Original Article

Negative effect of extra voice stimuli and elimination of this effect using hypnotic suggestion

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Abstract:

This study is realised for testing ratio of the sportmen performances which is effected by stimuli organ's (voice) negative acts and this effected which can be decreased or not by hypnatic suggestion is realised, also If it can be decreased; the kind of stimuli and the ratio of it must be researched. This study is applied to 28 volunteer subject who were national. Before hypnosis, force application is measured with TMR EST 1000 isometric muscle training measuring equipment. During force applying, to quinea-pigs 80, 100, 110 and 120 decibels voice 1000 Hz (cih-diagnostic audiometer AS 67 (equal intensity to the ear), applied to stimuli is determined. At the second part of the study, hypnosis is applied to the same guinea-pigs and stimuli are mentioned to them. Standart suggestions were give and said tahat; when they percieved stimuli, applied forces could be increased, felt more energetic and strang. Same stimuli were applied again at the same units. Both isometric strength difference between the state and the Wilcoxon Signed Ranks Chi-Square test were analyzed using statistical method. Results were compared. In conclusion; value variation between "before hypnosis" and "after suggestion", "during hypnosis" and "after hypnosis" were evaluated statistical. Consequently, when visual caution is given and maximum affect level is reched; at statistical there are meanful difference between hypnosis applied and not applied conditions, at auditory stimuli (80 db; $p<0,001$, 100 db; $p<0,001$, 110 db; $p<0,001$, 120 db; $p<0,001$). As a result; from this foundations and obtained findings; sportsmen concentrations are deranged by extre stimuli (it presants differently from person to person and also different ratio), but this negative effects will be removed by hypnotic suggestions. We must think of its curative sides of Europe, World an Olympiad medals's color and owner this subject must be taken seriously and taken into consideration.

Key words: attention, hppnosis, performances, voice, isometric strong.

Introduction

Human movements are shaped by the reactions given to the stimulants which are perceived by internal and external receptors. These stimulants have inhibitory and excitatory effects on the organized system (Kaya, 2012). Motor neurons innervate the muscles through the peripheral nerves with their long axons and they convey signals to the muscles through the spine in order to realize the movement. (Carp, 2010).

Organism is affected by the limited stimulants that are received in an instant and perceives the limited stimulants. In the end the organ shows reaction. The organized system decides on which of these stimulants will be perceived, which of these will be affected by and which to receive which amount of reaction in its own background. And the accuracy of this decision is directly proportional to the level of efficiency or performance. The fact that there are many contributing factors in the reaction processes and perception processes of the stimulants may negatively affect the display of the right reaction at the right time. (Kaya, 1999; Richards, 2012).

In the study which is performed considering that it might be one of the ways to eliminate this issue, it is planned and expected that the negatively affecting stimulants which are among the hypnotically conveyed aural stimulants are perceived as positively affecting stimulants.

There are some factors which hinder athletes who compete on international platforms from performing their highest performance during competition. (Kaya, 2001; Günay et al., 2010). Each of these factors are perceived by the receptors in the organism and inhibit the performance. (Guyton, 1996; Despopoulos & Selbernage, 1997). Athlete increases his chances of success as much as the controllability of these effects. Many hallucinations might be constituted by hypnotic infusion on people (Boksa, 2009).

It is stated in many sources that these hallucinations might inhibit, excite or converse stimulants (Ozakkaş, 1985; Jardri, 2014; Kaya et. al., 2015). This study is thought to investigate this relation and its level of effect. There has not been found any direct study as per the scannings.

Many performed studies focuses on performance problems with “attention”. It is notified in human psychology that positive emotions are strengthened by direct hypnotic infusions. All in all it was possible to change the content of some people’s emotions (Crews, 1992; Kaya, 1999; Kaya, 2011 b; Pates, 2014).

It is stated that many physiological, biochemical and psychological changes which may affect performance are to be achieved under hypnosis (Gwynne, 1978; Adlrcreutz, 1982; Horald, 1989; Fourie, 1992; Liggett, 1993; Kaya, 1999; Barker, 2013; Pates, 2014; Milling, 2015). It is recorded that even the minor change in the subconscious mechanism affects Neuroendocrine functions, % 25-%50-% 75 (VO2 Max) and that during the exercise there are remarkable increases on the oxygen consumption through hypnosis. It is suggested that hypnosis in sports can be realized according to isomorphic model. It is also put forward that with active alert hypnosis some physiological parameters are affected before and during the study. (Robbozza, 1994).

With the first stimulus perceived, within the time unit the created change need to be felt by 50%. This physics energy change is called threshold difference and it is notified that absolute threshold differs from person to person. (Uğur, 1994). Despite the fact that it is known which extra stimulants that cause attention interruption limits the performance even partially, it is not exactly known which situations are affected on which amounts (due to variability). As for conditionings constituted by hypnotic infusions (Kaya, 2011), the case of how much it can be controlled is utterly complicated. This study aims to shed some light on the solution of this complexity.

Materials and Methods

This study has been performed on 28 athletes who had completed for national titles before. The athletes were asked to apply force with TMR EST 1000 Isometric Muscle Operation Measurement Device before hypnosis and the changes occurred by the stimulants in the force are measured. The device was calibrated every day before use. During force application the subjects During force applications the subjects had stimulants of 80, 100, 110 and 120 db (Cih brand diagnostic audiometer with AS 67 device) at 1000 Hz (as it is close to speaking frequency), both sides (equal volumes to both ears), and the effect of stimulants on the applied force is determined. At the second stage of the study, the same subjects are taken under hypnosis by informing them about the stimulants and were told standard infusions that “when the stimulants are perceived, applied force shall be increased and they will feel more energetic and stronger”. The same stimulants were applied to the same units again. In the beginning and when taking the values at the end of stimulants, three seconds of process average were taken as data. In the end, the changes in pre-hypnosis values and after infusion, during hypnosis and after hypnosis are statistically analyzed along with the changes on the nature of extra stimulus which affected the applied force. It is seen that findings don’t show a normal distribution hence a non-parametric test of Wilcoxon Signed Ranks Test is applied.. $P<0.05$ is statistically acknowledged as meaningful.

Results

In the research, the stimulants given in voice format to the former national athletes while applying force, the type of effect of stimulants on the force and the answers they give to the same stimulants under hypnosis (by conversing stimulus).

Table 1. Maximal force parameters in situations with voice stimulants by 80- 100, 100-110,110-120 db with and without hypnoses and the related status between them.

N=28				
MAKS HYPNOZ	X±SD	X±SD	Z	P
80 maks hyp-100 max stmuly hyp	40,51±2,14	41,05±0,58	-0,541 ^a	P>0,05
100 maks hyp-110 max stmuly hyp	41,05±0,58	41,79±0,48	-1,297 ^a	P>0,05
110 maks hyp-120 maxs tmuly non-hyp	41,79±0,48	41,99±7,35	-1,025a	P>0,05
MAKS NON-HYPNOZ				
80 max stmuly non-hyp 100 max non-hyp	38,30±0,84	39,69±2,66	-3,196 ^a	P<0,001
100 maks non-hypn-110 max stmuly non-hyp	39,69±2,66	39,43±2,60	-3,196a	P<0,001
110 maks non-hypn-120 max stmuly non-hyp	39,43±2,60	38,92±2,11	-1,283a	P>0,05

Table 2. Applying force with and without hypnosis along with 80 db voice stimulus and the beginning of force applications; maximal force status and force change relations between end of stimulus status.

N=28 80 db.	X±SD	X±SD	Z	P
Start hypnos-start non-hypnos	38,52±1,07	38,21±1,06	-1,626 ^a	P>0,05
Max strength non-hypnos-start non-hypnos	38,30±0,84	38,21±1,06	-1,070 ^a	P>0,05
Max strength non-hypnos-start hypnos	38,30±0,84	38,52±1,07	-2,050 ^a	P<0,05
Stimuly finished non hypnos-start non-hypnos	39,07±1,59	38,21±1,06	-2,595 ^a	P<0,05
Stimuly finish non hypnos-start hypnos	39,07±1,59	38,52±1,07	-1,105 ^a	P>0,05
Max non-hypnos-start hypnos	38,30±0,84	38,52±1,07	-2,050 ^a	P<0,05
Max strength hypnos-start-hypnos	40,51±2,14	38,52±1,07	-4,054 ^a	P<0,00
Stimuly finish hypnos-start hypnos	38,72±1,54	38,52±1,07	-0,342 ^a	P>0,05
Stymuly finish non-hypnos-start hypnos	39,07±1,59	38,52±1,07	1,841 ^a	P>0,05
Max strength hypnos-max non-hypnos	40,51±2,14	38,30±0,84	-4,623 ^a	P<0,00
Stimuly finish hypnos-max strength non-hypnos	38,72±1,54	38,30±0,84	-1,344 ^a	P>0,05
Stymuly finis non-hypnos- max non-hypnos	39,07±1,59	38,30±0,84	-2,812 ^a	P<0,05
Stimuly finish hypnos-max hypnos	38,72±1,54	40,51±2,14	-4,623 ^a	P<0,001
Stymuly finish non-hypnos-max strength non-hypnos	39,07±1,59	38,30±0,84	-1,344 ^a	P>0,05
Stymuly finish non-hypnos-stimuly finish hypnos	39,07±1,59	38,72±1,54	3,223 ^a	P<0,001

Graphic 1. Graphic for Table 2

Table 3. Applying force with and without hypnosis along with 100 db voice stimulus and the beginning of force applications; maximal force status and force change relations between end of stimulus status.

N=28 100 db.	X±SD	X±SD	Z	P
Start hypnos-start non-hypnos	38,99±1,38	38,83±1,38	-,625 ^a	P>0,05
Max strength non-hypnos-start non-hypnos	39,67±2,66	38,83±1,38	-1,037 ^a	P>0,05
Max strength non-hypnos-start hypnos	39,67±2,66	38,99±1,38	-3,905 ^a	P<0,00
stimuly finish-start non-hypnos	38,66±0,85	38,83±1,38	-1,418 ^a	P>0,05
stimuly finish-start hypnos	38,66±0,85	38,99±1,38	-0,216 ^a	P>0,05
max strength non-hypnos-start hypnos	39,67±2,66	38,99±1,38	-0,961 ^a	P>0,05
max strength hypnos-start-	41,05±2,58	38,99±1,38	-3,769 ^a	P<0,00

hypnos				
stimuly finish hypnos-start	38,66±0,85	38,99±1,38	-0,192 ^a	P>0,05
hypnos				
stymuly finis non-hypnos-start	38,71± 0,88	38,99±1,38	-0,937 ^a	P>0,05
hypnos				
Max strength hypnos-max	41,05±2,58	39,67±2,66	-4,372 ^a	P<0,00
strength non-hypnos				
stimuly finish hypnos-max non-	38,66±0,85	39,67±2,66	-0,774 ^a	P>0,05
hypnos				
stymuly finis non-hypnos-max	38,71± 0,88	39,67±2,66	-0,774 ^a	P>0,05
non-hypnos				
stimuly finish hypnos-max	38,66±0,85	41,05±2,58	-4,228 ^a	P<0,00
hypnos				
stymuly finish non-hypnos- max	38,71± 0,88	41,05±2,58	-4,167 ^a	P<0,00
strength hypnos				
Stymuly finish non-hypnos-	38,71± 0,88	38,66±0,85	-0,923 ^a	P>0,05
stimuly finish hypnos

Graphic 2. Graphic for Table 3

Table 4. Applying force with and without hypnosis along with 110 db voice stimulus and the beginning of force applications; maximal force status and force change relations between and of stimulus status.

N=28 110 db.	X±SD	X±SD	Z	P
Start hypnos-start non-hypnos	38,56±0,84	38,40±0,88	-1,344 ^a	P>0,05
Max strength non-hypnos-start	39,43±2,60	38,40±0,88	-0,649 ^a	P>0,05
non-hypnos				
Max strength hypnos-start	41,79±2,48	38,56±0,84	-4,623 ^a	P<0,000
strength hypnos				
stimuly finish-start non-hypnos	39,41±1,78	38,40±0,88	-1,560 ^a	P>0,05
stimuly finish-start hypnos	39,41±1,78	38,56±0,84	-2,664 ^a	P<0,01
max strengthnon-hypnos-start	39,43±2,60	38,56±0,84	-1,139 ^a	P>0,05
hypnos				
max strengthhypnos-start-	41,79±2,48	38,56±0,84	-3,769 ^a	P<0,000
hypnos				
stimuly finish hypnos-start	39,41±1,78	38,56±0,84	-3,177 ^a	P<0,001
hypnos				
stymuly finis non-hypnos-start	38,20±1,01	38,56±0,84	-2,733 ^a	P<0,01
hypnos				
max strength hypnos-max	41,79±2,48	39,43±2,60	-4,623 ^a	P<0,000
strengthnon-hypnos				
stimuly finish hypnos-max	39,41±1,78	39,43±2,60	-1,674 ^a	P>0,05
strength non-hypnos				
stymuly finis non-hypnos-max	38,20±1,01	39,43±2,60	-0,843 ^a	P>0,05
strength non-hypnos				
stimuly finish hypnos-max	39,41±1,78	41,79±2,48	-4,623 ^a	P<0,000
strength hypnos				
stymuly finish non-hypnos- max	38,20±1,01	41,79±2,48	-4,282 ^a	P<0,000
strength hypnos				
Stymuly finish non-hypnos-	38,20±1,01	39,41±1,78	-3,530 ^a	P<0,000
stimuly finish hypnos

Graphic 3. Graphic for Table 4

Table 5. Applying force with and without hypnosis along with 120 db voice stimulus and the beginning of force applications; maximal force status and force change relations between end of stimulus status.

N=28 120 db.	X±SD	X±SD	Z	P
Start hypnos-start non-hypnos	38,82±1,08	38,48±1,15	-1,708 ^a	P>0,05
Max strength non-hypnos-start non-hypnos	38,99±2,11	38,48±1,15	-0,072 ^a	P>0,05
Max strength non-hypnos-start hypnos	38,99±2,11	38,82±1,08	-3,985 ^a	P<0,000
stimuly finish hypnoz-start non-hypnos	39,46±2,45	38,48±1,15	-0,091 ^a	P>0,05
stimuly finish hypnos-start hypnos	39,46±2,45	38,82±1,08	-1,617 ^a	P>0,05
max strength non-hypnos-start hypnos	38,99±2,11	38,82±1,08	-0,455 ^a	P>0,05
max strength hypnos-start-hypnos	41,99±7,35	38,82±1,08	-3,985 ^a	P<0,000
stimuly finished hypnos-start hypnos	39,46±2,45	38,82±1,08	-0,865 ^a	P>0,05
stymuly finis non-hypnos-start hypnos	38,43± 2,38	38,82±1,08	-1,104 ^a	P>0,05
max strength hypnos-max strength non-hypnos	41,99±7,35	38,99±2,11	-3,985 ^a	P<0,000
stimuly finish hypnos-max strength non-hypnos	39,46±2,45	38,99±2,11	-0,182 ^a	P>0,05
stymuly finis non-hypnos-max non-hypnos	38,43± 2,38	38,99±2,11	-1,093 ^a	P>0,05
stimuly finished hypnos-max hypnos	39,46±2,45	41,99±7,35	-3,962 ^a	P<0,000
stymuly finish non-hypnos- max hypnos	38,43± 2,38	41,99±7,35	-3,530 ^a	P<0,000
Stymuly finish non-hypnos-stimuly finish hypnos	38,43± 2,38	39,46±2,45	-1,799 ^a	P>0,05

Graphic 4. Graphic for Table 5

Graphic 5. Inter-data relations of all the data in table 1, 2, 3, 4 and 5

Discussion and conclusion

When looked at Table 1: Applying force with and without hypnosis along with 80- 100, 100-110, 110-db voice stimulus and the force applications; among the status of maximal force parameters, only between 80 db maximal non-hypnosis status and 100 db maximal non-hypnosis status and between 100 db maximal non-hypnosis and 110 db maximal non-hypnosis status showed that statistical difference is meaningful ($p < 0.001$). This case makes one to think that under non-hypnoses status external stimulus affects more. One may expect that the difference between 110-120 db should be more. Although there is an observable decrease in the maximal force during 120 db stimuli, this decrease is not statistically meaningful. The fact that this is not realized makes one to think that it may be resulted by some factors which depended on that specific moment. In a sports performance many factors like these should always be considered. One of the major indicators of factors like these is, with the words of a record holder weight-lifter, “scoring zero” which is a very common situation. Although it is expected to have more statistical difference affected by variable factors, there is a general result which affects the performance depending on the volume of the voice stimulus when applying force. However it can be also said considering the data that when reverse conditioning under hypnosis is achieved, the negative decrease on the force is decreased and even turned into a positive stimulus. The inhibitions of effective mechanism are thought to be related with a decrease on infusions (Guyton, 1996; Despopoulos & Selbernage, 1997). The effectiveness level of infusions is related to the factors such as the subconscious fund of information of the athlete, the athlete’s level of perception towards the infusions, the athlete’s level of affectability, the compatibility of infusions with athlete’s subconscious information, the level of effectiveness of hypnotizer’s infusions, athlete’s level of motivation on that moment and many more similar perpetual and situational variables (Kaya, 1999).

When looked at table 2, applying force with and without hypnosis along with 80 db voice stimulus and status between force parameters are as follows: between max strength non-hypnos–start hypnos, Stimuli finished non hypnos–start non-hypnos, Stimuli finish non-hypnos–max non-hypnos ($p < 0.05$), Max non-hypnos–start hypnos, Max strength hypnos–start-hypnos, Stimuli finish hypnos–max hypnos, Stimuli finish non hypnos–stimuli finish hypnos. ($p < 0,001$) level showed meaningful results.

When looked at Table 2, (with 80 db stimuli) isometric claw force averages showed close results in two situations in the beginning. It is also seen that results are not statistically meaningful ($p > 0.05$). The minor difference occurred is thought to be caused by personal differences. It is acknowledged that this finding affected the study positively and that in either situation the level of force applied by athletes in the beginning remains the same apart from the situational factors. When the top value where stimuli is the most effective, statistical meaningfulness is seen ($p < 0,05$). Also between Stimuli finished non hypnos – start non-hypnos there is statistically meaningful results ($p < 0,05$).

The situations when stimuli is given without hypnosis, and when stimuli is given conversed under hypnosis (so as to increase the force) show no significant difference statistically ($p < 0,0001$).

When looked at Table 3, applying force with and without hypnosis along with 100 db voice stimulus and the beginning of force applications; maximal force status and force change relations between end of stimulus status show the following: Max strength non-hypnos – start hypnos, max strength hypnos – start-hypnos, Max strength hypnos – max strength non-hypnos, stimuly finish hypnos – max hypnos, stymuly finish non-hypnos – max strength hypnos and in between them there is statistically meaningful differences ($p < 0.001$).

When looked at Table 4, applying force with and without hypnosis along with 110 db voice stimulus and the beginning of force applications; maximal force status and force change relations between end of stimulus status show the following: Max strength hypnos – start strength hypnos, stimuly finish - start hypnos, max strength hypnos – start-hypnos, stimuli finish hypnos – start hypnos, stimuli finis non-hypnos – start hypnos, max strength hypnos – max strength non-hypnos, stimuli finish hypnos – max strength hypnos, stimuli finish

non-hypnos – max strength hypnos, Stimuli finish non-hypnos – stimuli finish hypnos and in between them there is statistically meaningful differences ($p<0.01$ and $p<0.001$).

When looked at Table 5, applying force with and without hypnosis along with 120 db voice stimulus and the beginning of force applications; maximal force status and force change relations between end of stimulus status show the following: Max strength non-hypnos – start hypnos, max strength hypnos – start-hypnos, max strength hypnos – max strength non-hypnos, stimulus finished hypnos – max hypnos, stimulus finish non-hypnos – max hypnos and in between them there is statistically meaningful differences ($p<0.001$).

It is mentioned that Wundt, who showed central factors related with attention affects reaction time, performed experiments in order to show that strong and weak voices affect reaction time with their regular or irregular compatibility. To the regular strong voices compatibility increase is 116 ms, to weak ones it is 127 ms; to irregular strong voices compatibility is on average 189 ms, to weak ones it is 298 ms. In the second case, on condition that strong and weak voices are to be changed on one line, when it is made impossible for the attention to be ready to a stimuli of different volume or quality, it is notified that reaction time was prolonged both for strong and weak voices. (Özakpınar, 1987). In the study, regular compatibility increase has been applied (80, 100, 110, 120 db) and results are compatible with literature information. If the compatibility between stimuli and reactions is too high, first signal is negatively affected and reaction might be decreased. It is even stated that it might be completely eliminated. If the compatibility is too high for the compatible reaction, it is stated that the answer which is against the breaker of the first signal, could be decreased or eliminated (Schmidt, 1999). When it is not conversed on athletes, the force is lowered and Schmidt's study might be explanatory about this. This is because in this study a secondary stimuli is given during force application as well and a decrease on the force is recorded. After that same athletes were conversed on a determined amount with hypnotic conditioning. The unexpected results which are seen with this study and this kind of studies (the difference seen on the same athletes), commented to be related to the biorhythmic frequency of athletes and for both cases different biorhythmic frequencies might be the reason behind (Kaya, 1999) (due to variability of physiological, mental, emotive and intuitional fluctuations). When the top value where stimuli is most effective is checked, a significant meaning is seen ($p<0,001$). The fact that force performance is decreased when stimuli is given is coherent with Schmidt's 1999 study and studies of many other scholars. This is because all of them include the information that second stimulant affect the first one (Guyton, 1996).

Mulligan, 1996; puts forward that conceptional stimulations of indirect memory tests affect attention distraction just like direct memory tests do. However, it is underlined that these results need to be interpret along with the proper transfer of skeleton ruling. It is thought that personal differences in the research findings might be related to the ability of proper transfer of skeleton ruling.

By saying that many of human movements are done by reflexes and the utmost determinant for reflex choices is sensory input, it is put forward that change is not just due to variety of inputs but it is related to the intensity of their stimulation and clearance of affluence of units that can be singularly used. Just like a slight pressure ends with a very strong stimulation or a stinging needle makes traction reflex common, it is stated that these stimulants excite and inhibit the system not just physiologically but also psychologically. And sometimes a Word or a thought is more effective than a physiological stimulus (Rasc, 1989). In the research, the negative effect of the secondary stimulant which is formed by the effect of verbal infusions is decreased by hypnotic infusion (table 1, 2, 3 and 4, top values).

The excessive tension which comes with emotional stress generally said to be able to modify antagonists' reflex inhibition and this may cause different factors such as moving motivations, fear and stress (that are seen on the earliest stages of motor learning) to cause the random contraction of muscle groups. And this situation is emphasized to be affecting proper and effective performance. As it is able to prevent extreme stress, it is said that experienced athletes are successful as they are able to manage the coordination of contraction and inhibition processes. (Rasc, 1989). It is considered that negative stimuli can be utilized as if they are positive by conversing the mentioned emotional status with hypnotic infusions, just like other stimuli. After checking the findings of the research it is thought that the difference between the hypnose status and non-hypnose status of the same stimulus might be resulted from these conversions.

It is stated that various new orders that are occurred during a performance are not, at the high levels of the brain, logical doings that are thought upon but are reflexial signals which are directly given to the changing situations. And when reflexes are coordinated correctly, reactions would be also correct and then an athlete would be showing a successful reaction. (Rasc, 1989) For the reason that all physical reactions of the athlete is relates to the content, characteristic and efficiency level of stimuli; the performance of the athlete can be more effectively supported if stimuli are taken under control and conversed. It is underlined that this issue is also related with the athlete's previous subconscious depositions, his value judgment and shortly his information. As one stimulus (news) may mean that a chill ran down one's back, the same stimulus may cause another person to relax or to be happy. Reaction is said to be related to the contents of one's EGO and SUPEREGO. And received knowledge can be attributed with the correct information by making correct associations; contradiction level affects the reaction and its compatibility with one's own capabilities.

On another aspect, performance is said to be related to the severity of the stimuli and it is important on the effectiveness amount and relation of other stimuli that are received at the same time (Kaya, 1999). This is considered to be the reason behind the variability between the data in this study.

During the research it is found that the response to the second stimulus is late and when the amount is run decisively, durations that exceed 25 minutes, are decreased to 25 ms from 75 ms with some trining. However it is noted that delay can never be fully eliminated. This was said to be pointing out that refractory period can have a real structural base on the information processing system. Information receiving and processing is accepted to have a structural relation between (Özakpınar, 1987). In this research it is seen that stimuli decreases the performance and this is compatible information with literature and is statistically meaningful ($p<0.001$). The case is seen to be the opposite with hypnotis infusion. It is thought that the difference between decrease percentages may be resulted from duration differences. Total duration in this study is 10 seconds whereas in the literature it is 25 minutes.

It is mentioned that applying hypnotism in sports can be realized according to isomorphic model. Effects of active stimuli through hypnosis are examined before and during the study. Traditional hypnosis is used to reveal the relation between two experiences (Robbozza, 1994). Main targets are said to be as follows: to improve cerebral skills which are important both for motor and hypnotic performance, to achieve variance of motor and hypnotic physical experiences which are necessary for performance, to commonize hypnosis that is performed before or during performance for alertness and to form infusion models according to personal attributes. Model hypnosis and motor performance are based on the changeable skill sharing doctrine which was known throughout the study (Robbozza, 1994; Robbozza, 1995).

It is well known that the voluntary and spontaneous attention ratio and importance order are among the criteria that affect the athletes' success and also mentioned that the athlete who is dwelled on something may come out of the effect of other stimulants partially or completely. What the coach, psychologist or the hypnotiser are believed to do is, to enable the athlete comprehend the right stimulants for him fixing him on the topic/s that will take him to success, or to drive him out of the stimulants or topics if he is dwelled on the wrong stimulant (Kaya, 2011). The findings that are put forward in this study are believed to cast light and support on the mentioned principles.

As a frequently occurring situation stated by all coaches, if the athlete draws the type of sport in which he was most successful before, he is most affected or not affected at all by the stimulants that are given to him as a motivator (Kaya, 1999). It is foreseen in this study that when the necessary stimulant is given more effectively along with hypnotic confidence, he may come out of the negative effects of the previous stimulant.

It is stated that another fact is, there is a level of stimulant effects or organism tolerance to stimulants. It is also mentioned that while a glare from the competitor may be irritating for an athlete, it may be prompting for another, or while an athlete may go under the effect of sympathetic nerve system when he is angry, another may go under the effect of parasympathetic nerve system given in a similar situation; that is, while swear words from the audience may courage and boost and athlete, it may cause another athlete to get irritated and distracted. As any kind of hallucination could be created under hypnotic infusions, by conversing the effect of stimulants that cause the athlete to give a negative reaction, it is put forward that it could be turned into a quality to contribute the success of the athlete positively (Kaya, 1999). Also in this study the stimulants are conversed from the data in order to transform negative effect into positive.

It is stated that one nerve cell faces to ease the effect of many or even thousands of excitatory and inhibitory neurons (Rasc, 1989). This study performs the conversion of the negative ones.

It is underlined that cognition of senses in attention capabilities may result in attention disruption when faced with many stimulants. And also it is stated that cognitive functions tend to choose one and most suitable among the many stimulants it may face. In the first group the time needed for attention is measured in seconds whereas it is measured much longer in cognitive attention studies (Uğur, 1994). In this study it is put forward that with hypnotic infusions attention of athletes can be controlled as per their performance by changing the level of perception.

Many performed studies focused on performance problems with "attention". It is noted that thought models are affected by direct infusions and positive senses are strengthened. In the end it is said to be possible to change the content of many people's feelings with hypnotic infusion (Crews, 1992; Kaya, 1999). In this study it is also seen that given stimuli when applying forces distracted attention and this led to a reflection on the force. The mentioned distraction was seen in all stimulants. It is underlined that the stimulants which activate the athlete or block their performance are also related with the athlete's previous subconscious depositions, his value judgment and shortly his information. As one stimulus (news-questions) may mean that a chill ran down one's back, the same stimulus may cause another person to relax or to be happy; and this may bear important results regarding the performance (Kaya, 2011).

In this study it is considered that when the athletes are given infusions subconsciously so as to "increase the force", they create the increase on the force by getting conditioned to the infusions. The fact that athlete makes correct associations with correct information and thus makes correct attributions (Kaya, 1999), thought to be creating the force difference between athletes. It is noted that factos such as having a high or low level of contradiction, the compatibility between the reaction and his own skills, the severity of the stimulant, the relation

between the effectiveness of other stimuli given to the organism at the same time or their level of effectiveness are all determinants of the difference between the results (Kaya, 1999). The difference between the hypnosis and non-hypnosis cases is thought to be stemming from these issues.

It is stated that many physiological, biochemical and psychocological changes that may affect performance can be achieved under hypnosis (Haley, 1977; Gwynne, 1978; Adlercreutz, 1982; London, 1982; Horald, 1989; Fourie 1992; Nidffer, 1992; Liggett, 1993; Kaya, 1998). Even the slightest change in subconscious mechanism has an effect on especially Neuroendocrine functions. A receptor-end-organ is sensitive to the stimulant's own type (kind) and also a neuron has ability to respond to electrical, mechanical, chemical or thermal and even emotional stimulus. In some situations (cases) an adequate stimulus could result physico-chemical changes (just like creating burn bullae by giving burn infusions to subjects under hypnosis) (Horald, 1989; Kaya, 1999). If stimulus has enough power, in relation to the level of change of time and force, it is stated that a nerve impulse wave is initiated to expand through psycho-chemical change fibril. For a neuron, which runs according to all or none principal, to carry a stimulus is thought to be related to having the stimulus on the threshold value (Özakpınar, 1987). In this study stimulants and their stimulations are thought to be in a similar system.

Craik et al., 1996, in the study where they analyze realization memory, closed memory, the memory which is not occupied with remembering and encryption of divided attention, they give and some information aurally and they expect recall verbally. At the second process optical reaction-time function always appeared along with hand reactions and divided attention affected memory performance utterly negative in closure encryption process. In this study stimulants caused a decrease in performance and conversion of stimulants lead to performance increase.

It is stated that in order to achieve stimulated potential on humans and responses towards different paradigms vividly, stimulus and/or the incident need to be repeated many times. However when complicated paradigms need to be applied, this requires rather a long amount of time. This situation said to make it difficult for the subject to remain at a certain amount of attention and also said to be among the reasons of changes on average movements of responses according to changing brain status. It is mentioned that this disadvantage is partially eliminated with motivated subjects however if the EEG activity we have running in humans is higher than the original response, it is the biggest disadvantage towards human studies on revealing brain kinetics (Alkaç, 1994). In this case if more complex stimuli were to be given in this study, different results might have been obtained.

It is noted that a stimulus trend of two stimuli could be enough to create TSP (trend-end potential) (Alkaç, 1994).

As per the studies performed, it is seen that experience lowers attention distraction and supports focus (Wang, 1996; Soulé et al., 2014).

In this study in order to eliminate experience difference, half of the athletes are taken under hypnosis for the application and the other half are taken without hypnosis.

Conclusion

It is found that the external voices heard during force application affects the performance however this effect is eliminated with hypnotic infusions and even turned into a positive effect on performance. For this reason hypnosis is recommended for performance losses due to attention disruption.

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