

Evaluation of the biological rhythm during physical, emotional and mental cycle

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ABSTRACT

Hassan, A., Yassin, W. (2015). Comparison of maximum lactate between course navette test and hoff test in soccer players at 2600 meters above sea level. *J. Hum. Sport Exerc.*, 9(Proc2), pp.S712-S722. Finding the differences in the physical, emotional and mental capabilities at successive measurements according to daily curves of different Biological rhythms (day of birth, day of crest, descending to commencing line, descending to base line and going back to commencing line). Exploring the effect of measuring in different days of biological rhythm cycles on the correlations among physical, emotional and mental capabilities. Comparing the physical, emotional and mental of day of birth with these capabilities at different biological rhythm stages. The researchers used the descriptive methods. The sample was (24) students, aged (18-22) years. The following tests are used: Running test (50m), standard broad jump, sit-up, running and walking for 12 minutes, zigzag running 4x9 m, Bending the body forward and downward, stability balancing, shooting on interfered circles in handball, emotional tests, attention test to measure mental status by Burdon – Anvimov test. Statistical used, mean, standard deviation, simple and multiple correlation coefficients and t-test were used to analyze the data. The conclusions of study: There are significant differences between biological rhythm stages in flexibility tests between day of birth, day of descending to commencing line in favor of day of birth; crest day, day of descending to commencing line in favor of crest day; and day of ending to commencing line and day of ascending to commencing line in favor of ascending to commencing line. There are significant differences for biological rhythm stages in emotional tests between day of birth, crest day in favor of day of birth and there were no significant differences between the remaining stages. There are significant differences for biological rhythm stages in balance test between day of birth, descending to bottom and ascending to commencing line in favor of these two stages. There are significant differences in sharpness of attention tests on date of crest and ascending to commencing line in favor of ascending to commencing line. **Key words:** BIORHYTHM, PHYSICAL, MOTORED, EMOTIONAL, MENTAL



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INTRODUCTION

The huge Scientific progress covered all aspects of contemporary life including the athletic field, as a consequence, research increased in all such fields. The athletic field looks after the human especially achieving record numbers became a difficult task due to vast progress that occurred. (Quigley, 1982).

Therefore, there should be a maximum manipulation of human capabilities which will never occur unless the training burdens are manipulated completely, according to the available capabilities and at the appropriate timing. For these reasons, research into other fields serving the athletic progress like Biological rhythm in its three cycles (physical, emotional and mental) was carried out .

BIORHYTHM IN DAILY LIFE

Life is subjected to consistent changes and governed by a set of regular cycles influenced by the Sun, moon, day, night, spring, summer, autumn, winter. The biorhythm sinusoidal cycles can be calculated, interpreted and day-to-day life moments can be predicted. Experienced, trained individual, interpret the cycles by following a set of calculated path which is already destined and fixed in our day to day life of an individual (Beard, 1990).

A few here and there changes do happen in life. But the purpose of following the Biorhythm cycles is to experience our day-to-day mood changes and the fixed cycles we go through. We would like to improve our day-to-day lives. Some days are good days and feel very happy and joyful. Some days are bad, weary and tiresome. Some are very hectic, active and some are quiet, peaceful days. Some days we quarrel and loose our best friend or life partner. However we do not know these changes in our life and wait for surprises. Today knowing the Biorhythm cycles now we can enjoy, relax and save a friend and a life partner by taking precautions, plan our difficult and good times in advance and achieve success. By knowing and working out compatibility we can choose a good life partner, a helpful friend, good business relationship and enjoy the benefits of life. Since we know Compatibility between two persons remains consistent throughout their lives we can interpret compatibility. Twins for example are the most compatible yet they slightly differ in their habits, some time, because of their time of birth. However by studying the various cycles daily one can decide how the Biorhythm can help a person in his day-to-day life .We can calculate from your correct date of Birth, the age, predict no of days lived, zodiac birth sign, predict the new life cycle, Biorhythm life again, summaries positive, negative, high, low cycles, critical upward, downward caution days. Find out compatibility and incompatibility of your partner, children, friends, relatives. Take precautions in advance and avoid accidents in travel, tour and transportation. Achieve success in sports, olympics, finance, business and relationship. Print monthly cycles of your choice in colour and analyses your past, present and future cycles of your choice (Rob, 2011).

WHAT IS BIORHYTHM?

Biorhythm are natural regular cycles within our body and start effectively from the time we are born to the last breath of our life. They are physical, emotional, intellectual, institutional, exquisite, perception and spiritual. If you know their functions and notice their presence of Existence in our day-to-day life one can change the quality of their life. Learn to understand life better and be happy and avoid irritation and frustration. As per the sinusoidal graph, we start and understand with only 3 cycles and advance further with other cycles including the phases of the moon. When we are born the first day of our life there is a triple caution day. All the cycles start from the centre caution line i.e. Physical Emotional, Intellectual and

others and then go into a Sinusoidal wave form to form a Cycle with a crest peak (+) and trough (-) and in the centre caution line a caution day leading from a positive going cycle to 0 and then negative going cycle coming back to 0, from one cycle. Behavior of a person seems to be affected by Biorhythm when each cycle crosses the zero line and the process repeats. The central horizontal line is the critical Caution line. This line is most critical and vulnerable when any of the two cycles Physical or Emotional or others or Physical, Emotional, Intellectual all three cross together through centre-line at the same time. On these days uncertainty is caused because of the ebb and flow of energy. It has been proved through observation and statistics that a person is more accident prone on these days, 4 or 5 times more effective than a negative cycle, or all together. More attention must be paid during the critical days. Accident, deaths, bodily harm and colds can occur. Depression, fights, quarrel and senseless frustration, bad judgment, general resistance in learning cycle, remembering and understanding. In Intitutional cycle caution days Gut feelings, hunches, instincts should be ignored. Similarly all three positive cycles together in the positive peaks are very effective. Feel very good, energetic and achieve anything you require. However much of Hypertension can also be dangerous. It has also been observed that before birth the baby shares the Biorhythm of the mother. The cycles are within our body and reflect our potential only. They inform you whether you are in a peak, gaining period or expecting trouble or wait for a change to take place. They are an informing fixed pattern of our day-to-day life within our own body and in tough periods telling us when the body is building up a reserve for the next cycle.

Human lives are influenced by cyclic changes of the seasons, moon phase, day and night and so on. Scientists have discovered body cycles that are known as biorhythms. (Karbenka, 2001).

These cycles influence strength, mental abilities, moods, instincts, immunity to disease etc. Biorhythm charts can give you real indication about your abilities at a given time.

Each biorhythm cycle has it's own features:

-Physical rhythm:

The rhythm comes around in 23-days cycles. It affects our physical condition because our muscle cells are affected by this rhythm. In the process of evolution, belligerent attitude is closely associated with the male characteristics. That is why some scholars call the physical rhythm the "Male Rhythm".

-Sensitivity rhythm:

Activities of the brain that associated with your feelings are affected by a 28-day cycle. Whereas the physical rhythm is closely associated with male characteristics, the sensitivity rhythm is female-ish in the traditional sense. The sensitivity rhythm affects sensitivities, emotions, feelings, passion, sentiments and the like. Your intuition, imagination and creativity are also influenced by the sensitivity curve. Additionally, love, marriage and compatibility are swayed by your sensitivity rhythm.

-Intellectual rhythm:

Brain cell activities are on a 33-day cycle. The intellectual rhythm affects your sensation, perception and cognition. It also affects your thought process, mental control, analytical ability, reasoning, etc.

The function of your brain is dependent on, among other things, a few hormones which are known to have a cyclical rhythms. Perhaps the 33-day intellectual rhythm is the closest related to the hormones.

-Intuitional rhythm:

The 38-day Intuitional rhythm was discovered in recent years and is considered to be less important. Intuitional cycle influences unconscious perception, hunches, instincts and 'sixth sense'. On low and especially critical days it may be difficult to do work related with art or other tasks that require lot of creativity and intuition.

-Aesthetic rhythm:

The 43-day Aesthetic cycle influences harmony and interest in beautiful.

-Self-awareness rhythm:

The 48-day Self-awareness cycle influences confidence and self-awareness.

-Spiritual rhythm:

The 53-day Spiritual cycle influences inner stability and attitude.

Compatibility Biorhythms:

By a comparison of biorhythms of two persons you can determine degree of their compatibility. If all curves are in the same phase, that is for both persons they are rising and falling more or less simultaneously, then there is a big chance that these people are compatible and can be a good partners. If phases of curves are almost opposite, then there is a big possibility that their relations could be in a disharmony (Holunder, 1992)

Critical Days

Critical days are the days when one of the three curves intersect the zero line. Putting it another way, it is the point where your rhythm curve goes from the high phase to the low phase, or vice versa. The transformation from the high to low or from positive to negative is very taxing; therefore, it may cause stress and pressure. Accidents, illness or less serious but unpleasant things tend to happen a lot on Critical Days. That is why you should be extra careful on your Critical Days.

A number of statistics show that accidents tend to happen on one's Critical Days. One study shows that almost 80% of all traffic accidents happen on the drivers' Critical Days. In Japan, where statistical evidences are plenty, the correlation between Critical Days and accidents are take quite seriously. In many companies, the biorhythm of taxi drivers and truckers are routinely checked to minimize the number of accidents from happening.

THE AIMS*This reach aims at the following:*

- 1-Finding the differences in the physical, motored ,emotional and metal capabilities at successive measurements according to daily curves of different Biological rhythms (day of birth, day of crest, descending to commencing line, descending to base line and going back to commencing line).
- 2-Exploring the effect of measuring in different days of biological rhythm cycles on the correlations among physical, motored, emotional and mental capabilities.
- 3-Comparing the physical, motored, emotional and mental of day of birth with these capabilities at different biological rhythm stages.

METHODS

The researchers used the descriptive methods.

The sample was (24) students, aged (18-22) years, the following tests are used:

Running test (50m), standard broad jump, sit-up, running and walking for 12 minutes, zigzag running 4x9 m, Bending the body forward and downward, stability balancing, shooting on interfered circles used handball, emotional tests, attention test to measure mental status by Burdon – Anvimov test.

The tests make at Birth day (critical day), day of crest, descending to commencing line, descending to base day, going back to commencing line in the all cycles.

The researchers used mean, standard division, t. test and percentage to statistically the data.

RESULTS

Table 1. T Test to deferent's between biorhythm phases in dash (50) m/sec.

Days of tests		Day of crest	Descending to commencing line	Descending to base day	Going back To Commencing line
Day of birth	\bar{X}	7.3621			
	SD	0.3410	0.269	0.103	0.230
	t				0.192
Day of crest	\bar{X}	7.3467			
	SD	0.5034		0.115	0.395
	t				0.372
Descending to commencing line	\bar{X}	7.3567			
	SD	0.3581			0.307
	t				0.188
Descending to base line	\bar{X}	7.3742			
	SD	0.3554			
	t				0.000
Going back to commencing line	\bar{X}	7.3742			
	SD	7.4550			
	t				

*t.value at level 0.05 with degree of freedom (23)

Table 2. Rhythm phases in broad jump /cm.

Days of tests		Day of crest	Descending to commencing line	Descending to base day	Going back to commencing line
Day of birth	\bar{X}	2.2436	1.00	0.995	1.357
	SD	0.2631			
	t				
Day of crest	\bar{X}	2.2554	1.005	1.007	1.004
	SD	0.1998			
	t				
Descending to commencing line	\bar{X}	2.1975		0.493	0.112
	SD	0.2101			
	t				
Descending to base line	\bar{X}	2.1800			0.796
	SD	0.705			
	t				
Going back to commencing line	\bar{X}	2.2021			
	SD	0.2524			

*t. value at level 0.05 with degree of freedom (23) = 2.07

Table 3. T Test to deferent's between biorhythm phases in sit-up/no.

Days of tests		Day of crest	Descending to commencing line	Descending to base day	Going back to commencing line
Day of birth	\bar{X}	20.000	0.251	0.474	0.637
	SD	3.5386			
	t				
Day of crest	\bar{X}	20.1250	0.831	0.983	0.477
	SD	3.3403			
	t				
Descending to commencing line	\bar{X}	19.6667		0.000	0.441
	SD	2.8233			
	t				
Descending to base line	\bar{X}	19.6667			0.651
	SD	3.2793			
	t				
Going back to commencing line	\bar{X}	19.9583			
	SD	3.8276			

Table 4. T Test to deferent's between biorhythm phases in (12) mints walk- run. /m.

Days of tests		Day of crest	Descending to commencing line	Descending to base day	Going back to commencing line
Day of birth	\bar{X}	2258.4167			
	SD	341.6674	0.492	0.365	1.653
	t				1.174
Day of crest	\bar{X}	2246.1333			
	SD	328.6254		0.241	1.516
	t				0.815
Descending to commencing line	\bar{X}	2239.2917			
	SD	313.4624			1.750
	t				0.372
Descending to base line	\bar{X}	2190.750			
	SD	311.6176			
	t				1.410
Going back to commencing line	\bar{X}	2230.4178			
	SD	307.4399			

t. value at level 0.05 with degree of freedom (23)= 2.07

Table 5. T Test to deferent's between biorhythm phases in shuttle- run /sec.

Days of tests		Day of crest	Descending to commencing line	Descending to base day	Going back to commencing line
Day of birth	\bar{X}	7.3654			
	SD	0.6686			
	t		0.450	0.453	0.604
Day of crest	\bar{X}	7.3996			
	SD	0.5031			
	t			0.115	0.400
Descending to commencing line	\bar{X}	7.4067			
	SD	0.5102			
	t				0.271
Descending to base line	\bar{X}	7.4283			
	SD	0.5590			
	t				0.273
Going back to commencing line	\bar{X}	7.4562			
	SD	0.6589			

t. value at level 0.05 with degree of freedom (23)= 2.07*

Table 6. T Test to deferent's between biorhythm phases in bend the trunk forward and up word.

Days of tests			Day of crest	Descending to commencing line	Descending to base day	Going back to commencing line
Day of birth	\bar{X}	13.2174	0.305	2.228*	2.026	0.843
	SD	5.3679				
	t					
Day of crest	\bar{X}	13.3478		2.191*	2.288*	0.920
	SD	4.7540				
	t					
Descending to commencing line	\bar{X}	12.1729			0.103	2.105*
	SD	5.1403				
	t					
Descending to base line	\bar{X}	12.1304				1.964
	SD	4.9754				
	t					
Going back to commencing line	\bar{X}	12.9585				
	SD	4.7623				
	t					

Significant different at level ≤ 0.05 with degree of freedom (23) t .test = 2.07*

Table 7. T Test to deferent's between biorhythm phases in accuracy throw /point.

Days of tests			Day of crest	Descending to commencing line	Descending to base day	Going back to commencing line
Day of birth	\bar{X}	17.6250	0.401	0.643	0.796	0.052
	SD	4.1995				
	t					
Day of crest	\bar{X}	18.1250		0.905	1.600	0.651
	SD	4.3470				
	t					
Descending to commencing line	\bar{X}	17.0833			0.171	0.641
	SD	3.7174				
	t					
Descending to base line	\bar{X}	16.9583				1.155
	SD	2.997				
	t					
Going back to commencing line	\bar{X}	17.3833				
	SD	2.7806				
	t					

t. value at level 0.05 with degree of freedom (23)= 2.07*

Table 8. T Test to deferent's between biorhythm phases in balances /sec.

Days of tests			Day of crest	Descending to commencing line	Descending to base day	Going back to commencing line
Day of birth	\bar{X}	52.8567	1.654	1.342	2.662*	2.662*
	SD	32.4416				
	t					
Day of crest	\bar{X}	59.2596		0.079	1.412	1.412
	SD	34.5304				
	t					
Descending to commencing line	\bar{X}	59.5475			0.894	0.894
	SD	33.1795				
	t					
Descending to base line	\bar{X}	62.0992				0.666
	SD	32.0274				
	t					
Going back to commencing line	\bar{X}	65.0008				
	SD	31.3198				

Significant different at level ≤ 0.05 with degree of freedom (23) t .test= 2.07*

Table 9. T Test to deferent's between biorhythm phases in emotional /points.

Days of tests			Day of crest	Descending to commencing line	Descending to base day	Going back to commencing line
Day of birth	\bar{X}	3.6767	3.113*	1.989	1.295	0.545
	SD	0.3966				
	t					
Day of crest	\bar{X}	3.5637		0.438	0.547	1.415
	SD	0.3502				
	t					
Descending to commencing line	\bar{X}	3.5396			0.783	1.603
	SD	0.3404				
	t					
Descending to base line	\bar{X}	3.5962				1.288
	SD	0.5962				
	t					
Going back to commencing line	\bar{X}	3.7529				
	SD	0.5159				

Significant different at level ≤ 0.05 with degree of freedom (23) t .test= 2.07*

Table 10. T Test to deferent's between biorhythm phases in concentration attention/points.

Days of tests	Day of crest	, Descending to commencing line	Descending to base day	Going back to commencing line
Day of birth	\bar{X} 24.7373 SD 3.8692 t 0.059	1.068	1.068	0.365
Day of crest	\bar{X} 3.0313 SD 5.1454 t	1.145	1.145	0.317
Descending to commencing line	\bar{X} 3.9139 SD 3.2029 t		0.849	0.561
Descending to base line	\bar{X} 24.0120 SD 2.8029 t			1.328
Going back to commencing line	\bar{X} 28.8561 SD 7.5933			

t. value at level ≤ 0.05 with degree of freedom (23)= 2.07

CONCLUSIONS

The following are the conclusions of this study:

- 1-There are no significant differences between the biological rhythm stages in the physical capabilities (speed, explosive power, muscle stamina characterized and speed, stamina of the blood and respiratory systems).
- 2-There are no significant differences between biological rhythm stages in the dynamic capabilities (fitness and accuracy).
- 3-There are significant differences between biological rhythm stages in flexibility tests between day of birth, day of descending to commencing line in favors of day of birth; crest, day of descending to commencing line in favors of crest; and day of descending to commencing line and day of ascending to commencing line in favors of ascending to commencing line.
- 4-There are significant differences for biological rhythm stages in emotional tests between day of birth, crest in favors of day of birth and there were no significant differences between the remaining stages.
- 5-There are significant differences for biological rhythm stages in balance test between day of birth, descending to bottom and ascending to commencing line in favors of these two stages.
- 6-There are significant differences in sharpness of attention tests on date of crest and ascending to commencing line in favors of ascending to commencing line.
- 7-There is no absolute consistency between biological, emotional and mental rhythms, and tests results, but there is agreement at some stages in the physical, emotional and mental rhythms as the best achievement was at crest stage.

RECOMMENDATIONS

- 1-Biological rhythm courses must take into account the distribution of burden degrees of training in such a way that tension is high and size is biggest during the crest stage, whereas tension is low during the commencing line stage.
- 2-Difficult and complicated movements of biological rhythm must be taught during crest stage of the mental status as teaching processes depend on the high mental operations like paying attention.
- 3-Including biological rhythm in the syllabus of Physical Education Colleges to make use of in teaching, training and evaluation.
- 4-Conducting a similar study which deals with specialized specimens of athletic activities and study procedures of this study.

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