

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

## رشد و یادگیری حرکتی \_ ورزشی «حرکت»

### نشریه دانشکده تربیت بدنی و علوم ورزشی دانشگاه تهران

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1. Murtha\_Smith, E., Hwang, S.H. and Bean, J. (1992). "Load transfer in a space frame connection". ASCE, J. of Structural Eng., Vol. 7, No. 3, PP: 191-200.

2. Holstein, Barbara. (1988). Shaping up for a health pregnancy. 5<sup>th</sup>. Ed. Life Enhancement publication, Illinois, USA.

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## Factor Structure, Validity and Reliability of Sources of Acute Stress among Wrestling Questionnaire (SASWQ)

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(Received: 2012/10/14, Accepted: 2012/12/29)

### Abstract

*This study aimed at exploring the main sources of acute stress in wrestlers regarding the structure and the assessment of reliability and validity of the sources of acute stress in wrestlers questionnaire (SASWQ). For this purpose, this questionnaire was distributed among a sample of 330 wrestlers (mean age  $21.56 \pm 5.3$ ) in Tehran who were selected by multistage random sampling method. Analysis of data with SPSS software showed that the Cronbach's alpha for all items of this questionnaire was 0.909 and alpha coefficient of the internal consistency for the first and second section was 0.870 and 0.831 respectively. Content validity of the questionnaire showed the equity of each of the 8 principle components of acute stress in wrestlers including skill performance, evaluation, contest, error, prospect, time pressure, injury and environment as 2.43 on average through exploratory factor analysis in the principle component analysis (PCA) with Varimax rotation. In confirmatory factor analysis with Lisrel software, GFI=0.96, AGFI=0.92 and CFI=0.93 were obtained. The findings showed that SASWQ had acceptable reliability and validity and could measure the mentioned variable in the mentioned statistical population.*

### Keywords:

*Acute Stress, Factor Structure, Reliability, Source of Stress, Sport Psychology, Validity.*

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## Surveying of Causal Attributions of Elite and Sub – Elite Male Athletes in Individual Sports (from the Perspective of Athletes and Coaches)

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### Abstract

Attribution theory is one of the psychological dynamic theories that explains and describes people's perception of facts. Therefore, the aim of this research was to study success and failure attributions in athletes and coaches. The population of this study consisted of athletes and coaches of national teams (elite) and club teams (sub-elite) in swimming, badminton, karate, taekwondo, table tennis and wrestling. 120 male players and 12 coaches were selected through multistage convenience sampling method. Then, data were collected by attribution styles questionnaire (ASQ). The data were analyzed by multivariate ANOVA at  $P < 0.05$ . The findings showed that elite athletes expressed more unstable and specific attributions in failure conditions. In contrast, sub-elite athletes expressed more stable and general attributions in failure conditions ( $P \leq 0.0001$ ). As well, the coaches of elite athletes expressed more stable and specific attributions than the coaches of sub-elite athletes in success dimension ( $P \leq 0.0001$ ). The results showed that the casual attribution of athletes (elite and sub-elite) and their coaches (elite and sub-elite) expressed elite athletes and coaches' privilege as elite athletes expressed that most of the reasons for their success were internal, stable and general. Also, athletes and coaches stated different attributions in the same situation. It is recommended that coaches encourage their athletes to attempt more to express all of their competencies in the competitions.

### Keywords:

*Athletes, Attribution Styles, Coaches, Failure, Individual Sports, Success.*

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## The Comparison of Happiness in Active and Inactive Old Men and Women in Tehran

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### **Abstract**

*This study attempted to evaluate the effect of engagement with physical activity on happiness of elderly men and women in Tehran city. The study population included all the elderly in 22 regions of Tehran city and 400 subjects were selected by multistage cluster sampling method as the sample of the study. To discriminate active from inactive elderly subjects, Sharkey Physical Activity Questionnaire and to determine the amount of their happiness, Oxford Happiness Inventory (OHI) was used. The reliability and validity of the questionnaires were confirmed. All participants were more than 60 years old and had no psychological and physical disorders. After the questionnaires had been distributed and then collected and the raw data had been classified, SPSS13 software was used to analyze the data. The results of MANOVA at ( $P < 0.0071$ ) showed that active subjects significantly gained higher scores in all the happiness subscales such as life satisfaction, joy, self-esteem, control, efficiency, calmness and totally happiness than inactive subjects while gender and interaction of gender and activity level did not have any significant effect on happiness. Therefore, it can be stated that one of the factors influencing happiness in the elderly is physical activity.*

### **Keywords:**

*Gender, Happiness, Level of Activity, Physical Activity, the Elderly.*

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## The effect of Single Task and Dual Task Balance Training on the Balance of Older Adults

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(Received: 2013/05/07, Accepted: 2013/08/25)

### **Abstract**

*The aim of this study was to compare the effects of three types of balance training: single task, dual task under fixed priority instructional set (Fp) and dual task under a variable priority instructional set (Vp) on the balance of the elderly. The participants were 36 elderly over 65 years old from Kerman province who were randomly divided into three groups (each 12 subjects) based on Burg pretest scores. The groups included single task, dual task under fixed priority and dual task under variable priority. Experimental groups received 45 minutes of training session, 3 sessions a week for 4 weeks. For data analysis, ANCOVA and Bonferroni post hoc test were used at ( $P \leq 0.05$ ). The results showed that a significant difference between single task and dual task under fixed priority groups and also between single task and dual task under variable priority ( $P=0.008$  and  $P=0.000$  respectively). There was no significant difference between dual task under fixed priority and variable priority groups ( $P=0.149$ ). In addition, the results in Tug test under dual task condition showed a significant difference between single task and dual task under fixed priority groups and also between single task and dual task under variable priority groups and also between dual task under fixed and variable priority groups ( $P=0.035$ ,  $P=0.033$ ,  $P=0.000$  respectively). The results showed that single and dual task balance training improved balance performance in the elderly but those who had training under dual task outperformed under single and dual task conditions.*

### **Keywords:**

*Aging, Balance, Dual Task, Fixed Priority, Single Task, Variable Priority.*

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## Comparative Study about Effectiveness of two Different Teaching Methods of Traditional and Integrated of Physical Education on Learning Biology and Development of Social Skills of Male Junior High Students

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### Abstract

The major aim of this study was to compare the effectiveness of two teaching methods of traditional (common) and integrated for physical education on learning biology and developing social skills in male junior students. This study was semi-experimental which was conducted in Islamshahr city for 12 weeks. The statistical population consisted of 79 volunteer junior students who studied the second grade and 52 students were selected by an IQ test and were assigned to two groups of traditional (n=26) and integrated (n=26) purposively. During these three months, physical education and biology were taught by the common method (separately) for the traditional group while biology was integrated with physical education and taught for the integrated group. The data were analyzed using Wilcoxon test, U Mann Whitney test and t test. The results revealed a significant difference in learning biology between traditional and integrated groups at  $\alpha < 0.05$ . The t test results revealed a significant difference in the mean scores of impulsive behaviors between traditional and integrated groups at  $\alpha < 0.01$ , that is, the mean scores significantly decreased in the integrated method compared to the traditional method. Also, there was a significant difference in the mean scores of suitable social behaviors of subjects between integrated and traditional groups ( $\alpha < 0.001$ ). In other words, mean scores of the students in the integrated group significantly increased compared to the traditional group.

### Keywords:

Integrated Teaching, Learning, Social Skills, Teaching Method, Traditional Teaching.

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## Age-related Differences in Postural Control: Role of Sensory Information

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### **Abstract**

*Postural control requires the integration of sensory information in the visual, vestibular, and senses the body systems. Also research has shown that the sensory systems involved in postural control, decreased with increasing age. The aim of this study was to investigate the effects of age and manipulation of sensory information on the postural control. For this purpose, displacement of the anterior - posterior, middle – lateral and speed center of pressure (COP) 22 elderly (59/54 ± 2/31 year) and 25 young men (23/12±3/26 year) that selected based on target and availability from Shahid Chamran University students and staff in four different sensory conditions including 1) open eyes an hard surface 2) eyes open on soft surface 3) eyes closed on hard surface 4) eyes closed on soft surface during three 30-second efforts with 5 min rest intervals between efforts evaluated. After investigating the data normality with kolmogorov smirnov and equality of variance using the leven test, data using multivariable variance analysis and one-way variance analysis was analyzed. Significant differences was observed between young and elderly groups in all conditions, also removes the visual and plantar proprioceptive information lead to increased sway in the two groups that increase was greater in the elderly than in young group. This results indicate the importance of visual information and plantar proprioceptive in postural control, especially in the elderly.*

### **Keywords**

*Elderly, young, postural control, open eye, closed eye, hard surface, soft surface.*

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## Effects of Overt and Covert Motivational Self-talk on Performance and Perceived Exertion Rate of Wrestlers in Progressive Exhaustion Exercise

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### Abstract

The aim of this study was to examine the effect of overt and covert motivational self-talk on perceived exertion and performance in a progressive exercise until exhaustion in wrestlers. The population consisted of wrestlers in Urmia and 15 volunteer subjects were selected. This study was performed in three sessions with a one-week interval. The first session was held without self-talk while the second and third sessions were held covertly and overtly respectively. Bruce aerobic exercise test was used in this study as well. The time to exhaustion was considered as performance. Burg scale was used every 3 minutes in order to measure subjects' exhaustion. To analyze the data, ANOVA with repeated measures and TUKEY post hoc test was used. The results showed that only covert self-talk had a significant effect on subjects' performance ( $P=0.002$ ). Also, overt motivational self-talk ( $P=0.001$ ) significantly decreased the subjects' perceived exertion rather than covert self-talk. There was no significant difference between covert self-talk and without self-talk ( $P=0.121$ ). In conclusion, overt motivational self-talk decreased the perceived exertion of the subjects in the progressive exercise until exhaustion while covert motivational self-talk improved subjects' endurance.

### Keywords:

Covert Self-Talk, Motivational Self-Talk, Overt Self-Talk, Progressive Exercise, Wrestlers.

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## The Effect of Exercise (Swimming and Running) on Motor Function, learning and Spatial Memory in Elder Male Wistar Rats

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### **Abstract**

*In recent years, the effects of exercise on nervous system, spatial memory and motor function in the senescence period have received the attention of researchers. As the age increases, some functions of nervous system such as spatial memory are weakened. Thus, the effect of aerobic exercises including swimming and running on learning, spatial memory and motor function was investigated in old rats. The study was experimental. 30 rats (18 months old) were randomly divided into three groups: experimental 1 (running on a treadmill), experimental 2 (swimming in the water maze) and control. Rat treadmill was used for subjects' exercise, Morris water maze device was used to apply exercise protocol and to examine their memory and learning and open field device was used to examine subjects' motor function. One-way analysis of variance was used to analyze the data. The results were reported as mean  $\pm$  SD and suggested that in spatial memory test (time to reach the target and the covered distance to reach the target), Experimental 1 group (swimming) significantly outperformed control and experimental 2 (running) groups ( $P=0.001$ ). Treadmill group had a better performance in spatial memory test (time to reach the target) than control group ( $P=0.04$ ). In motor function test (open field test), experimental 1 and 2 groups were significantly superior to the control group in the total distance covered ( $P=0.001$ ,  $P=0.002$  respectively). In the mean speed covered in the open field test, Experimental 1 and 2 groups were significantly superior to the control group ( $P=0.001$ ,  $P=0.003$  respectively). The results showed that aerobic exercise especially swimming had a positive effect on memory consolidation, retention and motor function, that is, exercise probably improves reward paths in the nervous system of the rats and this factor can be a reason for memory consolidation and learning in the nervous system.*

### **Keywords:**

*Exercise, Motor Function, Rat, Running, Spatial Memory, Swimming.*

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