

DETERMINATION OF THE THOUGHTS OF NATIONAL TEAM ATHLETES ON THE CONCEPT OF DOPING: A STUDY OF METAPHOR ANALYSIS

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ABSTRACT

The aim of this research is to determine the thoughts of national team athletes on the concept of doping through metaphors. The sample of study consists of 29 national team athletes from the branches of athletics and weight lifting where the most doping cases occur. In research, for the purpose of collecting data, "metaphor form" was prepared to determine the thoughts of national team athletes on the concept of doping. The national team athletes were asked to fill the sentence "doping is like..., because...". In research, phenomenological method from the qualitative research approaches was used. For the analysis of data, content analysis method was used. For the reliability of the research data analysis, reliability coefficient among participants was calculated and this value was found to be 96%. With the evaluation of data, it was appeared that national team athletes produced 28 metaphors at total. These metaphors were gathered under 5 different categories. As a result, it was determined that national team athletes produced metaphors related to doping mostly at the category of "in terms of being deceptive", and this is followed by the categories of "in terms of increasing performance", "in terms of causing unfair acquisition", in terms of being unhealthy" and "in terms of causing failure". Dead metaphors such as illegal electricity, gamble, drugs and provision with no effort were generally used for doping.

As a result, it was determined that national team athletes expressed the concept of doping through metaphors with quite rich and different perspectives. Accordingly, metaphors determined in this study can help draw the attention those concerned by using in anti-doping.

Key Words: doping, metaphor, national team athlete, qualitative research method.

MİLLİ SPORCULARIN DOPİNG KAVRAMINA İLİŞKİN DÜŞÜNCELERİNİN BELİRLENMESİ: BİR METAFOR ANALİZİ ÇALIŞMASI

ÖZET

Bu araştırmanın amacı, milli sporcuların doping kavramına ilişkin sahip oldukları düşünceleri metaforlar yardımıyla belirlemektir. Araştırmanın çalışma grubunu ülkemizde en çok doping vakalarının görüldüğü, atletizm ve halter branşında toplam 29 milli sporcu oluşturmuştur. Araştırmada veri toplamak amacıyla milli sporcuların doping kavramına ilişkin sahip oldukları düşünceleri belirlemek için "metafor formu" hazırlanmıştır. Metafor formunda milli sporculardan "Doping... gibidir; Çünkü..." cümlesini tamamlamaları istenmiştir. Araştırmada, nitel araştırma yaklaşımlarından olgubilim deseni kullanılmıştır. Verilerin analizinde ise içerik analizi tekniği kullanılmıştır. Araştırma verilerinin analizinin güvenilirliği için katılımcılar arası güvenilirlik kat sayısı hesaplanmış ve bu değer %96 olarak bulunmuştur. Verilerin değerlendirilmesiyle, milli sporcuların toplam 28 metafor ürettikleri görülmüştür. Üretilen bu metaforlar 5 farklı kategoride toplanmıştır. Milli sporcuların dopinge ilişkin en çok "aldatıcı olması açısından" kategorisinde metaforlar geliştirdikleri belirlenirken, bunu "performans artırıcı olması açısından", "haksız kazançta sebep olması açısından", "sağlığa zararları açısından" ve "başarısızlığa uğratması açısından" kategorileri izlemiştir. Doping için genellikle kaçak elektrik, kumar, uyuşturucu, emeksiz karşılık gibi cansız metaforlar kullanılmıştır.

Sonuç olarak milli sporcuların doping kavramını metaforlar yoluyla oldukça zengin ve farklı bakış açılarıyla ifade ettikleri belirlenmiştir. Dolayısıyla bu çalışmada tespit edilen metaforlar dopingle mücadelede kullanılarak ilgililerin dikkatini çekmeye yardımcı olabilir.

Anahtar Kelimeler: doping, metafor, milli sporcu, nitel araştırma yöntemi

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INTRODUCTION

Among the basic dynamics of sport, one of the tools that help individual express in a daily life, there are the feelings of achieving, surpassing and winning. Moreover, the fact that all the ways to win, surpass, defeat the rival and staying as a champion constantly is considered as ordinary brings the serious problem of using doping with it. Doping constitutes one of the basic problems of sport principles. In current sport activities, when the fact that athletes use doping reveals with tests, athletes generally rejects innocently these events. And trainers claim that doping signs reveal as a result of medicine used or taken due to illness (Şahin, 1998; 54). Whereas Genç (1998) stated that among the reasons for doping use of athletes, the fact that the number of competition and prizes has increased (Genç, 1998; 99) is the primary factor; in TGNA parliamentary research commission report, published in 2014 and founded to determine the measure needed to be taken by researching the issue of doping occurring in Turkish sport in recent years, reasons that lead athletes to doping are sorted below;

- Personality characteristics,
- Inner motivation to win and display better performance,
- Request for being a competitive,
- Protecting and increasing the physical condition,
- Recovery of physical appearance,
- Decreasing pain,
- Protecting subjective perception against others' expectation and dealing with social/psychological pressures,
- Effects of reference group,
- Dealing with stress occurred due to threat evaluation,
- Realizing social and psychological purposes including economic benefits,

- Allowance of personal norms and moral characteristics to these kind of behaviors,
- The fact that rivals have an unfair advantage thanks to chemical and medical healers (TGNA Parliamentary Research Commission Report, 2014; 133)

Data obtained from above report base on the data obtained from athletes themselves and with this research it was preferred that athletes' thoughts described deeply with metaphor method.

Sackman (1989) expressed metaphors as "language form that it was applied on a different content to state certain similarity of a concept or term" (cited from Yıldırım and Şimşek, 2014; 237), Segrave (2000) expressed as "one of the most distinct and notable features of language", Lakoff and Johnson (2005) expressed as "fundamentally grasping and experiencing a thing according to another thing". Briefly, metaphor reveals by specifying that X fact is like Y fact clearly or vaguely. This is the situation that strengthens metaphor as a mental model; namely, it builds a relation between two different facts and enables to reflect a mental schema on another mental schema (Şaban, 2009).

Metaphor is generally considered as a figure of speech to ornament a statement, but it has much more importance. Metaphor means a way of thinking and vision that provides us to understand in general the world. Researches conducted in various fields show that metaphor creates a formative effect on stating us on daily basis as much as on our way of thinking, language and science (Morgan, 1998;14).

As a result of examination of literature on metaphor, researches conducted about sport were encountered. In existing studies (Segrave, 2000; Cude, 2007; Bergh, 2011; Özsoy, 2011; Şirin at al., 2012; Kesic ve Muhiç, 2013; Koç at al., 2015), metaphors mostly for the concepts

of sport and football were researched. Among these studies, study that measures the thought for the concept of doping wasn't encountered. Through doping, the aim of sport moved to a different platform from a wide range that changes up to healthy life and virtue of Olympia soul and turned into a tool that serves for the profits of some persons (Kurdak, 1996; 1). Since in our country there are few studies on metaphor in sport field and there are no metaphor study related to doping, it is thought that this study will show the thoughts of elite athletes on the concept of doping and will indicate subsequently different

MATERIALS AND METHODS

Research Model:

In this study prepared according to qualitative research model, phenomenology design was used. Phenomenology design focuses on phenomenon that we are aware of but we don't have the understanding deeply and in detail. Phenomenon can be seen in our world in various forms such as events, experiences, perceptions, tendencies, concepts and cases (Creswell, 2013; Yıldırım and Şimşek, 2014). In this study, thoughts of national team athletes on the concept of doping were determined through metaphors.

Study Group:

29 national team athletes from the branches of athletics and weight lifting were participated in this study conducted in 2016. Because of the reasons such as detailed data about subject is needed to be collected, researcher should work in the field of sport and the main purpose of national team athletes is to participate in Olympia that is the biggest sport organization, in this research study group was selected according to purposeful sampling method. For the selection of study group, criterion sampling from purposeful sampling methods

perspectives about necessities to be done in anti-doping in sport.

With reference this information, the aim of research is to determine the thoughts of national team athletes on the concept of doping through metaphors. Pursuant to this general aim, answers for following questions were searched:

1. Through which metaphors do the national team athletes state their thoughts on the concept of doping?
2. Under which categories were these metaphors gathered in terms of common traits?

(Büyüköztürk at al. 2009) which enables to research deeply depending on the aim of study by selecting rich situations in terms of information. Criterion sampling is the study of situations that meet a range of criteria determined in advance. Criterion or criteria can be created by researcher (Yıldırım and Şimşek, 2014). In this context, for the selection of national team athletes, correspondence with Turkish Anti-Doping Commission was exchanged, and as a result criteria such as in our country being athletes in the branches of athletics and weight lifting where the most doping cases occur and these athletes' request for participating voluntarily in study were paid attention. There are 21 (72.4%) male and 8 (27.5%) female participants in research. During the study, participants were informed about form that they state their thoughts on doping.

Data Collection Tool:

Research data were gathered with metaphor form prepared by researcher and consisting of semi structured questions. Semi structured questions are the primary data collection tool in metaphor researches (Döş, 2010; Inbar, 1996; Saban, 2009). In this context, all participants were asked to write a metaphor expressing doping and to

explain this. In form, the entire athletes were asked to fill the sentence “*Doping is like..., because...*” to determine the national team athletes’ mental images related to concept of *doping* and so it was figured out that participants stated one metaphor and they expressed these metaphors.

Data Analysis:

To start the data analysis, firstly answer papers of national team athletes were enumerated from 1 to 29. In this study, content analysis method from data evaluation methods used in researches within social fields was used. Content analysis is a process of describing, coding and categorizing of data (Patton, 2014). Furthermore, content analysis brings the similar data together within the scope of certain concepts and themes, and it is needed to interpret by organizing these the way that readers can understand (Yıldırım and Şimşek).

In research, the process of the evaluation and interpretation, with content analysis, of metaphors national team athletes stated were done in 9 stages. These are (1) examining papers, (2) eliminating the inappropriate papers, (3) compiling the papers again, (4) enumerating the papers, (5) examining the metaphors, (6) developing the categories, (7) the stage of proving the reliability and validity, (8) calculating the frequencies of metaphors obtained, and (9) the stage of interpreting the metaphors (Ekici, 2016; Ekici, Gökmen ve Kurt, 2014; Saban, 2008).

In the stage of examining the papers, the statements of participants and whether there is any empty part or not were generally examined.

In the stage of eliminating the inappropriate papers, metaphors and expressions of metaphors in all forms were examined one by one. At the end, there was no deficient form and it was determined that national team athletes filled carefully the forms at will. 100] (Miles and Huberman, 1994). In

Accordingly, none of the forms was eliminated.

In the stage of compiling the papers again, since there was no form that doesn’t match the criteria, metaphors in forms were listed and tabled in alphabetical order.

In the stage of enumerating the papers, metaphors were arranged in an alphabetical order and between K1 and K29 numbering were made.

In the stage of developing the categories, metaphors stated for the concept of doping were examined in terms of common traits. In this stage, since metaphors stated by national team athletes weren’t emphasized in a way that they can be involved in several categories at the same time, none problem was appeared for the distribution of categories.

In the stage of proving the reliability and validity; about the validity of research results, it was paid attention to “reporting broadly the data collected and expressing how the research reached the results” (Yıldırım and Şimşek, 2014). For this purpose, the analysis process of data obtained from participants and how the codes that are revealed were associated with categories were directly presented to readers with participant statements. For the whole categories obtained from research, samples from the opinions considered as they represent the category best were selected and included in findings section (Yıldırım and Şimşek, 2014). For the reliability of research, data were analyzed by two domain expert to determine whether conceptual categories reached as a result of data analysis represent the themes obtained; codes obtained and categories that codes represent were compared (Yılmaz and Güven, 2015). In this way, reliability of data analysis were calculated by using the formula of $[\text{Agreement} / (\text{Agreement} + \text{Difference of Opinion}) \times$

research, 28 metaphors were produced

and there was 1 metaphor (GMO seed) which was difference of opinion. Average reliability amongst codes was found to be 96% $[28 / (28 + 1) \times 100 = \%96]$. This result shows that reliability level intended in research was reached.

In the stage of calculating the frequencies of metaphors obtained, frequencies of

metaphors were stated between parentheses; for instance, rotten walnut (1). On the other hand, opinions of national team athletes were explained in findings section by stating participant number like (K18). Finally, metaphors athletes produced were interpreted with their opinion.

FINDINGS

This section was presented in the form of metaphors that national team athletes

developed related to the concept of doping, the evaluation of these metaphors under relevant categories and explanation samples.

Table 1: Metaphors That National Team Athletes Developed for the Concept of Doping

Metaphor Line	Name of Metaphor	Gender	f	Metaphor Line	Name of Metaphor	Gender	f
1	Vehicle Fuel Oil	M	1	16	Short Happiness	F	1
2	Bear	M	1	17	Motorizing Small Car with Big Motor	M	1
3	Father's Money	F	1	18	Gamble	M	1
4	A Stolen Hope	F	1	19	Angle	M	1
5	Stolen Ware	M	1	20	Death	M	1
6	Super Natural	M	1	21	Clown	M	1
7	Provision with no Effort	F	1	22	Fake Ware	M	1
8	Cheating on Partner	M	1	23	Devil	M	1
9	GMO Seed	M	1	24	Turbo Motor	M	1
10	Power	M	1	25	Drugs	F	1
11	Reassuring	M	1	26	Lie	M	1
12	Trick	M	1	27	Illegal Medicine	F	1
13	Drink	M	1	28	Shield	M	1
14	Rotten Walnut	F	1				
15	Illegal Electricity	M,F	2		TOTAL OPINION		29

When examined the Table 1, it is seen that totally 28 metaphors for the concept of "Doping" were produced by national team athletes and for that 29 opinions were stated. It was determined that metaphors were repeated only once except *Illegal Electricity* (2). National team athletes drew analogies to a wide variety abstract and concrete expression (*lie, devil, a stolen hope, drink, rotten walnut*) to explain the

concept of doping. It was determined that most of the metaphors are death metaphors and they are for the explanation of harms of doping.

Metaphors' classification under 5 categories in terms of common traits by considering the explanation/justification of metaphors of national team athletes developed towards doping was included in Table 2.

Table 2: Distribution, according to Categories, of Metaphors Which National Team Athletes Developed

Categories	Number of Metaphor (f)	%
1. In terms of being deceptive	7	24.13
2. In terms of increasing performance	6	20.68
3. In terms of causing unfair acquisition	6	20.68
4. In terms of being unhealthy	5	17.24
5. In terms of causing failure	5	17.24
TOTAL	29	100.0

According to Table 2, metaphors national team athletes developed for the concept of doping were gathered under 5 categories. These are “*In terms of being deceptive* (7-%24.13), *In terms of increasing performance* (6-%20.68), *In terms of causing unfair acquisition* (6-%20.68), *In terms of being unhealthy* (5-

%17.24) and *In terms of causing failure* (5-%17.24)”. Mostly metaphors towards doping’s being deceptive were specified.

Between Table 3 and Table 7, metaphors and explanation samples stated for metaphors in the categories that are determined were included.

Table 3: Metaphors and Explanation Samples in the Category of “In Terms Of Being Deceptive”

Category	Number Of Metaphor (f=7)
1. In Terms Of Being Deceptive	Clown (1), Devil (1), GMO Seed (1), Rotten Walnut (1), Fake Ware (1), Lie (1), Super Natural (1)
<i>Quotations from explanation samples of national athletes;</i>	
<i>Clown;</i> Its appearance is beautiful but it is fake (F22)	
<i>Devil;</i> Doping also deceives the athletes (F24)	
<i>GMO Seed;</i> It is reaped without planting (F9)	
<i>Rotten Walnut;</i> No matter how steady it is from the outside, it is a thing that won’t be eaten by anyone because it is rotten inside (F14)	
<i>Fake Ware;</i> It deceives humans ((F23)	
<i>Lie;</i> It is a thing that deceives the athlete (F27)	
<i>Super Natural;</i> You get a thing which doesn’t exist in nature (F6)	

As it is seen in Table 3, totally 7 metaphors in the category of “*In terms of being deceptive*” related to the concept of doping were stated. As it is appeared from the

explanation sentences stated for each metaphor, it is seen that national team athletes developed metaphors generally with reference to negative aspects of doping.

Table 4: Metaphors and Explanation Samples in the Category of “In Terms Of Increasing Performance”

Category	Number of Metaphor (f=6)
2. In terms of increasing performance	Turbo motor (1), Bear (1), Shield (1), Power (1), Confident (1), Angel (1)
<i>Quotations from explanation samples of national athletes;</i>	
<i>Turbo motor;</i> It gains power that can raise you way over the normal performance (F25)	
<i>Bear;</i> It gives extra energy and power (F2)	
<i>Shield;</i> It feels like steelmaking (F29)	
<i>Power;</i> It reveals more energy and power (F10)	
<i>Confident;</i> It is necessary for championship (F11)	
<i>Angel;</i> It leads to goal, summit (F20)	

In Table 4, when totally 6 metaphor stated in the category of “*in terms of increasing performance*”, it is appeared that national team athletes developed metaphors with reference to importance

of performance in sport. Moreover, in this category both alive (*Bear*) and death (Turbo Motor, Shield etc.) metaphors were stated.

Table 5: Metaphors and Explanation Samples in the Category of “In Terms Of Causing Unfair Acquisition”

Category	Number of Metaphor (f=6)
3. In terms of causing unfair acquisition	Father’s Money (1), Provision without Effort (1), Stolen Ware (1), A Stolen Hope (1), Trick (1), Illegal Electricity (1),
<i>Quotations from explanation samples of national athletes;</i>	
<i>Father’s Money; It is a provision without effort (F3)</i>	
<i>Provision without Effort; Provision is obtained with effort and working. Doping is a provision without effort (F7)</i>	
<i>Stolen Ware; It is an unearned gain (F5)</i>	
<i>A Stolen Hope; Because of the persons who use doping, hopes, dreams and goals of persons who make a great effort are left half unfinished (F4)</i>	
<i>Trick; It is not legal (F12)</i>	
<i>Illegal Electricity; It is a stolen thing (F15)</i>	

As it is seen in Table 5, totally 6 metaphors in the category of “*In terms of causing unfair acquisition*” related to the concept of doping were stated. As it is appeared from the explanation sentences stated for each metaphor, it is understood that national team athletes developed metaphors with reference to importance

of effort for humans, particularly for athletes. In this category, doping was explained with death metaphors (*Father’s money, Provision without effort, Trick etc.*).

Table 6: Metaphors and Explanation Samples in the Category of “In Terms Of Being Unhealthy”

Category	Number of Metaphor (f=5)
4. In terms of being unhealthy	Drink (1), Drugs (1), Death (1), Illegal electricity (1), Motorizing small car with big motor (1)
<i>Quotations from explanation samples of national athletes;</i>	
<i>Drink; I consider it as harmful in terms of health (K13)</i>	
<i>Drugs; It causes addiction (K26)</i>	
<i>Death; There is a big risk of dying after the age of 40 (K21)</i>	
<i>Illegal electricity; If voltage is irregular, it burns the transformer (K16)</i>	
<i>Motorizing small car with big motor; It weakens the existing strength (K18)</i>	

As it is seen in Table 6, totally 5 metaphors in the category of “*In terms of being unhealthy*” related to the concept of doping were stated. As it is appeared from the explanation sentences stated for

each metaphor, it is seen that national team athletes developed metaphors generally with reference to doping’s being in general a harmful material.

Table 7: Metaphors and Explanation Samples in the Category of “In Terms Of Causing Failure”

Category	Number of Metaphor (f=5)
5. In terms of causing failure	Short term happiness (1), cheating on partner (1), gamble (1), illegal medicine (1), vehicle fuel oil (1)

Quotations from explanation samples of national athletes;
Short term happiness; It's end is always bad (F17)
Cheating on partner; It's end is always unhappiness (F8)
Gamble; Your sport career is over when you are caught (F19)
Illegal medicine; It is like a torch that shines and burns out about life (F28)
Vehicle fuel oil; When it is over, it leaves you in the lurch (F1)

As it is seen in Table 7, totally 5 metaphors in the category of “*In terms of causing failure*” related to the concept of doping were stated. Doping was

explained with death (*Vehicle fuel oil, illegal medicine etc.*) and abstract (*short term happiness, cheating on partner etc.*) metaphors.

DISCUSSION AND CONCLUSION

In this research, it was aimed to determine the thoughts and feelings of national team athletes for the concept of doping through metaphors. According to results obtained, participants' thoughts on doping were interpreted.

It was figured out that national team athletes produced totally 28 metaphors related to the concept of doping. These metaphors were gathered under 5 categories. These are “*In terms of being deceptive, In terms of increasing performance, In terms of causing unfair acquisition, In terms of being unhealthy and In terms of causing failure*”. Mostly metaphors towards doping's being deceptive were specified. Metaphors in these categories displayed equal distribution. In this category; it is appeared that national team athletes stated their negative feelings for doing with the statements of “*like a Clown its appearance is beautiful but it is fake, like devil doping also deceives the athletes, like a GMO Seed it is reaped without planting, like a Rotten Walnut no matter how steady it is from the outside, it is a*

thing that won't be eaten by anyone because it is rotten inside etc.”

When the 4th category on doping's being negative and harmful is examined, participants stated metaphors about the concept of doping such as *Illegal electricity (2), Devil (1), Lie (1), Trick (1), Death (1), Gamble (1), Cheating on partner (1), Drink (1), Drugs (1)*. Genç (1998, 100) stated that sport is friendship and brotherhood, philosophy of sport bases on this and accordingly athletes shouldn't trick in competitions by using doping, right earned by trick is not a right. Whereas Sariibrahimoğlu at al. (2002, 31) stated that doping deranges the biological and psychological health of athlete, Erkiner (2007, 758) specified that at the start anti-doping was conducted due to the anxiety of “health of athlete”, but over time the opinion of athlete using doping tricks and the fact that sport gains economic importance have turned doping into a crime.

It was figured out that participants stated *like a turbo motor it gains power that can raise you way over the normal performance, like a bear it gives extra energy and power, like a shield it feels like steelmaking, like a power it reveals*

more energy and power, like angel it leads to goal, summit in the category of *In terms of increasing performance* in which national team athletes consider doping as a positive concept. Bourg (2006) specified that doping is a case containing very important social issues, never accepts the physical and mental limits; the facts that writer goes for cocaine, student goes for amphetamine, administer goes for stimulants, person with problems goes for antidepressant pills and finally the man in the street goes for viagra occur because of their desires to reach higher performance and surpass themselves (Cited from Erkiner, 2007, 748). Accordingly desires to reach higher performance and surpass themselves can be indicated as a reason why athletes incline to doping.

Despite scandals and ethical problems ended up with any athletes' death due to doping use, this problem can't be solved and even doping use increases and new doping methods are being found to enhance the performance (Tarıkçioğlu and Doğan, 2013). Lack of knowledge about doping is among the main reasons of this problem. Cetin at al. (2008) stated that our athletes, trainers and sport men are deficient in knowledge about doping. Öztürk at al. (2012) determined in their study on the athletes' knowledge level on doping that athletes' knowledge level about doping was low and some athletes used doping. Similarly, in the study of Gençtürk at al. (2009) on elite athletes' knowledge level on doping, it was figured out that trainers and club administrators haven't got enough knowledge about doping. 50% of 50 athletes answered with

yes the famous Aussie doctor's question of "If I give you a pill that provides you a gold medal but kills you within 12 months, would you take this pill?" (Sarıbrahimoğlu at al. 2002, 31). Accordingly, lack of knowledge about doping is not only our country's problem but also other foreign countries' problem.

Metaphors are the most powerful and clever way of transmitting the findings. With a powerful metaphor, many definitions can be expressed in a sole statement (Patton, 2014; 505). When evaluated the categories between each other in this research; it can be said that 4 category (*in terms of being deceptive, in terms of causing unfair acquisition, in terms of being unhealthy and in terms of causing failure*) emphasize the positive and harmful sides of doping, other category (*in terms of increasing performance*) emphasizes the positive and beneficial side of doping.

As a result, it was determined that national team athletes expressed the concept of doping through metaphors with quite rich and different perspectives. Accordingly, metaphors determined in this study can help draw the attention those concerned by using in anti-doping.

Following suggestions has been presented according to research results;

- Making metaphor studies on specific subjects peculiar to different branches of sport
- Determining the metaphoric thoughts of trainers on doping

REFERENCES

1. Bergh, G. (2011). Football is war: A case study of minute-by-minute football commentary. *Veredas On Line – Temática – 2/2011*, P. 83-93 – Ppg Linguística/Ujff – Juiz De Fora - Issn 1982-2243.
2. Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö.E., Karadeniz, Ş. & Demirel, F. (2009). *Bilimsel Araştırma Yöntemleri*. Ankara: Pegem A.
3. Creswell, J. W. (2013). *Araştırma deseni: Nicel, nitel ve karma yöntem yaklaşımları* (S. B. Demir, Çev.). Ankara: Eğiten kitap.
4. Cudd, A., E.(2007). Sporting Metaphors: Competition and the Ethos of Capitalism. *Journal of the Philosophy of Sport*, 34, 52-67.
5. Çetin, E., Dölek, B., E. & Orhan, Ö. (2008). "Gazi Üniversitesi Beden Eğitimi Ve Spor Yüksekokulu Öğrencilerinin Ergojenik Yardımcılar, Doping Ve Sağlık Hakkındaki Bilgi ve Alışkanlıklarının Belirlenmesi". *SPORMETRE Beden Eğitimi ve Spor Bilimleri Dergisi*, VI (3) 129-132.
6. Döş, İ. (2010). "Aday öğretmenlerin müfettişlik kavramına ilişkin metafor algıları". *Gaziantepe Üniversitesi Sosyal Bilimler Dergisi*, 9(3), 607-629.
7. Ekici, G. (2016). "Biyoloji Öğretmeni Adaylarının Mikroskop Kavramına İlişkin Algılarının Belirlenmesi": Bir Metafor Analizi Çalışması. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi (KEFAD)* 17(1), 615-636.
8. Ekici, G., Gökmen, A., & Kurt, H. (2014). "Öğretmen adaylarının "bilgisayar" kavramı konusundaki bilişsel yapılarının belirlenmesi". *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi (GEFAD)*, 34(3), 359-405.
9. Erkiner, K., (2007). Spor Hukuku Dersleri. Sporda Doping Mücadele. (Editör: Erkiner, K., & Soysüren, A.). İstanbul. Kadir Has Üniversitesi yayınları.
10. Genç, D., A. (1998). Spor Hukuku. İstanbul. 1. Baskı. Alfa yayıncılık.
11. Gençtürk, G., Çolakoğlu, T. & Demirel, M. (2009). "Elit Sporcularda Doping Bilgi Düzeyinin Ölçülmesine Yönelik Bir Araştırma (Güreş Örneği)". *Niğde Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi*. 3 (3). 213-221.
12. Inbar, D. (1996). "The free educational prison: Metaphors and images". *Educational Research*, 38 (1), 77-92.
13. Kesic, D. & Muhic, E. (2013). "Sports In Metaphor And Metaphor In Sports". *Sport Logia*, 9(1), 28-33. e-ISSN 1986-6119.
14. Koç, M., Murathan, F., Yetiş, Ü., & Murathan, T., (2015). "İlköğretim 7. Sınıf Öğrencilerinin Spor Kavramına İlişkin Algıları". *Akademik Sosyal Araştırmalar Dergisi*, 3 (9), 294-303.
15. Kurdak, S., S. (1996). Sporda Doping ve İlaç Kullanımı. Ankara. 1. Baskı. Sporsal kuram dizisi-7.
16. Lakoff, G. & Johnson, M. (2005). *Metaforlar: Hayat, Anlam ve Dil* (Çev: G.Y.Demir, Paradigma yayıncılık, İstanbul.
17. Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage.
18. Morgan, G. (1998). *Yönetim ve Örgüt Teorilerinde Metafor* (Çev:Bulut G). İstanbul: MESS yayıncılık.
19. Özsoy, S. (2011). "Spor Gazetelerinin Başlıklarında Militarist Ve Şiddet İçerikli Metaforlar". *Gümüşhane Üniversitesi İletişim Fakültesi Elektronik Dergisi*. Sayı 1. 88-114.
20. Öztürk, E., G., Suveren, S. & Çolakoğlu, T. (2012). "Türkiye'de Doping, sporcuların doping bilgi düzeylerinin ölçülmesi (Hentbol Örneği)". *Uluslararası İnsan Bilimleri Dergisi*. 9 (1). 249-260.
21. Patton, M. Q. (2014). *Nitel Araştırma ve Değerlendirme Yöntemleri*. 3. Baskıdan Çeviri.(Çev Edit.;Bütün, M & Demir, S. B.). Ankara. Pagem Akademi.
22. Saban, A. (2008). Okula ilişkin metaforlar. *Kuram ve Uygulamada Eğitim Yönetimi*, 55, 459-496.
23. Saban, A. (2009). "Öğretmen adaylarının öğrenci kavramına ilişkin sahip oldukları zihinsel imgeler". *Türk Eğitim Bilimleri Dergisi*, 7(2), 281-326.
24. Sarıbrahimoğlu, Y., S., Bakanay, M., A., & Tekin, T. (2002). Spor Hukuku. Sarıbrahimoğlu Hukuk Bürosu. Odak Baskı.
25. Segrave, J. O. (2000). "The sports metaphor in American cultural discourse. *Culture, Sport, Society*, 3:1, 48-60, DOI: 10.1080/14610980008721862
26. Şahin, M. (1998). Spor Ahlakı ve Sorunları. İstanbul. 1.Baskı.Evrensel Basım Yayın.
27. Şirin, E., F., Bektaş, F., Karaman, K., & Aytan, G., K., (2012). "Rafting Katılımcılarının Rafting Kavramına İlişkin Metaforik Algıları". *Niğde Üniversitesi Beden Eğitimi Ve Spor Bilimleri Dergisi* 6 (2), 207-2015.
28. Tarakçıoğlu, S. & Doğan, B. (2013). "Spor Etiği Bağlamında Gen Dopingi". *Hacettepe Üniversitesi Spor Bilimleri Dergisi*. 24 (1), 45-54.
29. TBMM Son Yıllarda Türk Sporunda Yaşanan Doping Sorununun Araştırılarak Alınması Gereken Önlemlerin Belirlenmesi Amacıyla Kurulan Meclis Araştırması Komisyonu Raporu, Nisan 2014.
30. Yıldırım, A. & Şimşek, H. (2014). *Sosyal Bilimlerde Nitel Araştırma Yöntemleri* (Genişletilmiş 9. Baskı). Ankara: Seckin Yayınları.

1992