

THE INFLUENCE OF MODERN TECHNOLOGY ON CHILDREN AND THEIR EDUCATION

Marija Simić²⁴

Abstract

In this paper I will tackle an issue that many of us encounter today - the excessive use of the internet and social media, examine how it affects children and young people. The excessive use of gadgets such as: smartphones, the internet, games and social networks became a necessity for any child nowadays. As one can imagine it is becoming a global issue. This use of modern technology greatly reduces the time which the child should spend learning and receiving information, furthermore it prevented the children in question from receiving good quality education and it reduces them to experiencing mediocre education instead.

Firstly, I would like to point out that throughout my research - the children who were seriously invested in playing instruments and quality music, were far less likely to be addicted to games and gadgets compared to those who were not.

Playing the instrument itself contributes to the development and enlargement of the frontal cortex as well as the acceleration of the function of synapses in the brain [1], which is in direct opposition to what we see when we look at how the brain reacts to the addiction to games and the Internet (in this case there is a reduction of the frontal cortex and lack of short and long term memory [2]). The solution to this problem is the inclusion of musical cognition in the child's education, from the earliest age. In order to achieve this in the best possible way, it is necessary to have certain factors in balance, which I will deal in this paper.

Key words: Music, education, innovations, youth, advancement, modern technologies

INTRODUCTION

This paper deals with the study of children and the young who have different combinations of the key factors. Here I will showcase what the key factors are for a child or young adult. These factors would ensure that he or she becomes a successful and mature adult. I will also introduce some common pitfalls or obstacles that should be avoided, as well as ways to overcome them.

METHODS OF RESEARCH: OBSERVATION AND COMPARATIVE ANALYSIS

Observation and comparative analysis in groups of children who have fulfilled all or most of the factors for progression in musical development. They have reached the

²⁴Prof. Marija Simić, Academician of IRASA, Belgrade, Republic of Serbia, +38163 362 851, e-mail: marija.simic@gmail.com

desired balance, and examining those who did not fulfill these factors and who may not have as much support as they need.

Results:

Throughout the years of my pedagogical work and observation, I have come to the conclusion that fulfillment and balance of all the key factors (such as: having a lot of support from the mother, in terms of her being supportive when the child decides to start playing the instrument; constant cooperation with the professor who also needs to be motivated to do the job right; recognition and respect of the environment that the child may need in regards to the space, instruments and such ; the financial stability of the child's family and perfecting the working conditions that are necessary to minimize the risks of an addiction to the internet and gadgets [2] in order to develop the child into a successful and mature musician.

Discussion:

As we all already see, we live in a time of gadgets and technical aids which we can no longer live without and can no longer separate ourselves from. The mobile phone is a great example of this because it connects the vast majority of tasks which we previously had to do separately - now we are connected to everyone, no matter if the person is at home or abroad, we can write documents and scan them for safekeeping, we can send emails, work and make appointments, use calendars, use different camera functions, have access to the Internet at any time, listen to selected or random music, use social media, play video games or chat with friends, real or virtual.

We should also be aware that the amount of gadget use also depends on our maturity level, for example: adults and mature individuals are using the internet and mobile phones to optimize time, to make their jobs and daily commitments easier, to make transactions in order to pay things with money, but also to make money.

For Musicians it is very valuable that we can listen to all the treasures of the world's classical music at any given time, previously we would have to work hard to find that same music or we would have to use complicated methods such as to tape them ourselves in order to have specific tracks recorded (complicated methods such as: magnetic tapes, Gramophones, vinyl records, cassettes and CDs) and in this way we can listen to music tracks that interest us at any given time. On the internet you can also find and print any musical text or notes, which is a huge help and it greatly saves time. It is also very valuable that we have phones to record our performances on - making so-called practice recordings - seeing ourselves from another perspective can help us realize what level we are at with a particular interpretation and we can have a better idea what remains to be done and how much more practice we need. We can also take recordings of our recitals and concerts which serve as beautiful memories to cherish. Now we can choose and post our best and favorite ones on the internet, later

we can even use these recordings in order to get recommended or to get a scholarship, finances from the funds, and so to speak as our visit card.

In contrast, children are highly vulnerable to the downsides of easy and fast access to the Internet, in every family today there are fights concerning the amount of time the children of the family spend on social networks or playing games. These are the 21st century problems. The children sometimes even have issues distinguishing this perfect virtual world from the whole physical reality. That is why children have issues with socializing as well (socialization is known to be an immensely important factor for that age, and especially if it fails to establish its importance and status from parents or real peers) - they tend to play virtually through online games, and that's how they choose to interact with other players, usually in these online games you are represented by a specific avatar and you immerse yourself fully into this virtual role and virtual reality, which can too often lead to addiction and seclusion from the real world [2].

And this is where music is a very valuable tool which can help. It can be said that music is even a form of salvation for some. (in my previous work [1] I explained how many different centers in the brain are activated by music and how music helps many synapses function so that the children or teenagers rapidly develop all their abilities, related to other activities besides music, in contrast to gamers, where the size of their frontal cortex is reduced in size).

We will now study each of the factors necessary for a positive result:

The mother's attitude and support towards the child in regards to instruments and classical music

Through careful observation and comparison between groups of children who have successfully completed the process of becoming great musicians and groups of children who have not, I have come to the conclusion that the role of the mother plays one of the key factors for the young musician's self-realization and for his or her success. It was also noted that the role of the mother in relation to the role of the father was much more dominant in the development of young musicians, and that seemed to be the rule in all observed cases.

This is also a complex factor, made up of several components:

Of course, it would be ideal for the mother herself to be a professional musician too because this alone means that she certainly has more respect and loves for the occupation than her child is getting involved in. She might also have a better understanding of what is necessary for the the child to musically advance.

Music is one of the most difficult and complex arts one can tackle. Mainly because it exists only in the moment of it is created, and when the interpretation is completed, it ceases to exist in its original form. We can say that there is a metaphysical process of rebirth and realization of an author's idea from long ago, many tens or hundreds of

years ago, and this requires the activation of all the psychic and emotional abilities of the performer, which are triggered by his musical talent.

Therefore, special forms of discipline are required while you are in the process of getting the high-quality interpretation of the music track. This is because the performer's organism is the medium through which the music passes through and therefore the young musician must be in shape the same way as a top athlete should be. Only in that way the best results can be achieved. [1].

Furthermore, when the mother herself is a professional musician, she can recognize that the child or young adult needs a healthy daily routine -this means that they should get enough sleep at night, regular nutrition and hydration during the day, but also they should have a peaceful room where they can practice their instrument for hours daily. This is mandatory in order for them to get into the routine of things and to be ready in time for concerts and such. Thus we can conclude that the child's mother becomes a valuable associate to the professor, because when she herself has the will and supports the child in everything that needs to be done, she can even be a part of the creative process (in consultation with the teacher or mentor naturally) and she can help by coming up with creative ideas for the musical or technical problem that the child may encounter.

However, if the mother is not a professional musician, she should be a great admirer and lover of classical music in order for her child to.

Therefore, she alone might not have the initiative to influence the daily routine of the child, but she will do everything to enforce the professors or mentor's suggestions, and will control the home environment and daily routine that is necessary as well as sufficient number of hours spent in practice. There is a mandatory factor and very close cooperation with the teacher or mentor and respect for his professional knowledge and personality from the mother.

The third variant, which again gives very good results, is when the mother herself is not a fan of quality music, but has a great respect for the education and studying (she can also be an educational field worker), as well as for the professional knowledge and personality of the professor or mentor. Then she will also take care of everything the professor suggests that the child must have in their daily routine at home, of course, including training on the instrument. Here, the mother will not be able to help with some of her ideas, but she will be an example to her child with her attitude towards the professor and education that the child will follow, consequently it will properly implement the professor's advice and suggestions.

The fourth alternative scenario could be that the mother might not be a fan of classical music, and she does not have respect towards the professor and to the educational process itself. In such a situation, the child most often (in most cases) has the problem

of respecting hierarchy and authority, and thus the progression and self-realization of him / her as a musician and a successful adult is much more difficult.

Here is the only solution that the child alone feels and understands the importance of education and grows extreme form of respect to his mentor.

In such a situation, it is also an important factor to spend as little time as possible under the negative influence of the parents - let's say, for example, that the child is a student in a boarding school where he/she will be supervised by professional musicians who understand what is needed on a daily basis. And maybe, even a better example could be - to enter the systematic training, where the professor or mentor in a sense "adopts" or becomes that parental figure (in Russia, where I myself studied and worked with children at the music school there and the term "Music son" or "Music grandson") then without much influence from the parents, the tutor proceeds to work with the child and he or she controls the individual exercise and follows closely the progress of the student. Of course, in order for a professor or mentor to have the desire and the motivation to work in such a dedicated way, they must have a special personality, so only the most reputable and authoritative professors do (there are many such examples in the Russian education system, but in our educational system there aren't many), and these are usually professors who got treated the same way when they were students. So that is why they understand the benefits.

And with that, we come to the following essential and crucial factor:

Choosing a professional and motivated mentor or professor to work with

The first option that gives the best results is just that, when the professor or mentor is a high quality motivated and strong figure that can "adopt" student, and in the absolute best way can take care and guide his progress and the work process. It is ideal for the student's mother to be as described in one of the first three variants from above, but even if the professor does not have the cooperation or respect of the students' parents, being a strong figure can ensure a smooth or even incredible progress for the student. Of course, the only condition that must be fulfilled in such a variant is to have respect and exceptional cooperation from the child or the young person himself/herself.

The next option is an extremely professional and motivated professor/mentor who works with a student for a certain number of hours a week/month, and the student that spends a lot of time independently completing the suggestions and assignments given by the professor or mentor. Of course, for this variant to work it is necessary for the mother of the child to be in the first and three types, fourth excluded (a mother who doesn't respect the professor and the education process), because then the young musician will not have sufficient motivation and quality of conditions to carry out the tasks given to him in his independent work. Of course there is also an exception that ensures that, even in such a negative home atmosphere, there are ways for progression,

that the student himself has a great respect for the professor and the teaching process, and that he organizes his independent exercise as much as possible outside the home, for example in the music institution itself.

The next variant is a professor who is not motivated enough to work with a student or student and works very irregularly, carelessly and without focus, just does not have enough knowledge, or if does, does not want to pass it on. Here the only way that a young musician progresses is to have a mother as described in the first two variants. As she will need to take on most responsibilities of practicing and playing of child on to herself. If she is a professional musician herself, she will be able to greatly ensure the quality of work and child's progress. If she is a great admirer and a lover of music, she will be able to provide the child more consultations with other professors who have lot of expertise and motivation to work. Of course, in reality, after a certain period of time, a non-motivated professor can be changed to another, who is better and more motivated to take part and share his knowledge.

Recognition and respect by the environment in which the young man resides, towards his/her engaging in quality music

A child who is just emerging is very conscious about what his environment thinks [3], and especially whether it accepts and respects him/her for his involvement in the music profession he is learning and which he wants to pursue.

The ideal situation is that young musicians is surrounded by peers or people who are like them engaged in music, and thus they have a better understanding of him/her and can provide sometimes even better support than teachers.

There are different types of support such as: a discussion on how to achieve the best possible outstanding interpretation of the musical work, and in particular why. Playing together and give mutual support to each other. (only possible if there is a mother which falls in the category of the first three types (as described above) and a professor who falls under the first two), these are the ideal conditions for the growth of a successful person and musician.

Another factor that should be taken into account is that the environment of the young musician. It should consist of admirers of proper and good music, because that will reflect on the musical performances of the student, and it should consist of people who admire the craft he or she has chosen to do. In this situation he would also receive a great incentive for progress.

The third factor is when the environment is composed of peers and persons who are far from music as such, and do not understand what the child is trying to accomplish. Of course this seems extremely counterproductive and makes it difficult for him/her to do the already demanding process of re-creating and reviving the musical text. In this situation the salvation is a mother (as described in one of the first three variations)

and can provide and find new environment of people and peers who evaluate and respect what he does. The child also needs the strong figure, a motivated and skilled mentor that provides such a productive environment naturally.

Financial situation of the family

The financial situation of a young musician's family is a very important factor, because it can have a twofold impact: to provide him with too much comfort and over-fulfillment of his wishes, or to use those finances for his professional advancement and development.

In the first factor above it shows that the motivation of the child for independent work and progress is in direct opposition regarding to excessive comfort - the more accessible all kinds of material things unrelated to the profession are, the motivation to achieve something himself/herself and put in effort becomes proportionally lower. To delve even further - the motivation of a child to work or progress is closely linked with myself to parent's attitude towards finances.

In another variant, when the mother is one of the first three types (herself a professional musician; great is an admirer of classical music, knows the value of knowledge and education and fosters respect for the profession and a professor of child), then a very favorable financial situation is a good factor, because then it is used to improve the condition and to forward the professional work of young musicians (I will process it in the chapter "quality of working conditions").

If the mother is like the fourth type (does not understand the value of knowledge and education, and doesn't cultivate respect for the professor and the educational process), then usually the attitude towards wealth, in this sense is wrong, because then the money is used unwisely and absolutely all the wishes of the child are fulfilled, whether it's deserved or not, but that reduces the kids desire for any progress and discourages investing effort in anything (especially in regards to succeeding in music, because as I am sure you already know, music is a vast ocean of progress and research and it needs constants work and motivation for it). Nothing can be served and gifted, everything is earned through hard work and dedication.

It is not good if parents judge other people based on their material status, this way of thinking can be passed onto the child and the child can have difficulties understanding the value of something as eternal as music, something which cannot be paid for with money, among. For example, the eternal beauty of music from: J.S. Bach, W.A. Mozart, L. Beethoven, F. Chopin... This child that has been led down the path of materialism is going to find it very difficult to understand that this Music existed before us, and will exist long after us.

There is also a solution to this as well, it's when the student cooperates with a gifted and a motivated Professor/Mentor, who will introduce him/her to the eternal works

in the field of music, literature, painting art and film [1]. Thus, the child will slowly begin to understand that life is not only in the amount of money and comfort, but it is a great fortune that we are among the chosen ones who have the honor and privilege to meet the Eternal, to revive it and recreate it at the moment of interpretation; that touch of Eternity leaves immense impression on a young person, to not view life in the same way as before [4] and this is the way it leaves the further progress of the young artist the musician enforced and forever open.

Quality of working conditions

A good financial situation in the family can also be a very favorable factor if the mother is in the first three types and understands the importance of good conditions for the professional work and progress of the child.

Then there is an opportunity to acquire a truly high-quality instrument for independent work, as this gives tremendous motivation to the child for further progress; to pay for a study trip to a child or young person, where he/she would become acquainted with the music education system in other countries and also through which he/she could see in what direction they can improve even further; or fees for participation in competitions, Master Classes, or winter and summer schools during the holidays (then the attention of students is free of compulsory teaching in school and can fully focus on perfecting their skills in playing the instrument).

CONCLUSION:

From all this we can conclude that it is crucial for a young person on the path to a successful future to have a mother who is one of the first three types listed above (that she is either a professional musician herself, or that she is a great admirer of classical music, or that she knows the value of knowledge and education and has the respect for the profession as well as the professor); that there is a continuous collaboration with a professor of the first two types - a professor or mentor of a sufficiently high-quality, motivated and strong figure who "adopts" his student, or a professional, high-quality and motivated professor who works a certain number of hours each week or month (which includes independent work of the young musician); that he is socialized in the company of peers who are also involved in music, and that he is surrounded by an environment that makes him/her feels admirable and appreciated; that the financial situation of the family, among other things, is in the purpose of his professional development and progress, and the benefits are to improve the quality of conditions for his work;

All of this leads to the use of the Internet, mobile phone and other gadgets. Mainly for the purpose of developing. What I mean by this is - the student should have access to all the tracks of classical music that the student is interested in, the student can make playlists of their favorite composers of classical music [1], they can make recordings of their rehearsals and concert performances and he or she can post it online and that

he/she has a way to call them in every professional presentation or appliance for specific scholarships or funds.

All of this and the presence of all the key factors, the student will be happily engaged and motivated for his profession, and he will develop his or her personality in a healthy and coordinated way. Avoiding unnecessary use of the internet along the way.

References

1. Simić Marija. "The Significance of Music Education for Children and Young People" by IRASA, Book of proceedings, edited by Vladica Ristić, Conference SETI I, Belgrade, Serbia, 12. april 2019
2. Dr. Goran Lazetić, Dr. Ivica Mladenović, "Lost in the Virtual World - Addiction to Games and the Internet" ISBN -: 978-86-531-0040-7, Publisher: Čigoja tisk Belgrade, Serbia, 2014.
3. Blanka Bogunovic "Musical Talent and Performance", Institute for Educational Research, Belgrade, Serbia, 2008.
4. Alfred Corto "About the piano art", published by Moscow "Music", Moscow, Russia, 1965.