

**Lifelong Learning:  
Adults' Perceptions of Learning a Musical Instrument  
Elizabeth Ann Scott,**

**Southern Nazarene University – Tulsa  
OL T 75**

**Abstract**

Many times individuals can be overheard saying that they cannot learn to do something because they are too old. This study was conducted to determine the overall perception of not only an individual's ability to learn, but also how s/he views the ability of others. The study was also conducted to find if this learning could include learning to play a musical instrument, even after the age of 50. A survey was used which included questions concerning learning that referred to older individuals and younger individuals. The findings included that all individuals believed that they and others could continue to learn after the age of 50. Exploratory research was also conducted concerning what questions most influenced outcomes. Recommendations for future research were also included.

## **Introduction and Statement of Purpose**

### **Statement of Purpose**

Many adults have felt that once a certain age was reached, it was not possible; or too difficult to learn something new. To learn to play a musical instrument, in particular, was seen as something that children or young adults did.

The purpose of this project was to discover if adult learners aged 50 and older, could begin to learn to play a musical instrument and become proficient in playing it. This was accomplished by surveying adult music beginners and teachers of adult learners, as well as non-music students, in the Tulsa, Oklahoma area during January 2012. These individuals were surveyed to determine if it was possible to continue learning after the age of 50, and even become a proficient musician when starting music at the age of 50 or older.

**Setting of the Problem.** The problem existed that adults thought they could not learn something new after a certain age. This would stop them from learning, a self-fulfilling prophecy. If they could be convinced that they could accomplish a learning goal, they could possibly become fulfilled lifelong learners. They could learn many things, thus giving them a sense of purpose. To be able to learn to play and become proficient at a musical instrument could open the door to other learning opportunities as well.

Research was done that covered aspects of both adult students and teachers of adult students. Student variables such as motivation and preconceived ideas were addressed. Other issues including student perceived problems, such as available time, health issues including sight and hearing were explored. Teacher problems considered were their own perceptions of the ability of older adults to learn.

**History and background.** Adult learning has been studied for years. What has not been studied as much are the specific methods that are most effective for adult learners and teachers of adult learners of music. There have been and still are differing opinions of whether or not adults should be taught using the same methods used to teach children. Research has found that teachers of adult learners use differing methods or make up their own methods and, at times, their own materials. The adult learner population continues to grow, adults are living longer. The need for teachers of adult learners grows as well.

**Significance and scope of the Project.** Adults have a lifetime of achievements and challenges to look back on, but also want to continue to be challenged and to achieve goals. (They want to continue to learn not only for the sake of learning, but specifically for enjoyment and even a social activity as well). The significance of the research cannot be stressed enough. Many times the only thing a person needs to succeed at a task or goal is the very notion that they are capable. Music is only one aspect of learning. If music learning could be accomplished, there could be many other goals accomplished as well. Old age does not have to be the end of learning or the end of adventure. Adult learning has had an impact on millions of older adults, and the even the people around them. They have led by example.

The results sought were not only to discover that it was never too late to learn, but that it is entirely possible to become proficient at playing the musical instrument of the individual's choice. It is important for older adults to wish to learn to discover, so that they may know that learning does not stop a certain age, and a fulfilling life of learning is still possible. Further, through the use of these surveys, it was anticipated that a "road map" to success in the musical endeavor could be outlined.

### Definition of Terms

**Adult learner:** For the purpose of this research, adult learner is defined as a learner over 50 years of age.

**Midi technology:** Musical Instrument Digital Interface. This technology is represented in the Midi keyboards many adult learners that study piano use for their practice.

### Review of Literature

Can an older adult, aged 50 and older, learn to play a musical instrument with proficiency? There has been extensive research on adult learning and adult music learners. According to Pamela D. Pike, "The US Census Bureau has projected that by 2030 nearly one-fifth of the population will be over the age of 65," (2011, p. 117). Pike also stated that those over 65 enter the "third chapter" of their lives and look for fulfillment, frequently through new learning. Many studies showed that the field of teaching has a need of instructors of adult learners. Teaching adults has been called a "new frontier" (Bowles, 2010 p. 2) by those interested in researching the topic of adult learning.

**Motivation.** Adults have different motivations for learning music. Many already have a love for music. The satisfaction of playing a piece with mastery has been known to raise self-esteem and "minimize the negative effects of physical and psychological aging" (Taylor, Hallam, 2008, p. 285). Besides a general love of music, adults have found music playing enjoyable, challenging, and empowering (Taylor, et al, 2008). Many adults have wanted to play music because they grew up in families where music was part of daily life, and it brought back good memories. Moreover, "adults seem to have to satisfy a strong need for achievement, enjoyment, and self-confidence..." (Taylor, et al, 2008, p. 299). These findings remained constant throughout many studies on adult learners of music. This was true not only in private study of music, but in ensemble playing. A study on adults over the age of 65 that played in a MIDI

piano ensemble found that they learned not just for the sake of learning to play the instrument, but also were empowered to continue due to "emotional or social motivation and personal satisfaction of playing music" (Pike, 2011, p. 117). The social aspect of music playing was also discussed in research done by Peter Cope, who stated that many adults started music for the social aspects and that this helped them to continue to stay motivated and continue their learning (2005, p. 135-36).

Katherine Roulston reported that there were three different motivational patterns in adult learners: goal oriented, activity oriented and learning oriented (2010, p. 343-44). Furthermore, some people join a group for the social aspects, some were driven by the accomplishment of the performance and some wanted to play for the sake of learning. It was also noted in the research that the three patterns could be combined or become more complex, starting out as a learning activity, moving to the goal of the performance, and finally maintained by the social aspects (Roulston, 2010, p. 345).

**Obstacles and conflicts.** Some adult learners have obstacles to overcome. Many believe that once they arrive at a certain age, they can no longer learn. They lack the confidence. Research into adult learning conducted by Michael J. Serra, John Dunlosky, and Christopher Hertzog showed that "older adults often have much less confidence in their ability to learn in general" (2006, p. 380). Adults also suffered from internal conflicts. One such conflict was the desire to learn for the sake of confidence, yet having to face a performance. Some wanted only to play for themselves or immediate family and friends, not for a recital type performance. Acquiring musical skills "involves many aspects of the learner's personality, which can sometimes be in conflict" (Taylor, et al, 2008, p. 290). Furthermore, "What people want to learn, what they feel they can learn, and what they think they can learn might not always match" (Taylor, et al, 2008, p. 298). Some adults experienced the conflict of wanting to play better; however, they did not want to practice the basics that would have

enabled them to become better. This statement can best be supported by an interview with a guitar student in her seventies, which was conducted by her instructor concerning why so many people had dropped her class. "Well, she said, 'I think maybe if we had learned to play a real song, instead of just practicing exercises, more of them would have stayed'" (Roulston, 2010, p. 347).

**Advantages.** Unlike child students of music, adults have the ability to "shop" around "in order to learn in a differentiated way" (Smilde, 2008, p. 246). In this study, they were able to find a teacher that fit their way of learning and personality style, for example. Adults also had life experiences to help them in their learning. According to Roulston, adults were "expert and ingenious problem solvers who willingly adapt to the rigors of aging" (2010, p. 344). Further, they learn music easier because of their lifetime memories of music, which also contributed to musical interpretation (Roulston, 2010, p. 344).

Advantages exist in the group learning situation as well. Students excel when they see their peers finding success in learning. Furthermore, in the case of the MIDI piano/keyboard group researched by Pike, not only did students "embrace the power of digital keyboards and musical applications of MIDI technology," but the technology kept the "students engaged in the program" (2011, p. 120).

Pike cited health benefits to adults who played music. The study found that "significant physiological changes, including lowering of stress hormones and stress signatures in the bloodstream, experienced by retirees participating in a group music program" (2011, p. 117).

**Disadvantages.** In a study of senior music students, hearing loss and diminished eyesight were common problems for older adults. However, due to their ingenuity, students overcame this with large print musical scores and had success with "closed loop" audio systems, which places these players closer to the conductor, and ensuring that they

speak slowly and clearly so members can hear their instructions" (Roulston, 2010, p. 345).

**Teacher's perspective.** How adults differ from children is a topic with as many answers as there are teachers. Different teachers have different views. Research conducted by Debbie Rohwer found that there were definite differences in teaching adults and teaching children. Some of these differences included the way adults perceive, feel, remember, and the ways in which they are motivated (Rohwer, 2005, p. 38). Researchers also found that child learners were new not only to music, but also to learning in general. In contrast, adults had a lifetime of learning and experience from which to draw, such as listening to music, and growing up around music, even if just in school. Roulston noted that children often took music because it was compulsory as opposed to an adult who took music because they wanted to. Not only were adults "self-directed learners," they were also willing to take on the "responsibility for what they learned" (Roulston, 2010, p. 345). There were many aspects to adult learning that could be seen as an advantage for teaching adults, including their being ready to learn tasks, and being intrinsically motivated (Roulston, p. 346).

Problems that may be common for adult learners include the fact that they may become frustrated by difficulties learning new skills. They especially become frustrated with skills that "rely on successful coordination of audiovisual and sensory information gained through the ears and eyes with various bodily movements encompassing the whole body" (Roulston, 2010, p. 347). Adults also tend to be more inhibited. There are other problems teachers have to overcome as well with adult learners. In the study conducted by Chelcy Bowles, teachers cited problems including "changing previous habits and learning, too much socializing, business issues (scheduling, canceling, and paying) non-adult behavior with peers, and failure to practice" (2010, p. 7).

**Methods and materials.** Teachers typically find their reward in helping their students succeed. In order to do that one needs to have the correct materials and proper methods for teaching adult learners. Bowles noted that “lifelong education depends for its success on teachers who are expert” (2010, p. 9). This fact was supported by Smilde’s statement that “teachers are pivotal within transformative processes and thus to implementing the concept of lifelong learning: success of change is highly dependent on teachers’ competences” (2008, p. 250). Both Bowles and Pike cited the need for flexible lesson planning, and printed material geared towards adult learners who have little time to practice. Many teachers of adult students designed their own materials for classes (Bowles, 2010 p. 7).

**Learning, a lifelong delight.** Virtually all the literature reviewed proclaimed the absolute ability for older adults to not only excel at learning in general, but learn a musical instrument as well. While Serra focused primarily on adults’ lack of confidence in their own learning, it was found that older adults were as capable as younger adults. Rineke Smilde (2005) focused his study on professional musicians in different phases of their career. Those musicians found themselves being adult learners in new musical situations, “learning by doing.” Pike, and Taylor, focused their studies on older adult keyboard learners, while Bowles and Roulston focused their studies on adult music learners in general. All agreed that it was never too late to learn and become proficient at playing a musical instrument. Cope summed it up best stating that any disadvantages adult may have felt they had by learning later in life were compensated for by the adult learners “commitment and their increased awareness of themselves as learners” (2005, p138). Cope further stated that most adults felt they were successful at playing to the level they needed to play in order to join bands if they desired.

## Methods

### Hypothesis

The purpose of this study was to determine if adults 50 years of age and older could learn to play a musical instrument with proficiency. Many adults seem to believe that after a certain age it is too late in life to learn something new. It has also been stated that sometimes things are best learned during childhood or as a young adult. The intended objective of this study was to find that older adults can learn to play a musical instrument with proficiency. It could be possible that what one believes is what one achieves. The alternate hypothesis was younger adults would be more confident in their ability to learn. A higher score would indicate that the individuals could learn to play an instrument with proficiency.

### Design

The research design utilized was a quasi-experimental method to measure perceptions and opinions of the sampled groups. The dependent variables included preconceived notions held by the individuals, and each individual’s perception of their own abilities. The independent variable was which group each individual belonged to, younger (age 18-49) or older (age 50 and up). Adult music teachers were included as well. Precautions were taken to prevent participants from knowing the precise purpose of the study, in an effort to compile more accurate data.

### Participants

The participants included in this study fell into one of three groups: adult music students, teachers of adult music students, and adult non-music students. There were 53 participants in all. These individuals were selected from schools of music and the general population. There were no other characteristics selected, such as race, income level, or gender.

### Instrumentation

A survey was used to measure the dependent variables, with two possible subscales including preconceived ideas and the individual’s perception. There were twenty-five questions covering such

topics as the individual's opinions on learning and perceptions of ability. The scoring for the twenty-five question survey utilized a Likert scale. The highest score possible for each question was five, while the lowest score possible for each question was one, if each question was answered. The scoring represented the scale of proficiency. The high score representing the individuals' perception was that an adult 50 years of age or older could learn, even become proficient in playing a musical instrument, while a low score represented the individuals perception that an adult aged 50 or older could not learn. Questions on the survey included "Learning keeps the mind young," and "I can learn anything I put my mind to, no matter how old I am." The full questionnaire can be found in the Appendix.

There were two separate tests run from the results. The first was a comparison to find perceptions of one's own ability to continue to learn, even a musical instrument; comparing younger adults to older adults. The scoring was based on ...questions on the survey concerning one's own ability to learn.

The second test was done to find out the participants' perceptions of other people's ability to continue to learn, including a musical instrument. The  $\mu$  for this test was 24, which was based on the middle score of three points for each of the eight questions concerning others' ability to learn. The three points represented a "somewhat agree" on each question. The survey was reviewed by 5 peers and a Cronbach's alpha was calculated for reliability.

### Procedure

Surveys were handed out to selected individuals for both students and teachers. Surveys were also given to selected individuals who stated that they were not music students or musicians. The completed surveys were scored and variables analyzed. The individuals selected were based on convenience and not a random sample.

### Data Analysis

**Descriptive analysis.** A mean and a standard deviation were found for both variables using the data from the survey. The data were then entered into STATISTICA (Statsoft, Inc., 2011) for the purpose of creating graphs to illustrate the results.

**Inferential analysis.** The alternative hypothesis was that younger adults would have more confidence in their ability to learn ( $H_a: M_s > M_o$ ). The null hypothesis was that younger adults would feel less able or equal to older adults in their ability to learn, even to play a musical instrument with proficiency ( $H_o: M_s \leq M_o$ ). The study used a level of significance of .05, and utilized a two-sample  $t$ -test to test the hypothesis.

Next, to determine how participants felt about the abilities of other individuals to learn, a single-sample  $t$ -test with a .05 level of significance was done to test the following hypothesis: null hypothesis was that others' abilities to learn would be equal to or less than the population mean ( $H_o: M \leq \mu$ ). The alternate hypothesis was that others' abilities to learn would be greater than the population mean ( $H_a: M > \mu$ ).

### Limitations

This study assumes motivation to learn to play a musical instrument does exist. It does not test motivation. The study does test perception and one's perception can change over time. The teachers of adult students were surveyed for their opinions, because the beliefs of the teacher can have an impact, both positive and negative on the student. Other limitations that could prevent the study from being conclusive include the survey, which was created in a short period of time. Every effort was made to insure its validity.

### Summary of Results

#### Descriptive Data Analysis

Fifty-three surveys were completed by participants, both young and old, ranging in age from 18 to 72. Participants responded to questions relating to how they felt about their ability to learn

and how they felt about others' ability to learn. The survey also posed questions concerning one's ability and desire to learn to play an instrument. With a sample size of 53, learning for self, had a mean of 46.56 with a standard deviation of 6.78. Learning for others, indicating how participants felt about other people's ability to learn, had a mean of 30.16 with a standard deviation of 3.38. Table 1 indicates the findings.

Table 1  
Descriptive Statistical Information

Descriptive Statistics (Betty Scott)								
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Variable	Valid N	Mean	Sum	Minimum	Maximum	Variance	Std.Dev.	Standard Error
Learning for Self	53	46.56257	2467.816	31.00000	64.00000	46.07777	6.788061	0.932412
Learning for Other	53	30.16110	1598.538	22.00000	39.00000	11.43770	3.381967	0.464549

A histogram of total scores for learning for self may be seen in figure 1 below.

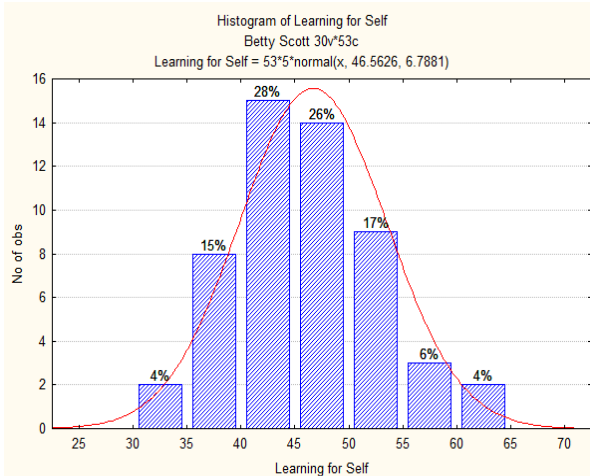


Figure 1: Ability to learn, self.

Next, a histogram of learning for others may be seen in figure 2 below.

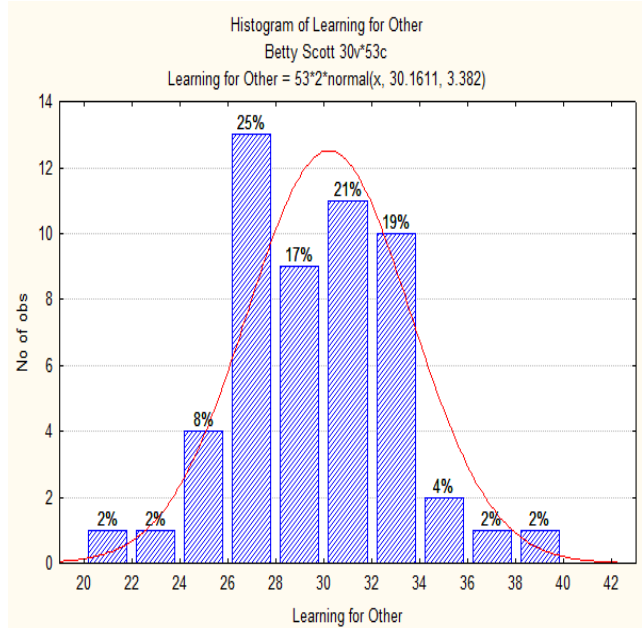


Figure 2: Ability to learn, Other (participants perception of other people's ability to learn)

Figure 3 is a box and whiskers plot which illustrates the comparison between how young people, under the age of 50, and older people, age of 50 and older, feel about their ability to learn. See figure 3 below.



Figure 3: Comparison of learning for self between younger and older individuals.

The information was gathered through the use of a survey; therefore a Cronbach's alpha analysis was done for internal consistency of the scores, to test reliability. The Cronbach's alpha for Self was .694 and the standardized alpha was .688. The Cronbach's alpha for Other was .539 and the standardized alpha was .580. The difference between the two may be due to fewer questions concerning learning for others than there were for learning for self. Since the results were less than .70, the conclusions may be questionable.

### Inferential Data Analysis

The null hypothesis for learning for self, younger compared to older, stated that younger individuals would feel less than, or equal to older adults in their ability to learn ( $H_0: M_y \leq M_o$ ). The alternate hypothesis stated that younger individuals would feel they have greater ability to learn than would older individuals ( $H_a: M_y > M_o$ ). A two-sample *t*-test was done with a .05 level of probability. The critical value was +1.697 and the *t* was .517. The null was not rejected. There was no significant difference between young and old and their abilities to learn. They all felt that they could learn.

Next, a null hypothesis stated that individuals feel that others' abilities to learn were less than or equal to the population mean ( $M \leq \mu$ ). The alternate hypothesis states that individuals feel that others are able to learn ( $M > \mu$ ). A single-sample *t*-test was done with a .05 level of probability. The critical value was 1.697, *t* was 13.26 ( $p = .000000$ ). The null was rejected; all seemed to agree that others can learn. (Because two test were run on the same data, I used a Bonferroni correction of .05/2 tests. The actual *p* was less than .025.)

Finally, a single-sample *t*-test was done to determine whether or not all those surveyed felt they could learn. (I used a  $\mu$  of 3 times the number of questions in the learn for self score to see if the participants were significantly above neutral.) The *t* was 6.94 ( $p = .000000$ , and .000000 is less than

.05/3, or .0167). Again, the participants seemed to agree that they could learn.

In conclusion, all felt confident that they could learn whatever they wanted, including how to play a musical instrument. If one did not learn to play a musical instrument, even after the age of 50, it is because they simply do not want to.

### Exploratory Statistical Analyses

A predictive analytic technique called feature selection and root cause analysis was done to see what questions in the survey most predicted the ability to learn to play a new instrument. Figure 4 illustrates the results.

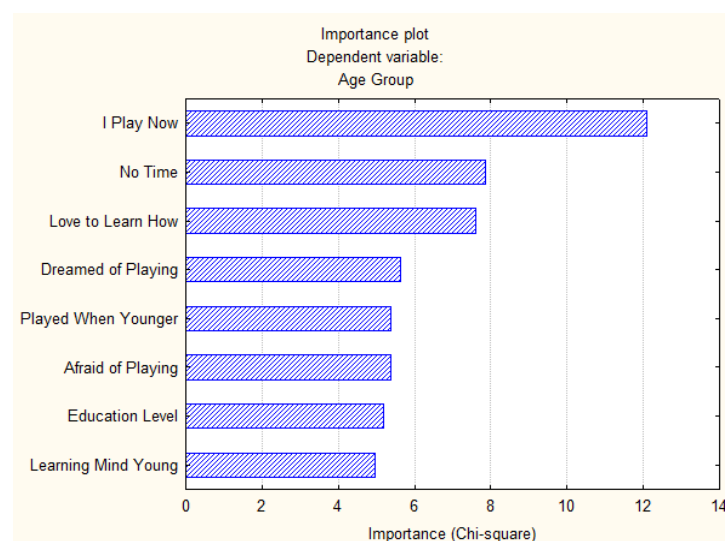


Figure 4: Feature selection and root cause analysis, run to predict age group.

The questions concerning whether or not they play an instrument now, if they have the time, and if they have the desire seemed to strongly predict the ability to learn to play a new instrument. The results of the tests run by P value and Chi square came out the same.

To find out how these questions predicted learning, a main effects ANOVA test was done. See Figure 5 below.



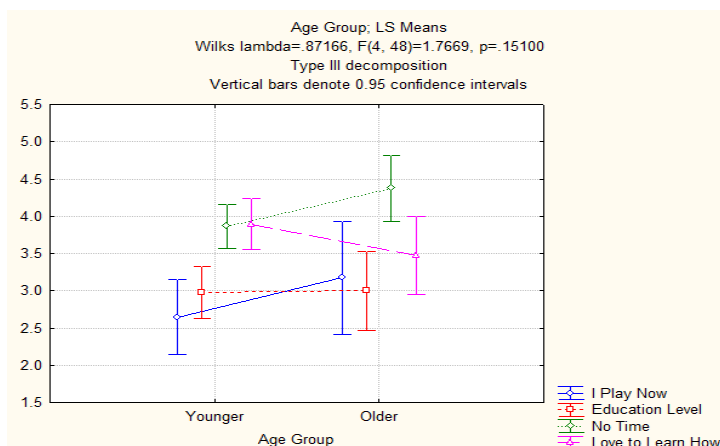


Figure 5: Main effects ANOVA indicating how the questions predicted ability to learn.

It was interesting to note that education level seemed to make no difference in the ability to learn to play a new instrument. Also, while the older group felt they had more time, they had less desire to learn to play a new instrument, perhaps because they already play an instrument.

## Discussion and Conclusions

### General Discussion and Conclusions

Research previously discussed in this paper indicates that people can continue to learn, regardless of age. This is evident not only in the rise in schools geared toward adult learning, but also in organizations geared to both beginner and experienced musicians, like the New Horizons group.

The results of this study were no less indicative of the continued ability to learn. Age did not appear to be a determining factor in learning, as indicated in Figure 3. There was absolutely no significant difference based on age. Both young and old felt that they continue to learn. Figure 1 illustrates participants' perceptions of their ability to learn. It seems to indicate that the older adults may even be more confident in their abilities, but not significantly so. The participants' perception of other people's ability to learn was no less

encouraging. As seen in Figure 2, there was a strong belief in other's ability to learn.

As stated before, education level seemed to have little to do with the ability to learn. Figure 4 illustrates the level of importance of each variable. The questions that seemed to most determine one's ability to learn to play a new instrument were, "I play an instrument now," "I have no time for hobbies or anything else in my life," and "If I had time, I would love to learn an (or a new) instrument." These results came out the same when run by  $p$  value.

To discover how these questions predicted the ability to learn, a main effects ANOVA test was run by age group. Once again, it seemed that education level was not a determining factor. When looking at the question of time, it appeared that the older adults felt they had more time to learn something new and/or pursue hobbies. (The high score on this question indicated that they felt they had more time). Perhaps that is the reason why more of the older age group played a musical instrument now. It was interesting to note that while the younger group felt they had less time to learn, they had more desire to learn to play a new musical instrument. Maybe it is possible that the older age group just did not want to play a different instrument, especially if they already played a musical instrument.

In conclusion, age was not found to be a determining factor in learning. Perceived time to learn and the desire to learn were found to be indicative for continued learning, whether it was a musical instrument or any other type of learning. More specifically, again referring to Figure 5, perhaps the primary reason an older individual does not learn to play a new instrument is primary because they do not have the desire to.

### Strengths and Weaknesses

The conclusions of this research were based on a survey that was created rather quickly. There may have been a problem of understanding the true intent of the questions, and it was determined that some participants wanted more detail. An example

of this was a participant who wanted the meaning of the word "complex." Yet others had exceptions to their answer for the question "It is easier for younger people to learn than older people." They indicated that it would depend on what they were attempting to learn. Some participants asked the meaning of the word "inept." Another aspect to consider is that the survey conducted was one of convenience.

### Recommendations

A larger random sample from a determined population would be better than the convenience sample that was used for this research. Is confidence in learning really this high? It could be that since many of those participating are involved with some sort of schooling, they are all confident they can learn.

### Suggestions for Future Research

If one wished to continue this research, some consideration could be made to changing the instrument. While analyzing Cronbach's alpha, it was determined that if the question "I have always been inept at music," was removed, the alpha would become .72, rather than .688, with a .70 score being construed as a reliable instrument.

Other areas of research could include topics such as methods of learning. In literature reviewed, it was found that adults have the benefit of being experienced learners. Because of this, they may not fit into a cookie-cutter type teaching method. Likewise, a teacher's confidence in their own abilities to instruct adult students may also play a role. Another area that may need exploring is that of materials available to teach adults. Once again, in reviewing material for this research, it was found that many teachers of adult students had to use material intended for younger learners, or they had to make their own material. If an adult beginner musician was given materials intended for beginner children, it could have a negative impact. Perhaps this would enforce the adult learner's perception that they should have started when they were a child and not an adult. It may be that without the proper

materials, an adult student may lose their desire to learn.

### References

- Bowles, C. L. (2010, May). Teachers of Adult Music Learners: An Assessment of Characteristics and Instructional Practices, Preparation, and Needs. *UPDATE: Applications of Research in Music Education*, 28(2), 50-59. doi:10.1177/ Retrieved from EBSCOhost
- Cope, P. (2005, July). Adult learning in traditional music. *British Journal of Music Education*, 22(2), 125-140. doi:10.1017/ Retrieved from EBSCOhost
- Pike, P. D. (2011, May). Using Technology to Engage Third-Age (Retired) Leisure Learners: A Case Study of a Third-Age MIDI Piano Ensemble. *International Journal of Music Education*, 29(2), 116-123. Retrieved from <http://lrcproxy.tulsacc.edu:2549/?url=http://lrcproxy.tulsacc.edu:2250/.aspx?direct=true&db=eric&AN=EJ924645&site=ehost-live&scope=site> Retrieved from EBSCOhost
- Rohwer, D. (2005, January). Teaching the Adult Beginning Instrumentalist: Ideas from Practitioners. *International Journal of Music Education*, 23(1), 37 - 47. doi:10.1177/ Retrieved from EBSCOhost
- Roulston, K. (2010, November). "There is No End to Learning": Lifelong Education and the Joyful Learner. *International Journal of Music Education*, 28(4), 341-352. doi:10.1177/ Retrieved from EBSCOhost

- Serra, M. J., Dunlosky, J., & Hertzog, C. (2008). Do older adults show less confidence in their monitoring of learning? *Experimental Aging Research*, 379-391. doi:10.1080/  
Retrieved from EBSCOhost
- StatSoft, Inc. (2011). WebSTATISTICA (data analysis software system), version 9. www.statsoft.com.
- Smilde, R. (2008, May). Lifelong Learners in Music; Research into Musicians' Biographical Learning. *International Journal of Community Music*, 1(2), 243-252. doi:10.1386/.1.2.243/  
Retrieved from EBSCOhost
- Taylor, A., & Hallam, S. (2008, June). Understanding what it means for older students to learn basic musical skills on a keyboard instrument. *Music Education Research*, 10(2), 285-306. doi:10.1080/

## **Appendix A**

### **Survey Cover Letter**

Dear Participant:

This study is being conducted by Betty Scott, under graduate at Southern Nazarene University in Tulsa, Oklahoma in order to better understand perceptions on learning. I plan to report my findings to Southern Nazarene University in the form of a senior research paper in April 2012.

I would greatly appreciate your completing this survey so that I may pick it up within one week. Since the validity of the results depend on obtaining a high response rate, your participation is crucial to the success of this study. The survey will focus on learning and this survey should take less ten minutes to complete.

Your return of the survey indicates your consent to participate in this study. Please be assured that your responses will be held in the strictest confidence, and your surveys will be identified by a number. As soon as I receive your completed survey, the data will be entered into a statistics program for analysis and stored. If the results of this study were to be written for publication, no identifying information will be used.

The potential benefits to science and humanity that may result from this study are a better understanding not only of the learning process for people of all ages, but also an understanding of people's perceptions of learning for all ages.

If you have any questions about this study, you can contact the person below:

Betty Scott

atatiger@aol.com

It is my hope that you will participate in this study.

Sincerely,

Betty Scott

## Appendix B

### Survey

<b>1. Age</b>					
<b>2. Played an instrument as a child Y or N</b>					
<b>3. Teach music? If yes, what instrument(s) do you teach?</b>					
<b>4. Highest education level: HS, some college, BS Degree, Graduate Degree</b>					
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
5. It is never too late to learn something new.					
6. It's easier for younger people to learn than older people.					
7. I have no time for hobbies or anything else in my life.					
8. Adults 50 years of age and older are not capable of learning complex material.					
9. I dislike anything outside of my comfort zone					
10. I have always been inept at music.					
11. Experience makes even new things easier to learn for adults.					
12. I can learn anything I put my mind to, no matter how old I am.					
13. I have always dreamed of playing a musical instrument.					
14. I am artistic.					
15. I enjoy listening to music but would never contemplate actually playing anything but the radio.					
16. I feel comfortable learning new things.					

### Survey

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
17. My health inhibits my abilities to learn.					
18. I would be afraid of playing an instrument in front of anyone.					
19. If I had more time, I would love to learn an (or a new) instrument.					
20. I play an instrument now.					
21. I played an instrument when I was young but not now.					
22. Experience makes even new things easier to learn for adults.					
23. Adults are more committed to learning than younger students.					
24. Younger students have more performance anxiety than older students.					
25. Learning keeps a mind young.					
<b>Additional comments:</b>					

### **Author's Note**

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