Role of intrinsic motivation in the process of mastering the piano

Oleksii Nalyvaiko
https://orcid.org/0000-0002-7094-1047
V. N. Karazin Kharkiv National University, Pedagogy Department
nalyvaiko@karazin.ua

Anastasiia Bondarenko
https://orcid.org/0000-0001-6560-839X
V.N. Karazin Kharkiv National University, General Psychology Department
hedgehogasia@gmail.com

Abstract: The article presents the results of a study aimed at analyzing the role of intrinsic motivation in the process of mastering the piano. The study used various methods to identify the facts of the influence of intrinsic motivation on the process of mastering the piano for students of music educational institutions and for people who chose a different path in further education. The study revealed a number of interesting facts that will help to look at the problem of motivation in the context of internal motives for mastering such a musical instrument as the piano.

Keywords: Intrinsic motivation; piano; students; higher music education.

TÍTULO: PAPEL DA MOTIVAÇÃO INTRINSECA NO PROCESSO DE DOMÍNIO DO PIANO

Resumo: O artigo apresenta os resultados de um estudo destinado a analisar o papel da motivação intrínseca no processo de domínio do piano. O estudo utilizou vários métodos para identificar os factos da influência da motivação intrínseca no processo de domínio do piano para estudantes de instituições de ensino musical e para pessoas que escolheram um caminho diferente no ensino superior. O estudo revelou uma série de factos interessantes que ajudarão a analisar o problema da motivação no contexto dos motivos internos de domínio de um instrumento musical como o piano.

Palavras-chave: Motivação intrínseca; Piano; Estudantes; Educação musical superior.
Role of intrinsic motivation in the process of mastering the piano

Oleksii Nalyvaiko, V. N. Karazin Kharkiv National University, nalyvaiko@karazin.ua
Anastasiia Bondarenko, V.N. Karazin Kharkiv National University, hedgehogasia@gmail.com

1. Introduction

Based on the existing problems in the field of music education in the direction of "piano", it is appropriate to draw as much attention as possible to the specifics of the ratio of the motivational components of students and the lack of resources and sources of intrinsic motivation, which is influenced and in direct connection with the leading principles of the art education system in Ukraine. The interlayer of students’ musicians differs in a special way, whose motivational attitudes are constant and reflect previous trends in the formation of motivation in educational institutions, potentially affecting the orientation of motivation towards playing the piano in subsequent generations of applicants. The situation of a forced transition to distance learning due to the pandemic (Terrien, & Güsewell, 2021) caused by the spread of coronavirus infection, according to our assumption, is able to influence the overall picture of the motivational attitudes of future musicians, which is also accompanied by a paradigm shift, that is, the greater involvement of online broadcasts and recordings of the playing for an empty hall (Botstein, 2019) instead of the usual public performance of "live music" in concert venues.

The statement of the problem related to the motivational sphere of the personality of a pianist student reflects several separate lines of development of the process of solving both purely practical issues of piano performance, teaching and learning, and theoretical and methodological searches for providing the most favorable conditions for studying this phenomenon. Therefore, it seems appropriate to involve the basic principles of general and pedagogical psychology, as well as comparative pedagogy, which allow, in their combination, to trace the main differences in pedagogical achievements in the field of motivation, to identify the basic psychological patterns of the process of teaching music (Guirard, 1998), combined with the process of mastering and transferring performing knowledge, skills and abilities (Ömür, 2021). It is now considered indisputable that it is necessary to recognize the leading place of subject-subject (partnership) relations in pedagogical interaction, the personal characteristics of the applicant as a full-fledged active participant in the educational process, which produces and in a certain way directs its own internal driving forces and receives significant influence from the outside and the environment in general (Guillemet-Messire, 2021). Therefore, understanding what motivates an individual not just in the process of making music, but in systematic studies and obtaining a musical education in the piano class, can ensure the qualitative assimilation of a certain program, a certain trajectory of the development of the performer in general. So,
the problem brought up for discussion is complex — it is, first of all, the lack of attention to the motivational component of learning to play the piano as the cornerstone of the success of the learning process and further instrumental and performing activities, which is the basis for the lack of focus on identifying, shaping and developing the intrinsic motivation of the future pianist.

Analysis of the various studies on the problem allows us to highlight the uneven distribution of interest in motivation in music education and, as a consequence, the assertion of the priority of intrinsic motivation: to a greater extent, the development of this problem is inherent in foreign authors (Huguet-Benabdelmouna, 2007; Hallam, 2010; King, 2016; Egilmez & Engur 2017; Harris, 2017; Cheng, 2021), while the post-Soviet art and educational environment directs forces to other and, in some cases, no less important topics (Kirnarskaya, 2014), but with a few exceptions concerns the ratio of motivational components in the context of learning and teaching the subject of piano playing (Volyuvach, 2005; Toropova, 2011; Rostovska, 2017; Bondarenko & Nalyvaiko, 2021). It is important to expand the tools for measuring the manifestations of this phenomenon (Vallerand, Blais, Brière & Pelletier, 1989), the introduction of new diagnostic techniques (Comeau, Huta, Lu, et al. 2019), which allows more flexible assessment of the current situation, taking into account multiparadigmatic psychological and pedagogical research in the field of music art. Discussion of aspects of the painful topic takes the form of a purposeful analysis of teaching experience (Asmuse, 1994; Dubé, 2014; Cheng & Southcott, 2016; Simon, 2021), supported by the desire to enrich and systematize recommendations by building a single convincing concept (Fukuya, Takegawa, &Yanagi, 2013).

Therefore, the purpose of the study extends to the plane of determining the existing trends in the motivational sphere of modern pianist-students.

Objectives of the study:
- first, to conduct a theoretical review of the role of the motivational component in learning to play the piano and outline the key importance of intrinsic motivation,
- secondly, to identify the existing level of external and intrinsic motivation of student representatives;
- thirdly, to investigate the general motivational guidelines of the representatives of the studied sample;
- fourth, compare the results obtained for students currently studying as pianists at the moment and those who have already completed their studies or continue to study in another (non-music) specialty.

2. Methods

To implement objectives of the study we have established, we used methods such as analysis, synthesis and systematization of information about the phenomenon under study, as well as a number of methods aimed at diagnosing different aspects of the motivational complex of the personality. The study participants were asked to complete an online form (created in google forms) containing some general questions preceding the actual battery of tests. Among the questions posed were the following: indicate your age, level of musical education, current level of education. The first in the line of methods was the test "Diagnostics of the motivational structure" by V. Milman (Milman, 1990), the purpose of which is to identify individual stable personality tendencies: general and creative activity, desire for communication, ensuring comfort and social
status, etc., and as well as the work (business) and general life orientation of the individual. As a result, it is possible to derive different types of emotional and motivational profile, especially taking into account the construction of the methodology on the basis of ipsative assessment, which implies the importance of indicators on scales relative to each other, rather than relying on absolute and standardized values. The next task was a projective question: "Please, tell, what prompted you not to give up piano lessons in a difficult period of life (or relationship with music)?". On the one hand, it allowed to reveal more obvious motivations of the individual in the narrative form, and on the other hand, due to the forced actualization and selection of crucial memories, it made sense of experimental intervention, under the influence of which the following test methods were performed. Thus, the questionnaire "Scales of Academic Motivation" (Gordeeva, Sychev & Osin, 2014) is designed to identify different types of motivation in the context of educational activities (needs of knowledge, achievement, self-development) and external needs (autonomy and respect), it is based on theory self-determination and stratification of learning motivation into external and intrinsic. The final method was "Motivation of professional activity" by K. Zamfir (modified by A. Rean) (Zamfir, 2006), which is also based on the concept of external and intrinsic motivation, while external motives are differentiated into positive and negative. Mathematical and statistical processing of the obtained data involved the calculation of descriptive statistics, the use of analysis of variance by Student's t-test and correlation analysis by r-Spearman's coefficient.

3. Theoretical foundations of research

It is impossible to bypass all the variety of ways to study the phenomenology of motivation, which occupies a leading place in the structure of the psyche in their synchrony and diachrony (Weiner, 1979), and at the same time, the most important achievements in this area should be emphasized. Intentional dimension, hierarchy, structure, system, connection with emotional and cognitive spheres, set of motives, goal setting and needs – all this is used to explain the essence of motivation, which is most clearly highlighted as motivation for activity, organized direction of a particular activity.

In the context of the problem raised, it is more appropriate, immediately after the definitions have been provided, to turn to the definition of different types of motivation. The option with the division into social and cognitive, stable and unstable, positive and negative, orientation towards success and avoidance of failure (according to achievement motivation) takes its rightful place, however, the allocation of such varieties as extrinsic (external) and intrinsic (internal) makes it possible emphasize the influence of assessments, punishments and reinforcements related to the category of issues of educational psychology. Moreover, the transparent delimitation of ways to receive incentives makes it possible to determine the independence of the individual in his ability to choose, evaluate the content of the chosen activity, and this is emphasized by the theory of self-determination (Deci & Ryan, 1985). Impressively, intrinsic motivation is not subject to the Law of Motivational Optimum/Yerkes-Dodson Law (Yerkes & Dodson, 1908), which states that it is necessary to reduce punishments or rewards while increasing the difficulty of a task in order to achieve optimal learning rate. That is, the more significant the presence of intrinsic motivation without taking into account the complexity of the activity performed, the better the result is. But first, we must emphasize the essence of intrinsic motivation itself: as previously indicated, it lies in the very content of the activity performed, the desire to acquire competence, that is, the activity of the subject appears as the desired reward (Schmidt, 2007).
Clarifying the central concept, taking into account the inherent initial determinants of the study, intrinsic motivation should be considered in terms of the applicant’s significant interest in piano lessons, which does not depend on external motives. Under the auspices of actively promoting the ideas of "usefulness" of piano playing, the problem of attitude to art education as a condition of successful activity in other fields (from sports to mathematics) grows in contrast to the necessary at this stage view which would affirm the value of piano lessons, the pleasure of interacting with live, self-performed music, direct interest in learning something new - the conditions of self-development and self-actualization. Moreover, we do not intend to deny the proven positive effect of piano music (Lecocq & Suchaut, 2012) on cognitive processes, improving some general and special abilities - this opposition shifts the focus to the motivational component of learning, where the driving force is the process of playing, improving performing techniques and finding embodied artistic images with the help of a sound palette. Thus is formed "euphoric motivation" (Toropova, 2011), a wave that generates a similar and subdues the whole hierarchy of human activity to the leading idea.

It should be noted that the motivation of the internal type is fully equal to the motivation of development – as a special case, interest can be considered as its manifestation (Volyuvach, 2005) – and ensures a harmonious combination of elements of the structure of educational activity along with its subsequent implementation. The dominance of external motives is associated with building an inverted structure of educational activities, where the central place of the subject (piano playing) is the external motive, for which the development of performing skills, pushed to the periphery of attention, is determined only as a means or conditions. The same situation is typical for the motive of avoiding failure, since the frustration factor is concentrated in the center of the motivational complex, and the entire learning process is reduced to a tool to prevent a negative phenomenon. The result can be the substitution of a significant part of the subject's activity, previously aimed at mastering the techniques of piano playing, with a purely defensive activity with the ultimate goal of removing negative content.

It would be inexpedient to seek the complete exclusion of external motives that combine in some way the learning process and the external reality of it. It is optimal to search for and develop intrinsic motives as fundamental, accompanied by some external, peripheral aspirations. Thus, intrinsic motivation is based on a shift of motives: from external to intrinsic – from decline to development. Mastering the higher levels of instrumental practice within the piano class and expanding the worldview in general, the tendency to more complex forms of experience corresponds to the influence of intrinsic motivation – otherwise we get a steady regression of learning motivation, self-preservation, material values, elements of hedonistic existence.

Among the variety of psychological theories designed to explain the essence of motivation (Fenouillet, 2012), there is often an operation on the concepts of hedonism and eudemonism, which, above all, form the conceptual basis of modern scientific vision of happiness and well-being. The concept of well-being, which is equivalent to the term "happiness", receives different interpretations depending on the hedonistic or eudemonistic paradigmatic orientation of scientific research. Briefly outlining the main milestones, hedonism is based on the intensity of subjective experiences of joy and happiness as indicators of personal satisfaction with life and self, so the question of subjective well-being is crucial for hedonism. Eudemonism proclaims the key to the full functioning of the individual, the realization of human intrapersonal resources, resulting in the experience of the fullness of life and finding psychological well-being (Pavlenko, 2020). Important for our study is the fact that the theory of self-determination includes the eudemonic definition...
of happiness, which since the time of Aristotle (Fenouillet, 2012) and thanks to him extends to the plane of ethical theory, and is now understood as basic psychological needs: competence, social relations and self-determination. It becomes clear that happiness is achieved through the presence of the individual in a social environment that allows to fully meet their psychological needs. The importance of the group (team) for the formation of motivation to learn is based on the assertion of the social dimension of well-being, which affects student performance (Heutte, 2011). Consequently, the intrinsic motivation of piano students as the pleasure of playing the instrument (in its most transparent form) goes through the acquisition of psychological well-being within the framework of social relations and indirectly determines academic performance.

Associated with the above-mentioned "euphoric" motivation, flow is rightly considered to be such an optimal mental state of concentration and full involvement in the process of activity, which provides high achievements and positive experiences. Meanwhile, in the context of music education, it was investigated that the experience of the flow during a specific musical performance (from rehearsals to a solo concert or performance with an orchestra) is positively correlated with indicators of subjective well-being (Fritz & Avsec, 2007) – with a eudemonic experience of well-being, for which personal growth and capacity building are essential. Focusing on such a positive state results in significant psychological benefits in the two-way improvement of the educational process - learning and teaching (Wrigley & Emmerson, 2013). The experience of flow deals directly with the emotional aspect of subjective well-being, to a lesser extent with the cognitive one, which is not surprising, since the flow is a very emotional experience. However, these aspects have a significant interaction, because the setting of clear goals, balance of tasks and skills, the ability to concentrate on tasks are predictors of positive affect. Although it is impossible to purposefully learn such a condition, improving the favorable conditions increases the likelihood of its occurrence. The development of flow experience during training and in situations of evaluation of the obtained results allows to strengthen the confidence and self-efficacy of students.

Separately, questions should be raised about the peculiarities of motivation for learning in adults (Fenouillet, 2011). At present, in order to explain individual phenomena and processes occurring in an “adult” environment when faced with the need or need to acquire new knowledge and skills, the concepts of motivation, based primarily on child psychology, are widely used in the field of psychological and pedagogical research. Such concepts are adapted to adult education, but it is clear that there are significant gaps in some parameters. Among them - the role of evaluation and its impact on the formation of self-esteem (which is ignored in vain), the perception of control and more. Therefore, F. Fenouillet (2011) proposes to emphasize the procedural nature of motivation in adults, a combination of many factors (as opposed to only one) that allow you to delve into the essence of motivation to learn in adulthood.

Finally, such a cultural and historical universal as a game in the broadest sense, gets the most pronounced manifestations in music. Although the present research views on art no longer rule out the involvement of the listener, the "bearer of late culture", in the "sacred game of musical experience" (Huizinga, 1949), thus noting his authority to interpret what is heard, our attention is still focused on the performer. "Facultas ludendi" – the ability (chance) to play, most purely embodied only in music, has an essential agonal component. Changes in the cultural paradigm and historical transformations lead to a rethinking of the place of "competition" in the art of music, which, moreover, has long gone beyond the exclusively mimetic, while retaining the ethical and psychological functions entrusted to it by the ancient
Greeks. Fundamentally unchanged for any play (especially musical) is the focus on the process itself, fenced off in time, space and the criterion of compliance with the rules. And no matter how remote the era when learning to play musical instruments was equal to the possibility of leisure, not burdened with "usefulness" or "profitability" of the process and result, and now we must not forget to seek not "ultimate good" but enjoyment of the musical performance – perfection, which "tends to be divisible" (Barthes, 1977, p.172), and therefore potentially owned by everyone and achievable regardless of age due to a more developed system of art education. No wonder the Greeks left us a wonderful word of our language: "enthusiasm", from "en theo", which means "the god who is within" (Pasteur, 1882).

5. Research results

Distribution of the study sample (N=65) into 2 groups: 1) pianists studying in creative institutions of higher education (66%), and 2) musicians engaged in other activities, have completed their studies and are working or studying further in higher education institutions (HEIs) with a different focus specialization (34%) - revealed some differences due to the analysis by Student’s t-test. Given the general similarity of the averages (Table 1), as well as the ipsativity of the measurement of the Milman method, the graphical expression helps to see the main trends and discrepancies (Fig.1).

![Graph](image.png)

Figure 1 – Motivational profiles of two groups of participants.

In general, the motivational profiles of both groups of the sample correspond to the so-called “progressive” type, which is characterized by the dominance of developmental motives compared to life-supporting ones. Given the two "peaks", we should also talk about the "expressive" type of profile, which indirectly expresses the desire of the subject to self-affirmation.
Tab. 1 – Description of participant groups (N=65)

| Percentage | Average age | SD |
|------------|-------------|----|
| All participants | 100% | 21.6 | 4.9 |
| 1 group (students-musicians) | 66% | 20.2 | 2.6 |
| 2 group (other) | 34% | 24.2 | 3.7 |

Thus, it is seen that the second group of subjects in comparison with the first has higher averages on the scale of creative activity, and lower — on the scale of social status (Table 2).

Tab. 2 – Results of Vadim E. Milman’s methods.

|                  | LN (life necessities) | Comf (comfort) | SS (social status) | Com (communication) | GA (general activity) | CA (creative activity) | SU (social utility) |
|------------------|-----------------------|----------------|-------------------|--------------------|-----------------------|-----------------------|--------------------|
| All participants | 18,25                 | 17,67          | 19,7              | 25,5               | 19,45                 | 36,95                 | 25,75              |
| 1 group (students-musicians) | 18                   | 17,35          | 22,4              | 25,4               | 19,6                  | 34,9                  | 25,15              |
| 2 group (other)  | 18,5                  | 17,99          | 17                | 25,7               | 19,3                  | 39                    | 25                 |

It is important that this is confirmed by analysis of variance. Thus, pianist students who continue their studies in creative HEIs have statistically different indicators of motivation for creative activity, t (64) = 2.05, p <0.05, and to obtain the appropriate social status, t (64) = 2.241, p < 0.05 than students who have already completed their studies or are studying in another specialization.

Regarding the method of "Academic Motivation Scales", it was also found that the first category of students has a different degree of motivation to achieve, t (64) = 2.56, p <0.05, and different from the second group level of motivation, t (64) = 2.374, p <0.05.

Tab. 3 – Results of "Academic Motivation Scales". Questionnaire

|                  | Intrinsic cognition | Achievement | Personal growth | Self-respect | Introjected motivation | External regulation | Amotivation |
|------------------|---------------------|-------------|-----------------|-------------|-----------------------|--------------------|-------------|
| All participants | 4.3                 | 3.9         | 4.3             | 3.7         | 2.7                   | 1.9                | 1.5         |
| 1 group (students-musicians) | 4.1             | 3.7         | 4.2             | 3.7         | 2.6                   | 2                  | 1.9         |
| 2 group (other)  | 4.5                 | 4.2         | 4.4             | 3.7         | 2.9                   | 1.7                | 1.1         |

Correlation analysis by r-Spearman coefficient showed a positive relationship between the desire to obtain a certain social status and motivation to communicate (r = 0.483 **), and the latter is positively correlated with motivation to creative activity (r = 0.255 *). Assessments on the scale of general activity change according to the assessments of the scale of internal motivation (r = 0.31 *), which is part of the methodology "Motivation of professional activity". Agreed changes also occur with the desire to support life and motivation for self-esteem (r = 0.356 **). Meanwhile, a negative correlation is observed in the case of ammotivation and focus on communication (r = -0.274 *) - that is, the higher the desire to root and develop social contacts, the less ammotivation a pianist student has. However, paradoxically, the same ammotivation and motivation for creative activity correlate in the key of a positive relationship (r=0.291*). At the same time, high motivation for creative activity implies high scores on the scale of external negative motivation (r=0.42**).
Tab. 4 – Results of "Motivation of Professional Activity". Questionnaire

|                | Internal motivation | External positive motivation | External negative motivation |
|----------------|---------------------|------------------------------|-----------------------------|
| All participants | 4,54                | 3,6                          | 2,94                        |
| 1 group (students-musicians) | 4,5                | 3,6                          | 2,98                        |
| 2 group (other)     | 4,6                | 3,5                          | 2,9                         |

As for meaningful answers to the given projective question, their thematic analysis takes into account the possibility of combining several different topics in one answer, for example: "The content component of the lessons (the music itself) + the help of a psychologist and the support of teachers", "Love for music, well-being while playing "on the piano, good teachers", "What I like to play, and I have to pass exams", – sometimes even motivational attitudes that are multidirectional in valence. Thus, on the basis of 65 statements, 8 leading topics were identified, which are highlighted below, which highlight the motivations of music students and those who have chosen a different educational trajectory:

1) internal motives (29%): "Opportunity to create, pleasure from music, process, result", "Music prompted”. Music itself”, “Love for the art of music “, “It is a part of me “;
2) external motives (23%): "The first thought that all the years so far have been wasted, the second – that I can do nothing more", "It was a pity not to get a diploma after 6 years of university", "Lack of knowledge in another field “;
3) gestalt (17%): "Goal, dream", "Toofar", "Curiosity" and what will happen in the end “, "... did not want to throw half way unfinished affair! “;
4) parents (15%): “Parents” “My parents. There were attempts to leave, but my parents insisted, and I finished”, "Parents. At some point, they just forced me to continue... ", "First, in the decade (in school), my parents motivated me... “;
5) external support (12%): "The person who supported me and gave me a love of music", "Teacher support";
6) emotions (12%): "Piano helps me concentrate, relax... Playing, I forget about troubles", "Music fills life with meaning and allows you to live thousands of stories", "... no lesson gives me such inspiration and good mood as music “;
7) self-development (7%): “Desire to develop”, “Desire to develop to the professional level”;
8) public benefit (5%): “Confidence that this cause can bring benefit and joy to me and other people...”, “... this is what I can give to society. That is, I realized that my profession is my contribution to society... I can make this world better through art... “

Attention should be paid to the correlation of statements and assessments provided by test methods, which should be illustrated by the example of the data of two subjects with a pronounced divergent motivation.

A respondent under the nickname "X" noted that "Lack of knowledge in another field" prompted him/her not to give up music (there is an obvious negative motivation), while a respondent who called himself/herself "Y" chose the statement "Love for musical art “(demonstration of intrinsic motivation). Fig. 2 shows how different the results of the two studied in the plane of comparison of external and internal motivation.
Motivational profiles (Fig. 3) show the "flatness" of the profile of the subject with a low level of internal motivation and high – external. That is, in this case there is a lack of differentiation and poverty of the motivational hierarchy of personality. At the same time, the profile of the study with the dominance of internal motives reflects the general tendency for the sample to "expressiveness" and "progressiveness", but in a somewhat acute, exaggerated form.

6. Discussion

So we were able to see that in general, current pianist students and those who have chosen a different educational path are characterized by a high level of internal motivation, but external impulses are more clearly reflected in statements that outline memories of difficult periods of desire to leave the piano play.
The fact that the motivational guidelines of modern music students focus on development seems positive. Central, in addition to creative activity, for current and "former" pianists is communication. However, creative activity and social status can change in accordance with the age of the pianist or the choice of another educational trajectory. Achievement motivation, latently already present in the profiles according to the method of V. Milman and confirming the significance due to its difference for the two groups of the sample. The amotivation scale, which is almost on the periphery of attention due to low scores, meanwhile demonstrates that current piano students still have somewhat greater problems with lack of motivation than students of other specialties.

Of concern is the persistent positive relationship between motivation for creative activity and amotivation and external negative motivation.

Attention is drawn to the students' significant desire for completeness, integrity of ideas and efforts, explained by the theory of Gestalt psychology (Beswick, 2017) and potentially able to shift the focus of research in finding dependencies and patterns.

The last and non-obvious, just like Gestalt, in the list of topics is the social benefit, which is essentially the opposite of the desire to achieve, to gain recognition. Its share is very small, but the altruism of such beliefs directly reflects the more pragmatic idea that everyone who wants to make music their profession should want to become, first of all, a teacher (Yudovina-Galperina, 2002).

The influence of parents on motivational guidelines, even in student age, cannot be considered overestimated (Cheng, 2021) due to internalized principles of attitude to systematic classes, psychological trauma, etc. – it can be viewed through the prism of any theory. Parental influence is ambivalent, it should not be understood solely as rigid imperatives, which is why the most common one-syllable answer "parents", can be interpreted differently.

Simon (2021) in his practical advice to piano teachers emphasizes that there are no ideas for the development of motivation, suitable only for the needs of the piano class. In his opinion, the necessary distinction between internal and external motivation allows to distinguish successful and unsuccessful strategies of behavior with students.

That is, the development of the desire to devote oneself to playing the instrument is promoted by rather simple things, such as recognizing one's own imperfections and the desire to constantly move forward professionally, teach by example, talk with your students, ask questions and listen to answers. We are talking about changing the attitude of thoughts, beliefs, actions: establishing contact with a student pianist is an important part of helping students understand themselves, their aspirations, preferences, features of their own emotional sphere, which leads to confidence, self-confidence and as a desired consequence and formation of an internally inspired creative personality.

One of the most important factors of any activity is its meaning for the subject of activity. Therefore, it is necessary to clearly focus on the meaning of piano lessons for students. Our research shows that the meaning of classes for students is very important both in the context of intrinsic motivation and further
planning of their personal development. Loss of meaning can lead to abandoning the piano as a way of self-development (King, 2016).

Stress phenomena are also a significant factor influencing the motivational processes of musicians (Nalyvaiko & Lykhoshvai, 2021), so it is necessary in the educational process to pay attention to this component of student training. For example, trainings, additional specialized classes and playful professional situations can be effective.

Moore (2012) writes in his blog “Color in My Piano” that students often drop out of school when they feel that the effort needed to play well outweighs the benefits, and students can refrain from dropping out if they feel a sense of accomplishment and feel the need for their actions.

The position of the respondents on the public benefit of the chosen profession of pianist is not quite standard. On the contrary, Bowden’s research “The intermediate piano student: an investigation of the impact of learning material on motivation” states that surveys see social factors as an obstacle to mastering the piano at the highest level and clearly indicate that it is very difficult to combine socially responsible position with masterful mastery of this musical instrument. Perhaps this position is due to a fairly high level of social education, especially among the intelligentsia, which is the main basis for learning to play the piano. This factor of intrinsic motivation of applicants is quite rare in our time and requires further study.

We live in an era of digital technology and global communication (Isman & CananGungoren, 2014). This fact greatly affects all spheres of life and art is no exception. Modern scientific works in the field of musical art are devoted to the emergence of new electronic instruments, novelty and artistic expression of non-traditional performing technologies and their aesthetic significance.

Innovative music-educational process at the present stage is associated with the use of music computer technology (MCT) – an effective tool of improving the quality of music education at all levels of the educational process, an effective element of which is an electronic musical instrument (EMI). For example, Gorbunova (2018) considers the patterns of the evolutionary process of musical instruments and the features of EMI as a new instrument that constitutes the cultural content of a new stage in the formation of highly artistic musical culture. Her article reveals the horizons of new forms of music performed both on the concert stage and in everyday life, the possibility of developing the creative potential of both professional musicians and amateurs who have mastered new musical instruments of the digital age (Gorbunova, 2018). Our study did not cover such a large layer of modern youth life as the digital world and its impact on the motivation of music students, but this issue needs special consideration, especially in the context of the triangle music-psychology-pedagogy.

7. Conclusions

Thus, the study allows us to draw some conclusions and note the main results of our research:

1. The application of the concept of division of motivation into external and internal demonstrated the essence of interest in piano lessons as a variable independent of external reinforcements and punishments. Intrinsic motivation lies in the very content of the activity performed, the desire to
obtain competence, the desired reward determines the activity of the subject in the process of achieving his own goal.

2. The dominance of intrinsic motivation in mastering the skills of performing techniques is accompanied by an increase in psychological well-being in the social dimension, personal growth, self-efficacy and creative potential, expanding worldview and desire for new and more complex forms of experience.

3. It was determined that the motivational profile of Ukrainian students-pianists corresponds to the "progressive" and "expressive" type, where developmental motives prevail over life-sustaining and, at the same time, focused desire for self-affirmation. It is determined that the desire to gain a certain social status is closely related to the motivation to communicate. The higher the presence of motivation for communication in the student environment, the higher the motivation for creative activity and the lower the amotivation indicators, which confirms the social context for the development of well-being. Intrinsic motivation is also directly related to overall activity. However, the thirst for self-esteem is associated with the desire to maintain life - in this case, it should be about hedonistic well-being, not comparable to the development of intrinsic motivation.

4. In the course of the study, there was a greater inclination of piano students to obtain social status than those who, after a certain level of musical education, chose a different path or completed the educational cycle and work in the field of musical art. At the same time, the rate of creative activity is higher in the second category of respondents. Significant differences between groups are also observed in the level of achievement motivation and amotivation.

5. The resulting ratio of amotivation and motivation to creative activity in the key of a positive connection, together with external negative motivation, one way or another, prompts the search for new patterns in the formation of educational motivation. Such a debatable issue requires the involvement of new research perspectives, the formulation of other hypotheses and the use of additional methods that will help open a broader scientific context for studying the impact of the motivational component on the peculiarities of mastering the piano.

In future research it is planned to study the influence of external factors on the training of musicians in crisis situations.

3. References

Asmus, Edward. 1994. “Motivation in music teaching and learning.” The Quaterly Journal of Music Teaching and Learning 5, 5-32. http://www-usr.rider.edu/~vrme/v16n1/volume5/visions/winter2.pdf

Barthes, Roland. 1977. “Fragments d’un discoursamoureux.” Paris: Seuil. https://monoskop.org/images/d/d4/Barthes_Roland_Fragments_d%27un_discours_amoureux_1977.pdf

Beswick, David. 2017. “Cognitive Motivation From Curiosity to Identity, Purpose and Meaning.” Cambridge: Cambridge University Press. DOI: https://doi.org/10.1017/9781316822920.003

Bondarenko, Anastasiya, and Nalyvaiko, Oleksii. 2021. “Internal motivation of students as a priority component of learning to play the piano.” Educological Discourse 34(3), 83–95. https://doi.org/10.28925/2312-5829.2021.36

Botstein, Leon. 2020. “The future of music in America: the challenge of the COVID-19 pandemic.” The Musical Quarterly 102, 351–360. https://doi.org/10.1093/musqtl/gdaa007
Bowden, Harriet W. 2010. “The intermediate piano student: An investigation of the impact of learning material on motivation.” Master’s thesis, James Cook University, Townsville, Australia. https://researchonline.jcu.edu.au/18992/

Cheng, Zijia, 2021. “Students’ Motivation in Piano Learning: A Case Study in Australia.” Doctoral thesis, Monash University. https://doi.org/10.26180/13697617.v1

Cheng, Zijia, and Southcott, Jane E. 2016. “Improving students’ intrinsic motivation in piano learning: Expert teacher voices.” Australian Journal of Music Education 50(2), 48-57. https://files.eric.ed.gov/fulltext/EJ1146385.pdf

Comeau, Gilles, Veronika, Huta, Lu, Yuanyuan, and Swirp, Mikael. 2019. “The Motivation for Learning Music (MLM) questionnaire: Assessing children’s and adolescents’ autonomous motivation for learning a musical instrument.” MotivEmot 43, 705–718. https://doi.org/10.1007/s11031-019-09769-7

Deci, Edward L., and Ryan, Richard M. 1985. “Intrinsic Motivation and Self-Determination in Human Behavior.” New York: Plenum. http://dx.doi.org/10.1007/978-1-4899-2271-7

Dubé, France. 2014. “Motiver le jeune élève pour son apprentissage musical : un art pédagogique.” In Comment favoriser la motivation du jeune instrumentiste? actes des journées d’étude francoquébécoises de recherche et pratique en pédagogieinstrumentale (pp. 16–20). Toulouse: édition isdaT spectacle vivant https://www.isdat.fr/content/uploads/2016/02/Actes_Colloques_Comment-favoriser-la-motivation-du-jeune-instrumentiste_isdat.pdf

Eğilmez, Hatice O., and Engür, Doruk. 2017. “An Analysis of Students’ Self-Efficacy and Motivation in Piano, Based on Different Variables and the Reasons for Their Failure.” Educational Research and Reviews 12(3), 155–163. https://doi.org/10.5897/ERR2016.3096

Fenouillet, Fabien. 2011. “Note de synthèse : La place du concept de motivation en formation pour adulte.” Savoires 25, 9-46. https://www.lesmotivations.net/IMG/pdf/fenouillet_savoirs_2011.pdf

Fenouillet, Fabien. 2012. “Les conceptions hédoniques de la motivation.” Pratiques Psychologiques 18, 121-131. https://www.lesmotivations.net/IMG/pdf/fenouillet_2012_motivation_bien_etre.pdf

Fritz, Barbara S. and Avsec, Andreja 2007. “The experience of flow and subjective well-being of music students.” Psihološka Obzorja / Horizons of Psychology 16(2), 5–17. https://www.researchgate.net/publication/285086453_The_experience_of_flow_and_subjective_wel l-being_of_music_students

Fukuya, Yuto, Takegawa, Yoshinari, and Yanagi, Hidekatsu. 2013. “A Piano Learning Support System considering Motivation.” Proceeding of International Computer Music Conference (ICMC2013), (pp. 62-68). http://hdl.handle.net/2027/spo.bbp2372.2013.007

Gorbunova, Irina B. 2018. “New tool for a musician.” In 15th International Conference on Education, Economics, Humanities and Interdisciplinary Studies (EEHIS-18). International Conference Proceedings (pp. 144-149). https://doi.org/10.17758/URUAE2.AE06184024

Gordeeva, Tamara, Sychev, Oleg, and Osin, Evgeny N. 2014. “Questionnaire "Scales of Academic Motivation.”” Psychological Journal 35, 96–107. https://publications.hse.ru/pubs/share/folder/y93jdtmioo/122549995.pdf

Guillemet-Messire, Gabin. 2021. “La motivation et la place d’élévedansl’institution.” Master's thesis,
Centre de formation des enseignants de la danse et de la musique de Normandie.  
https://www.cefedem-normandie.fr/images/PDF/mem2021_GUILLEMET-MESSIRE_Gabin__La_motivation_et_la_place_de_leleve_dans_l'institution.pdf

Guirard, Laurent. 1999. “Abandonner la musique ?! Psychologie de la motivation etapprentissage musical.” Paris: Anne Marie GREEN.  
https://hal.archives-ouvertes.fr/hal-01271267

Hallam, Susan. 2010. “Music education: The role of affect.” In Handbook of music and emotion: Theory, research, applications edited by P. N. Juslin J. and A. Sloboda, (pp.791–817). Oxford: Oxford University Press.  
https://psycnet.apa.org/record/2010-02543-028

Harris, Amanda K. 2017. “Motivation in Private Piano Instruction for Adolescents: A Social Cognitive Analysis of Piano Pedagogy.” Doctoral dissertation, University of Washington.  
https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/40276/Harris_washington_0250E_17411.pdf?sequence=1

Heutte, Jean. 2011. “La part du collectif dans la motivation et son impact sur le bien-être comme médiateur de la réussite des étudiants : Complémentarités et contributions entre l'autodétermination, l'auto-efficacité et l'autotélisme.” Doctoral thesis, Université Paris-Nanterre.  
https://tel.archives-ouvertes.fr/tel-00933690/document

Huguet-Benabdelmouna, Marie-Céline. 2007. “La réussite en éducation musicale : des facteurs individuels aux facteurs contextuels.” Doctoral thesis, Université de Bourgogne.

Huizinga, Johan. 1949. “Homo Ludens: A Study of the Play-Element of Culture.” London: Routledge&Kegan Paul.  
https://bibliodarq.files.wordpress.com/2014/06/huizinga-j-homo-ludens.pdf

Isman, Aytekin, and Ozlem Canan G. 2014. “Digital citizenship.” Turkish Online Journal of Educational Technology-TOJET 13(1), 73-77.  
https://files.eric.ed.gov/fulltext/EJ1018088.pdf

King, Karen. 2016. “Parting Ways with Piano Lessons: Predictors, Invoked Reasons, and Motivation Related to Piano Student Dropouts.” Master's thesis, University of Ottawa.  
https://ruor.uottawa.ca/bitstream/10393/35033/1/King_Karen_2016_thesis.pdf

Kirnarskaya, Dina. 2014. “Musical talent as a universal model of giftedness.” PHILHARMONICA. International Music Journal 1, 105-112.  
https://nbpublish.com/library_get_pdf.php?id=30421

Lecocq, Aurélie, and Suchat, Bruno. 2012. “L'influence de la musique sur les capacitéscognitives et les apprentissages des élèves en maternelle et au courspréparatoire : note de synthèse.”  
https://halshs.archives-ouvertes.fr/halshs-00746512/document

Milman, Vadim V. 1990. “Method of studying the motivational sphere of personality.” In Workshop on psychodiagostics. Psychodiagostics of motivation and self-regulation.  
http://www.miuy.by/kaf_new/mpp/017.pdf

Moore, Kent. 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/

Nalyvaiko, Oleksii, and Lykhoshvai, Kseniia. 2021. “Impact of higher music education on coping with stress during COVID-19.” Engineering and Educational Technologies 9(3), 55-67.  
https://doi.org/10.30929/2307-9770.2021.09.03.05

Ömür, Özlem. 2021. “Characteristics of Generation Z Piano Students From the Perspective of Piano Teachers.” International Journal of Education and Literacy Studies 9(4), 278-285.  
https://doi.org/10.7575/aiac.ijels.v.9n.4p.278
Pasteur, Louis. 1882. “Discours de réception l’Académie française.” https://www.academie-francaise.fr/discours-de-reception-de-louis-pasteur

Pavlenko, Hanna. 2020. “Personal dispositions as a resource of psychological well-being in conditions of uncertainty.” Doctoral thesis, V. N. Karazin Kharkiv National University. http://ekhnuir.univer.kharkov.ua/handle/123456789/16020

Rostovska, Iryna O. 2017. “Theoretical and methodological foundations of the formation of motivation to learn to play the piano in future teachers of music.” Scientific journal of National Pedagogical Dragomanov University. Series 14. Theory and methodology of arts education 22(2), 50-55. http://nbuv.gov.ua/UJRN/Nchnpu_014_2017_22%282%29__11

Schmidt, Charles P. 2007. “Intrinsic-Mastery Motivation in Instrumental Music: Extension of a Higher Order Construct.” Bulletin of the Council for Research in Music Education 173, 7–23. http://www.jstor.org/stable/40319467

Simon, Jerald. 2021. “Piano Students – How and Why Do We Do It – if at all?” Retrieved from https://musicmotivation.com/motivating-piano-students-how-and-why-do-we-do-it-if-at-all-by-jerald-simon/

Terrien, Pascal, and Güsewell, Angelika. 2021. “Continuité pédagogique et enseignement à distance dans l’enseignement supérieur musical.” Revue internationale des technologies en pédagogie universitaire 18(1), 139-156. https://doi.org/10.18162/ritpu-2021-v18n1-13

Toropova, Alla. 2011. “Motivation for art and the problem of its development.” Personal Development 2, 116–126. https://cyberleninka.ru/article/n/motivatsiya-k-zanyatiyam-iskusstvom-i-problema-ee-razvitiya

Vallerand, Robert J., Blais, Marc R., Brière, Nathalie M., and Pelletier, Luc G. 1989. “Construction et validation de l’échelle de motivation en éducation.” Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement 21(3), 323-349.

Volyuvach, Elena. 2005. “Formation of motivation for teaching pianoforte junior schoolchildren.” Abstract of the dissertation, Krasnodar. https://static.freereferats.ru/_avtoreferats/01002830973.pdf

Weiner, Bernard. 1979. “A theory of motivation for some classroom experiences.” Journal of Educational Psychology, 71(1), 3–25. https://doi.org/10.1037/0022-0663.71.1.3

Wrigley, William J., and Emmerson, Stephen B. 2013. “The experience of the flow state in live music performance.” Psychology of Music 41(3), 292–305. https://doi.org/10.1177/0305735611425903

Yerkes, Robert M., and Dodson, John D. 1908. “The Relation of Strength of Stimulus to Rapidity of Habit Formation.” Journal of Comparative Neurology & Psychology 18, 459–482. https://doi.org/10.1002/cne.920180503

Yudovina-Galperina, Tatyana B. 2002. “At the piano without tears, or I am a children’s teacher.” St. Petersburg: Union of Artists. https://www.litmir.me/br/?b=549508

Zamfir, Korinna. 2006. “Motivation of professional activity (modified by A. Rean).” In Collection of psychological tests. Part III: Handbook (pp. 16-18). Minsk: ENVILA Women's Institute. https://school14.npi-tu.ru/assets/files/docs/psycho/Mironova-sbornik-3.pdf