

# Guitar as the Preferred Musical Instrument

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## ABSTRACT

The Guitar is a very popular instrument that is commonly used by many musicians. This study focused on the factors that made the guitar more appealing to the youth in comparison to other instruments. A semi structured, open ended questionnaire was used to collect the data essential for this study. 50 male and 50 female college students were interviewed in this study. The data was thematically coded to acquire the results and conclusions. Purposive sampling was used in this research study and the average age of both male and female respondents is 19 years old. The results suggested that the guitar was more appealing to their generation, affordable to purchase and had a distinct image as a musician and songwriter. The study focused on acoustic guitar players and composers.

*Keywords: College Students, Guitar, Acoustic, Youth, Music, Songwriting, Musical Instrument*

## BACKGROUND

The Guitar, classified as a six string instrument, is very popular specifically the acoustic guitar, which is used in various methods of playing. It is commonly played with the left hand for the chords and right hand for plucking or strumming. Some consider the guitar is a type of chordophone, traditionally constructed from wood with nylon or steel strings and distinguished from other chordophones by its nature and tuning. The modern guitar was based by the gittern, the vihuela, the four-course Renaissance guitar, and the five-course baroque guitar, all of which attributed to the construction of the modern six-string instrument.

The main types of modern acoustic guitar are the classical guitar (nylon-string guitar), the steel-string acoustic guitar, and the archtop guitar. Vibration is the root of the tone of the guitar strings, which is amplified by the body of the guitar that serves as a resonating tool to produce the sound of every string. The classical guitar is often played as a solo instrument using a comprehensive fingerpicking technique.

Electric guitars, introduced in the 1930s, use an amplifier that can electronically manipulate and shape the tone. Early amplified guitars employed a hollow body, but a solid body was eventually found more suitable, as it was less prone to feedback. Electric guitars have had a continuing profound influence on popular culture. (guitar.com)

## METHODOLOGY

### Participants

50 male and 50 female college students from Angeles City, Pampanga, Philippines were the respondents in the study. Their average age is 19 years old. The respondents' age when started to play guitar is 10.5 years old. All of them are songwriters and vocalists. The respondents are all performing public in school, church, music bars and in special occasions.

### Sampling

Purposive sampling was used in this study. All of the respondents were playing guitar, performing in public, songwriters and vocalists.

### Instruments Used

A semi structured, open ended questionnaire was used and also a recorded interview was the basis of this research study.

## SIGNIFICANCE OF THE STUDY/ SCOPE AND LIMITATIONS

This study would be a basis for the acknowledgement, subliminally or consciously, why the guitar was and is a preferred musical instrument compared to others. This may guide musicians, parents, and educators that the youth have an interest in music and specifically the use of the guitar. This study will only limit the scope on the use of guitar, specifically acoustic guitar, and all the aspects of singing, songwriting, and the use of the instrument as an expression of their emotions.

Many musicians, just like the respondents have a certain artistic dexterity that may serve as an outlet of their feelings and emotions. Such as listening to music and remembering certain situations in their life. The researchers acknowledge the fact that further studies or research should be conducted in order to solidify and enhance the results of this pilot study.

## PARTS OF THE GUITAR (ABOUT.COM GUITAR)

At the point in which the headstock meets the neck of the guitar, you'll find the "nut". A nut is simply a small piece of material (plastic, bone, etc.), in which small grooves are carved out to guide the strings up to the tuners.

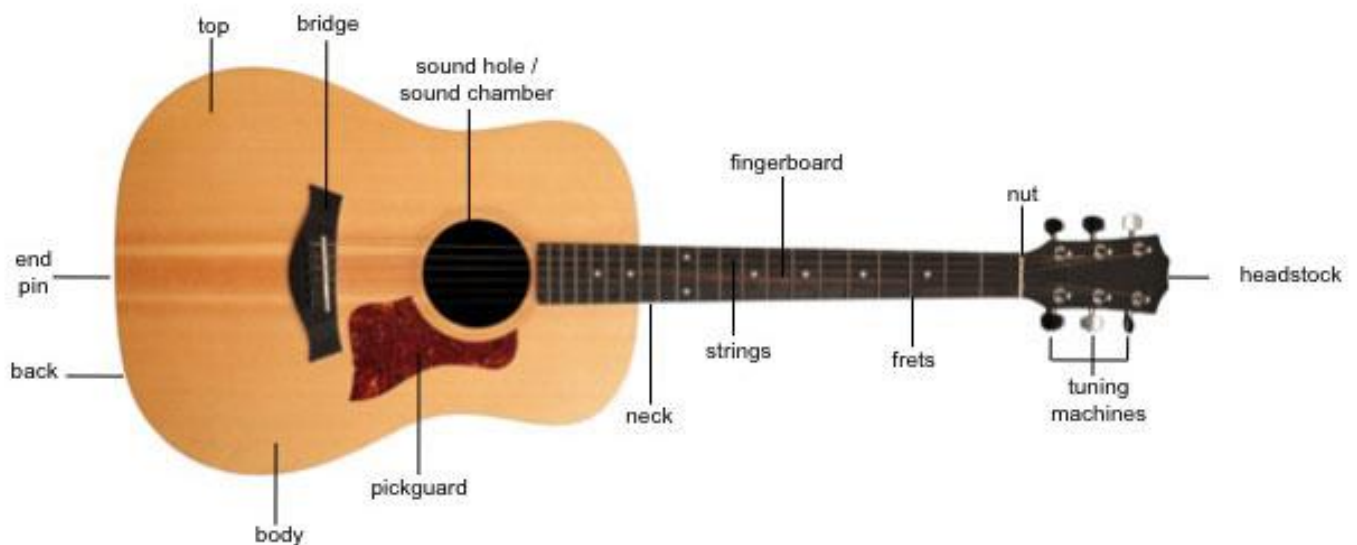
The neck of the guitar is the area of the instrument you'll concentrate a great deal on: you'll put your fingers on various places on the neck, in order to create different notes.

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The neck of the guitar adjoins the "body" of the instrument. The body of the guitar will vary greatly from guitar to guitar. Most acoustic and classical guitars have a hollowed out body, and a "sound hole", designed to project the sound of the guitar. Most electric guitars have a solid body, and thus will not have a sound hole. Electric guitars will instead have "pick-ups" where the soundhole is located. These "pick-ups" are essentially small microphones, which allow the capture the sound of the ringing strings, allowing them to be amplified.

The strings of the guitar run from the tuning pegs, over the nut, down the neck, over the body, over the sound hole (or pick-ups), and are anchored at a piece of hardware attached to the body of the guitar, called a "bridge".



## LITERATURE REVIEW

In a 2012 study conducted in Berlin, researchers scanned the brains of 12 pairs of guitarists, all of whom were asked to play the same piece of music. The researchers discovered that the guitarists' neural networks could synchronize not only while playing the piece — but even slightly before playing.

According to the study — which you can read here and (in a much more reader-friendly format) here — when a guitarist shreds, he or she temporarily deactivates the brain region that routinely shuts down when achieving big-picture goals, signalling a shift from conscious to unconscious thought.

When non-experienced-musicians attempt to play a solo, the conscious portion of their brain stays on, which implies that "real" guitarists are able to switch to this more creative and less-practical mode of thinking more easily.

According to [policymic.com](http://policymic.com), this research makes it clear that guitarists are spiritual, intuitive people. This sort of intuitive thinking runs all the way to how guitarists learn. Unlike musicians who learn through sheet music, guitarists, according to researchers at Vanderbilt University, get a better grasp of a song by looking at someone playing it rather than reading the notes on paper (Have you seen our LESSONS section, by the way?).

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The intuition might come from one truth every guitarist suspects: Playing guitar transcends simple brain chemistry. Pat Martino, a jazz guitarist from Philadelphia, had 70 percent of his left temporal lobe removed when he was in his mid-30s due to a hemorrhage. When he came out of surgery, he couldn't play guitar.

Within two years, Martino was able to completely relearn how to play jazz guitar. Scientists have used Martino's brain as an example of cerebral plasticity. For guitarists, Martino represents something else: Playing guitar isn't a skill. It's a way of being, a way of life. (Guitar World 2015)

There's a certain *Je ne sais quoi* about a guy holding a guitar. Or so says a new study from France, which suggests that a man is perceived as more attractive to women if there's a guitar in his hands. The study's results are similar to the findings of a 2012 study from Israel. France, Israel, Hoboken or Bumpass, Virginia — it doesn't matter where the guitarist is from. The point is, male guitarists are generally viewed as promising mating material. The French study, which was conducted by researchers at the Universite de Bretagne-Sud (University of South Brittany) and published in *Psychology of Music*, was centered around a 20-year-old man “previously evaluated as having a high level of physical attractiveness.” One day, this fellow approached 300 women ranging in age from 18 to about 22. He said hello and added, “I think you're really pretty” and asked for their phone numbers. During a third of the encounters, he was carrying a guitar case. For another third, he

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was holding a sports bag. For the last third, he wasn't holding anything. When he was carrying the guitar case, 31 percent of the ladies gave him their phone number. Only 14 percent gave him their number when he was empty-handed, and that figure dropped to an unhealthy 9 percent when he was holding the sports bag. In the Israeli study, which was published in *Letters on Evolutionary Behavioral Science*, 100 single female students at two universities received a Facebook profile of a single guy accompanied by a "friend" request and the words, "Hey, what's up? I like your photo." Half of the women saw a photo of the man playing a guitar. The other half saw a photo of the man looking like a "regular" person, as in, devoid of a guitar. "While five of the 50 women responded positively to the friendship request that was sent by the profile without a guitar, 14 of the 50 women (28 percent) responded positively to the friendship request that was sent by the profile with the guitar," wrote the research team. (Fanelli 2014)

Retrieved <http://www.practiceguitar.com/the-top-10-benefits-of-playing-guitar>

### *Better intellectual capacity*

One of the most obvious benefits of instrumental music for students is that you can get a better mark in music class, but did you know that making music can help you in your other subjects as well? Many studies have shown that students who play music have generally higher test and IQ scores than students who aren't musical. If you're past your school years, countless other studies have proven that practicing musicians of any age are more alert, which can lead to better memory retention.

### *Discipline and patience*

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Patience and discipline are virtues that so many of us lack in today's world. Music, however, is known for its ability to lengthen attention span for its player. The discipline required to master guitar is also helpful in your everyday life when coping with tedium or difficult tasks...

### *Relieves stress*

Creating music can soothe the mind, calm tempers and even lower blood pressure.

### *Sense of achievement*

Nothing can beat the feeling you get once you conquer a difficult passage in a piece you've been working on. Hard work pays off in music, and you'll often feel a sense of accomplishment if you dedicate yourself to the study of guitar.

### *Communicate your emotions*

Ever been told to find a better outlet for your emotions than a punching bag? Playing guitar can be the answer to your problems. If you've been heartbroken, play something sad and slow. If you just got a new job and you're over the moon, play something loud and joyful.

### *Emanate your personal style*

Not all music is classical and two hundred years old, written by some dead European guy. Other genres of music are out there for all types of instruments. Ever heard a guitar play Metall? Try it out! You might like how it feels under your fingers and how it sounds in your head.

### *Teamwork*

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One of the most rewarding things about being able to play guitar is being able to play with other musicians like you. Not only do you get to show off your amazing musical skills, but you can combine your talents and make music that you could never dream of playing on your own. In order for your group to find their groove, you'll need to work together on sound, tempo and style; in expanding your musical horizons together, you'll grow as a musician and as a person.

### *Physical workout*

Music isn't just for the mind and soul-it's good for the body, too! By playing guitar you are strengthening your arms, your fingers and hands, and even your legs (playing guitar burns approximately 90 kCals an hour).

### *Bragging Rights*

Say you're at a party, and a handsome man/beautiful woman/cute guy/hot girl asks you what you do. Once you play guitar, you can truthfully say, "I'm a musician". Let's face it: how many people do you know that would look down on you if you told them that? Music is in, and it always will be, so cherish the fact that you're a part of the never-ending trend.

### *Fun*

That's right, fun. Music is fun, and everyone accepts this. Listening to music is fun, so your friends will appreciate the fact that you've got a great way to entertain them. Playing music, though, is the most fun you can have. There's no denying it. When you really let yourself become one with the music, there's nothing in the world that can stand in your way. Music is the key to life, and it will always be one of the most worthwhile hobbies/careers ever invented.

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Another concept that music training can improve verbal memory was tested in children. The results showed that children with music training demonstrated better verbal but not visual memory than did their counterparts without such training. When these children were followed up after a year, those who begun or continued music training demonstrated significant verbal memory improvement. Students who discontinued the training did not show any improvement. Contrary to the differences in verbal memory between the groups, their changes in visual memory were not significantly different. Consistent with previous findings for adults (A.S. Chan, Y. Ho, & M. Cheung, 1998), the results suggest that music training systematically affects memory processing in accordance with possible neuro-anatomical modifications in the left temporal lobe (Pelayo 2010).

Loving and learning guitar are 2 different matters entirely. Instead of just envying your guitar idols like most raving fans, you can develop your style and brand. And what better way than learning to play? Here are 7 benefits of learning guitar that can help you be a guitar pro in no time: <http://www.selfgrowth.com/articles/7-benefits-of-learning-guitar>

### *Enhancing Your Brain*

Playing guitar certainly helps in enhancing your brain to function via initiating signals that subconsciously commands your hands to memorize where to place your finger on a certain fret be it left or right chord. All this while engaging in the appropriate manner of strumming. This is very similiar to playing piano and even typing whereby you

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know without even thinking exactly where or when to place your fingers on certain keys naturally.

### *Satisfying Your Basic Needs*

By playing guitar especially on your favorite song or music, it helps in satisfying your basic needs like inner fulfillment, personal pleasure and self - achievement. When that happens, you feel more motivated to move on.

### *Flexibility To Play Anywhere You Want*

Unlike a piano and drums, you can bring along your guitar when going out. Even if it is long and bulky, you can put it into carrying case and then placed into the boot of the car if you have one.

### *Get Noticed For Your Talent*

Though it might seem a daunting challenge, you never know when you get noticed for your talent. Especially when someone among the crowd happens to be the music director, producer or even the head of the guitar band looking for additional players.

### *Becoming A Natural Talent*

If they like you, they might want you to compete in some guitar idol competition where you get a chance not only to impress the judges and worldwide audience but also win a contract with some guitar company to be groomed into a professional guitarist should you finish in the top 3.

### *Cheering Up*

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Instead of just staring blankly into empty space and wondering why things are so unfair, you might want to vent your anger and sorrow on playing guitar. Doing this will help in cheering you up.

### *Building A Career*

But please note that impressing your future employers at guitar studios and judges at auditions are more difficult than impressing your family and friends. This is the challenge that separate guitar pros from guitar wannabes. As much as you want to play well, you need to be prepared to accept criticism, recover and improve from there. Though this is easier to be said than done, this is one of the essential requirements from every guitarist if they ever want to succeed as every guitar fan's next idol.

Furthermore, present interests in associations between music and intelligence stems from two independent areas of research (Schellenberg, 2003). One focuses on the short-term effects of simple listening to music. The so called Mozarteffect refers to the finding that passive listening to music composed by Mozart produces temporary increases in spatial abilities (Hetland,2000b; Rauscher, Shaw, & Ky, 1993). Subsequent studies indicate, however, that the Mozart effect is difficult to replicate (Chabris, 1999; Steele, Bass, & Crook, 1999; Steele, Dalla Bella, et al., 1999)When evident, it can be attributed to differences in arousal and mood generated by different testing conditions(Husain, Thompson, Schellenberg, 2002; Nantais & Schellenberg, 1999; Thompson, Schellenberg, & Husain, 2001)Compared with sitting in silence for 10 minutes, listening to Mozart induces more positive moods and relatively optimal levels of arousal, which lead to higher levels of performance on tests of spatial abilities (Pelayo 2010).

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Music and rhythm have been defined as powerful aids to language learning, memory, and recall. But is this due to structural and motivational properties of instrumental music and songs, or is there a relation between learners' language aptitude and musical intelligence? It seems that everyone who feels motivated to do it is able to learn other languages to some degree, as long as an appropriate learning method is used. However, learning foreign languages is not easy, as many variables need to be considered if the desired result is optimal language learning in a non bilingual environment. Probably, one of the main obstacles to learning a foreign language in this context is the lack of continuous target language auditory input. While in first language acquisition babies start receiving sonorous stimuli in their mother's womb, in foreign language learning opportunities to receive auditory input are mainly limited to the classroom, the teacher, the classmates, and situations in which listening is included in the lesson. Language acquisition depends on interaction. With interactions affect has been shown to be a mediating force for communication to become successful. For instance, teacher talk and parental talk share many similar features. Both can be described as simplified codes created to help the hearer to learn and understand language (Arnold and Fonseca-Mora, 2007). They share features such as the frequent use of repetition, of formulaic expressions, expansions, preference for simplified vocabulary, change in voice volume, and modification of intonational contours. These speech melodies are indicators of emotions and they have a great impact on communication because, as Berger and Schneck (2003: 689) state: "Humans are not thinking machines that feel, but rather, feeling machines that think." These melodies become a help for language learning. Exaggerated melodic contours found in adult-directed-to-infant-speech are considered to be parental intuitive behaviour to guide their

babies' musical beginnings (Papousek 1996), but they are also seen as a species-specific learning guidance towards language (Feu and Pinero 1996, Wermke and Mende 2009). Melodies, and music in general, are present in the language teaching context as well. (Melodies That Help: The Relation between Language Aptitude and Musical Intelligence. Author(s): Fonseca-Mora, M. C.; Toscano-Fuentes, C.; Wermke, K. Source: Online Submission, Anglistik International Journal of English Studies v22 n1 p101-118 2011 Pub Date:2011-00-00 Pub Type(s):Journal Articles; Reports –Research) (Pelayo, Galang 2013).

According to a study published in *Psychology of Music*, a woman is more likely to give her number to a guy carrying a guitar case than a man holding a gym bag. For the experiment, an attractive man approached 300 women and after complimenting them, asked for their phone numbers. He did this in three different scenarios: holding a guitar case, toting a sports bag, or not carrying anything at all. Over a third of the women gave their digits when the guy was carrying the guitar case, 14 percent responded positively when he was empty handed, and only 9 percent shared their number when a gym bag was in sight. Women associate musical talent with a genetic advantage and intellectual ability. Plus, there's the coolness and fun factor. "Music induces a positive effect, and this positive effect primes receptivity to a courtship request," says Nicolas Guéguen, study author and researcher at the University of South Brittany in France.

Another study, published in *Letters on Evolutionary Behavioral Science*, showed that women are more receptive to a Facebook profile picture that shows a man with a musical instrument. Researchers sent out a friend

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request to 100 single women with a note, “Hey, what’s up? I like your photo.” The only difference was that the sender’s own profile picture either included a guitar or didn’t. At the end of the study, 28 percent of women responded positively to the apparent guitar player, yet only 10 percent of women responded positively to the guy sans guitar. In short, priming a female with the notion that you’re a musician is sort of like getting your foot in the door. It’s similar to other tactics that will soften her up, like gently touching her forearm as you flirt. Researchers even have a name for it: sexual selection theory of music. Sure, it sounds like something we made up, but the theory suggests that music serves as a signal in mate selection.

<http://www.mensfitness.com/life/entertainment/study-women-more-attracted-to-guys-who-play-guitar>

## CONCLUSION

Based on the gathered data from 50 male and 50 female guitar players, songwriters and vocalists, the respondents prefer the acoustic guitar. Thematic coding has determined their preference, Although more studies should be conducted to further strengthen the conclusion, the researchers purpose was to determine a foundation in order to have a basis for this type or nature of research that hopefully would be investigated in the future.

1. The guitar is popular to the youth
2. The guitar is more affordable
3. The guitar (as stated on the Literature Review) had a very big impact on the opposite sex
4. The guitar is handy

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5. The guitar can be played solo or with a group
6. The most interesting is that only males see a guitar as a female's body curves

## REFERENCES

Denyer, Ralph (1992). *The Guitar Handbook*. Robert Fripp (foreword) (Fully revised and updated ed.). London and Sydney: Pan Books. ISBN 0-330-32750-X.

French, Richard Mark (2012). *Technology of the Guitar*. Robert Fripp (foreword). New York; Heidelberg: Springer Verlag. ISBN 978-1-4614-1920-4.

Gioia, Joe. *The Guitar and the New World: A Fugitive History* (Albany: State University of New York Press, 2013) 254 pp.

Pelayo, J. III, Mallari, S. (2015) A Review on the "Mozart Effect Phenomenon" Related Studies and Conclusions

Pelayo, J. III (2010) The Effect of Mozart Music on Social Learning Behavior of High School Students

Pelayo, J III, Gslsng, E. (2013) Social and Emotional Dynamics of College Students with Musical Intelligence and Musical Training

Sethares, William A. (2010). "Alternate tuning guide". Madison, Wisconsin: University of Wisconsin; Department of Electrical Engineering. 2010 PDF version by Bill Sethares. Retrieved 19 May 2012.

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