to piano lessons compared to only one-third (33%) of parents. The most common words cited by students were “playing” and “time” and most responses focused on either playing for personal enjoyment or not having enough time for formal lessons. For example, one student wrote that they “just play stuff by ear for fun, and lessons were just added stress”, and similarly, one parent wrote that their child was “busy with other activities [and] not interested anymore.” On the other side of the spectrum, less than a quarter of students (24%) and even fewer parents (18%) claimed they did intend to return to piano lessons someday. Students who thought they would take piano lessons again frequently spoke of scheduling and cited their continued interest, time permitting. For example, one student wrote that she “would love to pick it up again if the opportunity arises.” Likewise, parents also addressed present time constraints but an inner interest as the reason their child would return to lessons, and wrote such things as “yes, she does enjoy playing the music she likes.” Lastly – and most surprisingly – the largest group of parents

(47%) and even some students (11%) responded that piano lessons may be an option again in the future. One parent wrote that her child would return to lessons “perhaps in adulthood if she chooses to refine her talent or learn more to play with friends”, and another responded that her son “loves music and is in a band option at school... he's cultured a lifelong love.” The most commonly cited word throughout the parent responses was *possibly* and it seemed that parents wanted their children to continue and hoped their resistance to lessons was just a passing phase.

### **Motivation in Piano Student Dropouts**

Research Question Three asked if piano students dropped out due to low levels of autonomous motivation. Data for this question was gathered solely with the student component of the *Survey of Musical Interests*. Students were asked to think back to how they felt when they were still involved with piano lessons, rather than their current opinions of piano lessons, to a past-projection of their motivation. Researchers combined students’ answers concerning Intrinsic, Integrated, and Identified motivation into one group labeled “Autonomous Motivation”; Introjected, and Externally regulated motivation into one group labeled “Controlled Motivation”; the final group of Amotivation questions remained independent. We can see that while the students who dropped out of piano lessons still showed higher levels of autonomous and controlled motivation, there is a notable mean value for amotivation (see Table 22). The results directly below show the averages for all 55 dropout students.

Table 22 – *Average Values of Dropouts’ Types of Motivation*

Type of Motivation	Scale range	Mean	Standard Deviation
Autonomous	1 to 7	3.42	1.35
Controlled	1 to 7	2.60	1.07
Amotivation	1 to 7	2.56	1.15

To gather motivation results within the dropout student group, researchers used the Independent Samples T-test, however the data for amotivation proved to be highly skewed. Since this section of data caused a non-normal distribution, the comparison of means tests researchers performed were not valid and led to a necessary manipulation of data. Researchers attempted various ways to reduce the skew for amotivation and were successful by taking the inverse ( $1/\{\text{original score}\}$ ) and reversing it so that the higher number still equates to a higher original score. Researchers reversed it by the formula  $1-\{\text{inverse}\}$  and the transformation is the reverse of the inverse of amotivation (see Table 23).

Table 23 – *Examples of Amotivation Response Transformation*

Amotivation Scale Response	Inverse of Amotivation	Reverse of Inverse of Amotivation
1	1.00	0.00
2	0.50	0.50
3	0.33	0.67
4	0.25	0.75
5	0.20	0.80
6	0.17	0.83
7	0.14	0.86

We discovered that there is essentially no statistically significant difference between male and female former piano students' responses for motivation (see Table 24). As with previous studies (Comeau, Huta & Liu, 2015), this reveals that gender has no effect on motivation. This table directly below also shows participants' responses regarding interest in piano performance, hard work, and creativity, as well as responses regarding piano learning activities. Females did show statistically significant higher levels of creativity than males in piano learning, however no other results proved significant.

Table 24 – Comparison of Female and Male Dropout Students' Motivation

Type of Motivation	Scale range (if applicable)	Mean		SD		Statistical results		
		Female	Male	Female	Male	t	df	p
Autonomous	1 to 7	3.52	3.26	1.21	1.56	0.706	53	0.483
Controlled	1 to 7	2.71	2.40	1.13	0.97	1.048	53	0.299
Amotivation		0.51	0.52	0.24	0.25	-0.122	53	0.903
Interests	Scale range	Mean		SD		Statistical results		
		Female	Male	Female	Male	t	df	p
Performance	1 to 7	4.16	3.74	1.24	1.04	1.291	53	0.202
Hard Work	1 to 7	3.76	3.34	1.03	0.87	1.580	53	0.120
Creativity	1 to 7	5.11	4.44	0.93	1.08	2.440	53	0.018
Activities	Scale range	Mean		SD		Statistical results		
		Female	Male	Female	Male	t	df	p
External	1 to 7	3.40	3.07	1.10	0.87	1.183	53	0.242
Combination	1 to 7	5.07	4.68	1.14	1.24	1.208	83	0.233
Internal	1 to 7	2.95	2.89	1.00	1.44	0.177	53	0.860

Within the 55 dropout students, there was a sub-group of 18 students who wanted to play other instruments. It was thought that those who showed a general interest in music and simply wanted to switch to another instrument would show higher levels of autonomous motivation than those who stopped all music lessons. Students in the “Switched Instruments” group may or may not have actually begun other instrument lessons at the time of being surveyed: most students simply cited the potential interest but had yet to follow through. While students who wanted to play another instrument showed slightly higher mean values of autonomous motivation, we discovered that there were no statistically significant results between those who were interested in switching to another instrument and those who dropped out altogether (see Table 25). Compared to those who dropped out, the students who wanted to try other instruments showed no significantly different results in any form of motivation, no difference in overall interest in music learning, and no difference in activities music students typically undertake.

Table 25 - *Comparison of Switching Instruments and Dropping Out Groups' Motivation*

<b>Type of Motivation</b>	Scale range	Mean		SD		Statistical results		
		Switched to another instrument	Quit all music lessons	Switched to another instrument	Quit all music lessons	t	df	p
Autonomous	1 to 7	3.69	3.29	1.60	1.21	1.040	53	0.303
Controlled	1 to 7	2.26	2.76	0.94	1.11	-1.621	53	0.111
Amotivation		0.49	0.53	0.24	0.24	-0.467	53	0.642
<b>Interests</b>	Scale range	Mean		SD		Statistical results		
		Switched to another instrument	Quit all music lessons	Switched to another instrument	Quit all music lessons	t	df	p
Performance	1 to 7	4.25	3.88	0.91	1.28	1.086	53	0.283
Hard Work	1 to 7	3.70	3.55	1.03	0.98	0.496	53	0.622
Creativity	1 to 7	4.83	4.86	0.94	1.08	-0.103	53	0.919
<b>Activities</b>	Scale range	Mean		SD		Statistical results		
		Switched to another instrument	Quit all music lessons	Switched to another instrument	Quit all music lessons	t	df	p
External	1 to 7	3.15	3.34	0.86	1.10	-0.625	53	0.535
Combination	1 to 7	4.49	5.14	1.18	1.14	-1.958	83	0.055
Internal	1 to 7	3.04	2.87	1.36	1.09	0.528	53	0.600

In the above results (Tables 24 & 25), there are so few significant findings that they may be Type I errors. In other words, if each analysis has a Type I error risk of .05, then 1 in 20 analyses is likely to look like there is an effect when in reality there is not. Given the 18 analyses above, which is close to 20, the one analysis which shows that females score higher than males on creativity in piano learning may be significant by chance. The extremely significant findings come when comparing the dropout group to a group of students still taking piano lessons and with plans to continue.

### **Motivation in Continuing and Dropout Piano Students**

Before making comparisons between two opposing groups, we must examine the demographics of the participants in question – continuing and dropout piano students – to highlight the similarities and differences. There were 153 participants in the continuing group

and 55 in the dropout group. Despite differing numbers of overall participants, the gender and age balance between the two groups proved to be similar (see Table 26). There was, however, a significant difference regarding the ethnicities of the children (see Table 27). Results showed that there was a statistically significant presence of Asian-background parents in the continuing group and Caucasian-background parents in the dropout group. Researchers also found there was a statistically significant difference as to when children began piano lessons (see Table 28), and results show that those in the continuing group began piano lessons earlier than the dropouts, and reached a higher overall playing level.

Table 26 – *Comparison of Gender and Age in Continuing and Dropout Groups*

	Continuing	Dropouts	$\chi^2$ contingency results		
Female	100	34	DF	$\chi^2$	p
Male	53	21	1	0.22	0.638
Average Age	11.0	13.1	$\chi^2$ contingency results		
			DF	$\chi^2$	p
			14	20.29	0.121

Table 27 – *Comparison of Ethnicity between Continuing and Dropout Groups*

<b>Mother's Ethnicity</b>	<b>Continuing (n)</b>	<b>Dropouts (n)</b>	$\chi^2$ contingency results		
Caucasian	90	44			
East Asian	45	6	DF	$\chi^2$	p
Other	18	5	2	8.726	0.013
<b>Father's Ethnicity</b>	<b>Continuing (n)</b>	<b>Dropouts (n)</b>	$\chi^2$ contingency results		
Caucasian	84	41			
East Asian	49	8	DF	$\chi^2$	p
Other	20	6	2	7.260	0.027

Table 28 – *Age of Students Upon Beginning Piano Lessons*

	Mean		SD		Statistical results		
	Continuing	Dropout	Continuing	Dropout	t	df	p
Age of children when beginning piano lessons	6.27	6.99	2.06	2.15	-2.185	206	0.030

Researchers found stark differences when comparing the motivation of continuing and dropout students (see Table 29). It is notable that all results in the table below are significant findings. Results show that the continuing students had significantly higher levels of autonomous motivation, significantly higher levels of controlled motivation, and significantly lower levels of amotivation. The continuing students also showed significantly higher levels of interest in piano performance, hard work, and creativity in learning. Finally, the continuing students consistently showed higher levels of internal enjoyment, such as playing the piano for fun and making friends with other music students, and lower levels of external activities such as finding excuses to skip practice. The dropout students consistently scored lower on autonomous and controlled motivation, higher on amotivation, showed less interest in all forms of piano learning, and responded that piano activities were more unnaturally driven, such as being forced by parents to practice.

Table 29 – *Comparison of Continuing and Dropout Students' Motivation*

Type of Motivation	Scale range	Mean		SD		Statistical results		
		Continuing	Drop Out	Continuing	Drop Out	t	df	p
Autonomous	1 to 7	4.36	3.42	1.02	1.35	4.674	77.40	0.000
Controlled	1 to 7	3.30	2.60	1.24	1.07	3.711	206	0.000
Amotivation		0.21	0.51	0.18	0.24	-8.546	76.20	0.000
Interests	Scale range	Mean		SD		Statistical results		
		Continuing	Drop Out	Continuing	Drop Out	t	df	p
Performance	1 to 7	4.79	4.00	1.15	1.18	4.335	206	0.000
Hard Work	1 to 7	4.12	3.60	1.07	0.99	3.172	206	0.002
Creativity	1 to 7	5.21	4.85	1.12	1.03	2.091	206	0.038

Activities	Scale range	Mean		SD		Statistical results		
		Continuing	Drop Out	Continuing	Drop Out	t	df	p
External	1 to 7	2.65	3.28	1.07	1.03	-3.779	206	0.000
Combination	1 to 7	4.12	4.92	1.23	1.18	-4.182	206	0.000
Internal	1 to 7	4.04	2.92	1.16	1.17	6.121	206	0.000

Researchers asked if there was a correlation between age and motivation, practice time and motivation, or parental involvement and motivation. We tested the data within both the dropout group and the continuing group (see Table 30). Age and motivation was tested by comparing the age at which the continuing students completed the survey and the age at which the dropout students stopped lessons. We can see that there is a weak correlation between age and autonomous motivation, and scatter plots (see Figure 6) show that autonomous motivation did slightly increase with age in the dropout group. There was no correlation between age and motivation in the continuing group. Practice time was calculated by using the average total number of minutes per week a student practiced, rather than just the individual minutes per practice session. The correlation coefficient  $r$  values below show that there is no linear relationship between practice and motivation and this signifies that practice time has no effect on motivation. Finally, we tested both groups' responses to see if parents attending lessons alongside their children would have an impact on motivation. We found there to be a moderate negative correlation between parent attendance at lessons and autonomous motivation with the dropout students, and a moderate negative correlation between parent attendance at lessons and controlled motivation within the continuing group. There were no significant correlations found between parental help with practice and student motivation.

Table 30 – Correlations Between Age, Practice Time, Parental Involvement and Motivation

<b>Dropout Group</b>	<b>Amotivation</b>	<b>Controlled</b>	<b>Autonomous</b>
Age (at the time of dropout)	-0.18	0.02	0.28*
Practice time (minutes per week)	-0.10	0	0.12
Parent sits in lesson	0.13	-0.17	-0.27*
Parent helps with practice	0.07	-0.06	-0.10
Rewards for piano achievements	-0.24	-0.09	0.29*
<b>Continuing Group</b>	<b>Amotivation</b>	<b>Controlled</b>	<b>Autonomous</b>
Age (when survey completed)	-0.14	0.04	.02
Practice time (minutes per week)	-0.13	0	0.08
Parent sits in lesson	-0.10	-0.20*	0.05
Parent helps with practice	0.12	-0.05	-0.01
Rewards piano achievements	0.03	0.12	0.06

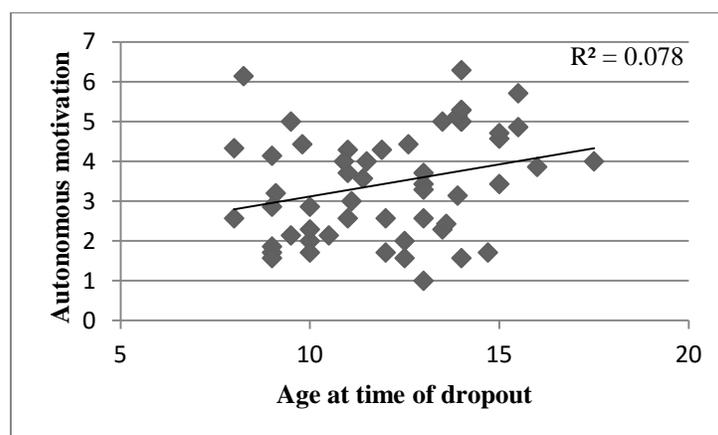


Figure 11. Relationship Between Age and Autonomous Motivation in Dropouts

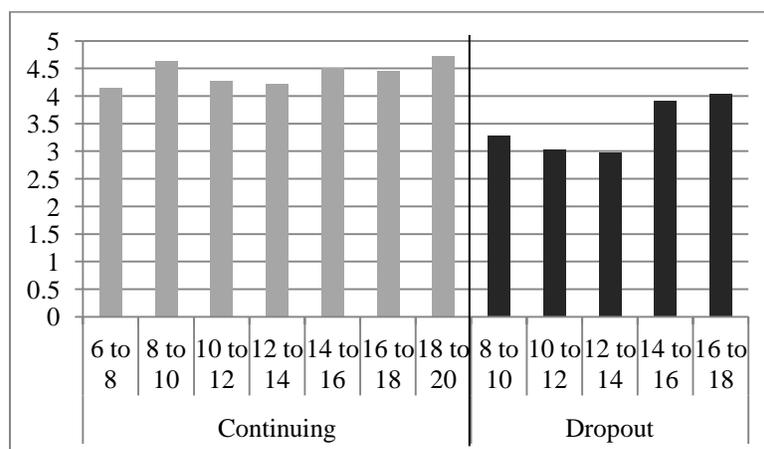


Figure 12. Autonomous Motivation by Age in Continuing and Dropout Groups

## **Chapter Four: Discussion**

The goal of this study was to understand the complexities behind the decision to drop out of piano lessons. More specifically, we wanted to approach the problem from three different angles: predictors, invoked reasons, and motivation. Further, we wanted to see if these invoked reasons would align with or diverge from the motivation correlations and predictors. This section will examine this study's results closely and make interpretations of the data, consider how these results fit with the existing literature, answer the three research questions, and make practical suggestions for teachers and parents wanting to support student learning.

### **Predictors of Dropout**

Research Question One surrounded the predictors connected to drop out, and our results aligned studies which found that socioeconomic status (Young 1971; Corenblum & Marshall, 1998), musical ability (Mawbey, 1973), musical achievement, (Flowers, Sasaki & Costa-Giomi, 2005), parental involvement (Govel, 2004; Chardos-Camilli, 2010), practice time (Dyal, 1991; Graziano, 1991; Costa-Giomi, 2004, Van Cleave 2010; McPherson & Davidson, 2002; Costa-Giomi, 2004), and a lack of long-term commitment to lessons (McPherson, 2000) were the most significant predictors of student dropout. It was notable that the one predictor which did not influence dropout was academic achievement. It became apparent in the analysis that most of the predictors were adept at anticipating student dropout, but did not necessarily impact levels of motivation. The one predictor which did have a slight impact on motivation was parental involvement. We are able to see which predictors connected the most strongly with dropout, and examine each one individually.

Socioeconomic status was inferred based on a combination of parental levels of education and occupation. Our results showed significant findings on the social and cultural side of socioeconomic status, particularly with the educational levels and occupations between mothers. The dropout group's mothers were generally less educated and had far higher percentages of stay-at-home mothers than the continuing group, and this comes in contrast to previous research which found that continuing and dropout piano students were similar in parental employment or parental education (Costa-Giomi, 2004). It is conceivable that the stay-at-home mothers were less driven to succeed in their own career, had generally lower standards of achievement, and this created a different home environment for student learning. Our results suggests that parents who place a high value on academics, partly due to their own high levels of education, will have students who continue with piano lessons. It also speaks to the type of family who enroll and then persist with piano lessons: families who may have read research on the benefits of music lessons, value long-term learning, have high standards of achievement, and can afford to pay for private lessons. While any student can take music at school, it takes a special interplay of parental education, occupation, and financing to register children for private piano lessons. Although we did not directly ask the family's annual income, researcher visits to participants' homes confirmed a very high financial status, and one possible explanation for the percentage of stay-at-home mothers is that they did not need to work based on their spouse's considerable level of income. A possible explanation for dropouts despite a high income level is that parents from a strong socioeconomic status did not encourage their children to pursue music professionally due musicians' lower overall income level, and wealthy families valued music less as a potential career. Our results may support findings done in school music settings that the highest socioeconomic status families had students who valued music significantly less than students in

the lower and middle levels (McPherson, Osborne, Barrett, Davidson & Faulkner, 2015). McPherson and colleagues' (2015) findings suggest that students from more affluent backgrounds are potentially making – or being pressured to make – decisions about their future and careers earlier than students from lower socioeconomic status backgrounds, which may partially explain why well-off students leave piano lessons.

An obvious factor to predict music students' continuation or dropout is musical ability. The results of our study show that children and parents acknowledge two viewpoints: both continuing and dropout groups strongly responded that musical ability was something one is born with and also something that is developed by working on it. The literature is divided on this issue. Some studies attribute music ability to outward effort and environment and suggest that ability is due to “differences in early experiences, preferences, opportunities, habits, training, and practice” (Howe, Davidson & Sloboda, 1998, p. 399), but others believe that musical ability is innately rather than circumstantially determined (Gagne, 1991). The discussion can be complicated because one group of research is referring to externally developed expertise while others are referring to inner natural talent, and meanwhile all under the heading ‘ability’. However, children who feel they are natural musicians are likely to achieve at a higher level than children who have more negative views about their musical ability (Austin, Renwick, & McPherson, 2006). Children in the dropout group of our study cited their own significantly lower levels of musical ability than the continuing students. One student alluded to their lesser innate musical ability and wrote they wished they were “able to play better and had an easier time learning hard pieces”. In spite of reaching a relatively low playing level and dropping out of piano lessons, parents of dropout students rated their child’s music abilities as average or above. Parents of dropout students seemed to be easily satisfied with their children’s lesser musical

abilities compared to continuing students, suggesting that parents who have higher expectations of ability development also have children who stay in piano lessons. For example, one parent thought it was reasonable for her daughter “to finish after her Grade 1 exam.” Interestingly, the dropout parents and students also responded that despite their lower natural musical ability, their children needed to work “about the same” as other students to reach the same level of success. In fact, the dropout students did not work at the same rate as the continuing students: the dropout group practiced significantly fewer days per week which, compound over time, led to less externally developed ability. The students’ recognition of their own lower musical ability, and paired with a less than average amount of effort, suggests that both nature and nurture led to a shortfall in musical ability.

Musical achievement had been shown in the literature (Flowers, Sasaki & Costa-Giomi, 2005) to be a predictor of student dropout, and our results suggest the same. Despite taking lessons for slightly more time, the dropout students achieved less and were less proficient than the continuing students. After an average of 4.9 years of lessons, the dropout students were playing at an average of Grade 2 conservatory level, and after an average of 4.76 years of lessons, the continuing students on average were playing at a Grade 4 conservatory level. With a significantly lower level of achievement, dropout students may have reached fewer milestones, had fewer opportunities to perform in recitals, and were not eligible for exam participation. Our results showed that continuing parents rewarded their students for piano achievements, such as completing a piano book or passing an exam, significantly more often than the dropout students and this could simply be because there was more achievement to celebrate. This difference in achievement may also have impacted motivation, however this is simply a hypothesis for future research. Previous research describes that as achievement “increases motivation for subsequent

tasks it is likely that there is a link between motivation and already acquired expertise” (Hallam, 1998). Students in our study who experienced relative failure compared to their peers’ achievements were more likely to lose interest and dropout.

Academic achievement had been shown in the literature to be a strong predictor of music student dropout (Mawbey, 1973; McCarthy 1980; Klinedinst, 1991). Our results showed that dropout students were in fact rated above average in academic achievement, which came in disagreement with previous studies which predicted low academic achievement would be connected with dropouts. One possible explanation is that the previous studies were done with school music setting where anyone can study any instrument without much prior consideration as to achievement, but that it takes the acknowledgement of strong cognitive ability to even commence study in an instrument as difficult as the piano. Instead, our study supported more recent findings done specifically with piano students which found no differences in cognitive abilities between dropout and continuing groups (Costa-Giomi, 2004). We can infer that the dropout students who had no cognitive inability studying music were strong academically, and their emphasis on academic achievement and high marks at school was such that learning the piano was interfering with their schoolwork. One student wrote that she may “take piano again in the future when [she] finish[es] school”, but for now piano lessons were viewed as interfering with her academic achievement.

Parental involvement was shown in the literature to be a significant predictor of student dropout (Govel, 2004). It was surprising in our results that we found no statistical significance between dropout and continuing group parents’ attendance at lessons, presence at recitals, contact with the piano teacher, and praise of home practice or major piano achievements. In fact, the mean averages suggest that the parents of dropout students helped slightly more with home

practice than the continuing parents. The results suggest that parental involvement did not necessarily correlate with dropout, but did have an impact on motivation: within the dropout group, parents sitting in at lessons and helping with practice negatively correlated with autonomous motivation. Our results seem to describe that the more involved parents were, the more controlled and less autonomously motivated the students felt. Contrary to what we assumed, the mothers of dropout students had significantly stronger musical background themselves. This history of musical training, coupled with a significantly higher percentage of stay-at-home mothers, suggests that parents may have overstepped their boundaries and interfered with practicing at home. Although mothers may have been trying to make helpful suggestions, this could have been perceived by the student as nagging or giving criticism. It could also be that since the mothers were not actualizing themselves in a rewarding career, they put extra demands on their children as a reflection of their own missed success and this could put extreme pressure on a child. On the other side of the spectrum, parents of continuing students with no musical background may have shown delight and celebration at every one of their child's small accomplishments, and results show that within the continuing group, parents sitting in on lessons negatively correlated with controlled motivation. This aligns with previous research which found that close parental supervision could improve performance standards, but a demanding parenting style can have a detrimental effect on autonomous motivation (Chardos-Camilli, 2015). Further, research acknowledges the necessity of parental support, but warns that it must be sensitively offered, with "undue interference often resented by the children, and superficial praise sometimes serving to reduce expectations rather than act as encouragement" (Pitts, Davidson & McPherson, 2000, p. 53). Further, the results imply that mothers may have remembered their own positive feelings of piano lessons when younger, and enrolled their

children for lessons without the students' own, autonomous choice of choosing to play the piano for themselves. While previous research has shown that parental involvement creates higher quality learning, develops stronger student practice habits, greater self-concept in music, and creates students who are more interested in piano performance, creativity, and pursuit of other musical activities (Sichivitsa, 2007; Comeau & Huta, submitted), we must also carefully examine the quality of parental involvement to ensure it is autonomy supportive.

Aside from direct parental involvement, the overall family culture, as viewed through home environment and social preferences, resulted as a surprisingly strong predictor for dropping out and warrants further research. Family culture is a particularly important distinction between piano and other instrumental lessons: the many hours of solitary home practice necessary for mastering the piano are starkly contrasted with school band where the majority of learning takes place during school hours and has immediate social rewards. Taking private piano lessons requires the support of the entire family such that children require a focused practice space with few distractions from siblings, a regular practice time without interfering scheduled activities, and encouragement from parents without negative comments about playing too loudly or complaints about repeating the same passage. Research in music education shows that the best musical learning is achieved when parents and teachers work "in concert so that the unique opportunities and special resources of home and school operate simultaneously and cooperatively to positively influence the growth of children" (Brand, 1986, p. 118). Our results suggest that the home environments of the dropout students did not work in tandem with what was being learned at piano lessons. We found that dropout families spent significantly less time listening to classical music, more listening to pop and country, fewer attendances at professional concerts, less ensemble participation than continuing students. This supports previous findings in

which students referred to classical repertoire as “their” music and never developed ownership of this style of playing (Williams, 2002). It is understandable that a student who has never listened to classical repertoire would not find a connection to playing that style. By listening to classical music and attending professional concerts, parents are also showing the child that these are things consider valuable, and children do not often get that same message at school or from other activities. This suggests that students involved in classically-trained piano lessons must be regularly exposed to various styles of recorded and live piano music by their families. It also seemed that the family culture of dropout students was not supportive of long-term music learning, and our results revealed that a very high percentage of dropout students’ siblings had also started but stopped music lessons. This illustrates a home environment where music lessons are taken without any serious commitment and parental attitudes generally allow for lower standards and little follow-through.

There was a distinct difference between dropout and continuing groups’ practice habits and practicing was confirmed as a predictor of dropout but, surprisingly, not connected to motivation. The early-beginner dropout students practiced 69 minutes per week compared to continuing students who practiced a total of 108 minutes per week, and the late-beginner dropout students practiced only 81 minutes per week, compared to 155 minutes for continuing students of the same level. Our findings were even less that Govel’s study (2004) which found that the reported average practice time of piano students who had dropped out was 100 minutes per week. One former student in our study even admitted that, “if [she] had practiced more so that [she] could have improved quicker, [piano lessons] would have been more fun.” Our results are aligned with other studies which found that continuing students showed a stronger commitment to practicing, higher levels of reflection and self-evaluation during practice, more awareness of

their progress, and better understanding of the purpose and importance of practice than dropouts (Costa-Giomi, 2004). The significant findings particularly came in the number of days per week students were practicing, and results from other studies that found that large amounts of piano practice are not as important as consistency of practice for successful participation in piano study (Duke, Flowers, & Wolfe, 1997). These findings suggest that teachers should work with parents to structure frequent but not necessarily lengthy practice periods for children. While it is generally thought that the more you do an activity, the more you will want to do that activity, practicing did not necessarily predict motivation. It was surprising that despite testing for practice correlations between continuing and dropout groups, between grade levels, or between number of minutes per week, we were not able to find any relationship between practicing and motivation. One possible explanation for this finding is that there are two groups of students: those who have low motivation but higher than average practice times, and those with high motivation but low practice times. The first group could be coerced into practicing by threats or bribes which results in high practice times but negatively impacts their motivation, while the second group genuinely enjoys playing the piano but are overscheduled with other activities to find time to practice. In this case, the groups would neutralize one another. Overall, practicing remains an important predictor in whether students continue or dropout of piano lessons.

Dropout students in our study did not view piano lessons as aligning with their future selves which negatively impacted lesson longevity. Studies show that higher autonomously motivated students “saw music as a part of their identity and future selves” (Comeau, Huta & Liu, 2015, p. 190). However, one dropout student wrote that they just did not “see themselves doing it”, which supports previous findings that of the students who showed no long-term intention of learning their instrument, most had ceased instruction within the following 12

months (McPherson, 2000). It is interesting to note that in both the continuing and dropout groups, the mean averages suggest that parents thought their lessons would continue far longer than their children did. However, dropout parents and students consistently rated lower in their intentions to continue piano lessons long-term or play as adults compared to the continuing group. This suggests that teachers and parents need to have serious discussions with students before lessons begin about the lifelong learning journey and long-term commitment towards playing the piano. These results are similar to previous studies which reference a “rigorous process of initial selection” before beginning lessons to avoid later dropout (Mawbey, 1973, p. 42). Dropout students did not view piano lessons as congruent with their vision of themselves, and this suggests that careful thought must be given before beginning lessons to confirm the child’s long-term interest and ensure they are set up for success. Those already involved in lessons need more dialogue about the ways in which they can inwardly connect with what they are learning. In other words, the questions of the purpose and benefits of learning music should be addressed in different ways for every student to ensure long-term ownership of their piano lessons.

### **Invoked Reasons**

Research Question Two sought to directly ask students and parents their invoked reasons for dropping out and their reasons confirmed the predictors and issues of motivation. Upon asking for the primary reasons behind dropping out, participants responded that they did not have enough time to practice, they wanted to play a different instrument, or that there was a general lack of interest. While practice time was shown to be a strong predictor of dropout, it also implies motivational challenges. Students and parents who referenced practicing generally fell into two categories: involvement with other activities or schoolwork which left little time to

practice despite a desire to do so, and those who could not sustain the motivation for sufficient practice despite the time to do so. It seems that most cases fell into the second category, and parents acknowledged that their children in fact did have enough time to practice, but frequently shared concerns over struggles with practicing. Parents expressed that lessons would have been more fun and may have even continued if there was “less complaining about the practicing”. Practicing became parents’ strongest invoked reason for stopping lessons, appearing multiple times throughout various questions, which matches the literature which references practice time, motivation, and dropout (Pitts, Davidson, McPherson, 2000). Next, the students who did not view playing the piano as desirable often wanted to switch to guitar lessons instead. At this point in history, few rock stars or famous musicians are proficient pianists, and students did not find learning the piano related to the current popular culture. Interestingly, the results showed no significant difference in motivation between those who wanted to switch instruments and those who dropped out altogether, which might suggest that students who wanted to play a different instrument sought to simply gain approval from their peer groups without any serious intention of mastering the instrument with genuine autonomous motivation. Students cannot be carried by the motivation of peer pressure and studies show that motivation to practice an instrument to gain social approval declines markedly by age twelve (Sloboda & Davidson, 1996). Our results suggest that there is a strong social image with playing the guitar, especially for a teenager, and the desire to switch instruments might not be a reflection of how serious they are about music but the reflection of how highly that instrument is valued by peers. Finally, the many comments about a general lack of interest or boredom with lessons speak to the lower overall levels of motivation with dropout students. The dropout students had a significantly lower levels of autonomous motivation than continuing students, their motivation may not have been robust

enough to overcome obstacles and other setbacks such as persevering with a certain piece of music or playing scales. It seems that dropout students gave up more easily due to fragile motivation and a loss of interest.

Other invoked reasons found that involvement in sports was a strong reason of why students leave piano lessons (Dyal, 1991; Govel, 2004). The results suggest that students value the friendship and collaboration of sports teams, and that sports teams are valued more highly in Western culture than music performance as seen through the Olympics, Stanley Cup, or World Cup tournaments. This also supports research which finds that motivation for music lessons significantly declines in the adolescent years, however motivation for sports remains constant from childhood upwards (Wigfield et al., 1997). Our findings revealed that although dropout students did have higher levels of autonomous and controlled motivation than amotivation, and students were not necessarily unmotivated to play the piano, they had stronger interests in other activities. The results of leaving lessons due to sports can also connect to the predictor of practice time. Students who are heavily involved in team sports such as hockey or soccer will not have sufficient time to practice, and this will impact rate of progress and likely lead to drop out. We saw earlier that not having enough time to practice – or not prioritizing daily practice in their schedules – was the primary reason students themselves invoked as their main reason for dropping out. As other research confirms, “not having enough time for something is usually the first plausible reason why one does not participate in an activity” (Evans, McPherson, Davidson, 2012, p. 11).

We found that there were very few instances of sudden abandonment of piano lessons, although there were rare cases of job loss, illness, or moving away. Although a certain few participants invoked these as the main reasons for stopping lessons, unpredictable or

circumstantial reasons for stopping piano lessons did not hold a strong presence. This suggests that most families found a new piano teacher after they moved, or generally overcame these incidental hurdles if they considered music valuable. The students who invoked reasons such as their teacher moving away likely considered it a convenient time to curtail lessons, and may have dropped out eventually even if their teacher had stayed. Instead, the invoked reasons primarily connect back to impacting motivation and predictors, rather than creating their own unique, circumstantial category.

There were two particular themes of teacher and repertoire within the invoked reasons which either disagreed with the literature or illuminated gaps in the literature. There was a powerfully contrary finding to previous research that teachers themselves were a factor in dropping out (Williams, 2002) and instead teachers were cited as a strong reason why students continued with lessons as long as they did. Dubal (1984) claimed that too many students have a "life-time love affair with music cut off at the pass because of rigid teachers" (p. 35), but teachers were never remembered as rigid and instead described by students with vocabulary like "supportive", "dedicated", and "patient". Teachers were strongly not one of the invoked reasons for dropping out and instead were considered to have as provided "a supportive learning environment". For example, one student wrote that her former teacher "did believe in [her] a lot". Our findings seem to suggest a change in teaching culture over the past few decades, however there have been no studies completed to confirm this trend. Further, the relationship between teacher-student interaction, motivation, and continuing or dropping out has not been well explored in the literature. There was a strong presence in both student and parent comments which expressed the need for more modern, engaging, or diverse repertoire, and supplementary activities like theory or music games. The invoked reason of repertoire may align with

motivation through the three interrelated psychological needs of competency, autonomy, and relatedness: students may not have felt competent and been pushed to play more advanced music than their ability allowed, they may not have had autonomous choice in their repertoire, and students may not have seen the music they were studying as related to their family and peer culture. The impact of repertoire on student motivation has also not been well researched and very few studies (Williams, 2002) discuss repertoire and its effect on dropout. Our findings suggest that while teachers may have previously been thought to be a contributing factor in dropping out, that is not necessarily the case, and while repertoire had not been a common theme in the literature, it may have more of an impact on dropout than previously thought.

### **Motivation**

The demographics of this study proved that the groups of students in question – continuing and dropouts – were statistically similar in age and gender, and these descriptors had essentially no impact on motivation. Motivation did not generally increase or decrease as students got older. Although there was a slight correlation between age and motivation within the dropout group, it could simply signify that the very amotivated students dropped out at earlier ages which left only the slightly more motivated students remaining in the teenage years, making it appear that students become more motivated with age. Comparing the levels of autonomous motivation between continuing and dropout groups, there is a noticeable decline in both groups in the pre-teen years, and confirms a commonly held belief among teachers that motivation for piano lessons presents challenges particularly around age twelve (Cathcart, 2015; Chen, 2011; Milne, 2013). By age sixteen, the dropout group's autonomous motivation is only slightly below the level of the continuing group, and it seems that if students had persevered through the challenging teenage years, their motivation would have increased significantly. We can learn

from the literature that motivation may not necessarily decline in the preteen years, but shifts to attribution beliefs which are “differentiated with increasing age” (Austin, Renwick & McPherson 2006, p. 229). These beliefs transfer from the young student’s view that an amount of effort is required to be successful at a task, to the adolescent’s view that they must lack ability when they do not succeed. In other words, with age, students tended to de-emphasize the relative importance of effort attributions and credit greater importance to inner ability and task difficulty. McPherson and O’Neill (2010) also reported a general decline in competency beliefs and values for school subjects, including music, from the earlier to later years of schooling. These beliefs unfortunately often result in students dropping out of music lessons (Cogdill, 2015). This could explain why the dropout students were still more autonomously motivated than other forms of motivation: they did not dislike piano lessons, but felt they had reached the limit of their natural ability. We also found no significant difference in motivation between genders which comes in contrast to previous studies done with music students which claimed that boys are more extrinsically motivated than girls, and girls more intrinsically motivated than boys (Miyamoto, 1997). Instead, our results support studies (Rife, Shnek, Lauby & Blumberg Lapidus, 2001) which report no significant gender differences in children's attitudes toward music experiences.

Previous studies (Dyal 1991; Klinedinst, 1991; McPherson, 2000; Pitts, Davidson & McPherson, 2000; Flowers, Sasaki & Costa-Giomi, 2005; Evans, McPherson & Davidson, 2013) clearly displayed that there are two major drop off points with piano lessons: within the first 20 months, and in the pre-teen, middle school years. While students in the current study took lessons for nearly five years, this length confirms the pre-teen dropout stage but does not adequately represent the early years dropout often seen in the review of literature. This could be

because teachers had not developed a strong relationship with those students to recommend their involvement in our research, or forgot about students who had been with them for only one year.

It was surprising that the ethnicity between the continuing students and dropouts were significant: there was a strong presence of Asian-background parents in the continuing group and a strong presence of Caucasian-background parents in the continuing group. These findings reinforce the common impression among teachers that Asian-Canadian students dropout less frequently and reach higher levels of playing. The higher-achieving Asian-background students also coincide with Power's (1990) findings which suggested that American mothers' high satisfaction with their children's relatively low achievement in piano lessons contrasted with Japanese mothers who were not as satisfied with their children's lessons and achievement as their American counterparts, even though the Japanese children had achieved more than the American children. The clear presence of highly motivated, Asian-background students in the continuing group also supports findings by Comeau, Huta, and Liu (2015) which found that Chinese piano students showed higher levels of autonomous motivation than their North American counterparts.

Our results show that students in the continuing group began lessons at age six while the dropout students began lessons at age seven. There is research which provides evidence for a sensitive period in developing brain structure in musicians who began lessons prior to age seven ( Schlaug, Jäncke, Huang, Staiger, & Steinmetz, 1995; Steele, Bailey, Zatorre & Penhune, 2013). One study in particular showed that children who began lessons prior to age seven performed better on visuomotor rhythmic tasks in adulthood than those who began after the age of seven, “even when matched on total years of musical training and experience” (Bailey & Penhune, 2010, p. 91). These important developments in brain structure cannot be ‘made up for’ in later

years and starting after age seven not only impacts skill and brain development, but also motivation. It seems that by starting piano lessons later in childhood, the early gains made by early beginners are never surpassed and give the late beginners a consistent feeling of falling behind. As initial stages of success increase motivation for subsequent tasks, it is likely that there is a link between motivation and early acquired ability. Those late beginners who may feel failure compared to their peers are likely to dropout, and having positive music experiences at a young age is extremely important for providing a foundation for learning. Hallam (2009) agreed that early music experiences greatly reinforce music self-concept, as students become more aware of their abilities in comparison with their peers and continually interpret feedback on their musical abilities. While dropout students in our study took lessons for nearly 5 years – slightly longer than their continuing peers – they reached significantly lower playing levels. It seems that the point at which most students in this study dropped out, at Grade 2 conservatory level, is where hard work and consistent effort is required to improve. The motivation to continue was not viable given their late start in lessons, comparatively inferior skill, and very slow progress after a number of years. Although we could not find a direct link between the age at which students began lessons and motivation, we are perplexed by this result and suggest more investigation be done between the age children begin piano lessons and their later motivation.

The primary research goal of this study was to discover if there was a correlation between low levels of motivation and dropout. While dropout students' highest type of motivation was in fact autonomous, the similarly high values in controlled motivation and amotivation suggests that the level of autonomous motivation was overtaken and not sufficient to sustain further music study. These findings suggest that dropout students did not dislike playing the piano and did find some personal meaning in the activity, however their lower level of autonomous motivation for

playing the piano may not have been sufficient to triumph over the autonomous motivation they had for other interests, such as sports. Additionally, we wanted to compare the types of motivation displayed between continuing and dropout groups. We found that dropout students showed lower levels of autonomous and controlled motivation, and significantly higher values of amotivation, in comparison to continuing students. Students who continued piano lessons showed a higher level of autonomous motivation and a lower level of amotivation and that was to be expected. Dropout students also consistently scored lower on all types of interests, such as performance, creativity, and hard work, and showed less internalization of activities piano students undertake, such as making up their own music or playing pieces they knew well just for pure enjoyment. One conceivable explanation for these results is the lack of imagination in teaching or opportunity for personalization: it is possible that skills such as composition, playing along with background accompaniment, or involvement in summer music camps were simply not offered. The overall motivation findings when comparing the two groups in this study were mostly aligned with the literature (McPherson, 2000; Pitts, Davidson & McPherson, 2000; Evans, McPherson & Davidson, 2013) and partially support the hypothesis in Research Question Three: the dropout students did show higher levels of autonomous motivation compared to controlled or amotivation, which was unexpected, but unsurprisingly showed significantly lower levels of all forms of functional motivation – both autonomous and controlled – when compared with continuing students.

Given that the dropout group showed significantly lower levels of autonomous motivation than continuing students, this could be because they were not given autonomous choice in the music they played. There was a strong presence of invoked reasons for dropping out which expressed the desire for more freedom of choice in repertoire, for example, as one

student wrote that lessons would have been more enjoyable “if the pieces were more interesting instead of only classical pieces composed in the 1700's.” This also illuminates the low result in students’ desire to work hard: it is difficult to persevere at something you do not connect with. Our results align with previous research (Dyal, 1991) which recommends the need for a varied musical education, with a mixture of styles and moods, and implies that teachers must present their students with personalized options rather than standardized assignments. Providing students with choices has been found to strongly relate to superior learning outcomes (Reynolds & Symons, 2001), and even the provision of quite trivial choices has been found to lead to increases in intrinsic motivation, higher levels of learning, and perceived competence (Cordova & Lepper, 1996). Autonomy is required for the self-regulatory behaviours that foster the desire to work hard and perform with creative ownership, but the dropout group consistently scored lower on all measures of performance, hard work, and creativity. These results could be because students did not feel ownership of their pieces, and results show that they were primarily taught from the traditional method book or conservatory systems which may have lacked personalization in choosing repertoire.

Students are typically motivated to work hard at something they are viewed as ‘good at’, which often comes from external affirmation by their social community. As Fredricks and colleagues (2002) displayed, part of a student’s personal belief in their own competency comes from sufficient confirmation for their skills from peers, family members, or teachers. Our results displayed that within the dropout group, rewards given for achievements produced a notable positive correlation with autonomous motivation. While it may initially seem strange than an external reward would impact intrinsic motivation, Fredricks and colleagues explain that “individuals who won awards got further recognition from teachers and peers, which helped to

further increase the perceptions of their ability and thus increase their persistence and the likelihood of receiving more external incentives in the future” (p.79). Receiving external validation strengthens a student’s perception of their own abilities, which in turn helps to strengthen their commitment to the activity. Although some studies cite extrinsic motivators as undermining to intrinsic motivation (Deci & Ryan, 1985), Fredricks and colleagues (2002) argue that extrinsic rewards and recognition seemed to be reciprocally related to intrinsic motivation based on confirming feelings of competency over time. The results suggest that rewards for genuine improvement or accomplishing significant learning milestones may confirm a student’s commitment to piano lessons and strengthen feelings of autonomous motivation for those students who naturally display high levels of controlled motivation or amotivation for piano lessons.

## Chapter Five: Conclusion

The topic of piano student dropouts is often discussed among private studio teachers, but without a significant amount of scientific evidence to uphold popular opinion. Considering the frequency at which children study the piano and the seemingly high volumes at which they dropout, it was surprising that more scientific study has not been undertaken. Researchers examined the predictors connected to dropping out, levels of motivation, and asked open-ended questions about the reasons students and parents invoked for dropping out. While we knew that band and orchestral students left lessons due to predictors such as insufficient parental involvement or low socioeconomic status, and the invoked reasons raised topics of teacher issues and repertoire, it was less clear if low levels of autonomous motivation connected to drop out. The goal of this thesis was to understand the complex decision behind why students leave piano lessons before reaching a moderate mastery of the piano and ultimately offer recommendations to teachers and parents on how to support student learning.

Our primary finding was that students who drop out of piano lessons are significantly less autonomously motivated than those who continued, and we had thought that certain predictors may explain why. The dropout students reported less overall musical ability, began lessons later in childhood, and had weaker practicing habits, which therefore resulted in their rate of progress being far slower than students who continued. This combination of factors may have resulted in impaired feelings of competency. The dropout group also showed a family culture which did not listen to the same types of music being learned at piano lessons, had fewer ensemble participation opportunities, and attended fewer professional classical concerts, which may have resulted in impaired feelings of relatedness. The dropout group also did not connect with the repertoire they were learning, did not envision themselves playing the piano long-term, and had

musical mothers who may have overstepped their boundaries while practicing at home, which combined may have weakened the perceived inner locus of control and obstructed the student's autonomy. Self-Determination Theory requires an interplay of all three psychological needs to build meaningful, autonomous motivation. However, our results produced very few significant correlations between the predictors and motivation. While it may seem obvious that beginning lessons in early childhood, forming good practice habits, and having involved parents would produce high levels of motivation, our calculations could not reach this conclusion and we are puzzled by this outcome. The dropout group did practice significantly less and did show lower levels of motivation, for example, but we could not find a connection between practicing and any type of motivation. The topic of predictor variables' impact on motivation requires further study, and the question of *why* drop out students' autonomous motivation was significantly lower needs investigation. It seems that the predictors of musical ability, musical achievement, practice habits, and long-term commitment can accurately predict dropout, but do not necessarily have an impact on motivation. The only predictor which impacted motivation was the quality of parental involvement. Overall, motivation seemed to be its own, unique reason about why many students left lessons, but the environmental impact on motivation leaves more to be explored.

We thought it was essential to directly ask students and parents what they considered as their primary reasons for leaving lessons and our results revealed that the majority of the invoked reasons aligned with predictors and motivation. There was a strong sentiment that practice was a problem that contributed to dropout which fits simultaneously with predictors and motivation: while some students genuinely did not have enough time to practice due to involvement with other activities, most students did have sufficient time to practice but did not have the desire. The comments surrounding a loss of interest or boredom and the desire for different repertoire speak

to the low levels of motivation and the inability to engage with the music itself. The comments about wanting to play a different instrument such as guitar or the involvement in sports could relate to the predictor of musical ability, or inability in this case. Finally, a large majority of students thought that they would never return to piano lessons, which highlights the predictor of long-term intention to study music. While we wanted to explore all of the reasons students and parents invoked for leaving piano lessons, and thought there may be comments raised about unpredictable circumstances for leaving lessons such as teacher retirement or sudden job loss, we did not find any large themes of circumstantial reasons for dropping out.

With the proper predictors in place, a major question becomes how to develop autonomous motivation. No student is purely autonomously motivated throughout their learning; highs and lows are inevitable. Research shows that “nearly all children required greater or lesser amounts of encouragement, cajoling, and even threat” while learning an instrument (Sloboda & Howe, 1991, p. 12). The literature shows that children’s motivation changes over time (Wigfield et. Al, 1997), and so motivating methods must change also. As research describes, “the motivation to continue lessons is different from the motivation to begin. Students need new reasons to persevere when study becomes more challenging.” (Williams, 2002, p. 7). Young students often require more extrinsic motivation, such as stickers or parental congratulations, than older students. While young students are often initially extrinsically motivated, there is a point at which controlled motivation must migrate along the scale and be translated into autonomous motivation in order to ensure continuation. As research confirms, if the effort needed to sustain learning is to be developed, “a more intrinsic level of commitment needs to emerge” (McPherson, 2000, p. 52). Although controlled motivation plays a role throughout life, autonomous motivation must play a bigger and stronger role over time, and “unless external

motivation develops into internal self-motivation by the early teenage years, it is difficult to sustain the commitment required to persist with musical instrument learning" (Sloboda & Davidson, 1996, p. 181). Luckily, because young students view musical ability as malleable, increased effort gives way to increased ability and results increased motivation. As the literature shows, children need to invest reasonable effort and develop a modicum of proficiency before they gain motivational benefits from the process (Austin, Renwick, & McPherson, 2006). If students can begin music lessons early in life, and develop solid practice habits – even if initially prompted with candies or outings – by the time most students reach adolescence and their desire for music lessons begins to decline, these music students have established piano as a part of their everyday lives and found the autonomous motivation required to persist. As research confirms, “finding strategies to develop the intrinsic desire to learn is the most important task for beginning instrumentalists and those who support them” (Pitts, Davidson, & McPherson, 2000, p. 52). The long quest to develop expertise in playing a musical instrument requires a deep level of autonomous motivation to persist with the thousands of hours of practice required. It is arguable that any child can play the piano with the supports for intrinsic motivation and the appropriate predictors in place. For children to gain long-term pleasure and satisfaction from playing the piano, it is essential that they have the opportunity to learn within a supportive environment while being driven primarily by autonomous motivation. However, without the appropriate predictors in place, raising autonomous motivation may not be enough.

It is unfortunate that so many piano students begin lessons every year, only to give up a short time later. As composer Elissa Milne (2013) writes on her website, "No one ever reached adulthood and said 'I wish my mum had let me stop learning the piano'...". Similarly, Dr. David Pollei claims that 90% of students who dropout still wish that they could play the piano

(Chappell, 1996). It is surprising to deduce based on these opinions that the majority of students who quit piano may later regret that decision. We may be able to deter piano students from dropping out in such high numbers by creating environments that are supportive of autonomy, competency, and relatedness. Teachers must find effective ways to create a learning environment that provides choices in repertoire and highlights each student's unique abilities. Parents must enroll children for music lessons as early as possible, become a positive role model, and build a home atmosphere that is filled with instrumental music. Students must maintain a daily practice routine and explore all kinds of musical endeavours such as ensemble playing or attending professional concerts. By understanding the missing predictors which impacted dropout, hearing student's own invoked reasons about why they left lessons, and considering ways in which to develop autonomous motivation, this study sought to give parents and teachers tools to understand the problem of piano student dropouts, and provide new information to the field of piano pedagogy which may ultimately result in fewer students leaving lessons.

### **Limitations**

We acknowledge there were limitations with this research study. Primarily, the 55 students in the dropout sample were generally homogenous in background: upper-middle class, Caucasian families from western Canada. It was difficult to gather a strongly diverse sample of participants, simply because low socioeconomic status families generally cannot afford piano lessons, and most families in our study would be considered middle- to upper-class. Providing a larger sample size with students from varied background and ethnicities may have provided slightly different opinions or insights. The hesitation from teachers to connect the researcher with their former students provided an unexpected barrier to finding participants. While a suitable sample size was ultimately collected, these students were often the siblings of other students who

were still involved in lessons, or students who had left lessons on surprisingly good terms with their former teacher. These families who were still in some way involved with music lessons, or who had parted ways happily with their teacher, may have had slightly different opinions than students who suddenly quit or left lessons suddenly or with resentment. Finally, as attitudes of adolescents change regularly, this study provides only a snapshot into students' feelings and attitudes at time of taking the survey. Participating in this study one year later may have revealed new opinions given increased time for reflection, or one year earlier may have provided more detail while participants' memories were still fresh.

### **Future Research**

There is great potential for future research on the topic of piano student dropouts, and three areas stand out in particular. First, it would be interesting to see the difference between groups' dropout and continuation when controlled for the recommendations made in this study. If one group of beginners was trained in consistent practice habits, encouraging parental involvement, a commitment to long-term piano learning, and environments supportive of autonomous motivation, while a second group of beginners was simply left to their own accord, there may be a difference in dropout rates. The literature would benefit from a study which investigates if the predictors and motivation could limit the number of dropouts. Another interesting study would be to follow up with the students who had participated in this study in the future to see if their attitudes towards music lessons have changed. Research shows that adolescents find their motivation for music becomes increasingly intrinsic and self-sustaining with age (Davidson, Sloboda, & Howe, 1995), and students sometimes return to piano lessons after turbulent teenage years. It would be interesting to see if the students involved in this study find their way back to the piano bench someday. Finally, the field of piano pedagogy needs

research to examine the entire lifespan of a piano student. A longitudinal study recording the peaks and valleys of student motivation over time would give great insight into which types of motivation are most prominent at various points in the learning journey.

## Bibliography

- Albert, D. J. (2006) Strategies for the Recruitment and Retention of Band Students in Low Socioeconomic School Districts, *Contributions to Music Education*, 33(2), p. 53 – 72.
- Austin, J., Renwick, J., McPherson G. (2006). Developing Motivation. In G. McPherson (Ed.), *The Child as Musician: a handbook of musical development*, (p. 213 - 233). New York: Oxford Press.
- Bailey, J. A., Penhune, V. B. (2010). Rhythm Synchronization Performance and Auditory Working Memory In Early- and Late-Trained Musicians. *Experimental Brain Research*, 204(1), p. 91–101.
- Biggs, N. (2010). Six Tips To Avoid Becoming The Teacher You Always Dreaded. *American Music Teacher*, 60(2), p. 23.
- Bonifati, L. (1997). *The Impact Of The Home Environment On Success In Instrumental Music* (Doctoral Dissertation). Columbia University, New York, NY.
- Brand, M. (1986). Relationship Between Home Musical Environment and Selected Musical Attributes Of Second-Grade Children. *Journal of Research in Music Education*, 34(2), p. 111-120.
- Cain, P. T. (January 20, 2015). *What do you think of the #1 Reason Students Lose Motivation and Drop Out of Piano Lessons?* In *Piano Teacher Central*. Retrieved from <https://www.facebook.com/groups/pianoteachercentral/permalink/627884774007918/>
- Canadian Federation of Music Teachers' Associations (2015). *School Credits Information*. Retrieved from <http://www.cfmta.org/html/schoolcredits.html> .
- Cathcart, S. (March 1, 2015). *Is Learning the Piano in Decline? The Good News and Our Challenges...* Retrieved from <http://www.thecuriouspianoteacher.org/home/is-learning-the-piano-in-decline-the-good-news-and-our-challenges>
- Chandler, C. L., Connell, J. P. (1987). Children's intrinsic, extrinsic and internalized motivation: A developmental study of children's reasons for liked and disliked behaviours. *British Journal of Developmental Psychology*, 5(4), p. 357 – 365.
- Chappell, J. (1996). The Piano: its present and future. *Piano and Keyboard Magazine*, (March/April), p. 26 – 27.
- Chardos-Camilli, T. (2010). *Parental and Personality Factors That Predict Students' Length Of Piano Study* (Doctoral Dissertation). University of Oklahoma, Norman, OK.
- Chardos-Camilli, T. (2015). Parental Factors and Personality Traits that Predict Students' Length of Piano Study, *Music Teachers National Association e-Journal*, 6(3), p. 2 – 14.
- Check, J., Schutt, R. K. (2012). *Research Methods in Education*. London, UK: SAGE Publications.
- Chen, T. (August 19, 2011). *The 6 Stages of Piano Students: Why and When Piano Students Quit Lessons*. Retrieved from <https://musicmemos.wordpress.com/2011/08/19/the-6-stages-of-piano-students-why-and-when-piano-students-quit-lessons/>

- Clough, P., Nutbrown, C. (2012). *A Student's Guide to Methodology* (3<sup>rd</sup> ed.). London, UK: SAGE Publications.
- CMUSE (2014). *How to Get Your Child Excited to Play a Musical Instrument*. Retrieved from <http://www.cmuse.org/how-to-get-your-child-excited-to-play-a-musical-instrument/>.
- Cogdill, S. (2015). Applying Research in Motivation and Learning to Music Education: What the Experts Say, *Update: Applications of Research in Music Education*, 33(2) p.49-57.
- Comeau, G., Huta, V. (Submitted). Addressing Common Parental Concerns About Factors That Could Influence Piano Students' Autonomous Motivation, Diligence And Performance. *Psychology of Music*.
- Comeau, G., Huta, V., Liu, Y. (2015). Work Ethic, Motivation, and Parental Influences in Chinese and North American Children Learning to Play the Piano. *International Journal of Music Education*, 33(2), p. 181 – 194.
- Cook, B. V. (2013). *An Examination of Factors Contributing to Orchestra Students' Attrition in Transition From Elementary to Middle School* (Master's Thesis). University of Michigan, Ann Arbor, MI.
- Cooper, T. L. (2001). Adults' Perceptions of Piano Study: Achievements and Experiences. *Journal of Research in Music Education*, 49(2), p. 156 – 168.
- Cordova, D. I., Lepper, M. R. (1996). Intrinsic Motivation and the Process of Learning: beneficial effects of contextualization, personalization, and choice. *Journal of Educational Psychology*, 88(4), p. 715 - 730.
- Corenblum, B., Marshall, E. (1998). The Band Played On: predicting students' intentions to continue studying music, *Journal of Research in Music Education*, 46(1), p. 128 – 140.
- Costa-Giomi, E. (2004). "I Do Not Want to Study Piano!" Early Predictors of Student Dropout Behavior. *Bulletin of the Council for Research in Music Education*, No. 161-162, p. 57 – 64.
- Daniel, R., Bowden, J. (2013). The intermediate piano stage: exploring teacher perspectives and insights. *British Journal of Music Education*, 30(2), p. 245-260.
- Davidson, J. W., Sloboda, J. A., Howe, M. J. A. (1995). The Role of Parents and Teachers in the Success and Failure of Instrumental Learners, *Bulletin of the Council for Research in Music Education*, Issue 127, pp.40-44.
- Deci, E. L., Ryan, R. M. (1985). The General Causality Orientations Theory: self-determination in personality. *Journal of Research in Personality*, 19(2), p. 109 – 134.
- Deci, E. L., Ryan, R. M. (1987). The Support of Autonomy and the Control of Behavior, *Journal of Personality and Social Psychology*, 53(6), p. 1024 – 1037.
- Deci, E. L., Ryan, R. M. (2000b). The “What” and “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behavior, *Psychological Inquiry*, 11(4), p. 227 – 268.

- Deci, E. L., Ryan, R. M. (2008). Self-Determination Theory: a macro-theory of human motivation, development, and health. *Canadian Psychology*, 49(3), p. 182 – 185.
- Desrochers, A., Comeau, G., Jardaneh, N., Green-Demers, I. (2006). L'élaboration d'une échelle pour mesurer la motivation chez les jeunes élèves en piano. *Recherche en éducation musicale*, 24, p. 13-33.
- Dow, A. (January 27, 2012). *Today's Q&A – When a Student Wants to Quit Piano Lessons*. Retrieved from <http://www.teachpianotoday.com/2012/01/27/todays-qa-when-a-student-wants-to-quit-piano-lessons/>
- Dubal, D. (1984). Thoughts and Afterthoughts. *The Piano Quarterly*, 125 (Spring), p. 34-35.
- Duke, R. A., Flowers, P. J., Wolfe, D. E. (1997). Children Who Study Piano With Excellent Teachers. *Bulletin of the Council for Research in Music Education*, No. 132, p. 51-85.
- Dyal, E. I. C. (1991). *An Examination Of Factors Which Associate With A Successful Outcome In Piano Lessons* (Doctoral Dissertation). Columbia University, New York, NY.
- Evans, P., McPherson, G. E., Davidson, J. W. (2013). The Role Of Psychological Needs In Ceasing Music And Music Learning Activities. *Psychology of Music*, 41(5), p. 600 – 619.
- Flowers, P. J., Sasaki, W., Costa-Giomi, E. (2005). Piano Lessons of Beginning Students Who Persist or Drop Out: Teacher Behavior, Student Behavior, and Lesson Progress. *Journal of Research in Music Education*, 53(3), p. 234-247.
- Frakes, L. (1984). *Differences In Music Achievement, Academic Achievement, And Attitude Among Participants, Dropouts, And Nonparticipants In Secondary School Music* (Doctoral dissertation). University of Iowa, Iowa City, IA.
- Fredricks, J. A., Alfeld-Liro, C. J., Hruda, L. Z., Eccles, J. S., Patrick, H., Ryan, A. M. (2002). A Qualitative Exploration of Adolescents' Commitment to Athletics and the Arts. *Journal of Adolescent Research*, 17(1), p. 68 – 97.
- Gagne, F. (1991). Nature or Nurture? A Re-examination of Sloboda and Howe's (1991) Interview Study on Talent Development in Music, *Psychology of Music*, 27(1), p. 38 – 51.
- Gerber, A. (January 20, 2015). *What do you think of the #1 Reason Students Lose Motivation and Drop Out of Piano Lessons?* In *Piano Teacher Central*. Retrieved from <https://www.facebook.com/groups/pianoteachercentral/permalink/627884774007918/>
- Govel, L. S. M. (2004). *An Examination Of The Types Of Parental Involvement Among Piano Student Dropouts* (Doctoral Dissertation). University of Southern California, Los Angeles, CA.
- Graziano, V. (1991). *A descriptive analysis of various relationships between home environment and success in piano study* (Doctoral Dissertation). Columbia University, New York, NY.
- Hallam, S. (1998). The predictors of achievement and dropout in instrumental tuition. *Psychology of Music*, 26(2), p. 116–132.
- Harrell, L. (July 13, 2012). *Why I Quit Piano Lessons*. Retrieved from

- <http://oneminutemusiclesson.com/2012/07/13/why-i-quit-piano-lessons/>
- Howe, M. J. A., Davidson, J. W., Sloboda, J. A. (1998). Innate Talents: reality or myth? *Behavioral and Brain Sciences*, 21(3), p.399-407.
- Keith, M. (2004). My Turn: You Only Fail if You Fail to Prepare, *American String Teacher*, 54(2), p. 120.
- Kinney, D. W. (2010). Selected Nonmusic Predictors of Urban Students' Decisions to Enroll and Persist in Middle School Band Programs, *Journal of Research in Music Education*, 57(4), p. 334 – 350.
- Klinedinst, R. M. (1991). Predicting Performance Achievement and Retention of Fifth-Grade Instrumental Students, *Journal of Research in Music Education*, 39(3), p. 225 – 238.
- Kreader, B. (2003). *What Do You Say to a Student Who Wants to Quit Piano Lessons?* Retrieved from <http://www.claviercompanion.com/Samps/Au03/TSP.html>
- Kuhlman, K. (2005). Musical Aptitude Versus Academic Ability as a Predictor of Beginning Instrumental Music Achievement and Retention: Research and Implications, *Update: Applications of Research in Music Education*, 24(1), p. 34 – 43.
- Küpers, E., Van Dijk, M., McPherson, G. Van Geert, P. (2014). A Dynamic Model That Links Skill Acquisition With Self-Determination In Instrumental Music Lessons, *Musicae Scientiae*, 18(1), p. 17 – 34.
- Lawrence, S. J., Dachinger, N. (1967). Factors Relating to Carryover of Music Training into Adult Life, *Journal of Research in Music Education*, 15(1), p. 23-31.
- Mawbey, W. E. (1973). Wastage from instrumental classes in schools. *Psychology of Music*, 1(1), p. 33-43.
- McCarthy, J.F. (1980). Individualized Instruction, Student Achievement, and Dropout in an Urban Elementary Instrumental Music Program. *Journal of Research in Music Education*, 28(1), p. 59 – 69.
- McPherson, G. E. (2000). Commitment and Practice: Key Ingredients for Achievement during the Early Stages of Learning a Musical Instrument, *Bulletin of the Council for Research in Music Education*, No. 147 (Winter 2000, 2001), p. 122-127.
- McPherson, G. E., Davidson, J. W. (2002). Musical Practice: mother and child interactions during the first year of learning an instrument. *Music Education Research*, 4(1), p. 141 – 156.
- McPherson, G. E., O'Neill, S. A. (2010). Students' Motivation To Study Music As Compared To Other School Subjects: a comparison of eight countries. *Research Studies in Music Education*, 32(2), p. 101–137.
- McPherson, G. E., Osborne, M. S., Barrett, M. S. Davidson, J. W., Faulkner, R. (2015). Motivation to study music in Australian schools: The impact of music learning, gender, and socio-economic status, *Research Studies in Music Education*, 37(2), p. 141 – 160.
- Merwin, K. (2014). Top ten reasons for letting your child quit piano. *Clavier Companion*, 6(4), p. 9.

- Milne, E. (December 15, 2013). *It Takes Two Generations*. Retrieved from <https://elissamilne.wordpress.com/2013/12/15/it-takes-two-generations/>
- Milne, E. (February 4, 2015). *Where Did the 40 Piece Challenge Begin?* Retrieved from <https://elissamilne.wordpress.com/2015/02/04/where-did-the-40-piece-challenge-begin/>
- Miserandino, M. (1996). Children Who Do Well in School: individual differences in perceived competence and autonomy in above-average children, *Journal of Educational Psychology*, 87(2), p. 203 – 214.
- Miyamoto, K. (1997). *Japanese high school students' motivation in band as it relates to the gender of the band directors and the student* (Doctoral Dissertation). University of Arizona, Tuscon, AZ.
- Moore, K. (February 8, 2012). Why Do Children Drop Out of Piano Lessons? Retrieved from <https://coppellpianoshop.wordpress.com/2012/02/08/why-do-children-drop-out-of-piano-lessons/>
- Morin, J. (August 14, 2012). *Forum Q&A – Keeping Teenagers Engaged*. Retrieved from <http://colorinmypiano.com/2012/08/14/forum-qa-keeping-teenagers-engaged/>
- Morrow, G. (1987). Standardizing practice in the analysis of school dropouts. In G. Natriello (Ed.), *School dropouts: Patterns and policies*, (pp. 38-51). New York: Teachers College Press.
- Ng, C. C., Hartwig, K. (2011). Teachers' perceptions of declining participation in school music. *Research Studies in Music Education*, 33(2), p. 123 – 142.
- Opie, C. (2004). *Doing Educational Research: a guide to first-time researchers*. London, UK: SAGE Publications.
- Piano Teacher Central (January 17, 2015). *What do you think of the #1 Reason Students Lose Motivation and Drop Out of Piano Lessons?* In *Piano Teacher Central*. Retrieved from <https://www.facebook.com/groups/pianoteachercentral/permalink/627884774007918/>
- Pingel, J. (2011). *Piano Quitters, Snobs, and Wanderers*. Retrieved from <http://keyeduppiano.blogspot.ca/2011/02/quitters-snobs-and-wanderers.html>
- Pitts, S. E., Davidson J. W., McPherson G. E. (2000). Models of success and failure in instrumental learning: case studies of young players in the first 20 months of learning. *Bulletin of the Council for Research in Music Education*, No. 146, p. 51 – 69.
- Power, K.M. (1990). *A cross-cultural study of mothers' and teachers' attitudes toward music education in the U.S.A. and Japan* (Doctoral dissertation). University of Hawaii, Honolulu, HI.
- Queen, K. (January 30, 2010). *What to Do When Your Child Wants To Quit Music Lessons*. Retrieved from <http://www.portlandfamily.com/posts/what-to-do-when-your-child-wants-to-quit-music-lessons/>
- Renwick, J. M., McPherson, G. E. (2009). Multiple Motives: profiles of young Australians' reasons for musical engagement. In A. Williamson, S. Pretty, & R. Buck (eds.), *Proceedings of the International Symposium on Performance Science* (p. 469 – 474). Utrecht, The Netherlands: European Association of Conservatoires.

- Renwick, J. M. (2008). *Because I Love Playing My Instrument: young musicians' internalized motivation and self-regulated practice behavior* (Doctoral dissertation). University of New South Wales, Sydney, Australia.
- Reynolds, P.L., Symons, S. (2001). Motivational Variables and Children's Text Search. *Journal of Educational Psychology*, 93(1), p. 14 - 22.
- Rife, N. A., Shnek, Z. M., Lauby, J. L., Blumberg Lapidus, L. (2001) Children's Satisfaction with Private Music Lessons, *Journal of Research in Music Education*, 49(1), p. 21-32.
- Rigby, C. S., Deci, E. L., Patrick, B. C., Ryan, R. M. (1992). Beyond the Intrinsic-Extrinsic Dichotomy: self-determination in motivation and learning, *Motivation and Emotion*, 16(3), p. 165 – 185.
- Robertson, S. (January 2, 2014). *Piano Stores Closing as Fewer Children Take Up the Instrument*. Retrieved from <https://www.facebook.com/groups/pianoteachercentral/permalink/619729364823459/>
- Royal Conservatory of Music (2008). *Piano Syllabus: 2008 Edition*. Toronto, Ontario: The Fredrick Harris Music Co. Ltd.
- Ryan, R. M., Deci, E. L. (2000a). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being, *American Psychologist*, 55(1), p. 68 – 78.
- Ryan, R. M., Deci, E. L. (2000c). Intrinsic and Extrinsic Motivations: classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), p. 54 – 67.
- Ryan, R. M., Deci, E. L. (2000d). The Darker and Brighter Sides of Human Existence: basic psychological needs as a unifying concept. *Psychological Inquiry*, 11(4), p. 319 – 338.
- Schlaug, G., Jäncke, L., Huang, Y., Staiger, J.F., & Steinmetz, H. (1995). Increased Corpus Callosum Size In Musicians. *Neuropsychologia*, 33(8), p. 1047–1055.
- Sichivitsa, V.O. (2007). The Influences Of Parents, Teachers, Peers and Other Factors On Students' Motivation In Music. *Research Studies in Music Education*, 29(1), p. 55 – 68.
- Sichivitsa, V.O. (2004). Music Motivation: A Study of Fourth, Fifth and Sixth Graders' Intentions to Persist in Music, *Contributions to Music Education*, 31( 2), p. 27-41.
- Simon, S. M. (2001). *The Effects of Director Motivation Techniques on Middle and High School Band Students in Georgia* (Doctoral Dissertation). University of Georgia, Athens, Georgia.
- Sloboda, J. A. (2001). Emotion, Functionality and the Everyday Experience of Music: where does music education fit?. *Music Education Research*, 3(2), p. 243 – 253.
- Sloboda, J. A., Davidson, J. W. (1996). The Young Performing Musician. In Deliège & Sloboda (Eds), *Musical beginnings: Origins and Development Of Musical Competence* (pp. 171-190). Oxford: Oxford University Press.
- Sloboda, J. A., & Howe, M. J. A. (1991). Biographical Precursors Of Musical Excellence: An interview study. *Psychology of Music*, 19(1), p. 3-21.

- Steele, C. J., Bailey, J. A., Zatorre, R. J., Penhune, V. B. (2013). Early Musical Training And White-Matter Plasticity in the Corpus Callosum: evidence for a sensitive period. *Journal of Neuroscience*, 33(3), p. 1282–1290.
- Van Cleave, T. (2010) *Perceptions Of Studio Based Music Teachers Regarding Recruitment and Retention Of Students* (Doctoral Dissertation). Ball State University, Muncie, Indiana.
- Vallerand, R. J., Bissonnette, R. (1992). Intrinsic, Extrinsic, and Amotivational Styles as Predictors of Behavior: a prospective study, *Journal of Personality*, 60(3), p. 599 – 620.
- Viss, L. (September 24, 2013). *The Best Route to Motivation*. Retrieved from <http://88pianokeys.me/musings/the-best-route-to-motivation/>
- Wigfield, A., Harold, R. D., Freedman - Doan, C., Eccles, J. S., Yoon, K. S., Arbreton, A. J. A., Blumenfeld, P. C. (1997). Change In Children's Competence Beliefs and Subjective Task Values Across The Elementary School Years: a 3-year study. *Journal of Educational Psychology*, 89(3), p.451 – 469.
- Williams, K. (2002). Attrition in Applied Music Study: Three Retrospective Case Studies. *Update: Applications of Research in Music Education*, 21(1), p. 1 – 9.
- Young, W. T. (1971). The Role Of Musical Aptitude, Intelligence, and Academic Achievement In Predicting The Musical Attainment Of Elementary Instrumental Music Students. *Journal of Research in Music Education*, 1 (4), 385-398.
- Zdzinski, S. F. (1992). Relationships Among Parental Involvement, Music Aptitude, and Musical Achievement of Instrumental Music Students, *Journal of Research in Music Education*, 40(2), p. 114 – 125.

**Appendix 1**



uOttawa

École de musique  
School of Music

**Survey of Musical Interests**

**Parent's or Guardian's Questionnaire**

**Research Group on Motivation**

**Piano Pedagogy Research Laboratory**

**University of Ottawa**

**GENERAL INFORMATION**

Parent's or Guardian's Name	
Child's Name	
Former Piano Teacher's Name	
Date	

This form is to be filled out by the child's parent(s) or guardian(s).

**NOTE**

Rest assured that this information will remain strictly confidential. Only the research team will have access to this information. Only group data (e.g., group averages) will be made public when we present the results of this study in scientific conferences or similar contexts.

PLEASE CIRCLE OR ENTER YOUR RESPONSES TO THE QUESTIONS PRESENTED BELOW

**SECTION 1: DEMOGRAPHIC INFORMATION**

1	Gender of your child	<input type="checkbox"/> Female	<input type="checkbox"/> Male
2	Age of your child		
3	Birth date of your child (month and year)		
4	Ethnic Background of your child's mother (or adoptive mother if your child is adopted)	<ul style="list-style-type: none"> <li>• Caucasian</li> <li>• Asian (e.g., Chinese, Japanese, Korean, South-east Asian)</li> <li>• East Indian, Pakistani</li> <li>• African-American/Black</li> <li>• Hispanic</li> <li>• Middle-Eastern</li> <li>• Mixed White and Asian</li> <li>• Other _____</li> </ul>	
5	Ethnic Background of your child's father (or adoptive father if your child is adopted)	<ul style="list-style-type: none"> <li>• Caucasian</li> <li>• Asian (e.g., Chinese, Japanese, Korean, South-east Asian)</li> <li>• East Indian, Pakistani</li> <li>• African-American/Black</li> <li>• Hispanic</li> <li>• Middle-Eastern</li> <li>• Mixed White and Asian</li> <li>• Other _____</li> </ul>	
6	Ethnic Background of your child's former piano teacher	<ul style="list-style-type: none"> <li>• Caucasian</li> <li>• Asian (e.g., Chinese, Japanese, Korean, South-east Asian)</li> <li>• East Indian, Pakistani</li> <li>• African-American/Black</li> <li>• Hispanic</li> <li>• Middle-Eastern</li> <li>• Mixed White and Asian</li> <li>• Other _____</li> </ul>	
7	What is the occupation of the mother and her highest academic degree?	<p>Occupation: _____</p> <ul style="list-style-type: none"> <li>• High school</li> <li>• College</li> <li>• Bachelor's</li> <li>• Master's</li> <li>• PhD</li> </ul>	

8	What is the occupation of the father and his highest academic degree?	Occupation: _____ <ul style="list-style-type: none"> <li>• High school</li> <li>• College</li> <li>• Bachelor's</li> <li>• Master's</li> <li>• PhD</li> </ul>
9	How would you rate your child's overall academic abilities in school?	<ul style="list-style-type: none"> <li>• Higher than most students</li> <li>• Higher than average</li> <li>• About average</li> <li>• Lower than average</li> <li>• Lower than most students</li> </ul>
10	What other out-of-school activities is your child involved in?	

### SECTION 2: CHILD'S MUSICAL HISTORY

1	How old was your child when piano lessons began? (years and months)	
2	Name of the piano book(s) that your child used when piano lessons began? You can ask your child.	
3	Name of the piano book(s) that your child used when lessons finished? You can ask your child.	
4	Name of the last 3 pieces that your child was working on? You can ask your child.	1. _____ 2. _____ 3. _____
5	What was your child's highest piano playing level? You can ask your child.	Beginner/Preparatory _____ Grade level _____ Suzuki book _____ Other _____
6	Had your child taken any piano exams? (If not, skip the next four questions)	Yes    No
	<ul style="list-style-type: none"> <li>• If so, which type of exam has your child taken?</li> </ul>	<ul style="list-style-type: none"> <li>• Royal Conservatory of Music piano exam</li> <li>• Conservatory Canada piano exam</li> <li>• Other _____</li> </ul>
	<ul style="list-style-type: none"> <li>• Can you provide the grade level of your child's last piano exam?</li> </ul>	
	<ul style="list-style-type: none"> <li>• Can you provide the date of your child's last piano exam? (month and year)</li> </ul>	

	<ul style="list-style-type: none"> <li>• Can you provide the result of your child's last piano exam? (% , bronze, pass, good, etc.)</li> </ul>	
7	<p>Had your child ever participated in group piano lessons? (If not, skip the next three questions)</p>	Yes    No
	<ul style="list-style-type: none"> <li>• If so, which program was your child registered in?</li> </ul>	<ul style="list-style-type: none"> <li>• Yamaha</li> <li>• Music for Young Children</li> <li>• Suzuki</li> <li>• Other _____</li> </ul>
	<ul style="list-style-type: none"> <li>• For how many years?</li> </ul>	
	<ul style="list-style-type: none"> <li>• If your child stopped group lessons, what was your reason for leaving them?</li> </ul>	<ul style="list-style-type: none"> <li>• Scheduling</li> <li>• My child become too advanced to continue in a group lesson format</li> <li>• The teacher recommended private lessons</li> <li>• Streaming issue - the class was too fast/slow for my child's pace</li> <li>• My child was better suited to private lessons</li> <li>• Other (please specify): _____</li> </ul>
8	How long did you anticipate your child to take piano lessons for?	<ul style="list-style-type: none"> <li>• Intended to stop soon after starting</li> <li>• Until the end of elementary school</li> <li>• Until the end of high school</li> <li>• Would continue even after high school</li> </ul>
9	In your opinion, do you think your child will continue to play the piano (somewhat regularly) as an adult?	<ul style="list-style-type: none"> <li>• Absolutely</li> <li>• Most likely</li> <li>• Probably</li> <li>• Maybe</li> <li>• Not likely</li> </ul>
10	How would you have rated your child's piano playing abilities?	<ul style="list-style-type: none"> <li>• Higher than most students</li> <li>• Higher than average</li> <li>• About average</li> <li>• Lower than average</li> <li>• Lower than most students</li> </ul>

### SECTION 3: FAMILY MUSICAL HISTORY

1	<p>Had the child's <b>mother</b> ever taken music lessons, for any kind of instrument? (if not, skip the next three questions)</p>	Yes    No
---	--	-----------

	1 <sup>st</sup> Instrument	<ul style="list-style-type: none"> <li>• Which instrument? _____</li> <li>• Approximately how many years? _____</li> <li>• At what age did she start lessons? _____</li> <li>• At what age did she stop lessons? _____</li> <li>• Does she still play today? Yes No</li> </ul>	
	2 <sup>nd</sup> instrument	<ul style="list-style-type: none"> <li>• Which instrument? _____</li> <li>• Approximately how many years? _____</li> <li>• At what age did she start lessons? _____</li> <li>• At what age did she stop lessons? _____</li> <li>• Does she still play today? Yes No</li> </ul>	
	3 <sup>rd</sup> instrument	<ul style="list-style-type: none"> <li>• Which instrument? _____</li> <li>• Approximately how many years? _____</li> <li>• At what age did she start lessons? _____</li> <li>• At what age did she stop lessons? _____</li> <li>• Does she still play today? Yes No</li> </ul>	
2	Had the child's <b>father</b> ever taken music lessons, for any kind of instrument? <i>(if not, skip the next three questions)</i>	Yes No	
	1 <sup>st</sup> instrument	<ul style="list-style-type: none"> <li>• Which instrument? _____</li> <li>• Approximately how many years? _____</li> <li>• At what age did he start lessons? _____</li> <li>• At what age did he stop lessons? _____</li> <li>• Does he still play today? Yes No</li> </ul>	
	2 <sup>nd</sup> instrument	<ul style="list-style-type: none"> <li>• Which instrument? _____</li> <li>• Approximately how many years? _____</li> <li>• At what age did he start lessons? _____</li> <li>• At what age did he stop lessons? _____</li> <li>• Does he still play today? Yes No</li> </ul>	
	3 <sup>rd</sup> instrument	<ul style="list-style-type: none"> <li>• Which instrument? _____</li> <li>• Approximately how many years? _____</li> <li>• At what age did he start lessons? _____</li> <li>• At what age did he stop lessons? _____</li> <li>• Does he still play today? Yes No</li> </ul>	
3	Does your child have any <b>siblings</b> ? <i>(If your child does not have any siblings, skip the next three questions)</i>	Yes No	
4	Sibling 1	Age _____ Has this child taken (or is taking) music lessons?	
		Yes	No

		<ul style="list-style-type: none"> <li>• Had started but stopped lessons</li> <li>• Was / Is taking music lessons for ____ years</li> <li>• Which instrument(s)? _____</li> </ul>	<ul style="list-style-type: none"> <li>• Is too young to take music lessons</li> <li>• We don't think music is a priority for that sibling</li> </ul>
5	Sibling 2	Age _____ Has this child taken (or is taking) music lessons?	
		Yes	No
		<ul style="list-style-type: none"> <li>• Had started but stopped lessons</li> <li>• Was / Is taking music lessons for ____ years</li> <li>• Which instrument(s)? _____</li> </ul>	<ul style="list-style-type: none"> <li>• Is too young to take music lessons</li> <li>• We don't think music is a priority for that sibling</li> </ul>
6	Sibling 3	Age _____ Has this child taken (or is taking) music lessons?	
		Yes	No
		<ul style="list-style-type: none"> <li>• Had started but stopped lessons</li> <li>• Was / Is taking music lessons for ____ years</li> <li>• Which instrument(s)? _____</li> </ul>	<ul style="list-style-type: none"> <li>• Is too young to take music lessons</li> <li>• We don't think music is a priority for that sibling</li> </ul>

#### SECTION 4: CHILD'S PIANO LESSONS & RECITALS

1	How often did you (or your spouse) sit in at your child's piano lesson?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>
If you <b>did</b> regularly attend your child's piano lessons, please answer the following two questions.		

2	When you (or your spouse) sat in on your child's piano lesson, it was because...	<ul style="list-style-type: none"> <li>• I was invited by the teacher</li> <li>• It was my own decision</li> </ul>
3	When you (or your spouse) attended your child's piano lessons, to what degree did you focus on what is going on in the lesson as opposed to doing something else (e.g., reading, texting, answering emails)?	<ul style="list-style-type: none"> <li>• Focus entirely on something else</li> <li>• Focus largely on something else</li> <li>• Focus partly on something else and partly on the lesson</li> <li>• Focus largely on the lesson</li> <li>• Focus entirely on the lesson</li> </ul>
<p>If you <b>did not</b> regularly attend your child's piano lessons, please answer the following questions.</p>		
4	If you (or your spouse) never sat in on your child's piano lesson, it was because...	<ul style="list-style-type: none"> <li>• Our piano teacher would not have allowed it</li> <li>• I never thought about attending my child's lesson</li> <li>• I did not have time / a scheduling conflict</li> <li>• I'm not sure I would have been very helpful</li> <li>• I had no interest in attending the lesson</li> </ul>
5	If you (or your spouse) never attended your child's piano lesson, how often did you have contact with the teacher (in person, phone calls or emails) to be informed about your child's progress?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>
6	How often did the child's <b>mother</b> attend piano recitals/concerts?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> <li>• If they are unable to, please comment: _____</li> </ul>
7	How often did the child's <b>father</b> attend piano recitals/concerts?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> <li>• If they are unable to, please comment: _____</li> </ul>

## SECTION 5: CHILD'S PIANO PRACTICE

1	In your home, did your child have access to a quiet and conducive space for practicing the piano?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>	
2	What type of instrument did your child practice piano on?	<ul style="list-style-type: none"> <li>• We did not own a piano</li> <li>• Mid-size electric keyboard</li> <li>• Full-size digital keyboard with weighted keys</li> <li>• Acoustic upright piano               <ul style="list-style-type: none"> <li>a. less than 20 years old</li> <li>b. 20-50 years old</li> <li>c. more than 50 years old</li> </ul> </li> <li>• Acoustic grand piano               <ul style="list-style-type: none"> <li>a. less than 20 years old</li> <li>b. 20-50 years old</li> <li>c. more than 50 years old</li> </ul> </li> </ul>	
3	When your child stopped piano lessons, what was the quality of the piano on which your child practiced?	<ul style="list-style-type: none"> <li>• Of poor quality</li> <li>• Of medium quality</li> <li>• Of good quality</li> <li>• Of excellent quality</li> </ul>	
4	If your child practices on an acoustic piano, how is the instrument maintained and tuned?	<ul style="list-style-type: none"> <li>• More than twice a year</li> <li>• Twice a year</li> <li>• Once a year</li> <li>• Less than once a year</li> </ul>	
5	In your child's <i>final year of piano lessons...</i> (approximate values)	how many <i>days a week</i> did your child practice the piano?	how many <i>minutes</i> was each practice session?
		_____ days per week	_____ minutes
6	In your child's <i>previous years of piano lessons...</i> (approximate values)	how many <i>days a week</i> was your child practicing the piano?	how many <i>minutes</i> was each practice session?
		Year 1 _____ Year 2 _____ Year 3 _____ Year 4 _____ Year 5 _____	Year 1 _____ Year 2 _____ Year 3 _____ Year 4 _____ Year 5 _____
7	At home, how often did you (or your spouse) help your child with piano practice?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>	

8	At home, which of the following best describes you (or your spouse) during your child's piano practice?	<ul style="list-style-type: none"> <li>• I was not really involved</li> <li>• I listened to my child's practice from a distance so I knew what was going on</li> <li>• I provided feedback when I heard something wrong or something well played</li> <li>• I sat with my child during piano practice and we worked together</li> </ul>	
9	Home Practicing	Did you (or your spouse) <i>praise</i> your child for practicing at home?	Did you (or your spouse) offer your child <i>material rewards or privileges</i> practicing at home?
		<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>
10	Milestones and Achievements (lessons, performing, competitions, exams, completing a certain level)	Did you (or your spouse) <i>praise</i> your child for achievements or milestones at the piano?	Did you (or your spouse) offer your child <i>material rewards or privileges</i> for achievements or milestones at the piano?
		<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>
11	If you (or your spouse) rewarded your child for practicing or for achievement, what sort of rewards did you provide?		

### SECTION 6: OTHER MUSICAL EXPERIENCES

1	Did your child attend summer music camps?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>
2	Did your child attend master classes or workshops?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>

3	Did your child participate in any kind of collective music-making on the piano (duets, bands, accompanying other performers, small ensemble)?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>
4	Did your child participate in any kind of informal performances (playing for family and friends, in retirement homes)?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>
5	Did you (or your spouse) listen to CLASSICAL music together with your child at home (or in the car)?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>
6	Did you (or your spouse) listen to JAZZ music together with your child at home (or in the car)?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>
7	Did you (or your spouse) listen to POP music together with your child at home (or in the car)?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>
8	Did you (or your spouse) listen to COUNTRY OR WORLD music together with your child at home (or in the car)?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>
9	Did you (or your spouse) attend professional classical concerts with your child?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>
10	Do you (or your spouse) attend other types of concerts with your child?	<ul style="list-style-type: none"> <li>• Never</li> <li>• Seldom</li> <li>• Sometimes</li> <li>• Often</li> <li>• Always</li> </ul>
	If so, what kinds of concerts?	

## SECTION 7: PARENTS' OPINION

1	In your opinion when your child did well in music, it was because:	<ul style="list-style-type: none"> <li>• My child was talented</li> <li>• My child practiced hard</li> <li>• My child was talented and practiced hard</li> <li>• My child is lucky</li> </ul>
2	In your opinion to succeed in music, your child needed:	<ul style="list-style-type: none"> <li>• To work harder and practice more than most students</li> <li>• To work and practice about the same as most students</li> <li>• To work less and practice less than most students</li> </ul>
3	In your opinion musical ability is:	<ul style="list-style-type: none"> <li>• Something we are born with</li> <li>• Something we can develop by working on it</li> <li>• Both of the above</li> </ul>

## SECTION 8: REASONS FOR LEAVING LESSONS

1	My child's piano lessons ended primarily because...  (Choose the <i>one</i> best answer, or write your own.)	<ul style="list-style-type: none"> <li>• Playing the piano proved to be too difficult</li> <li>• We did not have enough time to practice</li> <li>• My child wanted to play another instrument</li> <li>• My child did not like the music he/she was learning</li> <li>• Lessons were moving too fast / too slow</li> <li>• My child did not like performing</li> <li>• We did not own a suitable instrument</li> <li>• I felt my child had learned enough to play music on their own</li> <li>• Other _____</li> </ul>					
2	Did you like your child's piano teacher?  <i>Why or why not?</i>	<table border="1" style="width: 100%; text-align: center;"> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No			
Yes	No						
3	Did you stop piano lessons because they were too expensive?	<table border="1" style="width: 100%; text-align: center;"> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No			
Yes	No						
4	Did <i>you</i> move away?	<table border="1" style="width: 100%; text-align: center;"> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No			
	Yes	No					
Did <i>your teacher</i> move away?	<table border="1" style="width: 100%;"> <tr> <td style="width: 60%;"> <ul style="list-style-type: none"> <li>• You have not found another teacher yet?</li> <li>• You do not want to find another teacher?</li> </ul> </td> <td style="width: 40%;"></td> </tr> <tr> <td style="text-align: center;">Yes</td> <td style="text-align: center;">No</td> </tr> <tr> <td> <ul style="list-style-type: none"> <li>• You have not found another teacher yet?</li> <li>• You do not want to find another teacher?</li> </ul> </td> <td></td> </tr> </table>	<ul style="list-style-type: none"> <li>• You have not found another teacher yet?</li> <li>• You do not want to find another teacher?</li> </ul>		Yes	No	<ul style="list-style-type: none"> <li>• You have not found another teacher yet?</li> <li>• You do not want to find another teacher?</li> </ul>	
<ul style="list-style-type: none"> <li>• You have not found another teacher yet?</li> <li>• You do not want to find another teacher?</li> </ul>							
Yes	No						
<ul style="list-style-type: none"> <li>• You have not found another teacher yet?</li> <li>• You do not want to find another teacher?</li> </ul>							

5	Did your child have too much interfering homework from school?	Yes	No
6	Did your child stop piano lessons because of sports? If so, which one(s)?	Yes	No
7	Did your child stop piano lessons in order to play a different instrument? If so, which one(s)?	Yes	No
8	What would have made piano lessons more enjoyable for your child?		
9	Was there anything that could have changed your mind from dropping out?  <i>If so, what?</i>		
10	Do you think your child will ever return to piano lessons?  <i>Why or why not?</i>		

**THANK YOU FOR TAKING THE TIME TO FILL OUT THIS SURVEY!**

*Our goal is to promote a research-based approach to piano pedagogy and apply this approach to the continuous improvement of piano teaching*

**Appendix 2**



uOttawa

École de musique  
School of Music

**Survey of Musical Interests**

**Student's Questionnaire**

**Research Group in Piano Pedagogy**

**University of Ottawa**

## GENERAL INFORMATION

Child's Name	
Date	
Parent's or Guardian's Name	
Former Piano Teacher's Name	

### PART 1

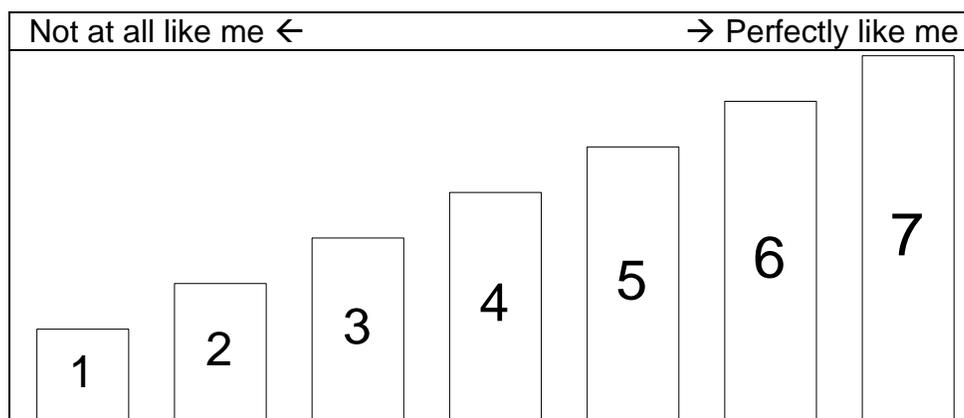
#### Instructions

You had been learning to play the piano but stopped after a while. You were probably learning to play the piano for various reasons and some of these reasons may be more important than others. I am particularly interested in your reasons about why you started to play the piano.

I will present you with different reasons why people learn to play the piano and what I would like you to do is tell me how much each of these reasons described what you thought or how you felt when playing the piano. When you think about a reason for learning to play the piano, ask yourself if this reason described you “perfectly”, “not at all” or “somewhere in between” when you were taking piano lessons.

To indicate how much the statements described you, all you need to do is choose one of the towers shown below. Circle the number to identify the tower you choose.

- If the reason mentioned described you perfectly, then pick the highest tower.
- If the reason did not describe you at all, then pick the smallest tower.
- If the reason described do to some degree in between these two extremes, then pick a tower somewhere in between.



Do you understand what we are going to do? OK. Let's do a couple of examples just to practice. These examples have nothing to do with music but they will help you understand what we are going to do. Are you ready to begin?

## Just for practice

I do my classwork \_\_\_\_\_.

		Not at all like me ←→ Perfectly like me
1	So that the teacher won't yell at me.	
2	Because I want to learn new things.	
3	Because I will feel guilty if I don't.	
4	Because it's fun.	
5	Because my parents pay me to go to school.	

Very good! Now I am going to give you various reasons why people may learn to play the piano and I would like you to do exactly the same thing you just did. Tell me how much these sentences described your own reasons when you were learning to play the piano.

## Now, the real thing!

**I learned to play the piano \_\_\_\_\_**

		Not at all like me ←→ Perfectly like me
1	because I enjoyed learning new things about music.	
2	because I had a talent for playing piano.	
3	but it was a waste of my time.	
4	but I didn't think I had much talent for it.	
5	because my parents did not leave me any choice.	
6	because I didn't want to disappoint my parents.	

## I learned to play the piano \_\_\_\_\_

		Not at all like me ←→ Perfectly like me
7	because I enjoyed making soft and loud sounds on the piano.	
8	because I got praised when I played.	
9	because it helped me with school.	
10	because I got a reward for it.	
11	because my parents forced me to.	
12	because it made me feel proud.	
13	because I felt good when I played a piece very well.	

## I learned to play the piano \_\_\_\_\_

		Not at all like me ←→ Perfectly like me
14	because I wanted to be a musician when I grew up.	
15	because it was important to me.	
16	but I didn't see the point in learning to play the piano.	
17	because I liked moving my fingers on the keys.	
18	because I saw myself as a musician.	
19	but I didn't care if I played the piano or not.	
20	because it was part of who I was.	

## I learned to play the piano \_\_\_\_\_

		Not at all like me ←→ Perfectly like me
21	because it was a part of my life.	
22	because I would have been ashamed if I stopped playing so soon after starting.	
23	because my friends were taking piano lessons.	
24	for longer than I wanted because I was afraid of disappointing my teacher if I stopped playing.	
25	but I didn't like practicing.	
26	because it made me feel good.	
27	but learning to play the piano was not worth all the trouble.	

## I learned to play the piano \_\_\_\_\_

		Not at all like me ←→ Perfectly like me
28	because it helped me be a better person.	
29	because I liked the sound the piano made.	
30	because I would have felt bad if I didn't learn to play the piano.	
31	because it was a normal thing for me to do.	
32	because it helped me reach my personal goals.	
33	but I felt relieved when the piano lesson was over.	
34	for longer than I wanted to because I did not want my parents to be upset if I quit the piano.	

## I learned to play the piano \_\_\_\_\_

		Not at all like me ←→ Perfectly like me
35	because this was something I really wanted to do.	
36	but I didn't feel excited about it.	
37	because it helped me believe in myself.	
38	because it was a choice I made.	
39	because this was what a musician did.	
40	because I had made the decision to become a good piano player.	
41	because I wanted to be able to play every day.	

## I learned to play the piano \_\_\_\_\_

		Not at all like me ←→ Perfectly like me
42	but I didn't know why I was doing it.	
43	because I enjoyed learning new pieces.	
44	because it made me a more interesting person.	
45	because playing the piano was a lot of fun.	
46	because there was always something new to learn in life.	
47	because it made me feel special.	
48	because I wanted to prove to myself that I could do it.	

## I learned to play the piano \_\_\_\_\_

		Not at all like me ←→ Perfectly like me
49	because I didn't want to get in trouble.	
50	because I did not want to feel guilty.	
51	because I liked the idea of playing the piano often.	
52	because it was really interesting.	
53	but I did not want to do it.	
54	because it made me feel that I was a special person.	
55	because I wanted the teacher to say nice things about me.	

## I learned to play the piano \_\_\_\_\_

		Not at all like me ←→ Perfectly like me
56	because it made me feel smart.	
57	because I would have liked to become a musician.	
58	but I was not interested in it.	
59	because it was what I loved to do.	
60	for longer than I wanted to because I did not want my teacher to be upset with me if I stopped.	
61	because I did not want to feel anxious.	
62	longer than I wanted to because I would have felt embarrassed if I stopped too soon.	

## I learned to play the piano \_\_\_\_\_

		Not at all like me ←→ Perfectly like me
63	longer than I wanted to because I would have let down my parents if I stopped too soon.	
64	because I would have felt bad about myself if I didn't learn to play the piano.	
65	because I used to guilt myself into doing it.	
66	for a longer than I wanted to because I would have been ashamed of myself if I stopped playing.	
67	because I pressured myself.	

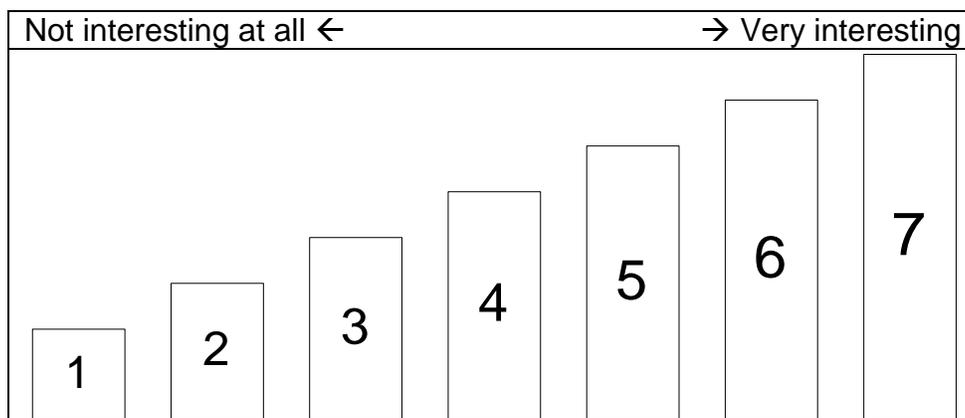
## PART 2

### Instructions

Now we will turn to something different. As you know, when you played the piano you learned many different things. You probably noticed that you enjoyed certain things more than others. What I would like to know now is how interesting these different things were to you. We will now consider different things that are related to music and you will tell me how interesting you think they were when you were taking piano lessons.

To indicate how interesting these things were to you, choose one of the towers shown below. Circle the number to identify the tower you chose.

- If you found it very interesting, then pick the highest tower.
- If you did not find it interesting at all, then pick the smallest tower.
- If your level of interest was somewhere between these two extremes, then pick a tower somewhere in between.



Do you understand what we are going to do? OK. Let's do a few examples just to practice. These examples have nothing to do with music but they will help you understand what to do. Are you ready to begin?

### Just for practice

		Not interesting at all ←→ Very Interesting
1	Watching TV	
2	Playing video games	
3	Washing dishes	
4	Cleaning up my room	
5	Receiving presents on my birthday	

Very good! Now I am going to show you activities that are related to music and I would like you to do exactly the same thing you just did. Tell me how much interesting you think these activities were when you were taking piano lessons.

Are you ready to continue?

### Now the real thing!

		Not interesting at all ←→ Very Interesting
1	When I listened to piano music on CDs or on the radio	
2	Practicing a piece I already knew	
3	When I went to music camp	
4	Repeating a certain bar that needed practicing	
5	Composing a piece of music	
6	When my parents were in the room during my piano lesson	

		Not interesting at all ←→ Very Interesting
7	When I played piano duets	
8	When I learned a new piece	
9	When I had my parents help me with practice at home	
10	When I practiced a piece slowly	
11	When I went to concerts	
12	When I went to my piano lessons	

		Not interesting at all ←→ Very Interesting
13	When I played the piano along with the metronome	
14	When I performed at a recital	
15	Counting out loud when I played	
16	Sight reading	
17	Practicing scales	
18	When I worked on a hard piece of music	

		Not interesting at all $\leftrightarrow$ Very Interesting
19	When I played for my piano teacher	
20	When I played for my family or friends	
21	When I took a piano exam	
22	When I learned a piece on my own	
23	Improvising	
24	Composing music	

		Not interesting at all ←→ Very Interesting
25	When I played familiar songs by ear	
26	When I played along with a CD or disc accompaniment	
27	When I played with other instruments or in a band (such as rock band or any type of ensemble)	
28	When I used a computer to make my own music	

### PART 3

#### Instructions

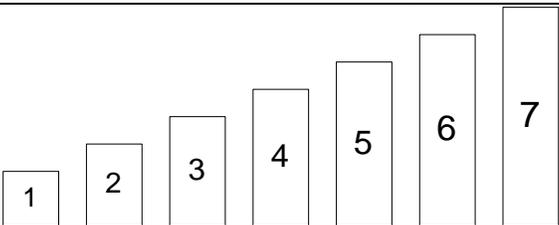
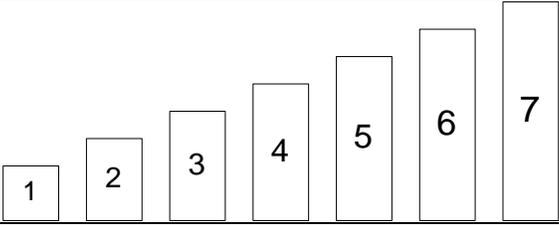
I will now describe different actions piano students do. I would like you to tell me how much these actions resemble things you did as a piano student. To do this, you will circle the number that corresponds to your impression, just like you did before.

If the action describes something you did a lot, then select the tallest tower. If it describes something you never did, then select the smallest tower. If it describes something you did sometimes, then pick a tower in between.

		Not at all like me ← → Perfectly like me
1	I practiced piano only when my parents made me	
2	I played pieces I knew just for the fun of it	
3	I would have rather played the piano than do any other activity	
4	I often had to be reminded to practice piano	
5	I forced myself to practice the piano	

		Not at all like me ←→ Perfectly like me
6	When I was away from home I looked for a piano I could play	
7	I often skipped practice	
8	I made up my own music	
9	I never practiced longer than I was supposed to	
10	I was too busy to practice	
11	I made sure I practiced before going out with my friends	
12	I would have played the piano all day if I could	

		Not at all like me ←→ Perfectly like me
13	I often played my pieces for my friends	
14	I made a point of making some time for music every day	
15	I tried to make friends with other music students	
16	I often found excuses not to practice	
17	I sometimes skipped my piano lesson	
18	My parents made me go to my piano lessons	
19	I often spent free time playing around on the piano	

		Not at all like me ←→ Perfectly like me
20	I often watched the clock when I practiced	
21	Most of the time I got to my piano lesson on time	

## PART 4

### Instructions

Please circle the response that best describes what you think.

1	When I compared my piano abilities with those of other students, I considered myself to be _____.	<ul style="list-style-type: none"> <li>• Better than most students</li> <li>• Better than average</li> <li>• About average</li> <li>• Worse than average</li> <li>• Worse than most students</li> </ul>
2	I took piano lessons _____.	<ul style="list-style-type: none"> <li>• But I intended to stop soon after I started</li> <li>• And I thought I would continue until I finished elementary school</li> <li>• And I thought I would continue until I finished high school</li> <li>• And I thought I would continue even after high school</li> </ul>
3	When I did well in music it was because _____.	<ul style="list-style-type: none"> <li>• I was talented</li> <li>• I practiced hard</li> <li>• I was lucky</li> </ul>
4	To succeed in music I needed _____.	<ul style="list-style-type: none"> <li>• To work harder and practice more than most students</li> <li>• To work and practice about the same as most students</li> <li>• To work less and practice less than most students</li> </ul>
5	In my opinion, music ability is _____.	<ul style="list-style-type: none"> <li>• Something I was born with</li> <li>• Something I could develop by working on it</li> <li>• Both of the above</li> </ul>

## PART 5

### Instructions

You are almost done! Last, I am interesting in finding out some reasons why you left piano lessons. Remember that there are no wrong answers: just be true to what you think about why your piano lessons ended. Please circle the response that describes you the best.

1	<p>The main reason I stopped piano lessons was because...</p> <p>(Choose the <i>one</i> best answer, or write your own.)</p>	<ul style="list-style-type: none"> <li>• Playing the piano was too hard</li> <li>• Playing the piano was too easy</li> <li>• I did not have enough time to practice</li> <li>• I wanted to play another instrument</li> <li>• I did not like the music I was learning</li> <li>• I did not like performing</li> <li>• I did not have a very good instrument</li> <li>• I had learned enough about music to play by myself</li> <li>• Other _____</li> </ul>	
2	<p>Did you like your piano teacher?</p> <p><i>Why or why not?</i></p>	Yes	No
3	<p>Did you stop piano lessons because they were too expensive?</p>	Yes	No
4	<p>Did <i>you</i> move away?</p>	Yes	No
		<ul style="list-style-type: none"> <li>• You have not found another teacher yet?</li> <li>• You do not want to find another teacher?</li> </ul>	
	<p>Did <i>your teacher</i> move away?</p>	Yes	No
		<ul style="list-style-type: none"> <li>• You have not found another teacher yet?</li> <li>• You do not want to find another teacher?</li> </ul>	
5	<p>Did you have too much interfering homework from school?</p>	Yes	No
6	<p>Did you stop piano lessons because of sports?</p> <p>If so, which one(s)?</p>	Yes	No
7	<p>Did you stop piano lessons in order to play a different instrument?</p> <p>If so, which one(s)?</p>	Yes	No

8	What would have made piano lessons more fun?	
9	Was there anything that could have changed your mind from quitting piano? If so, what?	Yes                      No
10	Do you think you will ever take piano lessons again? Why or why not?	Yes                      No

**You are done. Good work!**

**Thank you for taking this time to help us with our research.**

### Appendix 3

#### Comparison Of Wording In Additional Questions

#	Original Question	Reformatted Student Version	Reformatted Parent Version	Original Author
1	What is/are your main reason(s) for wanting to quit?	The main reason I stopped piano lessons was because... (Choose the one best answer, or write your own.)	My child's piano lessons ended primarily because... (Choose the one best answer, or write your own.)	Govel
	My lessons ended primarily because:			Dyal
2	Do you (or did you) like your private piano teacher? Why or why not?	Did you like your piano teacher? Why or why not?	Did you like your child's piano teacher? Why or why not?	Govel
3	Did you quit because the lessons were too expensive?	Did you stop piano lessons because they were too expensive?	Did you stop piano lessons because they were too expensive?	Govel
4	You recently moved and haven't found a teacher you like? You recently moved and you haven't considered continuing with lessons? Your piano teacher moved away and you haven't found a new one?	Did you move away? Did your teacher move away?	Did you move away? Did your teacher move away?	Govel
5	Did you quit because you have too much homework?	Did you have too much interfering homework from school?	Did your child have too much interfering homework from school?	Govel
6	Did you quit because of sports?	Did you stop piano lessons because of sports? If so, which one(s)?	Did your child stop piano lessons because of sports? If so, which one(s)?	Govel
7	Did you quit because you wanted to play another instrument?	Did you stop piano lessons in order to play a different instrument? If so, which one(s)?	Did your child stop piano lessons in order to play a different instrument? If so, which one(s)?	Govel

8	What could (would) make your lessons more enjoyable?	What would have made piano lessons more fun?	What would have made piano lessons more enjoyable for your child?	Govel
9	What could (would) change your mind?	Was there anything that could have changed your mind from quitting piano? If so, what?	Was there anything that could have changed your mind from dropping out? If so, what?	Govel
10	N/A	Do you think you will ever take piano lessons again? Why or why not?	Do you think your child will ever return to piano lessons? Why or why not?	Researcher

## Appendix 4 Ethics Board Approval for Research

File Number: 06-15-41

Date (mm/dd/yyyy): 07/14/2015



**Université d'Ottawa**      **University of Ottawa**  
 Bureau d'éthique et d'intégrité de la recherche      Office of Research Ethics and Integrity

### Ethics Approval Notice Social Science and Humanities REB

**Principal Investigator / Supervisor / Co-investigator(s) / Student(s)**

<u>First Name</u>	<u>Last Name</u>	<u>Affiliation</u>	<u>Role</u>
Gilles	Comeau	Arts / Music	Supervisor
Karen	King	Arts / Music	Student Researcher

File Number: 06-15-41

Type of Project: Master's Thesis

Title: The Development of a Motivation Assessment Scale for young Piano Students

<u>Approval Date (mm/dd/yyyy)</u>	<u>Expiry Date (mm/dd/yyyy)</u>	<u>Approval Type</u>
07/14/2015	07/13/2016	Ia

(Ia: Approval, Ib: Approval for initial stage only)

Special Conditions / Comments:

N/A

## Appendix 5

### Initial Email to Teachers

Hello Teacher,

I'm writing today not only as a fellow registered music teacher, but a researcher in piano pedagogy. I'm hoping you might have a moment to help me with my graduate research and connect me with any of your students who may have left piano lessons recently. For my thesis, I am interested in studying the motivations of students who have dropped out of piano lessons. This is the first study ever of its kind and very important to find as many participants as possible.

My research project is focused on students who have left piano lessons after having completed at least one full year (even if they continued to take music lessons on another instrument), did not reach a Grade 8 RCM playing level, and who are now between 8 and 18 years old.

Please let me be clear: this will not reflect poorly on you as a teacher and teachers are not required to fill out a survey. Throughout the research it has been well demonstrated that teachers are *not* one of the main reasons that students leave lessons.

I'm hoping you might connect me with some of your former students by forwarding the *sample email below* and the attached letter for parents. Please feel free to change anything to suit your writing style. **After asking parents to participate and permission to pass along their contact information, simply forward their phone & email information to me and I will contact them separately to arrange an interview.**

If you would like more information, I have attached another letter for teachers describing the process more thoroughly. My many thanks for your help connecting me with some of your former piano students!

Karen King

---

Hello \_\_\_\_\_,

*I know it's been a while since we last spoke and I hope you are well! I'm writing today on behalf of my colleague, Karen King, who is doing graduate research with piano students through the University of Ottawa. Since you are one of my former piano students, I was thinking you might be interested in participating in this project.*

*The goal is to interview former piano students on their motivation for taking piano lessons and some of the reasons for leaving lessons. Please be clear that no judgment is intended for having left lessons: researchers are simply trying to discover themes in students' reasons for starting or ending lessons and they understand that piano is just not for everyone. For example, students will be asked to rate on a 1 through 7 scale how much they considered piano to be part of their everyday life. The researcher would also like to interview parents about things like practice habits, the child's academic background, or what kinds of music the family listened to at home.*

*Both students and parents will complete questionnaires about their experiences with piano lessons and the whole process will take about half an hour. These surveys can be completed at your home, at a Starbucks, or any convenient location for you.*

*Research is very important to the success of music teaching and I think you would be perfect for contributing to this academic knowledge. **Could I have your permission to pass along your contact information to the researcher?** If so, Karen will contact you shortly to arrange a convenient time and location with you and your child.*

*I have attached a letter describing the process more thoroughly. Thank you for your contribution to music education research!*

---

## Appendix 6 Letter to Parents and Guardians

Calgary - July 15, 2016

**Dear Parent or Guardian,**

I am writing to you today as a researcher from the Piano Pedagogy Research Laboratory at the University of Ottawa. The goal of this laboratory is to explore new and better ways to help children learn to play the piano and enjoy this activity. Currently, we are researching children's interest in piano lessons and their motivation to continue or withdraw from piano studies. We have drafted a questionnaire to better understand the reasons why piano students leave lessons. You are being contacted because of your previous involvement in piano lessons and the permission you gave your former piano teacher to forward your contact details. I am writing to ask if you and your child would participate in this research project. Here are the details.

**Objective:** To understand and measure 9- to 17-year-old children's reasons for leaving piano lessons.

**Funding:** All costs related to this project will be paid for by the University of Ottawa. There will be absolutely no cost to you, your child, or your child's former piano teacher.

**Requirements:** The project will be carried out as separate interviews with both parent and child and this process will take approximately 30 minutes.

*Former piano students* will be asked various reasons or motivations that a student might have when learning to play the piano. Your child will assess how familiar these statements were to their experience. Participants will be asked to rate different piano-related activities on a scale from one to seven to show how interesting these activities were when they were taking piano lessons (e.g., working with a metronome).

*Parents* will be asked to provide background information related to their child's previous piano learning experience. For example, parents will share their child's exam marks or recital participation, the family musical history, how frequently parents attended lessons, or what types of recorded music were commonly played at home.

Both children and parents will be asked additional, circumstantial questions about leaving piano lessons, such as scheduling conflicts, or switching to another instrument. None of the questions in any part of the interviews are intended to be embarrassing, and no judgment will be made on anyone's character for having left piano studies. There are no right or wrong answer to these questions - we are simply asking each participant to share his/her opinions or circumstances.

**Researcher:** The interview will be carried out by Karen King, a Masters candidate from the Piano Pedagogy Research Laboratory at the University of Ottawa, who has vast experience interacting with young music students.

**Time and Location:** The interviewer will contact parents by phone or e-mail and make the necessary arrangements regarding the date, time and place of the interview.

**Voluntary participation, anonymity and confidentiality:** You and your child should participate in this project only if you feel compelled. After indicating interest in this project, you may decide not to answer every question or may stop the interview at any time. All information provided will remain strictly anonymous and confidential. Only authorized members of the Piano Pedagogy Research Laboratory will have access to the data provided. When we report the results of this project, only group averages will be presented and no information about individuals will ever be made public.

This project has been approved by the Research Ethics Board of the University of Ottawa. For any information regarding ethical issues in research, feel free to contact the Office of Research Ethics and Integrity, University of Ottawa, Room 154, Tabaret Hall, 550 Cumberland Street, Ottawa, Ontario K1N 6N5. (Tel.: 613-562-5387; Email: ethics@uottawa.ca)

**Your consent and that of your child:** If you are interested in this project, may we ask you to discuss it with your child? If both you and your child are interested, consent forms should be filled out and signed before the interviews begin. Even after signing these forms you are not bound to anything; these forms just indicate that you agree to participate in the project. You will be given one copy of the consent form and will return the other.

We hope you will find this project interesting and we thank you in advance for considering this request for participation.

Sincerely,

**Karen King**

Master of Arts in Piano Pedagogy candidate  
École de musique / School of Music  
Université d'Ottawa / University of Ottawa

**Gilles Comeau**

Professeur titulaire / Full professor  
École de musique / School of Music  
Université d'Ottawa / University of Ottawa

## Appendix 7

### Researcher Script For Student Participants

INTRODUCTION: I'm a graduate student at the University of Ottawa doing research with piano students and my goal is to find out some things you liked or didn't like about taking piano lessons. I'm sure you noticed that some things came very naturally to you and were very easy when you were taking lessons, but other things might have been difficult and sometimes not that fun. I'm hoping to understand how you felt when you were taking lessons so you just need to be totally honest about whatever it is that you think. There's nothing you could possibly write down that would be considered "wrong". I'm not going to show this to your mom, to your piano teacher, or anyone else - these papers are going to be sent to Ottawa and stored in the archives for the next five years.

SECTION 1: We're going to pick a number that will tell me how much this sentence describes you. Let's do some practice questions first. If you choose a seven, that represents you 100%. For example, that might mean you watch TV 17 hours a day, love every single show, and even the commercials! If you choose the one that might mean you don't even have a TV. If you choose something in between, that means sometimes but not always. What do you think? Circle or checkmark whichever tower describes you the best.

You can go through this first part at your own pace as fast or as slow as you like. There are about 65 questions and when you get to the end just pause and I will tell you what to do next.

PART 2: We're still going to pick a tower between one and seven but now it will tell me how interesting, how exciting, or how much you enjoyed doing these things when you were taking lessons. For example, choosing a seven means it's awesome, a one means horrible, and four would be just OK.

If you come across a question that you've never tried before cross it out or write "no". You might try it someday, you might love it, but for now we just don't know.

PART 3: This is mostly like Part One where there's going to be a sentence and you just have to rate how much it applied to you by choosing a tower from 1 to 7.

*\*no more practice questions*

PART 4: All you need to do here is choose whichever ending you think fits best with the beginnings of these sentences. Circle the dot or the words - it doesn't really matter – but you only get to choose *one* answer per question.

## Appendix 8

### Open Ended Questions

**Question 1:** The main reason I stopped piano lessons was because...

“Other” Answers

#### Students

I was bored of it.  
 I got a new teacher that I didn't like.  
 I didn't like practicing.  
 I got tired of playing the same songs over and over.  
 I was not interested.  
 I moved and couldn't find a teacher.  
 I was interested in other activities (sports).  
 I didn't enjoy playing scales.  
 I was not interested.  
 My parents finally let me.

#### Parents

We left the piano teacher and are looking for another more suitable teacher  
 Her interest in other non-music activities was growing and level of commitment. Her interest in piano was waning.  
 Due to school work.  
 She lost interest in playing piano music.  
 She would fight with me and not want to practice.  
 Did not like the time commitment and not enough interest.  
 She wanted a break from music homework.  
 Moved out of area.  
 No longer had funds for piano lessons.  
 She said she didn't like it anymore.  
 Didn't enjoy practicing - ready to move to band.  
 She was not interested. She didn't love it and wasn't born with interest.  
 Child was tired of lessons.  
 Loss of interest  
 Practicing was a fight.  
 We moved and cost was high.  
 Mental health issues.  
 Wasn't interested in it.  
 My child wants to focus on sports.  
 My child likes to focus on sports.  
 Not motivated and not enough practicing.

He really disliked practicing.  
 She did not enjoy practicing and chose to stop lessons.

**Question 2:** Did you (or your child) like your piano teacher? Why or why not?

Students

Because I felt she pushed me a bit too hard.  
 She always encouraged me and she inspired me.  
 Very nice and encouraged; allowed high progress in piano ability.  
 She was awesome! Funny, nice, always there for me.  
 She was always nice, supportive, helpful, a good teacher who helped me learn and understand everything about music.  
 She helped me play to the best of my ability. She was always kind.  
 Because she was nice.  
 She was super nice and wasn't too strict.  
 She was nice.  
 She pushed me to keep trying as long as I could and I respect that.  
 She is really nice.  
 I didn't like her personality even though she was nice and a good teacher.  
 He didn't let me choose songs I played. We often spent months at a time working on one song.  
 I wasn't allowed to look at my hands or play by ear.  
 Because he was kind.  
 Very flexible and worked with me to find what worked/helped me.  
 I think that she really helped me to improve, sometimes, however, I thought that her expectations for me were slightly unreasonable.  
 She was there to help me with anything I needed and was there to motivate me.  
 I liked that she was very kind, helpful, and that she made sure you were comfortable.  
 She taught in a unique way.  
 She was very kind and constantly gave me motivation.  
 I liked my teacher because she was really nice.  
 She was nice and she congratulated me when I did well, and she showed what to improve on for next time.  
 Because she was nice.  
 She yelled too much.  
 Singing, fun.  
 Very nice.  
 Teaching style  
 She was fun and her methods worked well.  
 My piano teacher was both supportive and critical.  
 She was kind, a great teacher and sweet.  
 She was always coming up with fun ways to teach, and we'd spend lots of time just chatting.  
 She was always very fun and we had lots of laughs.  
 She seldom got angry.

I liked my teacher because she was really patient, encouraging, and really helped me understand music better.

She was very kind and taught me well.

She was dedicated, funny, caring, and wanted me to succeed. She wouldn't give up helping me until I mastered a piece and was encouraging.

She gave constructive criticism. She helped me with things I was confused about.

She did not put a lot of pressure on me.

Patient, flexible, challenged me with appropriate pieces, lots of different styles of music.

Personal motivator and helped out in my life - really got me through tough moments. But, too slow, didn't learn much and slowly distanced myself.

Kind, funny, and overall a good teacher.

Because she was nice.

She was nice.

She was kind and never got mad at me.

Because she was nice and she did not get mad when I was bad.

She was very patient and even when I made lots of mistakes she would go through them slowly and use interesting ways to make it easier.

Sometimes - did not enjoy process and therefore teacher. When I got older, it improved.

She is very kind and loves teaching. She knows a lot about the piano and is very talented. She is very supportive.

Because he wanted me to be a musician.

She did believe in me a lot, and wasn't too strict like others I'd heard of.

Because you taught me well.

Because she was fun and always happy.

She was talented, funny, and kind.

She was fun and let you pick your own songs.

## Parents

She didn't challenge Evan in ways that motivated him - wouldn't let him pick songs or told him he couldn't learn songs he requested.

She was very effective and Kali was very fond of her. She was motivating.

She is a wonderful teacher, very patient, and taught any child in a way that she can understand.

Very upbeat and encouraging/inspirational.

Excellent teacher who balanced structure, strictness, yet fun and loving.

She challenged him and provided praise and incentive for hard work.

She was good at encouraging practise and held mini-recitals.

Very experienced and skilled.

Tanya was consistent and fair; she allowed some leeway in music choice for each child.

Work at child's pace; fun & engaging; very supportive.

She had great musical skills herself. She was organized and had good teaching methods.

Very capable - tried to make the basics interesting.

Michael was excellent at engaging Justin and providing a supportive learning environment.

Very strong technically, had high expectations, nice person.

We loved Madeline. She had high but realistic expectations. Kind but firm, also open to suggestions.

Strong passion for all things musical. Very knowledgeable and creative.

Kind and patient. Great belief in students.

Lynn was kind, encouraging, cheerful, helpful, engaging, creative, stimulating, patient.

She was patient and could relate well with kids.

She was very patient and tolerant, and made it fun.

Enthusiastic

Enthusiastic

Janet was talented and worked well with the children. They learned a lot.

Talented, easy to connect with, geared lesson to child's ability and interests.

Katie was very passionate about her students' success.

She was kind and organized.

Allowed child to move at own pace, very encouraging and supportive.

She is patient, knowledgeable, and creative.

She understood Nathan and challenged him. Nathan enjoyed her.

She was awesome. Made lessons fun yet challenging. Easy to talk to.

She was patient, easy going, but worked the kids hard & inspired the kids.

Patient, flexible, catered to your likes!

Very nice, connected with kids, a good teacher.

She is kind and knowledgeable, very professional, very good at teaching young children.

She is kind, knowledgeable, very professional, and very good at teaching young kids.

Nice personality, always smile

Janice was an excellent teacher and Rachel wanted to do well partially for her. Janice was kind, always interested in Rachel as a human being, and was infinitely patient.

He is okay - but could not motivate some children to enjoy music.

**Question 6:** Did you (or your child) stop piano lessons because of sports? Which ones?

### Students

Basketball

Irish Dancing

Volleyball And Softball

Skiing, Gymnastics, Trampoline

Horseback Riding

Volleyball, Track & Field

Gymnastics & Volleyball

Basketball, Baseball, Horseback Riding

Hockey

Hockey, Baseball

Ringette

Soccer

Rock Climbing, Dance  
 Cross-Country Skiing  
 Track & Field, Cross Country  
 Lacrosse  
 Lacrosse  
 Soccer, Badminton  
 Soccer, Hockey  
 Badminton  
 Football  
 Synchronized Swimming  
 Table Tennis  
 Lacrosse, Rugby

### Parents

Baton Twirling  
 Hockey & Soccer  
 Dance  
 Hockey & Lacrosse  
 Equestrian  
 Volleyball & Track  
 Soccer  
 Gymnastics  
 Soccer  
 Soccer  
 Hockey, Baseball, Lacrosse  
 Hockey, Soccer, Ski  
 Hockey, Soccer, Ski  
 Synchronized Swimming  
 Art, Ping Pong, Chinese School, Creative Writing, Math Tutor, Speech Art

**Question 7:** Did you stop piano lessons in order to play a different instrument? Which one(s)?

### Students

Drums  
 Guitar  
 Cello  
 Guitar  
 Guitar  
 Guitar  
 Guitar  
 Violin

Guitar  
 Baritone  
 Guitar  
 Guitar  
 Baritone  
 Violin  
 Guitar  
 Violin  
 Guitar

### Parents

Clarinet  
 Guitar  
 Cello  
 Drums, Guitar  
 Guitar  
 Drums, Bass Guitar  
 Guitar  
 Guitar  
 Guitar  
 Baritone Tuba  
 Violin, Flute  
 Guitar  
 Violin, Guitar  
 Guitar

**Question 8:** What would have made piano lessons more fun?

### Students

If I had theory & question sheets  
 If I could have played around with the song more.  
 If I was able to play better and had an easier time learning hard pieces.  
 Nothing.  
 Different pieces, song I've heard on the radio that I like.  
 No technique or sight reading.  
 Nothing.  
 If I didn't have to practice.  
 Playing more songs.  
 More freedom for song choice.  
 Playing in groups more.  
 Learning more song from music I listened to.

Choosing my own songs, playing piano games, playing by ear.  
 I do not know.  
 Playing the music that appealed to me.  
 If the pieces were more interesting instead of only classical pieces composed in the 1700's.  
 Learning more types of music.  
 I never liked doing recitals. I liked just having lessons.  
 More freedom of what you were doing.  
 Not having to practice every day.  
 Music I would have known.  
 More playing the piano.  
 Getting to choose some music to play as well as the vital things.  
 More duets and 2 people.  
 Little games.  
 Good, just lots to practice and not have enough time.  
 Nothing  
 I liked my piano lessons the way they were. I just lost the motivation to practice/play.  
 Learning to play piano pieces that were really fun (example: Yankee Doodle).  
 Really only if I had been able to have more freedom with the songs I played.  
 I don't know.  
 More pieces from TV shows and movies.  
 Playing more songs that I know.  
 If I didn't have to practice so much.  
 Playing more and going until I couldn't anymore.  
 More of making up my own music.  
 Probably more learning pieces and less scales and sight reading.  
 If I had practiced more so that I could have improved quicker it would have been more fun.  
 If the pace was faster and it was able to actually learn more and correct my mistakes since not much was learned and most of it was self-reliant.  
 Learning songs I recognised.  
 Nothing.  
 If I could play games more often.  
 More exciting pieces.  
 I have no idea.  
 If I had more time to practice the pieces then I would have more fun at lessons because I would be able to learn more and have more experiences.  
 If you didn't have to take them.  
 Less pressure on exams and recitals. To go at your own pace.  
 If I didn't have to play scales all the time.  
 I enjoyed learning songs by ear much more, and playing anything I wanted (although that wouldn't be possible with exams. RCM fix that please).  
 Playing songs I actually knew.  
 More variety.  
 If the songs I learned were more interesting.

More piano songs.

### Parents

Choosing songs that were exciting to him. For example, he downloaded the Mario game theme song and wanted desperately to get help learning it for a school talent show, but the teacher refused. He taught himself the first few lines but struggled and felt disappointed to have to play/perform a song his friends wouldn't recognise or be entertained by.

I think the waning interest was intrinsic not the result of external factors. We would have considered changing teachers (with our teacher's blessing). If Kali were interested but she was simply "done".

She was already enjoying piano lessons.

Involve her more in classical music, which we didn't. Maybe we should have brought her more often to concerts.

I'm not sure. She seemed to enjoy them.

No practicing :)

The primary reason for quitting was time commitment. He enjoyed and will continue to play.

Not to have her mother involved.

More choice in pieces.

I think if more of his friends played, Jake may have continued.

Playing with other people.

Possibly a teacher that he really connected with.

She just wanted to play and we wanted her to learn some of the basics to reading music.

Fewer other activities. A more structured practice environment (i.e. schedule for days of practice and possibly more rewards for milestones).

More "popular" repertoire.

Not sure but maybe more contemporary music.

A few more modern pieces.

She only wanted to attend a lesson once a month rather than every week.

We're now realizing that he loves a totally different style of music that he has a definite passion for - techno, electronic music.

Less homework and required effort.

I'm not sure. They were fun and engaging.

Nothing. She just didn't want to play.

Unsure.

Not sure.

Not sure.

Not sure. Daniel really enjoys playing guitar and I only allow one instrument's lessons per child.

Not practicing :)

Possibly - if she could have played more pop music and no theory.

If teacher was more sensitive and creative in ways she wanted to develop. She has perfect pitch but is not overly gifted at piano.

More participation from parents.

In later years - less focus on classical/exams - more focus on performing.  
 Group lessons might have generated more interest and camaraderie.  
 He enjoyed playing, just not formal, structured practicing so he wasn't really improving. We felt that was a waste of money.  
 If they didn't have to practice.  
 If they didn't have to practice.  
 She had fun.  
 N/A - she liked it.  
 Different music, less practice time.  
 She loved it!  
 Practice more and lesson more.  
 Nothing - everything was fine.  
 Closer to home.  
 To be relaxed for herself other than doing school homework.  
 More praise, a reward system.  
 Nothing. Janice's studio was a perfect match for Rachel's goals and personality.  
 No theory, just playing music.  
 Music she would playing more.  
 Nothing - Carter just didn't like it. He'd rather play sports.  
 More choice in the music he played.  
 I think practicing more would have increased my daughter's confidence and enjoyment in learning. Also, learning music meaningful to her versus grades or specific programs.  
 I believe more involvement from me but in a different way. Making lessons/practice more fun.  
 Also, if I could have demonstrated the value of practice - and patience in practice - more, that would have helped.

**Question 9:** What there anything that could have changed your (or your child's) mind from quitting piano?

Students

Less practicing and more fun pieces.  
 If they stopped doing recitals.  
 If somebody said they would give me \$10 million dollars if I stayed in piano.  
 Getting my previous teacher back.  
 I was honestly quite relieved when I quit that I would have some more free time and no more pressure to practice. I don't know what could have changed my mind.  
 Finding more time and effort.  
 Not having lessons every week.  
 I was set on my decision.  
 It was boring.  
 It was too hard.  
 I still feel like that my teacher had more to teach me, but I wouldn't be motivated enough to appreciate her efforts.

Perhaps if I was given more freedom in the songs I played.  
 Less practicing.  
 If I didn't move and could've found another teacher as good as my last one.  
 If I had less homework. If I had less anxiety about practicing.  
 If an extra day or two could have been added to the week, I would have definitely continued.  
 If school work was less rigorous.  
 My athletic abilities and my passion for guitar.  
 I think that if I started playing piano when I was younger (I started when I was 12) I would have a stronger connection to piano, however since I am going into Grade 11 next year (the year where my marks will matter for university) I think I do not have a great enough connection to piano to balance practicing with schoolwork.  
 Playing scales less often.  
 Playing my own music and having my teacher help me with arranging things.  
 Different schedules

### Parents

Just finding a teacher who makes it more meaningful to the individual - still looking.  
 Less schoolwork.  
 We could have forced her to keep going but we figured it would push her away from it.  
 Less complaining about the practicing.  
 If he would promise to practice independently, but always wanted me to sit with him and help him practice. Very time consuming as a parent with 3 kids in activities.  
 If she wouldn't have fought with me around practicing.  
 I did not want Jake to drop out.  
 It was Maddy's decision.  
 If Justin was interested in continuing lessons and would commit to more frequent practices with less resistance/complaining we would have continued.  
 More time. If not interested in guitar instead.  
 Maybe a different teacher. She was lovely just looking for something different.  
 If she could have lessons every 3 or 4 weeks rather than every week.  
 Potentially, if we had explored different styles of keyboard music - it might have made a difference.  
 I would have loved for her to continue but I thought it was reasonable for her to finish after her Grade 1 exam.  
 Not at the time.  
 Having the money to continue.  
 I tried very hard to encourage her to continue but she begged me to let her stop.  
 No - he simply enjoys guitar more.  
 Had our piano teacher not moved away, I might have convinced Abby to do some sort of connecting with her regarding piano lessons, even though she wanted to do another instrument.  
 If she were creatively challenged or engaged.  
 If she was more interested and wanted to continue lessons.  
 If my child stayed interested in taking lessons.

Nathan practicing without fighting/complaining. The teacher couldn't have done anything different.

I would have kept them going - they just felt it was too much.

Cost of lessons.

It was daughter's choice.

If he wanted to continue in piano lessons.

Wasn't so far away. If my child liked to practice.

Yes, but it's complicated.

It was ultimately Rachel's decision so if she had reached a different conclusion (i.e. stick with piano) we would have gone that route.

My husband was out of work for 4 months at the time when lessons were to begin again with no prospects. If he were working at the time, I would have pushed for her to continue.

No - Carter's resistance was growing, not lessening. It wasn't a battle worth fighting.

No - Tyler was not interested in piano any more.

If my daughter would have wanted to continue, we would have continued.

**Question 10:** Do you think you (or your child) will ever take piano lessons again?

### Students

Because it can help with mind development (or so says my mom).

Because at school we have a wonderful music program and I'm really enjoying percussion.

No more free time to play for enjoyment because of school and other activities.

I will continue to play but I don't enjoy playing classical music.

Because I didn't like taking them and I don't think my thoughts on piano lessons will change.

I can sit down and play a piece. I didn't enjoy lessons but I enjoyed playing.

I just won't.

Now I am probably too busy for it with dance. And, my mom and I would have way too many arguments.

If I find that I have more time and interest (not as busy).

Because I love cello.

Because I know enough to play and learn pieces on my own and I generally only enjoy playing once in a while for recreational purposes.

Because I found them boring and in the future I will have less and less time for it.

I may.

I still enjoy playing; if I have time in the future I would.

I think that if I ever start playing again I will play songs for fun instead of to improve.

If I feel I need more advanced skills or chops.

Gives more structure to help with practicing.

I want to play modern music.

Still too many things to deal with.

I liked putting my fingers on the keys and looking at the notes.

I prefer to teach myself when I want, and how I want. I need to learn the things I want to learn, and not get taught simple things that I already know. And I don't think that I will continue to

teach myself piano for very long.

Because I did not like it.

It was boring.

I did not enjoy it.

Because guitar.

Know what I needed to learn, just have to work on it.

Cause I don't want to do lots of activities at once.

As I said, I've lost the motivation to practice/play. Even if I was practicing, I wasn't getting better. I feel that I had reached the limit to what I could offer.

I just started playing in band.

Not regular, once a week lessons, but I can see situations where I would need one or two lessons for some help.

It was not something I had fun in.

To learn more technique.

I don't think I will take piano lessons again because I will be busy with school and sports.

Because I'm not interested.

I would love to pick it up again if the opportunity arises.

I don't have enough time. I don't like practicing.

Maybe if I have more time and feel more passionate about it.

I loved playing piano and I miss it.

Maybe in the future after I settled down into a decent life.

I just don't see myself doing it.

I will be busy.

I am not interested anymore.

I have other interests. I do not have time for piano.

Yes because learning an instrument takes a long time and even if I stop taking lessons because I have a lot of schoolwork, it is important to have many skills to help you succeed so if I have the chance to take piano again in the future when I finish school, then I would.

Not my thing.

I am happy that I took piano but I didn't enjoy it enough to do it again.

If the teacher let me play what I wanted to play.

Nowadays, I just play stuff by ear for fun, and lessons (to me) were just added stress.

Because I really didn't like it and my mom let me quit so I don't think she would put me back in.

Because I'm interested in other things.

To learn new songs.

### Parents

Definitely. He loves to perform and wants to be a singer. Hopes to accompany himself.

Kali has other creative outlets that she seems more inspired to pursue. While I hope she may find her way back to piano, or other music lessons, I am not holding my breath. She continues to be in a percussion group at her school - the ensemble rehearses 2 times per week as a music option.

Maybe in future.

I'm not sure. She never spend enough time practicing - she likes more singing.

I don't think so. I think she has just lost interest and didn't like performing.

Will probably take guitar lessons in high school.

Possibly - he does enjoy playing, just too busy right now.

Maybe just on her own.

Busy with other activities; not interested anymore.

Possibly - he loves music and is in a band option at school. I believe he's cultured a lifelong love.

His current interests are more athletic. If he continues with music, it will likely be with guitar.

She still plays occasionally and she sees her brother going back to music.

Possibly. Justin has been involved in music lessons (eg. Parent & Baby, Kodaly, piano) since birth and Justin enjoys listening to Pop much and composing his own lyrics, so he may return to piano in the future if it captures his interest.

She sits down from time to time and plays. If a friend plays and she likes the song, she'll try it.

Doesn't seem interested.

He may realize he would like to know more about jazz or pop music playing.

She enjoys music and I believe she may as a young adult.

At this point, we are actively looking into alternatives to traditional piano instruction. His piano instruction, I believe, will help any future pursuits immensely.

I think there's a chance she'll take up another instrument in school (band).

When she has finished school.

Currently, she also has an interest in learning guitar. She loves music so I hope to see her continue.

Unsure. But we've left the door open for her to take it up again.

I think she just needed a break for a bit but she still plays piano and loves to perform and I'm optimistic she will take lessons again.

No, not likely. He has no interest.

Yes, likely. She enjoys music.

Perhaps - Daniel has a natural musical talent.

No - she is motivated to learn many instruments so I see her moving in that direction.

Possibly - if tuba isn't enjoyed or sports slows down.

She does not want to perform and make a mistake. Too much of one thing (perfectionist) presented in one way.

No - but she did decide to join the school band this year and play piano.

Possibly, if he decides to do Grade 8 practical exam.

I don't think she will be interested in playing again.

Probably not. I sometimes wonder if we started Nathan too early. It's almost like he lost interest in practicing and got tired of it. With 3 kids in piano, it was hard to give them all the attention they needed in practice time. After 8 years of Nathan enjoying himself, and also fighting with us, we got tired too.

I hope so, as I regret not continuing on.

I hope so as I really regret not continuing on.

Possibly - she still plays today sometimes.

Perhaps once the [mental health] issues are all resolved.

No, she didn't like it and enjoys dance.

He will return once he has time.

Not sure.

He is very musical and has a genuine interest in music.

I think my son had a great experience and truly enjoyed piano. He may mature and try again.

I don't think he will because he likes to move on to other interests.

I don't think he will because he wants to move on with other interests.

It will be up to herself when finishing high school.

Possibly.

Yes. I think she will when she is older, or if she quits synchronized swimming. It was a difficult decision for her.

For piano only - no theory.

Yes - maybe. She does enjoy playing the music she likes.

No - Carter prefers action (sports). Piano required too much sitting.

Possibly. Tyler like to play the piano and learn new songs/figure out new songs but often just didn't have interest in "polishing" pieces once he learned the notes. He often sits at the piano and plays/learns a new song for 5 minutes here or there when "the mood strikes him" and I think he enjoys being able to do that.

Perhaps in adulthood if she chooses to refine her talent or learn more to play with friends.

No, because for some reason she has her mind set on not returning.

This thesis research was funded in part by a grant from the Alberta Foundation for the Arts.