Gardasevic et al. (2012) the research was conducted on 120 young football players aged 15 from the following football clubs: Sutjeska FC, Čelik FC, Polet Stars FC and Nikšić YFC, all from town Nikšić. They were tested by 21 motor tests for estimating 7 hypothetical motor abilities. After completing a six week training process (an experimental activity) using the factor analysis the qualitative changes have been established. In the initial state 4 latent dimensions are identified: power, endurance, speed of movement and coordination. In the final state as well are identified 5 latent dimensions: power, agility, flexibility, endurance, and speed of movement. The positive qualitative changes are certainly the result of professional performance of the tasks that the experimental programmed provides.

Belcic and Sporis (2011) The purpose of this study was to assess the reliability and validity of the newly constructed bike tests among non-selected school population. The total of 30 non-selected primary school pupils (mean age = 13 ± 0.6 years; mean height = 162.35 ± 9.63 cm; mean body mass = 54.47 ± 13.08 kg) participated in this study without previous involvement in any training process. A total of six tests have been used. Three standardized tests for schools long jump from a place (LJP), bend gap (BG), raising trunk (RT) and three cycling tests cycling acceleration (CA), cycling polygon (CP), 1000 m time trial (C1000). Reliability coefficients for cycling tests CA $\alpha = 0.904$, $\alpha = 0.978$ CP. From a total of six tests, factor analysis resulted in two significant factors. The first factor explains 41.97% of the total variance and is defined as the cycling factor. The correlation coefficients of tests with the first factor
CA = -0.869, CP = -0.849, and LJP = 0.692. The second factor explains 22.437% of the total variance and stands for the flexibility with the correlation between BG and other factors of 0.858. The results indicate that the tests are reliable and valid.

Stankovic et al. (2011) The aim of this research to measure the system containing 12 pathological connate variables on the sample of 180 handball players belonging to the First and Second League as well as the national rank of the Republic of Serbia; then, this research aims to determine their latent structure and conduct the comparative analysis among three groups of athletes (in each sub-sample there are 60 respondents) so the information on the variety of latent structures towards the levels of the quality of athletes in competition ranks will be obtained. The obtained information can be used for the purposes of forming more rational procedures for optimal modelling, diagnosis, programming and controlling the training process as well as for efficient tracking of their development during continual selection and implementation of transforming training process. By applying the factor analysis (direct oblimin) and Kaiser-criterion (1.00), there are two pathological latent variables (integral neuroticism and asthenic syndrome) detected with the handball players.

Zivcic et al. (2011) The main aim of this study was to test the prior knowledge of basic gymnastic elements among the second-year students, as the basic guidelines for the (conduction of) Gymnastics course at the Faculty of Kinesiology in Zagreb. An additional goal was to determine the differences among the three tested generations. The research was conducted on a sample of 153 students from (of) three different studying generations at the (of) Faculty of Kinesiology, the University of Zagreb. The
The technique of eight gymnastic elements that is an integral part of the physical education curriculum for primary school children was estimated: a forward roll, a backward roll, the right cartwheel, the left cartwheel, a handstand (beside) against vertical surface (handstand), pullover, a forward walk on the balance beam (forward walk) and a safety walk on the balance beam (safety walk). We have found significant differences among the groups in some variables. Group(s) 1 and Group 2 differ significantly in three basic elements of gymnastic elements.

Bubanj et al. (2010) The only valid and objective way of assessing muscle strength is measurement with a dynamometer. From the biomechanical aspect, explosive strength is required in athletic sport disciplines like long jumping, high jumping and throwing. Particularly, in technical gestures like take off and landing in vertical jumping. The device “Myotest” (Myotest SA, Sion, Switzerland), enables technology and methodology to assess mentioned gestures. The measurement systems used for the data collection have to possess high sensitivity, reproducibility, transportability, and easiness of use by the coach or athlete. Aims: The main aim of actual research was to determine, by performing Countermovement Jumps (CMJ), whether “Myotest” is a reliable device which allows assessing and discriminate variables Height, Power, Force and Velocity. Methods: The sample of subjects consisted of 10 male students of the Faculty of Sport and Physical Education from Niš, randomly selected, practicing the different sport activities.
Doder et al. (2009) A system of 24 dependent variables, and 1 criterion variable, were analysed on the sample of 82 karate-practising boys aged 10-14. There were 12 morphological variables, 12 basic motor skills variables, and the remaining one was the single criterion variable: the roundhouse kick (mawashi geri), as a specific situational motion structure. The purpose of this study was, on one hand, to determine the specific impact of each predictor variable on a single criterion variable (the roundhouse kick) with the forward stepwise regression model, and, on the other, to create a battery of instruments for the evaluation and monitoring of all the relevant parameters based on this prediction model, with the aim of planning, programming and monitoring of the effects of an operationalised training process. The results of the regression analysis demonstrated that only an integrated system of morphological variables had a significant impact (p=.02) on the roundhouse kick.

Singh and Kumar (2008) The purpose of this study is to prepare the ‘norms profile’ of specific skills of handball players with a view to compare and evaluate further planning of handball game as it’s not being practiced in our country at present. So, an objective was set by the researchers to prepare the norms for each important specific skill of handball game at school, university and senior level of performance. Total of five hundred eighty six (N=586) players of handball were examined during School National championship (N=200), All India Inter University championship (N=195) and Senior National championship (N=191). The tests of specific skills of Handball, standardized by Singh (2007) were used to record the specific skills of handball players. The percentile values were distributed through SPSS. These prepared norms are presented in tabular form. The research evaluation highlights that
there is an increase of specific skills with participation level of handball players. Speaking specifically, the ‘different levels’ include the level of school to university and then from university to senior level. The implicational interpretation will result in the form of an increased competitive ability of the players.

Lozovina et al. (2012) In accordance with the basic principles underlying the theory and mathematical modulation of sports training, which studies the anthropological, methodological and methodical principles of planning, programming and control of the sports training, for didactic reasons, within the scope of this study, we presented the simplest but maybe the most realistic model which will help up explain all the features of some sports activity. Model does not reflect realistic reality, but it’s certainly very close. Linear additive model, presented in this paper, does not take into account the interactive relationship among the factors, even though they really exist and are very much acting. We selected such approach in order to, in the simplest and user friendly way, define the basic features of the anthropological status of athletes and encourage the reader to, in accordance with methodological and methodical principles of planning, programming and control of training, create systematic approach to sports they are involved in.

Invanovic et al. (2011) in this research, author endeavours to determine the extent of speed endurance (criterion) prediction, according to some anthropometric and motor variables (predictor). 174 male and female students (N=174), who are fourth grade of primary school in Vaijevo, have been examined. Morphological characteristics have been examined using 14 standard anthropometric measures and
motor ability with 6 battery tests, while speed endurance has been checked with the 3 minutes running test. Multiple hierarchy analysis has been used for the statistical data processing. On the significance level (p < .05), achieved results show that predictor variables set among boys, with medium multiple correlation of $R = .59$, explains 21% of the criterion variability.

Milenkovic (2011) Speed as an important component of football games has an important place in the training process. The setting of today’s football requires faster and faster players, that would be unpredictable and elusive for the opponent. For this reason, this investigation was concerned with speed in football in an attempt to understand the laws of its development. The study was conducted among 60 participants of football schools, 13 and 14 ± 6 months years of age in order to determine the relations between motor speed and the situational-motor speed in football. Motor speed as a predictor system consisted of eight tests.

Masala (2009) The research results of global trends of sport in Europe and the world specified the crossroad of sport in Europe in 2002. The chosen ways were various, but all of them that accepted similar to business approach, based on management, were successful. Keeping in mind such trends, the focus of this research in directed towards sport organization management models (football, basketball, volleyball and handball organizations of Sarajevo Canton during 2003/04 Season) on the aspect of organization process – sport as a business. Using multiple regression analysis, actually, stepwise method of predictor inclusion in prediction model, the model of business success prediction was objectified and confirmed. According to this
model it is possible to reliably design and develop management models of sustainable development in team sports. Within a frame of this statistical procedure, coefficients of multiple correlations and regression (beta) coefficients were calculated, as well as the levels of their significance and the selection of variables that most contribute to its prediction was conducted.

Schorer et al. (2009) Relative age effects (RAEs) refer to differences among individuals in age-based cohorts typically used in sport. These effects usually favour relatively older members of the cohort and are thought to result from differences in maturation and experience among athletes of different chronological age. Recently, researchers suggested that relatively younger participants may not be as disadvantaged as previously thought. In two studies, we examined whether relatively younger athletes who were able to survive in a system that advantages their relatively older counterparts would develop superior technical skills. In study one, participants age 13-15 years (n=140) drawn from a regional handball talent selection camp in Germany demonstrated a general relative age effect but no differences between relatively older and relatively younger athletes in physical body size (i.e., height/weight) or technical skills. In study two, similar tests were considered with a larger sample (n=478) and revealed similar results. Furthermore, there were no differences between those selected for the national youth team and those not selected. Differences in RAEs do not seem to be due to technical skills or body size variables. Moreover, the homogeneity of these results suggests causes of the relative age effect occur early in development.
Mahmoud Badr et al. (2010) the two researchers aims to build intelligence sports test in handball and to develop normative levels to the test and to identify the relationship between the intelligence of sports and psychological fitness. The two researchers have used the descriptive approach to the relevance of the nature of the objectives of this research, research sample included Handball female players consists of 62 players, data collection tools in the intelligence test of knowledge in handball and the measure of psychological fitness and found the results to improve social intelligence test in related to improve psychological fitness test and to improve the dynamic intelligence test is related to improve psychological fitness and to improve the intelligence test of language is related to improve psychological fitness, the two researchers recommend applying cognitive intelligence test on Handball players with the variables of their levels and ages and the application of the test on the players to know how to handle any type of intelligence is to deliver information easily and get the desired results with minimal effort and time.

Lidor et al. (2009) A Searching for talent and the assessing ability in young prospects from individual and team sports often include measurement, analysis, and evaluation of physical and motor skills. The use of these tests in early stages of talent development has been widely observed in both female and male prospects. The purpose of this paper is to review a series of studies conducted on talented and less-talented athletes / players that were aimed at distinguishing between the two groups and at predicting the athletes’/ players’ future achievements/ success. Thirteen studies examining the use of physical and motor skill tests in young prospects are reviewed.
Based on this review, four main observation and highlighted and a number of benefits and limitations associated with the use of such tests are discussed.

Bjelica et al. (2012) this research has been conducted on 100 young handball players aged from 14 to 15, Montenegro. They were divided into 2 (two) groups according to their regional belonging. The first groups consist of 50 players from the continental region, and the second group – 50 players from the Mediterranean region. They were tested by 21 motor tests for estimating 7 motor abilities, with the aim to compare basic motor abilities between the two groups. Of the motor abilities the following were tested: frequency of movement; flexibility; explosive power of legs; explosive power of arms and shoulders; repetitive power; coordination and equilibrium. After processing the data with the basic descriptive methods, and having established the differences by t-test and discriminative analysis, the conclusion is that the handball players from the continental region have achieved far much better results than those of the Mediterranean players.

Wagner et al. (2008) our aims were to undertake a comprehensive temporal, effective, and practical training study (variable and differential learning) that would offer athletes the opportunity to increase their performance, and to analyze the effects by measuring kinematics and quality parameters. Two participants of differing standards – a player of the first Austrian League and an Olympic and World Champion – but of similar anthropometric characteristics were recruited. One of the participants (Austrian League) was tested on five different occasions (pre-test and four retests) to measure the effects of four different training phases using kinematic analysis. The
results of the study indicate an increase in ball velocity within the differential training phases (first, second, and fourth phases), different proximal-to-distal sequences of the participants, and a change of movement pattern during training measured by the segment velocities and the angle-time courses.

Sebaee et al. (2010) the stage from nine to twelve years old is considered the most important and test period to learn the basic physical movement skills. The program of physical education is based mainly on the concepts of movement that are taught through three forms of movement including plays. While supervising some primary schools, the researcher noticed a decrease in the students’ level of performing the skills requested in their curriculum. He also observed that teachers of physical education choose some warm-up exercises or educational and applied exercises in the main part of teaching their course without relating these exercises to movement classifications inside the single lesson in order to benefit from the experience of the presented movements. The study aims to conduct an educational program for Handball students of the 4 grade (primary) according to aspects and dimensions of movement to recognize the effect of this program on the level of performing the skills of their handball course.

El-Din et al. (2011) this international comparative study between talented young handball players in Germany and Greece investigated specific physical and anthropometric characteristics. This investigation of both elite profiles will allow us to determine the differences in the selection system for elite young handball players between the two countries. One hundred and sixty-two players participated in this
study, 88 Greek young male players and 74 German young male players. For anthropometric tests the players were measured for body height, body mass and body mass index, arm span, hand length and hand spread. Physical fitness measurements were 30 m sprint, standing long jump, sit and reach flexibility, and 20 m shuttle run test. The results of this study demonstrate that Greek players were taller and heavier (p<0.01), had longer arm span and hand length (p<0.01), and performed better in 30 m sprint (p<0.01), standing long jump (p<0.01) and aerobic capacity (p<0.01). German players outperform in hand spread (p<0.03). While some of these differences can be explained by the different strategies and training methods, and also the training environment, the results do have important implications and effects in the physical condition of junior players.

Hemmatinezhad et al. the purpose of this research is survey relationship between emotional intelligence and mood with team-efficiency and performance in elite handball players. The statistical population consist of all Iranian male handball players (n=115) (9 teams) that participated in superior handball matches in Iran (March 2010). Participants were n=95 volunteer athletes (M=246, SD=231) that completed Emotional Intelligence Scale (EIS) that consist of 5 sub-scale (Self-awareness, Self-management, Self-motivation, Empathy, Social skills). Items are rated on a 5-point scale anchored by “not at all” (0) to “extremely” (4) and the Brunel Mood Scale with 6 sub-scales (anger, confusion, depression, fatigue, tension, and vigor) are rated on a 5-point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree). Feltz self-efficiency questionnaire, were use to evaluation of athletes self-efficiency too.
Sporis et al. (2011) the purpose of this study was to assess the reliability and validity of the newly constructed bike among non-selected school population. The total of 30 non-selected primary school pupils (mean age = 13 ± 0.6 years; mean height = 162.35 ± 9.63 cm; mean body mass = 54.47 ± 13.08 kg) participated in this study without previous involvement in any training process. A total of six tests have been used. Three standardized tests for schools long jump from a place (LJP), bend gap (BG), raising trunk (RT) and three cycling tests cycling acceleration (CA), cycling polygon (CP), 1000 m time trial (C1000). Reliability coefficients for cycling tests CA a = 0.904, a = 0.978 CP. From a total of six tests, factor analysis resulted in two significant factors. The first factor explains 41.97% of the total variance and is defined as the cycling factor. The correlation coefficients of tests with the first factor CA = -0.869, CP = -0.849, and LJP = 0.692. The second factor explains 22.437% of the total variance and stands for the flexibility with the correlation BG and other factors of 0.858. The results indicate that the tests are reliable and valid.