



A REVIEW ON THE NEED FOR INDIVIDUALIZED INSTRUCTION MODEL STUDY: FOOTBALL IS AN INDIVIDUAL GAME

(Review study)

Murat Turhan ^a, Metin Gümüşay ^b

^a Niğde Municipality, Sports Unit, Niğde, Türkiye

^b Yozgat Bozok University, Şefaati Vocational School, Şefaati / Yozgat, Türkiye

Received: 08.11.2023

Revised version received: 17.12.2023

Accepted: 27.12.2023

Abstract

In new teaching approaches in football, the coach should not dictate his own thoughts to the football players, but should introduce the football player's idea and learning model and direct the football player to scientific and up-to-date training methods. For a football education design to reach the desired level, the flow of learning and teaching should not be done randomly, but in a scientific, systematic and sustainable way. Among the studies carried out in this direction, individualized teaching model activities have an important place. In our study, we took action with the idea of conducting an in-depth literature research on this subject and contributing to the field on the subject. In this regard, it is useful to mention some explanations regarding the individualized teaching model. In this study, how the individualized teaching model football education will be implemented is included and tried to be presented. Thus, coaches and scientists can obtain new information about this subject and add different perspectives to their knowledge. Therefore, the aim of our study is to conduct detailed field research on the need for an individualized teaching model in football.

Keywords: Football; infrastructure; education; individualization; teaching model.

© 2023 IJSTS & the Authors. Published by *International Journal of Sports, Technology and Science (IJSTS)*. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (CC BY-NC-ND) (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

*Corresponding author: Murat Turhan. ORCID ID.: <https://orcid.org/0000-0001-6070-2829> E-mail: murattrh3@gmail.com

1. Introduction

Football is a popular sport that has its own technical and tactical skills and is enjoyed by all ages. In order for this sport to be played at a high level, the main determinants of sporting efficiency are related to the players' speed, endurance, anaerobic capacity, technical and tactical skills (Koşar and Demirel 2004). Anaerobic system in football player's snapback Plays a key role in backfield tackle and suddenly and at the same time attack control changing direction, shooting the ball suddenly and rising headed goal (Budak et al. 2019).

Football is a sport that requires constantly competing with complex, suddenly changing field conditions. Well-developed technical skills are needed to perform eye-pleasing and aesthetic movements that require high challenge (Singh 1991). The meaning of the word team in the Turkish dictionary is profession, behavior, situation, etc. It appears as a community of people who are compatible with each other in all aspects (TDK, 2023). Being a team is important in football. It is a group of football players consisting of individuals who share the same feelings, can act towards a common goal and have the ability to share. However, in order to be a team, it is also necessary to develop individually. Clubs consisting of football players who have not completed their individual development have a very low probability of becoming a team, but their success is in the same direction. Individual football players need physical and spiritual maturity (TFF, 2009). That's why we need football players with good individual skills to be a good team. Expectations and competitions within the football element are increasing day by day. In the face of this situation, clubs in football increase commercial profitability by both winning matches and gaining a prestigious status, especially through star player transfers. This situation is thought to cause financially strong clubs to always be the strongest and the best, causing unfair competition between them and clubs with low budgets (Liu et al. 2016).

Modern educational thought should be researched within a scope of individuals' physical, mental, emotional and social stages. In this case, what is wanted from education is to reveal the person's potential energies and abilities and enable them to be developed at a good level. In this way, it is very likely to bring physically and psychologically healthy, happy and productive people into society with its physical, intellectual and emotional stages (TFF, 2009).

The aim of football training for children and young people is to create a good infrastructure with different systematic aspects and to enable football players to develop their performance skills related to this structure (Mülazımoğlu, 2007). Infrastructure education has a strategic importance for this formation; The main techniques, game intelligence and motor skills must be taught correctly, with a very important emphasis. While football was mostly played on the streets in previous years, the infrastructure formation of football clubs is gradually turning into football schools. This infrastructure formation within football first selects naturally talented football players and then trains them. Players who receive systematic training and are successful take their place as football players in the football world. Football clubs should attach importance to facility and infrastructure organization so that they do not have trouble finding talented players in the coming years (Meral, 2010).

As in every sports branch, talent is very important in football. In our clubs, very little time is allocated for individual training that will improve certain skills and fill in the gaps. In younger age categories, special programs should be implemented to accelerate personal development through individual studies. Talented players have some distinctive characteristics. Talented players are ambitious, willing and risk-taking players. Their performance constantly improves. They are more creative on the field (Küçük, 2009). In this context, football infrastructures can provide a safe environment for children to achieve the psychological and sociological health they need. In addition,

it is thought that the infrastructure training that children receive in the world of sports will bring positive results in their social development in terms of being conscious, educated and exhibiting good behavior (Mayda, 2019).

In today's football, football players are under constant pressure during the game. He has to use the ball in the most positive way by possessing and carrying the ball in the face of the opponent's pressure, the positions of his teammates and opposing players on the field of play, as well as the positions that develop. That's why individual training is the key to individual development. (İnal, 2004) One of the best examples of this situation is the high number of football players who trained from the infrastructure in Spain and play in professional clubs at the A-Team level. In Spain, there are clubs with high economics in world football such as Barcelona and Real Madrid when it comes to training players from the infrastructure. Individual performances make a difference and determine the result. In order to create a quality football group, all players must receive training that will contribute to themselves and their club. For example; Barcelona has trained world-famous players such as Lionel Messi, Victor Valdes, Andres Iniesta, Xavi, Carles Puyol, Gerard Pique and Pedro from the football academy called "La Masia". In Barcelona's match against Levante in 2012, all 11 players who played on the field were players from the infrastructure (Eurosport, 2012). The individualized teaching model, developed by Keller (1968), is a teaching perspective that prioritizes the student and creates opportunities for the personal development of individuals (Güneş, 2017). BÖM is a teaching model that takes into account individual differences among students and gives each student the opportunity to develop in line with their qualities such as affinity for the activity they want, ability and speed. There are positive relationships between quickness and speed in the literature (Taskın et al. 2014). BÖM is also called the "Keller Plan", pioneered by Fred Keller. Individualized teaching is to meet the educational needs of individual students rather than a team or team" (Erdoğan and Özdemir, 2010).

The development of training science in football and the rapid developments in education and training models provide opportunities to bring the working conditions of football players to a good level and provide the spectators sitting in the stands with better viewing pleasure and satiating enthusiasm, and activities are carried out to help the development of football and reach wider public communities (Günay , Yüce, 2001). Therefore, in the light of all this, in order to keep up with today's football, general motor skills, tactical knowledge and basic techniques will not be sufficient, however, the use of them in coordination with the individualized training model and the starting point for their training at an early age are, and the football world we live in is now very dynamic. It is thought that new talents that can respond to football should be trained.

2. Method

Collection of Data

The research was conducted using the document review and scanning model. Document review and research involves the analysis of written materials containing information about the targeted event or phenomenon. In the research, a literature review was conducted regarding football, teaching method and individualization needs.

Data Collection Tool

This study is a compilation research. In the study, documents found in the literature were analyzed as a data collection method. While scanning the literature; Pages from search engines such as PubMed, Dergipark, ISI, SportDiscus, Scopus, Google Scholar were used. While scanning, the words 'individualized teaching model, football, individual games, teaching models' were searched as keywords. An attempt was made to create up-to-date information by compiling and bringing together the sources obtained.

Statistical Analysis of Data

Qualitative data analysis is where researchers organize their data, divide it into units of analysis, synthesize it, come up with formats, discover important variables, and decide what information to include somewhere in the report. In other words, the researcher conducting qualitative analysis starts from the data he collects from the field. It tries to discover and reveal what is hidden in this data. Within the scope of this general information, works, articles and articles written about football, energy systems and training programs are scanned, examined and interpreted within the scope of the reviews.

3. Results

3.1. Individualized Instruction Model

Providing individual education to all students in the field of education is the end point of education, but it fails to achieve the desired result in education. In order to reveal the abilities of students with crowded classrooms, limited time, inadequate equipment, buildings and many specialties, individual learners need various models and methods (Metzler, 2005). There are various models applied in the field of sports and these models are more successful than others, but this model is intended to provide individualized education (Metzler, 2005). This model is called the individualized teaching model. Also called the Keller Plan.

3.2. Theory and Rationale of Individualized Instruction Model

The first ideas that come to mind for the individualized type of teaching were made in the field of applied behavior analysis. This section, which deals with psychology, shows that the individual's learning is a result of the communication between people and their environment (Metzler, 2005). The model was first designed to teach an introductory psychology course to a large group of students studying at the Fred Keller University of Brazil in the early 1960s. B.F. Following Skinner's explanation of the Behavior Assessment principle, Keller and other researchers defended the idea that classical teaching practices did not meet today's conditions. Keller argued that in order to advance education, it was necessary to renew teaching methods. In addition to this situation, Keller expressed the necessity of applying a methodological teaching model based on students' previous success in order to make the desired development rapid and permanent (Allen, 2015). The idea of the "Keller Plan" was born by deciding that the educator should concentrate more on the people receiving training with the feedback principle and that the individual is responsible for learning the lessons taught in detail (Prewitt, 2015). Since the day the idea emerged, BPM training has been given at universities in the United States and has been accepted by many instructors (Protopapas, 1974).

Scientific studies show that the Keller Plan has been examined in 11 different disciplines (psychology, physics, engineering, mathematics, statistics, biology, chemistry, English, sociology, communication and office management). Furthermore, BÖM constitutes sample groups in high school and graduate courses (Protopapas, 1974). In addition, although BOM is a new research topic in universities, it has become a very popular research topic in a short time. In countries where research is at the forefront, there are many studies related to BLM to measure the usefulness of the learning and teaching process (Kalaivani, 2014). However, there has not been sufficient research in Turkey to prove the effect of the individualized teaching model on learning. In studies related to BÖM, researchers have addressed the following teaching issues:

- Skill
- Memory
- Transfer in education
- Efficient learning methods and Attitudes (Kalaivani, 2014). Seidentop (1974) was the one who proposed the application of BLM to teach cognitive content in sports lessons to students in higher education (Hannon et al. 2008). According to Prewitt, Hannon, Colquitt,

Brusseau, Newton and Shaw (2015), BÖM is a very sufficient teaching method to increase the content knowledge and ability quality of sports lessons.

3.3. Purposes of Individualized Instruction

The main issue of BÖM is that individuals receiving education cannot reach the desired level and develop at a low level. BÖM allows students to develop at their own level according to their own interests and attitudes in order to learn the course subject. It allows individuals with quality skills and experience to develop quickly in the desired education, while students with poor quality skills, inexperience and less skills may take more time to complete each activity. Because in this model, there is no development at the individual or team level (Metzler, 2005). Kalaivani (2014) states that BÖM improves the effectiveness and efficiency of the study in order to achieve the teaching objectives in a sequence made according to a certain order and quality stated below:

- To create the necessary conditions for the individual to establish socially effective communication as a result of the education he receives throughout his life,
- Creating the necessary conditions for the individual's motivation for learning,
- To benefit from the base of education for a realistic examination of the program, its content and teaching principles and to increase the opportunity for instructors to redo,
- To benefit from various methods and models for all objectives of teaching, in order to reduce the student's anxiety about the lesson,
- To evaluate with a scale determined to measure the level of knowledge and ability of individuals who have received a reasonable level of education at different times (Kalaivani, 2014).

3.4. General Features of the Individualized Instruction Model

The individualized teaching model places great emphasis on written texts. The instructor prepares and applies study materials consisting of preparatory studies to the individuals receiving training. It determines the study materials and where and how information will be given to individuals. When individuals receiving training are active in the practices in the study materials, they apply observation forms to measure what they have learned. These practices are carried out under the supervision of instructors. If there are any mistakes or inadequacies of the individuals receiving training, it shows that a more coordinated work is needed. Individuals receiving education resort to testing themselves. The observation forms applied are not in the nature of an exam. Individuals who receive training are

not sanctioned if they make mistakes or are inadequate (Kalaiivani, 2014). The main features of Keller (1968) Individualized Instruction Model are stated below;

- To enable students' individual development.
- To create the necessary conditions to ensure that the student specializes in the field in which he/she has received education.
- Ensuring that the instructor takes responsibility for motivation.
- To ensure that written reporting is given priority in the communication between the educator and the individual receiving training.
- Ensuring that assistant educators are involved in previous tests, immediate grading, lecturing, and the opportunity to clearly develop the individual-environmental aspect of the education path (Colquitt, Pritchard, & McCollum, 2011).

4. Discussion

The concept of infrastructure in football clubs is known as competitive teams consisting of children and young people separated according to certain age categories (TFF, 2009). In the Football World, players trained from the infrastructure can provide great economic returns to their clubs. Over time, players trained in the infrastructure reach the point where they can play in the A-Teams of the clubs. It is thought that this situation may prevent clubs from making transfers by paying significant fees. On the other hand, clubs can make economic profits by marketing the players they acquire from the infrastructure to the world football market (Dinçer et al. 2016). For example; They have shown the necessary sensitivity to major infrastructure organizations and infrastructure training in Europe such as Barcelona FC and Ajax. As a result, both clubs earned significant financial income thanks to the football players they trained from the infrastructure (Yaşar and Sunay, 2019). Football clubs develop important strategies to train players from the infrastructure and to turn the players they train into a commercially valuable element in world football. Investments in the football infrastructure organization are thought to be investments that will definitely yield material and moral returns. In addition, players who grow up from the infrastructure and gain an important place in world football constitute the national value of the country. Because players trained in the international arena from the infrastructure play for the national team and fight for their country. In recent years, Europe has focused excessively on the concept of infrastructure in football. European football clubs have created a large football industry by marketing talented players to the world (Darby et al. 2007).

The most important factor in the football world is football players. The skills of football players in playing the game make the leagues of clubs and countries more watchable and economical. The infrastructures of the clubs emerged as football schools, clubs that provide education and raise football players, and educational institutions that supply and produce football players for the football economy (Güngör 2014). Infrastructure is the place where the manpower that will play a role in the future of a football club is trained. Clubs that train football players using their own resources meet the need for football players, which is the basic product of football, and have the opportunity to transfer economically available football players at astronomical prices. Especially the leading clubs of Europe's leading league have created their own infrastructure by investing heavily in their infrastructure and facilities.

The main element of these infrastructures; In addition to the tactical and technical training of football, it aims to prepare institutionally talented athletes for professional life with psychology,

language, athlete health, diction, nutrition, doping and communication training (TFF, 2009). The person responsible for the tactical and technical development of the players in the youth team is the coach. The impact of youth coaches on the player training process is absolutely undeniable. It is important that youth coaches are knowledgeable and equipped to train players. It is thought that the coaches' connection with the club, their communication with the club, the management vision of the club and the working environment will affect the coach, and therefore the process of training players in the infrastructure (Yaşar, 2015). The process of training players in the infrastructure includes all tactical, technical, physical and mental training, starting at a young age until they have the ability to play professionally at the A-Team level. Different training methods during the training process can have different effects on children. For this reason, it is thought that factors such as the intensity, amount and combinations of training that will maximize the development of each age group and even each player in the teams will affect the infrastructure efficiency in football (Soylu, 2016).

Yenibertiz and Mirzeoğlu's (2019) focused on universities' learning of volleyball skills and their attitudes towards volleyball lessons with the Individualized Instruction model. Under the part-time model, the pre-test/post-test was conducted using the control group model. 30 students (15 experimental group and 15 control group) were formed for the research to be enrolled in the blind and elective course of a university's sports sciences faculty, sports management department and recreation. Participants formed experimental and control groups and participated in a 6-week study. According to the pre-test-post-test application in the attitude towards volleyball and psychomotor domain (pass types), the post-test result showed a different difference in the group using the individualized teaching model. There was no significant difference between the attitudes towards volleyball and the psychomotor domain gainable scores versus the experimental and control intervals.

The purpose of the research conducted by Sönmez and Mirzeoğlu (2021) is to examine the effect of the individualized teaching model on university students' learning of freestyle swimming skills and track exit technique. The sample consisted of 24 students (12 experimental, 12 control) between the ages of 18-20, studying at the Preparatory Class of the National Defense University, Naval Academy, and taking swimming lessons. A significant difference was found when the pretest and posttest scores of the swimming skills (freestyle swimming, track start and total skills) of the students in the experimental and control groups were compared, and when the students' achievement scores for swimming skills (freestyle swimming, track start and total skills) were compared, There was no statistically significant difference. The aim of Becan's (2023) research is to use the individualized teaching model to improve some physical parameters (balance; (Flamingo Balance Test (FDT), Y-balance test (right), Y-balance test (left), explosiveness; Standing Double) in 6th grade students. It is to examine whether the Leg Forward Jump (LBCBS) affects endurance; 30-second shuttle test, flexibility; sit-and-reach test).: While there is no difference in the pre-test scores between the experimental and control groups, the post-test experimental group takes the 30-second shuttle test and Y-balance test (right) scores. As a result of the pre-test-post-test comparison, a difference was found in favor of the post-tests in all test scores in the experimental group. A significant difference was found in the comparison of BMI pre-test-post-test scores of the experimental and control groups. As a result of the findings, the applications made with both models It can be said that it is effective on physical parameters. It was found that the post-tests of the group to which the Individualized teaching model was applied were in favor, especially in the 30-second shuttle test and Y-balance test (right) scores.

Pritchard et al. (2012) aimed to investigate the effectiveness of weight training on the course by using an individualized teaching model at the university. 22 students participated in the study and lasted 15 weeks. The study has an experimental design with a control group as pre-test and post-test. "FITNESSGRAM" physical fitness test and a knowledge test consisting of 50 questions were applied as measurement tools. According to the findings, while there was no significant difference between the two groups (Progressive Aerobic Cardiovascular Endurance Run (Pacer), Back Saver, Trunk Lift test), it was found to be significant in the curl-up, pushup, body fat knowledge test in the group where the individualized teaching model was applied. . Prewit et al. (2015) is a research on physical activity and health-related fitness levels with an individualized teaching model. 24 students participated in a 6-week study at a private high school. Audio recording and video were used along with interviews to determine whether the individualized instruction model's standards for Physical activity and health fitness levels were met. According to the results of the study, he stated that he was successful in using the physical fitness unit using the BLM, as he met 3 of the 4 components (determining the individual speed development himself, teachers taking on and presenting the motivation task, students developing their own abilities).

5. Conclusions

There is a great need for research on the impact of learning and teaching methods during studies to advance education and training activities. Achieving the goals of an education program depends on learning and teaching methods based on scientific research results, not haphazardly or based on hearsay information. In the way of teaching, coaches should not restrict athletes with their own thoughts, the coach should enter the athlete's thinking and learning system and show the path to follow (Soylu, 2004). Among the studies carried out in this direction, learning activities based on individualized training have a strategic place. In this regard, it is deemed useful to include some information about individualized training-based learning. Just like the models used in general education, there are field-specific teaching models used in the sports literature. Three models (only sports education model, tactical game model, individual and social responsibility model) are models specific to the field of sports (Yenibertiz, 2019). Developed by Keller (1968), BÖM (Individualized teaching model) is a student-centered approach that helps individuals develop their individual pace (Güneş B. M., 2017). It is a model based on individualized education and professionalization and success. Apart from specialization-based education, students must fulfill their performance duties while continuing their learning task. A success-based education focuses on students' learning involving cognitive and psychomotor areas (Mirzeoğlu, 2018). Based on this, the individualized teaching model can be used in the time period outside the main training, where the athlete wishes to learn alone or train alone, without the participation or help of anyone else (Erciyes, 2010). The individualized teaching model is a form of teaching that offers the opportunity for development in individuals such as individual speed and differences, areas of interest, capacity and speed.

The individualized teaching model is as different as possible from other teaching methods. The first sign of this difference is that the individualized teaching model differs from the classical training image. The differences starting from the image are followed by applications, activities and environments. There are also a few common misconceptions about the Individualized training teaching model learning method. The first of these; Football is seen only as a team game and training is perceived as a teaching method consisting only of group training, while others stand out as mixing position or position group studies in traditional training studies with individualized training learning method. The individualized training teaching model learning method has no relationship with

traditional group studies. (Erdoğan and Özdemir, 2010). Considering only the feature of football players working in groups, it is considered to be equivalent to the limited position group work applied in training. It can be said that group work implemented in teams is not an individualized teaching model of learning, primarily for reasons related to the structuring of group work. In this context, due to rapid progress and changes in the world, it has become clear that new needs must be met and football and training must be at a higher level towards the individual. It is clearly seen that classical teaching methods are not very responsive to daily life. (Metzer, 2005).

The reason for the inadequacy of the education given in football schools today is that the infrastructure does not base the education of football players on learning by doing and experiencing. Every football player has different abilities, behavior and intelligence. In order to counter these differences, it also brings individualization in education. One of the methods in which individualization is most prevalent in the teaching environment is the individualized teaching model (ICM). BÖM is a method that has the power to meet the needs of football players and the national education standards of the elements that a football player should have (Prewitt, 2014). In this context, it is as necessary to know the steps of transferring the individualized teaching model learning path to the field application field. In this research, research conducted and applied on the individualized learning method in football and other sports branches are included. In the application of the individualized learning method; All stages have been tried to be explained, from determining the subject to the formation of the groups, arranging the fields, determining the roles, conducting and evaluating the training. We believe that if the application methods of the individualized learning method, which is one of today's active learning strategies, are studied, almost all of the football outcomes desired to be achieved in the education path will be achieved by the football players.

Acknowledgements

I would like to thank the scientists whose sources I used in the preparation of the study. I would also like to thank my teachers and family for their support.

Declaration of Conflicting Interests and Ethics

“In this article, journal writing rules, publishing principles, research and publication ethics rules and journal ethics rules were followed. Liability for any violations that may arise regarding the article belongs to the authors. "The authors declare no conflict of interest."

References

- Allen, C. (2015). *Personalized System of Instruction and Student Performance in High School Weight Training Courses*. (Doctoral Dissertations) , 1-143.
- Becan. S. (2023). “Bireyselleştirilmiş öğretim modelinin 6.sınıf öğrencilerinde bazı fiziksel parametrelere etkisi” (Yayınlanmış Yüksek Lisans Tezi). Manisa Celal Bayar Üniversitesi SBE.
- Budak, C., Sanioğlu, A., Taşkın, M., & Budak, M. Relationship between maxvo2and anaerobic endurance.
- Colquitt, G., Pritchard, T. ve McCollum, S. (2011). The Personalized System of Instruction in Fitness education. *Journal of Physical Education, Recreation and Dance*, 82(6), 46-54.
- Çetin HN, (1997).*Teknik analizi ve teknik antrenmanı*. II. Spor Bilimi. Ankara
- Darby, P., G. Akindes ve M. Kirwin (2007). “Football academies and the migration of african football labor to europe”, *Journal of Sport & Social Issues*, Volume 31, Number 2, 143-161.
- Dinçer, Ö., E. Arı1 vd. (2016). “Profesyonel futbol takımlarının alt yapılarında oynayan genç futbolcuların profesyonel futbol ligleri için performans açısından yeterlilik düzeylerinin incelenmesi”, *Ondokuz Mayıs Üniversitesi Spor ve Performans Araştırmaları Dergisi* Cilt 8, Sayı 1.
- Erciyes, G. (2010). *Öğretim yöntem ve teknikleri, öğretim ilke ve yöntemleri* (s. 253-374). Ankara: Pegem.
- Eurosport (2012). “İspanya ligi - Barcelona’da sahada 11 altyapı oyuncusu”, https://www.eurosport.com.tr/futbol/ispanya-Ligi-1/2012-2013/ispanya-LigiBarcelona-da-sahada-11-altyapi-oyuncusu_sto3505712/story.shtml (Erişim Tarihi: 20 Aralık 2023).
- Erdoğan ve Özdemir, E. T. (2010). *Temel öğrenme ve öğretme. öğretim ilke ve yöntemleri*. Ankara: Pegem Akademi
- Güneş, B. M. (2017). *Bireyselleştirilmiş öğretim modeli. model temelli beden eğitimi öğretimi*. Ankara: Spor Yayınevi ve Kitabevi.
- Güngör, A. (2014). “Avrupa futbol pazarının ekonomik boyutu ve Avrupa futbol kulüplerinde finansal performans analizi”, *İstanbul Gelişim Üniversitesi Sosyal Bilimler Dergisi*, Cilt 1, Sayı 2
- Gündüz, N.(1993). *Antrenman bilgisi*, Kanyılmaz Matbaası, İzmir,1993.
- Günay, M., Yüce, A. (2001). *Futbol antrenmanının bilimsel temelleri*, Gazi Kitapevi, Ankara, 2001.
- Hannon, J. C., Holt, B. J. ve Hatten, J. D. (2008). Personalized systems of instruction model: teaching health-related fitness content in high school physical education. *Journal of Curriculumand Instruction*, 2(2), 20-33.
- İnal, A.N. (2004). *Futbolda eğitim ve öğretim*. 2. Basım. Nobel Yayın Dağıtım. Ankara (2004)
- Koşar, N,S., Demirel, H,A. (2004). Physiological characteristics of child athletes. *orthopaedica et traumatologica turcica*, 38 (1), 1-15.
- Küçük, V. (2009). *Futbolda yetenek seçimi*. İstanbul: TFF Fgm Futbol Eğitim Yayınları.
- Kalaivani, A. (2014). Personalized system of instruction (psimethod) for innovative teaching methods and techniques. *International Journal of Pharmaceutical Science Invention*, 28-30.

- Kurak, K. (2020). “Yaz spor okullarında futbol çalışmalarına katılan grupların iki aylık gelişmelerinin fiziksel yönden değerlendirilmesi”, *Atatürk Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi*, Cilt 22, Sayı 3.
- Liu, X.F., Y-L. Liu (2016). “The anatomy of the global football player transfer network: club functionalities versus network properties”, *Plos One* 11(6): <https://doi.org/10.1371/journal.pone.0156504>.
- Mayda, F. A. (2019). “Çocuklara Yönelik şiddet ve bağlanma ilişkisinin incelenmesi: futbol altyapı örneği”, (Yayınlanmamış Yüksek Lisans Tezi). Hacettepe Üniversitesi SBE.
- Meral, S. (2010). “Ailelerin çocuklarını futbol okullarına gönderme sebeplerinin araştırılması”, (Yayınlanmamış Yüksek Lisans Tezi). Marmara Üniversitesi SBE
- Metzler, M.W. (2005). *Instructional models for physical education. holcomb hath away pubs.*217-255.
- Mine, T., Cengiz, T., Turgut, K., & Halil, T. (2014). Relationships between quickness and speed performance in amputee footballers. *Science, Movement and Health*, 14(Suppl 2), 580-584.
- Mirzeoğlu, D. (2018). *Model temelli beden eğitimi öğretimi*. Ankara: Spor Yayınevi.
- Mülazımoğlu, O., (2000). *Trabzon’da okullararası futbol müsabakalarında dereceye giren ilk, orta ve liseli sporcuların futbol beceri düzeyleri ve psikomotor özelliklerinin araştırılması*. Yüksek Lisans Tezi, Trabzon Üniversitesi Sosyal Bilimler Enstitüsü, s.80. Trabzon,
- Prewitt, S. L., Hannon, J. C., Colquitt, G., Brusseau, T. A., Newton, M. ve Shaw, J. (2015). Effect of personalized system of instruction on health-related fitness knowledge and class time physical activity. *The Physical Educator*, 72(5).
- Pritchard, T., Penix, K., Colquitt, G., & Mcollum, S. (2012). Effects of a weight training personalized system of instruction course on fitness levels and knowledge. *Physical Educator*, 69, 342-359.
- Prewitt, S., Hannon, J. C., Colquitt, G., Brusseau, T. A., Newton, M., & Shaw, J. (2015). Implementation of a personal fitness unit using the personalized system of instruction Model. *The Physical Educator*, 72, 382-402.
- Prewitt, S. L. (2014). The personalized system of instruction: fidelity and effect on health-related fitness knowledge and in-class physical activity. *The University Of Utah*.
- Protopapas, P. N. (1974). The keller plan implementation of the personalized system of instruction in a freshman biology course. *The Science Teacher*, 44-46.
- Seidentop, D. (1974). How to use personalized system of instruction in college teaching. national college physical education association for men proceedings, *Kansas City*, 116-125.
- Singh H, 1991. *Science of sports training*. D.V.S. Publisher, New Delhi, p.159-65.
- Soylu, Y. (2016). *16-21 yaş arası elit düzeydeki takımların genç sporcularının duygusal zekâ düzeylerinin incelenmesi*”, (Yayınlanmamış Yüksek Lisans Tezi). Kırıkkale Üniversitesi SBE.
- Soylu, H. (2004). *Fen öğretiminde yeni yaklaşımlar*, Eğitim ve Psikoloji Yayınları Dizisi, Nobel Yayınları, Nisan.

Sönmez, H. O. (2021). *Bireyselleştirilmiş öğretim modelinin serbest stil yüzme becerilerinde öğrenimine etkisi* . (Yayınlanmamış Yüksek Lisans Tezi). Sakarya Uygulamalı Bilimler Üniversitesi.

TDK, (2023). *Türk dil kurumu*. <https://sozluk.gov.tr/>

TFF,(2009). Türkiye Futbol Federasyonu. [https://www.tff.org/Resources/TFF/Documents/2009DK/FGM/yayinlar/aylik-kitapcik/cocuk-ve-genclerde-futbol\(Eylul\).pdf](https://www.tff.org/Resources/TFF/Documents/2009DK/FGM/yayinlar/aylik-kitapcik/cocuk-ve-genclerde-futbol(Eylul).pdf).

TFF,(2009). Türkiye Futbol Federasyonu. [https://www.tff.org/Resources/TFF/Documents/2009DK/FGM/yayinlar/aylik-kitapcik/FutboldaYetenekSecimi\(Mayis\).pdf](https://www.tff.org/Resources/TFF/Documents/2009DK/FGM/yayinlar/aylik-kitapcik/FutboldaYetenekSecimi(Mayis).pdf).

Yaşar, O. M. ve H. Sunay (2019). “*A new football philosophy in turkish football altınordu football academy*”,*new horizons in sport sciences*, Sayfa 87, Ankara: Gece Akademi Yayınları.

Yaşar, O. M. (2015). *İç anadolu bölgesinde görev yapan futbol altyapı antrenörlerinin iş doyum düzeylerinin ve örgütsel bağlılıklarının incelenmesi*, (Yayınlanmamış Yüksek Lisans Tezi). Ankara Üniversitesi SBE.

Yenibertiz, S., & Mirzeoğlu, A. (2019). *Bireyselleştirilmiş öğretim modelinin voleybol becerilerinin öğrenilmesi ve tutuma etkisi*. (Yayınlanmamış Yüksek Lisans Tezi). Sakarya Uygulamalı Bilimler Üniversitesi

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the Journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (CC BY-NC-ND) (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).