

Freedom at the Tip of the Pedal: A Metaphor Study

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Abstract

The aim of this study was to reveal the perceptions of bicyclists' about bicycle and cycling through metaphors. It is thought that the findings obtained for the purpose of the research will contribute to the studies to be made in order to spread the use of bicycles in the society. For this purpose, the phenomenology model, one of the qualitative research approaches, was used in the research. 76 bicyclists selected by the purposive sampling method were included in the study. In the data collection phase, a personal information form and a form composed of semi-structured sentences created by the researchers were used. In the analysis of the data; content analysis method was used. During the analysis of the data, the metaphors created by the participants regarding the concepts of "Bicycle" and "Cycling" were listed and categorized. The categories created from the metaphors obtained within the scope of the research indicate that cycling is an activity that reflects the difficulties and beauties of life, makes feeling free and happy, contributes to physical and mental development, and has risks from infrastructure deficiencies. In addition, it is seen that participants identify bicycle with happiness and develop emotional commitment with their bicycles.

Keywords: cycling, bicyclist, metaphor

1. INTRODUCTION

Although many opinions about the history and first appearance of the bicycle have been put forward, the view that the first wooden bicycle named "Celerifere" was designed in France in 1790, in which the rider pushed her feet on a hard surface gains weight (Bartholomew and Kidd, 2004; Bogović, 2001; Harper, 1982; Missoni, et al., 2012; Mozer, 2009; Pritchard and Cartwright, 2004).

Competition categories carried out by UCI (Union Cycliste Internationale), which is the only authority institution to organize international racing of cycling in the world; road races, track races, mtb races, bike crosses, bmx races, trials, figure bike, cycle-ball and para-cycling (Union Cycliste Internationale). The bicycle tour of France, which stands out among the various competition categories, is watched by 3.5 billion viewers every year on world televisions, attracts 12 million viewers along the tour route, and the audience travels an average of 130 km to see a scene on the tour, and they also spend an average of six hours at a time on the roadside (Tour De France the Facts, 2015).

Cycling is a physical activity that can be performed by individuals of almost any age. In the past, while the word bicycle recalls a report card gift, today it evokes various activities such as transportation, travel, recreation activities. Especially in city centers where there is heavy traffic, the use of bicycles for short-distance transportation provides ease of transportation. In addition, with daily tours or longer trips, individuals can set goals such as gaining experience in cycling and participating in various recreational activities by traveling in nature.

It is thought that the widespread cycling will contribute positively to issues such as alternative transportation, reducing environmental and air pollution, urban sustainability, efficient leisure time efficiency, public health and energy efficiency. Cycling is important for urban sustainability. Widespread cycling contributes to reducing transportation costs, air and noise pollution, traffic accidents, traffic congestion and negative climate change (Bauman et al., 2008). Bicycle is an effective means of transportation to reduce the need for non-renewable energy sources and to ensure environmental sustainability (Mert and Öcalır, 2010). Bicycle is a means of transportation that contributes to the solution of traffic congestion and pollution problems that arise due to motor vehicle traffic, especially in the cities of developed countries. Today, societies with concerns such as traffic congestion, public health and quality life tend to produce solutions by encouraging individuals to use bicycles (Krizek et al., 2007). In European countries such as the Netherlands, Denmark and Germany, where daily transportation rates are made by bicycle rather than by automobiles, the rate of carbon emissions per person in road passenger transportation is lower than in the USA (International Energy Agency, 2011).

The reasons of cycling for individuals cycling vary from country to country. While 60% of bicyclists in Australia are cycling for social and recreational purposes (Sydney Cycling Survey Methods and Findings, 2011); in the Netherlands, 50% of bicyclists use in education-oriented daily transportation (Dufour, 2010) and 30% in Turkey prefer to use bicycles for maintaining good health (Balcı, et al., 2017). In addition to being a performance based sports activity, cycling is; transportation, excursions, group activities, entertainment for children, etc. The fact that individuals use bicycles for different purposes may mean that they position the bike in different ways in their lives. In order to reveal these variations, the use of metaphor was preferred in the research.

The word metaphor is derived from the Greek word "metapherein" and meta means "change", pherein means "carry" (Levine, 2005). Metaphor refers to a particular group of linguistic processes in which aspects of an object are 'moved' to another object or transferred to another object, so that the second object is spoken as if it were the first (Hawkes, 2017). Kesić and Muhić, (2013), define sports metaphors as the crossroads of collective thought and wisdom, achieved in a concise and metaphorical expression. In this research, cycling was basically considered a sportive activity. However, considering that individuals use bicycles for different purposes, these aims were tried to be described through metaphors. Revealing the perceptions of cyclists about bicycle can create awareness among non-cyclists and can motivate them. In addition, it can be a guide for the city administrators who need to shape their work on the bicycle infrastructure.

In this direction, the purpose of this study is to reveal the perceptions of bicyclists on bicycle and cycling use through metaphors. For this purpose, answers to the following questions were sought in the research:

RQ1: What are the metaphoric perceptions of bicyclists regarding cycling and bicycle?

RQ2: In which categories can the metaphors obtained be brought together?

2. METHOD

2.1 Purpose and Model of the Research

In the study, it was aimed to reveal the perceptions of individuals who actively use bicycles in their daily lives on bicycle and cycling through metaphors. It is thought that the findings obtained for the purpose of the research will contribute to the studies to be made in order to spread the use of bicycles in the society. In line with this purpose, the phenomenology pattern, one of the qualitative research approaches, was adopted in the research. A phenomenological study describes the common meaning of the experiences of individuals about a concept or phenomenon (Creswell and Poth, 2016). Facts can appear in various forms such as events, experiences, perceptions, orientations, concepts and situations in daily life (Yıldırım and Şimşek 2013).

2.2 Study Sample of the Research

76 individuals who actively use bicycles in their daily lives participated in the study. With the idea that perception related to the cycling and bicycle can be obtained from active bicyclists, the study group of the research was selected by the purposeful sampling method. Purposeful sampling, which is one of the common unlikely sampling methods, refers to the "selection of the sampling group that is thought to be suitable for the purpose by the researcher" and is used in qualitative research (Marshall and Rossman 2006). While analyzing the data, numerical codes B1, B2, ... B76 were used for each participant. Information of the participants is shown in Table 1.

Table 1. Information about participants

Characteristic Features	Groups	f
Gender	Male	57
	Female	19
Age	18-44	41
	45-60	30
	61-75	5
Felt age	Young	54
	Middle aged	17
	Old	5
How long has she/he been an active bike rider?	Less than 1 year	6
	Between 1-5 years	36
	More than 5 years	34
Total		76

2.3 Data Collection

Semi-structured forms created by the researchers were used for the participants to define “cycling” and “bicycle” based on their own experiences. The form consists of two semi-structured expressions as “Bicycle is like; because” and “Cycling is like; because”. In addition, through the form used in the research, information about the participants' gender, age, age they felt and how long they had been cycling was obtained (Table 1). The word “like” used in both sentences in the form was used to create the metaphors of the participants, and the word “because” was used to justify the metaphors.

2.4 Data analysis

In the analysis of the data; content analysis method was used to reach the concepts and relationships that will explain the obtained data (Yıldırım and Şimşek 2013). While analyzing the data, the metaphors created by the participants regarding “Bicycle” and “Cycling” concepts were listed, and metaphors that could not be associated with the related concepts were excluded from the study. In the next stage, the remaining metaphors were classified according to their common features and converted into codes; the codes obtained were categorized. The codes obtained from the data and the categories associated with these codes were interpreted by the researchers and the findings were explained and made sense. By establishing a cause-effect relationship between the findings, explanations about the importance of the results are included.

The approaches put forward to ensure the validity and reliability of qualitative studies have focused on the concept of “trustworthiness” and “credibility”; It is examined under the headings of “credibility”, “transferability”, “reliability”, “approachability” (Lincoln and Guba, 1985). Expert review which is one of the methods to increase credibility is the reviewing of the study with different dimensions by people who are experts in the content of the research and qualitative researches (Creswell, 2013). Within the scope of the research, by asking the opinions of 3 faculty members who are experts in the field of sports sciences and qualitative research; feedback was received in the design of the research, the data obtained, the analysis of the data and the transfer of the results.

3. FINDINGS

3.1 Metaphoric perceptions about cycling as an activity

Table 2 shows the categories created from metaphors related to “Cycling”, the number of metaphors expressed by the participants, metaphors created by how many participants, and their percentages.

Table 2. Categories, metaphors and distribution of participants

Categories	Number of Metaphors and Percentage Distribution		Number of Participants and Percentage Distribution	
	f	%	f	%
Reflecting the hardships and beauty of life	5	10.2	9	11.9
Making to feel free and happy	35	71.5	58	76.3
Contributing to physical and mental development	6	12.2	6	7.9
Having risks from infrastructure deficiencies	3	6.1	3	3.9
Total	49		76	

When the metaphors related to “Cycling” are analyzed, it is seen that the highest number of metaphors among the total of 49 metaphors are gathered under the heading “Making to feel free and happy”. There are also metaphors, albeit a small number, that describe the difficulties caused by infrastructure inadequacies. All of the metaphors about cycling are shown in Table 3.

Table 3. Metaphors reflecting perceptions of cycling and frequency of use of metaphors

Categories	Metaphors	f	Categories	Metaphors	f
	Freedom	12		Preparing for the exam	1
	Medicine	5	Contributing to physical and mental development	Paying credits	1
	Antidepressant	4		Revolution	1
	Flying	4		Testing your body	1
	Therapy	3		Making philosophy	1
	Breathing	3		Evolution	
	Flying on the ground	1			
	Journey to heaven	1		Having risks from infrastructure deficiencies	Driving a car
	A floating eagle	1		Performing acrobatics	1
	Walking on the moon	1		Embarking on adventure	1
Making to feel free and happy	The dream you don't want to end	1			
	Dreaming	1			
	Freedom in utopias	1			
	Freedom to	1	Reflecting the hardships and beauty of life	Life	6
	Being a bird	1		Lifecycle	1
	Passage gate	1		Living	1
	The door to a new world	1		Sticking to life	1
	Blending into nature	1			
	Chatting with your friend	1			
	Resetting the head	1			

Being happy	1
Brain medicine	1
Poetry	1
Meditation	1
Sleep	1
Touching the spirit	1
Falling in love	1
Heart beating	1
Learning to walk	1
Our childhood that we miss	1
Continuation of childhood	1
A meal that remains in your palate	1
Return to childhood	1
Dancing	1
Watching an amazing movie	1

Among the metaphors about "Cycling"; it seems that the metaphors of "Freedom", "Medicine", "Life", "Antidepressant" and "Flying" were used the most. Some of the participants stated that cycling is an activity that feels free and happy:

"Cycling is like freedom; because the only limit is you and your bike; there is no other limit." (B36)

"Cycling is like medicine; because it heals you both physically and spiritually." (B45)

"Cycling is like an antidepressant; because it rasps the sharp corners in your brain, strengthens your soul." (B35)

"Riding a bicycle is like flying; because your feet cut off from happiness." (B4)

Participants with codes B1 and B19 used the following sentences when describing that cycling is an activity that reflects the difficulties and beauty of life:

"Cycling is like life; because there are ups, downs and falls." (B19)

"Riding a bicycle is like holding on to life; because it is necessary to pedal constantly to stay in balance." (B1)

The participant coded B74 used the following sentence when describing the risks arising from infrastructure shortcomings:

"Cycling is like acrobatics; because there is no bike path anywhere." (B74)

Among the metaphors obtained, the contributions of cycling to the physical and mental development of the individual are described by some participants in the following sentences:

"Cycling is like paying credit; because the goals are not easily achieved." (B63)

"Cycling is like evolution; because you improve as you drive." (B17)

According to the findings, it is seen that cycling is perceived by the participants as an activity that makes them feel happy, contribute to the development of physical and mental limits, and reflects life itself. In addition, it was described by the participants that the lack of infrastructure in terms of safe cycling creates various risks.

3.2 Metaphoric perceptions about bicycle

Table 4 shows the categories created from metaphors about "Bicycle", the number of metaphors expressed by the participants, metaphors created by how many participants, and their percentages.

Table 4. Categories, metaphors and distribution of participants

Categories	Number of metaphors and percentage distribution		Number of participants and percentage distribution	
	f	%	f	%
Emotional commitment	7	43.7	12	52.2
Happiness	9	56.3	11	47.8
Total	16		23	

It was observed that the metaphors that most of the participants formed for the "Bicycle" phenomenon depicted the phenomenon of "Cycling" and were similar to the metaphors used for the "Cycling" phenomenon. For this reason, metaphors obtained from 23 participants could only be evaluated under the title of "Bicycle". When the metaphors about "Bicycle" are examined, it is seen that a total of 16 metaphors are gathered under the titles of "Emotional Commitment" and "Happiness". All of the metaphors related to the "bicycle" phenomenon are shown in Table 5.

Table 5. Metaphors reflecting perceptions of bicycle and frequency of use of metaphors

Category	Metaphors	f	Category	Metaphors	f
Emotional commitment	Friend	6	Happiness	Love	2
	Part of our body	2		Bird	2
	Comrade	1		Flying carpet	1
	Your one piece	1		Child	1
	My Wings	1		Transmitter	1
	An organ	1		Heroin	1
			Passion	1	
			Youth Potion	1	
			Health	1	

Among the metaphors about "Bicycle"; metaphors of "Friend" and seem to be used the most. The metaphors used by some of the participants in the category of "Emotional Commitment" are in the following sentences:

"Cycling is like a friend; because you have a comrade. " (B27)

"Bicycle is like a part of you; because you are connected to each other. " (B36)

The metaphors used by the participants in the "Happiness" category are expressed with the following sentences:

“Cycling is like a passion; because every day I can't ride is a loss for me. ” (B23)

“Cycling is like love; because you are connected with passion. ” (B16)

These findings indicate that bicyclists participating in the study perceive the place of bicycle in their lives as a vehicle that creates happiness and emotional commitment.

4. DISCUSSION

In this study, the perceptions of bicyclists about how they positioned the bike in their lives and what it means to cycling are revealed through metaphors. While metaphoric perceptions of the participants were obtained; it has been tried to determine how they evaluate “Cycling” as an activity. The metaphors used by the participants regarding the use of bicycles were gathered under the categories “Reflecting the hardships and beauty of life”, “Making to feel free and happy”, “Contributing to physical and mental development” and “Having risks from infrastructure deficiencies”. Most of the metaphors obtained from the participants indicate that cycling is an activity that feels free and happy. In addition to being a physical activity that can be performed by individuals of all ages, cycling is also considered as a recreation activity or type of transportation. Ardahan and Lapa, (2011), supported these findings and found that individuals who prefer cycling and trekking as a recreation activity feel happy, healthy and renewed. It is also among the studies that cycling has positive effects on human relationships (O'Connor and Brown, 2007), mood and self-esteem (Garrard et al., 2008) and stress levels (Scully et al., 1998). Especially, cycling in nature provides individuals with the opportunity to experience the natural beauties that cannot be noticed when traveling by motor vehicle, and to see more than the walkable path. In terms of transportation, especially in large city centers with safe bicycle routes, bicycles can turn into a vehicle that facilitates in daily life. These factors are thought to make individuals feel free and happy while on a bicycle.

Some of the participants pointed out that cycling is an activity that reflects the difficulties and beauty of life. Similarly, Ardahan and Mert, (2014b), determined the reasons for individuals to be motivated to ride bicycles as a healthy life, social environment acquisition, environmental awareness, regeneration, physical activity, as well as struggling with difficulties and setting an example for other individuals. Cycling can be considered as a physical activity that can vary from individual to individual according to individual characteristics (Physical fitness, mental readiness etc.) and environmental factors (Climate and geographical conditions, infrastructure competencies, etc.).

In the research, while participants stated that cycling is an activity that contributes to physical and mental development, they used metaphors such as “Preparing for the Exam” and “Testing the Body”. Supporting this finding, Balcı, et al. (2017), revealed that the vast majority of bicyclists have healthy lifestyle goals. Studies on the relationship between cycling and health suggest that cycling has moderate physical activity, increases cardiovascular performance (Hendriksen, et al., 2000), has positive effects on body mass gain and waist circumference (Wagner, et al., 2001), and is a fun and accessible form of physical activity. In addition, it is observed that individuals who provide transportation by bicycle in their daily life are less affected by health-related risk factors (Huy, et al., 2008).

While the participants pointed out that cycling in traffic is an activity with risks due to lack of infrastructure, they used metaphors such as "Performing Acrobatics" and "Going for Adventure". Infrastructure deficiencies for cycling constitute the main theme of many studies on cycling in daily life. Kienteka et al. (2012) identified the environmental obstacles for cycling for leisure and transportation in adults as physical disabilities, climate and topography and social obstacles. In many studies conducted on the subject, it was found that infrastructure deficiencies were at the top of the obstacles in front of cycling in cities (Çeyiz, 2019; Balcı, et al., 2018; Çeyiz and Koçak, 2015; Shaw, et al., 2015; Ardahan and Mert, 2014a; Chataway, et al., 2014; Fernández-Heredia, et al., 2014; Broache, 2012; Bauman, et al., 2008; Titze, et al., 2008; De Geus, et al., 2007; Heesch and Han, 2007; Salensminde, 2004; Jones, 2001). In order to adopt cycling in the society, it is considered that bicycle transportation should be evaluated within the scope of sustainable transportation standards and appropriate infrastructure studies (integration to public transportation, bicycle stations, bicycle paths and parking areas etc.) should be carried out.

5. CONCLUSION

The metaphorical perceptions obtained from the participants point out that the bicyclists evaluate "Bike" as part of their lives under the headings "Emotional Commitment" and "Happiness". Today, individuals evaluate their free time in groups or individually, by carrying out short or long-term bicycle tours/excursions. It can be said that individuals making these kinds of trips develop an emotional bond with their bikes.

In the research, the metaphors emphasized about bicycle are gathered under the titles that are in life and which are identified with the individuals themselves. Therefore, when these metaphors, including life patterns, are associated with the bicycle as a tool, it is predicted that it will contribute to the understanding of the value of the bicycle in social life.

The themes obtained in this research on cycling such as "happy society", "physical and mental preparation", "emotional bond" and "freedom" are recommended to be used in sociology studies. Future research can be done using different methods on the same subject and working group; this can provide overlap and integration between findings.

Author Contributions

All authors contributed equally to the study.

Conflict of Interest

The authors declare no conflict of interest in the publication of this article.

Ethical Text

"In this article, the journal writing rules, publication principles, research and publication ethics, and journal ethical rules were followed. The responsibility belongs to the author (s) for any violations that may arise regarding the article. "

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