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## A Practical Examination of a Novel Statistical Approach for Anticipating Musicians' Performance

B. Minaei<sup>1,\*</sup>, H. Mohamadali<sup>2</sup><sup>1</sup> Department of Industrial Management, Faculty of Management, University of Tehran, Tehran, Iran<sup>2</sup> Department of Industrial Management, Faculty of Management, University of Tehran, Tehran, Iran

ARTICLE INFO	ABSTRACT
<p>Article History:            Received 17 October 2019            Received in revised form            14 December 2019            Accepted 24 February 2020            Available online 2 March 2020</p>	<p>Great musicians have long offered a wealth of suggestions on how to manage and make it easier to face the challenging circumstances of significant concerts. These suggestions might be a subset of self-management, stress management, etc., to regulate irrational feelings throughout the performance. While musicians frequently employ a variety of ways to manage the intensity of difficult situations during performances, there is still a need for an effective plan to manage the unfavorable effects of emotions or stress. Therefore, the connection between a musician's life cycle and performance must be discovered. This work examines the relationship between performance quality and biorhythm by doing a more thorough examination of the subject, introducing major biorhythms, and assessing the relationship. This relationship has been assessed using a discriminant analysis (DFA). There haven't yet been any research that compare the relationship between biorhythm and musical performance quality. But several academics have conducted studies to determine the relationship between biorhythms and various events, including accidents and other occurrences. Its outcomes have been divided into two categories. Some people have rejected the link between events and biorhythm, while others have embraced it and found significance in it. To the second category this study belongs.</p>
<p>Keywords:            Biorhythm, Life Cycles,            Musicianship, Performance,            Discriminant Analysis</p>	

### 1. INTRODUCTION

Before a musical performance, artists and musicians have always had trouble managing their bodies, minds, and emotions. Great musicians have long offered suggestions on how to manage and make it easier to face the challenging circumstances of significant concerts. These suggestions can be a subset of self-management, stress management, and... to regulate irrational emotions while performing. Before performing on stage, musicians employ

\* Corresponding Author :behzadminaei@ut.ac.ir

Department of Industrial Management, Faculty of Management, University of Tehran, Tehran, Iran



a variety of practices, such as: Deep breathing is regarded as one of the relaxing strategies since it increases the amount of oxygen that reaches the brain. Its repetition also lowers and controls the respiration rate.

Another technique that can be mentioned is meditation; the musician closes their eyes in a quiet place before performance and repeats a one spelled word and concentrates on it. In this case, if they think of something else, they will return to their concentration again. In origin, this technique is a way to practice concentration which can also be applied in other positions than performance. The technique can be completed by evoking the position that the musician should concentrate on the track performance and not paying attention to the audience. Of the other approaches which the musicians apply to overcome their stress and emotions is to use different food diets and medication diets. It is generally recommended not to have caffeine or alcohol drinks and also proteins before performance because of their difficulty in digestion. It's better to have fruits such as banana or carbohydrates such as pasta as carbohydrate gives a constant energy to the musician [1].

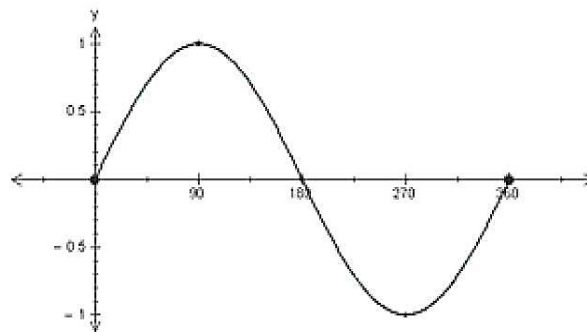
Beside the appropriate diets, some musicians take special medications to control stress and their heart beat. Although these medicines provide proper physical conditions for the musician, they have many side effects or disadvantages. The aforementioned methods can be somewhat helpful for artists, but it is obvious that there is a lack of an effective plan to deal with the negative effects of stress or emotions. Therefore, the connection between a musician's life cycle and performance must be discovered.

One of the clusters of ergonomic is biorhythm and normal curves of human life. Biorhythm of life cycle is very simple despite its complications. The theory states that every human is influenced by different rhythms from birth to death. Biologic origin of this claim is the expression of different hormones in the body which influences the total status of the body. In the birth time, the curves begin from zero and enters a positive region in a sin wave and then to a negative region and this behavior will continue until death [2]. No study has been conducted on the relation between life cycles and the performance of the musicians.

In general, studies on life cycles have been conducted in industrial fields to investigate the ergonomic problems in work places. Nevertheless, the difference between the current study and the others is the methodology and its wider perspective in order to increase the study validity and stability. In the previous studies simple statistic methods were applied for this purpose which raised questions about the validity and stability of the studies. However, this was because of interferer variables (uncontrollable) in these studies. The purpose of this study is to increase the results validity by appropriate methods.

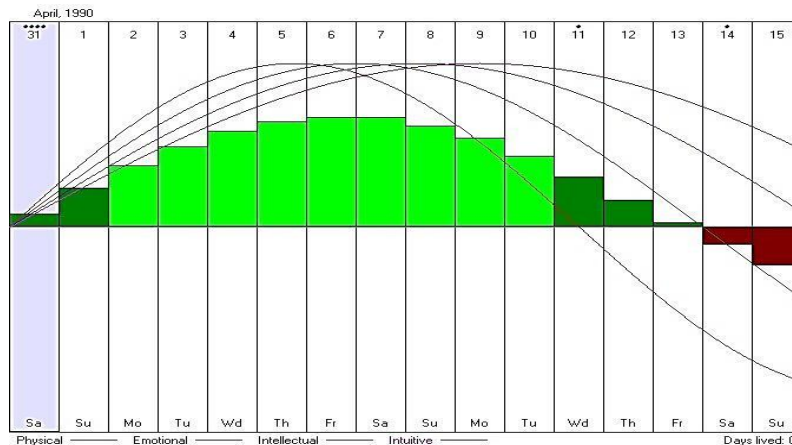
## **2. THEORITICAL FOUNDATIONS OF THE RESEARCH**

Changes in the general ability of human body can be contributed to different causes. These changes can be positive or negative. For example, loss of physical ability is a negative and its increase is called a positive change (when one is in a good physical position and is capable to do heavy physical activity). These changes are consistent and influence the whole life stream as well [3]. The studies have been already performed in the field of life cycle have introduced three main abilities influencing the human body power. These three abilities are: physical ability, emotional ability and intellectual ability. In addition to these abilities, intuitional ability is also discussed here as an important and effective factor. To be in a good or bad position of each ability is summarized in some diagrams which are called biorhythm. Biorhythm claims that the human life is influenced by these life cycles. The most important cycles are: physical, intellectual, emotional and intuitional. Each cycle has a constant time period and three discharge (positive), crisis (transient) and charge (negative) parameters. Combination of these cycles and their stages in each one will follow different physical, intellectual, emotional and intuitional conditions. According to the biorhythm theory, efficiency of individuals is a function of biorhythm cycle conditions and their combination [4]. Regarding to the following figure the days which located in the positive region of the cycle are good days in terms of ability from which the day in the peak is known as the best day. Also, the days in the negative region are known as passive and boring days for the individuals. The most dangerous and critical days are those in which biorhythm curve is close to zero and is transferring through active to passive phase.



**Fig. 1.** Sinusoidal behavior of life cycles

Despite of its complication, biorhythm theory is very simple. The theory states that every human is influenced by different rhythms from birth to death. Biologic originated from this claim is the expression of different hormones in the body which influences the total status of the body [5]. In the birth time, the curves begin from zero and enters to a positive region in a sin wave and then to a negative region and this behavior will continue until death (Fig.2).



**Fig. 2.** Birth; beginning point of life cycles

Each of the life cycles has its own period and are not coincides. Physical period is 23 days and affects physiological activities. Emotional period is 28 days and includes emotional factors in an individual. Intellectual period is 33 days including memorial efficiency, transfer rate, learning power and analysis power for problems. And finally, intuitional period which is the last cycle, 38 days and points out when the individual can trust their sixth sense and in general, refers to the individual's unconscious. Each period begins from zero in the birth time and then ascends to reach the peak then descends to 11.5th day of physical cycle, 14th day of emotional cycle, 16.5th day of intellectual cycle or 19th day of intuitional cycle in which the cycle enters the negative region [6].

The physical conditions of human body are different due to the effects of these curves on each other in different periods. This means that the physical curve may locate in the positive region in a certain time, while the other three curves locate in negative regions. Under these conditions, general physical conditions are influenced by the three curves which locate in the negative region and neutralize the positive influence of the appropriate physical conditions as well [7].

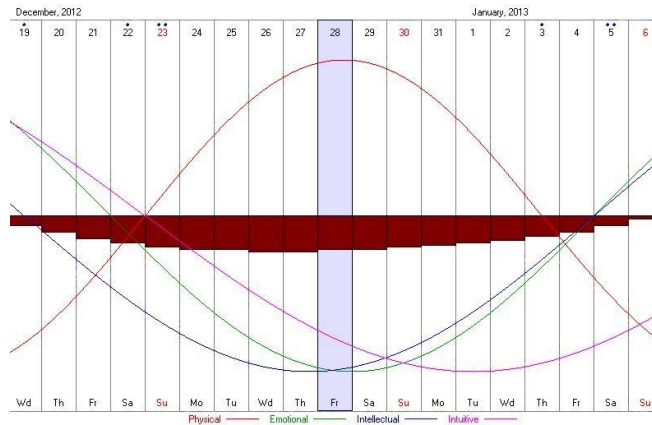


Fig. 3. Life cycle influence on general physical status

These cycles are constantly being repeated and crossover in many points. Almost every 59 years, the three physical, emotional and intellectual cycles cross over at zero [4]. Researchers believe that these cycles exist even in many complicated human functions such as intelligence, feelings and physical skills which begin from the birth and repeated regularly during the life time. In oxford dictionary, biorhythm means any repeated pattern of physical, emotional and intuitional activities which impact the human behavior in some viewpoints [8]. Wikipedia has introduced biorhythm as a method to predict general different aspects of life using simple mathematical concepts.

The idea that the human beings experience certain periods has emerged from the ancient era and from the time astronomy has been used to predict the human life. The idea was also seen even in superstitious beliefs of some sects who named a certain age as an individual lucky time. It is clear that none of these subjects have scientific background while biorhythm has been introduced with a scientific background, as the assumptions of this theory are still not confirmed completely. Biorhythm was first discussed in Europe in the late 19th century. In 1890's a German physician, Wilhelm Fleiss, reported data about his patients' physical conditions such as health, fever, disease and even death. He concluded that there were some periods inside the human body which influenced the individual physical and emotional conditions in 23 and 28 days, respectively [9], [10]. At the same time, an Austrian psychologist, Professor Hermann Swoboda did his research. Although the two researchers were working independently, they incredibly could obtain similar results. Then, Sigmund Freud and many other scientists showed their interests on biorhythm research and many successful experiments have been conducted to date. In 1930's, according to the feedbacks of his student results in their exams, Alfred Telscher, Professor of Innsbruck University, concluded that the good and bad days of his students followed a 33 day period , such that he introduced the intellectual rhythm. Prof Lexford Hersey from University of Pennsylvania studied the three physical, emotional and intellectual rhythms in order to prevent accident at work and confirmed them [4].

In the following, each rhythm in life cycle theory is interpreted:

### 2.1. Physical cycle

Fleiss believed that physical cycles were originated from muscle tissues. This cycle refers to masculinity nature in an individual and impresses the physical conditions. Also, it is noted that adrenal acts in coordinated with the physical cycle, i.e. in a 23 day period. This cycle controls parameters such as power, being lively, activity, stamina, resistance and tolerance. During the second to the eleventh day, the cycle curve locates in the positive region in which the individual's physical conditions is discharging gradually. During these days, the individual feels happy and more physical power and can overcome difficult affairs more conveniently. Also, the tolerance and patience increase and possibility of diseases decrease as well. Some physicians use the information of this cycle for their treatment. These physicians believe that from the second to the ninth day of the cycle, i.e. when the patient is completely in the positive region, is the best time to do surgery operations. When the physical cycle is below the base line, from 13th to 23th days, the discharged energy is gradually recovered and charged. The individual becomes easily tired and is prone to catch cold or other diseases [10].

## **2.2. Emotional cycle**

This cycle controls nervous system and mostly refers to the feminine nature in an individual and impresses their emotions as well. It prolongs 28 days which influences the level of sensitivity, morality, moods and the way of facing to emotional and nervous problems and the level of the individual creativity. When the emotional cycle is in its positive region (above the base line), i.e. 2nd to 14th days, emotions, love and feeling of collaboration are located in an appropriate position and the individual is more optimistic and happier than before, while when the cycle is in the negative region (below the base line), i.e. 16th – 28th days, the individual feels fret, bad tempered and depressed and more irritable than before [10].

## **2.3. Intellectual cycle**

This cycle is originated from the brain cells. Tehscher and coworkers believe that thyroid works along with the intuitional cycle. This cycle takes long 33 days and controls parameters like learning ability, analytical thinking, logics, decision making and judgment. When intellectual cycle is above the base line, i.e. 2nd to 16th days, the individual can think better, resolve the problems more effectively and succeed in their exams. Memory acts more appropriately and makes better decisions. This period is a proper time for creative thoughts and new ideas. But when the cycle is below the base line, i.e. 18th to 33th days, ability and power reduce, his/her memory capacity decreases and poor judgment will be revealed from them. Since focusing may be a little hard for the individual, this period may be an appropriate time to review the previous known opinions [10].

## **2.4. Intuitive cycle**

This cycle is one of the last discovered cycles in the human body which is not known as a main cycle but is increasingly interested for its influence on human body general conditions. The cycle duration is 38 days and refers to when the individual can trust in his sixth sense. The cycle is generally corresponded to unconsciousness. Once it is in the positive region (above the base line), i.e. 2nd to 19th days, intuitive power of the individual from their environment and from how to contact the others increases and will have more precise speculations, while the cycle is located in the negative region (below the base line), i.e. 20th to 38th days, their intuitive power declines and speculations are most wrong [4].

Here are some of the surveys that are conducted so far:

Foutkak has had a great experience about biorhythm. While Foutkak was studying the Northern Ireland Electricity Company staff, he realized there is a correlation between occurrence of work related accidents and those accidents being repeated. In his studies he concluded that amongst the people who had accidents in critical days and their biorhythm was not calculated, 15% had work accidents again in the future. Repeated occurrence of these accidents damaged the industrial equipment to the extent of 40% [11].

In 2004, Taylor conducted a research on 7292 of the British Electricity Company personnel and concluded that calculating the biorhythm and applying this theory in the delegation of authority to the personnel caused a 75% reduction in the number of accidents happened between 2000 to 2003. He also conducted a similar research on the senior managers of the organization and concluded that by applying biorhythm and taking the results of the analyzing it into account, the senior managers are less likely to make mistakes and they make more accurate decisions [12].

In a pairwise comparison test, Fellner and Sulzer compared two groups of workers. The first group received their work instructions by taking into account the biorhythm cycles and the second group received the instructions in the usual manner (the control group). It was found that the control group, which were working without considering the biorhythm had a 30% higher rate of accidents [13].

In a paper published in 2003, Wiley introduced lack of considering the individuals' biorhythms, specially the emotional aspect, as one of the most significant factors of decrease in the efficiency and quality of the work, especially amongst administrative jobs [14]. In a 15 month long study conducted in 2003, Sutra and Weir concluded that the critical days of individuals' biorhythms are the main cause of work related accidents [4]. In 1993 Sternburg and Wagner did a research study in this field. They studied 286 of German workers and concluded that there is a correlation between the biorhythm cycles and performance indicators [15]. Jones and Dea concluded from their 1997

study that considering and applying the bio cycles in the process of authority delegation and performing duties has a direct influence on efficiency [4].

Sipp proved that a critical day in the emotional cycle can disturb an individual’s work performance even if the other cycles are in an appropriate condition [15]. In 1996, Meir and Glenn studied the diversity of individuals' ability to relate their emotions and their thoughts. According to these researchers, those who were better at relating their thoughts and emotions were better at performing their tasks and duties. In this study, 321 participants read texts and inferred what the authors’ objectives were. The results concluded that those who were on their critical days had lower performances comparing to the groups who were on natural and good conditions [7].

### 3. RESEARCH METHOD

In this study, final performance scores of musician students in faculty of fine arts of University of Tehran were used. The data included date of birth, musician sexuality, date and time of their performance and the score. In general, 213 data were gathered containing the scores of the students from 1999 to 2014. The obtained data entered Excel software in which the conditions of each rhythm was revealed on their day of performance, i.e. it was specified that the musician has been on which of positive, negative or critical status of life cycles on their performance day. To analyze their performance quality, the musician score was used and the following range was provided for the quality level.

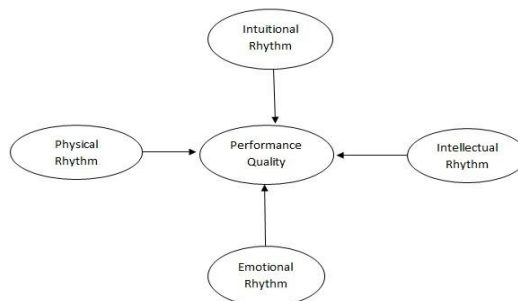
In order to analyze the relation between the performance quality and the musician biorhythms, these data and the data relating to the musician life cycles on performance day input SPSS software. This study is a correlation-regression in terms of data collection and is applicable in terms of the study purpose.

#### 3.1. Variable definition

In this study, both quality and quantity variables are defined as independent variables and quality, as the dependent one. Independent variables are categorized into four groups. The first is interval between the performance time and the critical day in terms of physical rhythm. Second is the interval between the performance time and critical day in terms of emotional rhythm. The third is the interval between the musician performance day and the critical day in terms of intellectual rhythm and the fourth is the interval between the performance and critical day in term of intuitive rhythm. The defined quality variable is the quality of each musician performance. In order to define each musician performance quality, it is divided into three groups of very good, middle and bad regarding to the performance quality and the score and they are defined by three codes 1, 2 and 3.

#### 3.2. The study questions (Hypos)

- H1:** How much does the proximity to the critical day in physical rhythm affect the performance?
- H2:** How much does the proximity to the critical day in emotional rhythm affect the performance?
- H3:** How much does the proximity to the critical day in intellectual rhythm affect the performance?
- H4:** How much does the proximity to the critical day in intuitional rhythm affect the performance?



**Fig. 4.** Conceptual Framework

### 3.3. Statistic population

In this study, the final performance scores of fine arts students of University of Tehran were used. The data included date of birth, the musician sexuality, date and time of performance and final score of the musician performances. In general, 213 data were collected which contained the musicianship scores of the students of fine art faculty of university of Tehran from 1999 to 2014.

## 4. DATA ANALYSIS

### 4.1. Descriptive data analysis

The data are divided into different groups according to some indicators such as demographic and ... factors which are discussed in the following:

	Number	Frequency
Female	116	54.5%
Male	97	45.5%
Total	213	1

	Number	Frequency
Very good	85	39.9%
Middle	98	46%
Bad	30	14.1%
Total	213	1

According to the performance quality range based on the scores, the data distribution percentages are as follow:

Age	Number	Frequency
22-25	159	74.6%
25-30	50	23.4%
Above 30	4	2%
Total	213	1

Performance time	number	frequency
Morning to noon	58	27%
Noon	36	17%
Afternoon	119	56%
Total	213	1

### 4.2. The statistic method used

Discriminant Analysis method which is known as DFA function is one of the multi variable statistic methods which is used to discriminate and identify the categories of a qualitative variable, according to several quantitative variables. The method can be compared to sequential regression or polynomial methods [16].

### 4.3. Application of Discriminant Analysis method

DA method can be useful once there are multi quantitative independent variables or one categorized variable. In the other words the method is a combination of two or more independent variables which interprets the differences between two or more groups in the best way. This is done through maximization of the variance between the groups,

based on a statistic decision making regulation [17]. The linear integration for Discriminant analysis is performed as follow:

$$Z=w_1x_1+w_2x_2+\dots+w_nx_n \quad (1)$$

Where  $z$  is discrimination level (difference),  $w$  is the discrimination weight and  $x$  is the independent variable. When there are hypos that the means of double and multiple groups are the same, discriminant analysis can be used in order to test the hypo. To do this, the discriminant analysis technique of each independent variable is multiplied by its weight and then they are summed and the result is in fact is a combination discriminant for each individual in the analysis.

#### **4.4. Selection of the variable for discriminant analysis**

To do a discriminate analysis, the author should first determine independent and categorization variables. The dependent categorization variable is non-parametric and double or multiple qualitative and the independent variables are parametric. Number of the categorization variable groups (categories) can be two or more groups.

#### **4.5. Purpose of Discriminant Analysis function**

The purpose of discriminant analysis function is to predict the group membership from a set of predictors. With discriminative analysis, one or more linear integration of quantitative predictions are created which called discriminative functions. First, the discriminative function is extracted so that to maximize the function discriminations. Then the second discriminative function is extracted so that it may maximize the discriminations related to the function between the groups with a constant added value which is not correlated with all the extracted functions. Specific values relating to the discriminative functions show how the functions discriminate the groups. The more the values, the more discriminative the groups. A special value for the discriminative function is the ratio of the total squares between the groups to the total squares inside the groups for ANOVA in which the discriminative function is as the dependent variable and the groups as the function surfaces. Since the special values show the group discriminations by the functions [18].

The greatest special value is for the first discriminative function, the second is for the second discriminative function and so on.

#### **4.6. Comparison of Discriminant Analysis with Regression analysis and variance**

Since discriminant analysis and regression analysis both try to explain and describe a dependent categorization variable using the linear integration of two or more independent variables, these methods have analogous applications and explanations. But the main difference of the methods is in their dependent variables. In discriminant analysis method the categorization variable is qualitative and in regression method, the variable is quantitative. On the other hand, discriminant analysis is comparable to the variance analysis. In discriminant analysis the categorization variable is qualitative and the independent variables are quantitative or parametric, while in variance analysis it is completely different and the dependent variable is quantitative and the independent variable is qualitative [19].

#### **4.7. Discriminative function indicators and criteria**

Computer programs typically give two values. One is the special value relative percentage along with the function. Special value is a special size which is computed in the discriminative function extraction process and is the relative importance of that function. Sum of the special values is a size of the total variance in discriminative functions. Once a unit special value is expressed as a percent of total values, it is a simple reference for the relative importance of the function companied it. As discriminative functions are extracted in the order of their importance, this process can be stopped whenever its relative percentage is small. However, there is no constant discipline for the smallness of the value. The other indicator for judgment is about the importance of the discriminative function correlation. The standard correlation is the amount of adaptation between a unit discriminative function and the virtual variable set ( $G-1$ ) in which  $G$  is membership in that group. The correlation state that how much there is a relation between

the discriminative and the group variable and is another indicator for the ability of the function to discriminate between the groups. It can be noted that the standard correlation square reflects the variance ratio in discriminant function which is justified by the groups. To omit the discriminant function, another standard is to test the statistic importance of discriminative data. Computer programs compute Wilks Lambda. Lambda is the reversed power amount of discriminant function in the main variables which has not been removed yet. The more the Lambda, the less the remained information. In fact wilks Lambda is varying between 0 and 1 and the less wilks Lambda value for a variable, the variable has a higher portion in the discriminant function , in the other word , that variable is the best discrimination between the dependent variable groups. Wilks Lambda can be used in two forms: first for variance analysis (F test) of the groups mean, the smaller the wilks Lambda, it is shown that the studied variable is an appropriate discriminant variable. The second application is in discriminant function efficiency, as finally the discriminant function gives a wilks Lambda whose distribution is very complicated. In this case wilks Lambda obtain all the changes simultaneously among multi groups and analyses them.

Four tests of statistic significance are used to evaluate the discriminant function which are: the greatest root of Ray's features. The test is not very appropriate when all the aspects should be considered.

The other three indicators evaluate the sources of the group differences. A summarized indicator of the differences is to compare the group centroids. If the distribution overlap is low, the discriminant function will separate the groups well.

- Wilks Lambda standard is a multi-variable F ratio to test the discriminations between the centroid groups. A variable which maximizes F ratio and will minimize wilks Lambda. The test considers the difference between all the centroids within the groups.
- Mahalonoise standard tries to maximize the Mahalonoise distance between two near groups. The variable which maximizes the smallest F ration among the group pairs is selected.
- The other standard which may separate the proximate groups is MINRRESID whose formula is derived from Mahalonoise distance between the groups and each statement of eat is an estimation of 1 minus multi variable correlation square among discriminative variables and is a virtual variable which defines the corresponding groups.
- The final standard is V Rao which is an expanded distance indicator. The selected variable is contributed with the maximum V value when it is added to the previous ones. This indicator is equivalent to the greatest separation among the groups. The variable which contains lots of information in the previous selection may really decrease V value. The meaning of this guarantees a reduction in discrimination power. Once there are many cases, a change in V has a K square distribution with one degree of freedom which can be tested in terms of statistic significance and their independent variables can be studied through skewness and expansion. If z is more than 1.96, the hypo of distribution normality is refused in a possibility level of 0.05. In addition Q-Q diagram can be used for normalization test of data. In this study Q-Q diagram has been utilized for normalization test of independent data which are revealed for physical, emotional, intellectual and intuitional rhythms, respectively as follow:

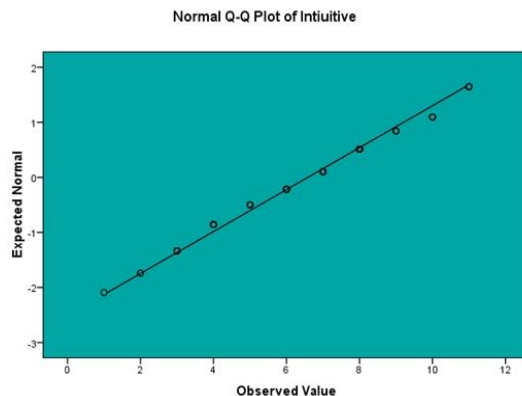


Fig. 5. Normal Q-Q Plot of Intuitive

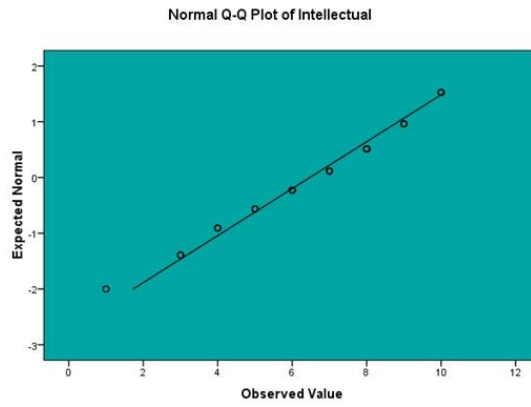


Fig. 6. Normal Q-Q Plot of intellectual

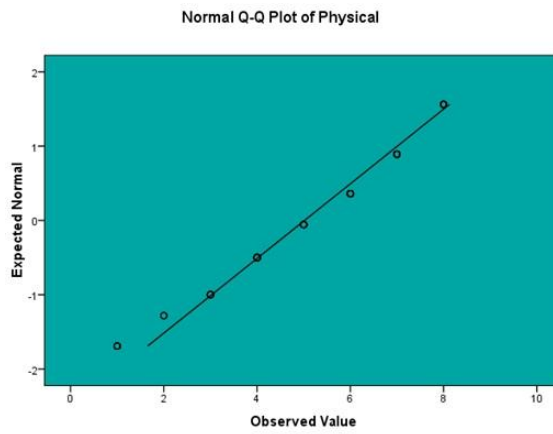


Fig. 7. Normal Q-Q Plot of physical

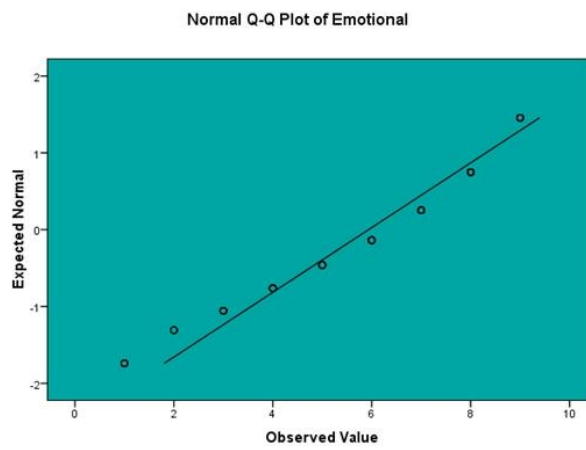


Fig. 8. Normal Q-Q Plot of Emotional

**4.8. Co-variance matrix consistency test**

For this test, Box’s M table output can be used. Regarding to the outputs of this table it can be concluded that the group variances are similar and it means that discriminant analysis method can be utilized here, i.e. this is a pre-test before using the required statistic method.

Box's M		18.142
F	Approx.	0.816
	df1	20
	df2	4.32
	Sig.	0.513
Tests null hypothesis of equal population covariance matrices.		

**4.9. Report of significant tests and statistic power for discriminant analysis**

In analysis, the standard correlation is the determination of the total standard function (linear combination) which is provided in the following table. A standard function (linear combination) has become significant. It means that discriminant standard function can be defined for each level. In the other word, according to the following table the coefficient of each independent variable is not a null discriminant standard function and this means that discriminant function can be used. Regarding to this output from Wilks Lambda table, the hypotes discussed in the study are not refused and there can observed a close relation between the proximity to the critical day and the quality of performance.

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1	.526	17.911	3	.001

**5. CONCLUSION**

Controlling bad emotions such as stress and other emotions that may distract the player during performing is very important. And also the way of controlling the mind, emotions and body, before and during a musical performance has been always a problem for the artists and musicians. Great musicians have always provided recommendations to control and facilitate confronting the difficult conditions of important performances. These recommendations can be a subgroup of self-management and using stress management and etc. to manage uncontrollable emotions during the performance. There are lots of techniques that are recommended. But considering the biorhythm theory as an effective way to overcome these problems is a novel issue. This paper has conducted a survey to find out if there is any relation between the life cycles; which are the principles of biorhythm theory, and the quality of musical performance. Analytical results show that there is a significant relation between life cycles and the quality of performance. By considering all the details of the results and classifying them, it can be seen that the relation between the emotional cycle and the quality of musical performance is highlighted. It can be said that the most important cycle which musicians should take care of that is emotional cycle. This cycle controls nervous system and mostly refers to the feminine nature in an individual and impresses their emotions as well. It prolongs 28 days which influences the level of sensitivity, morality, moods and the way of facing to emotional and nervous problems and the level of the individual creativity.

It's obvious that if there's a relation between these two, musicians should avoid performing in a day when their emotional cycle hits the base line or if it's possible they should avoid performing during the days when their emotional cycle is under the base line. But sometimes the day of performing is not controllable or it's been determined long time ago and it's fixed. In this situation musicians should control their emotions with any possible techniques to postpone their emotional cycle's negative period.

**ACKNOWLEDGEMENT**

In this study there were a lot of uncontrollable factors that surely has affected the results, such as age, sex, other cycles in biorhythm theory and etc. For future studies it is recommended to use more appropriate tools in order to control noises. Also it is recommended to use an MCDM technique to prioritize or select the best way to control bad emotions for overcoming the severity of performing in stressful situations.

## **CONFLICTS OF INTEREST**

The authors declare no conflict of interest.

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