# Analysis of Bibliometrics on Postgraduate Theses on Female Football Players

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# Analysis of Bibliometrics on Postgraduate Theses on Female Football Players

#### Abstract

This research aims to conduct a bibliometric analysis of postgraduate theses on women's football, a field that is not only becoming increasingly popular worldwide but also attracting significant academic interest. The growing participation and recognition of women's football have drawn researchers' attention to this field. The study covers master's and doctoral theses published in the National Thesis Center database affiliated with the Higher Education Council. Descriptive information such as thesis type, year, advisor titles, universities, departments, research methods, sample groups, page numbers, and the language of the sources used were examined in the bibliometric analysis. The analysis results indicate that most postgraduate theses on women's football are completed at the master's level, with the first thesis written in 2008. There has been an increasing trend in the number of theses since 2008, particularly becoming more pronounced since 2019. Advisors with the title of Assistant Professor have been found to supervise more theses than other titles. The highest number of theses was conducted at On Dokuz Mayıs University, with the majority being conducted within the Department of Physical Education and Sports. Quantitative research methods were mainly used. Female footballers were generally selected as the study group. Most theses ranged from 51 to 100 pages, with sources predominantly in Turkish. In conclusion, the increasing trend in the number of postgraduate theses on women's football is a clear indication of the growing academic interest in this field. This trend underscores the importance of research in women's football. It also highlights the urgent need for international collaborations in women's football research, a crucial aspect that needs to be addressed. Expanding the scope of academic studies on women's football and promoting interdisciplinary collaborations are crucial in this context.

Keywords: Female Football Players, Postgraduate, Bibliometric Analysis

# Kadın Futbolcular Konulu Lisansüstü Tezlerin Bibliyometrik Analizi

#### Özet

Bu araştırmada dünya genelinde giderek popülerleşen ve akademik ilgi gören kadın futbolu konusundaki lisansüstü tezlerin bibliyometrik analizini gerceklestirmeyi amaclamaktadır. Kadın futboluna yönelik artan katılım ve tanınırlık, arastırmacıların bu alana dikkatini çekmesine neden olmuştur. Araştırma, Yükseköğretim Kurulu'na bağlı Ulusal Tez Merkezi veri tabanında yayınlanmış olan yüksek lisans ve doktora tezlerini kapsamaktadır. Bibliyometrik analizde tezlerin türü, yılı, danışman unvanları, üniversiteleri, anabilim dalları, araştırma yöntemleri, örneklem grubu, sayfa sayısı ve kullanılan kaynakların dili gibi tanımlayıcı bilgiler incelenmiştir. Analiz sonuçları, kadın futbolu konulu lisansüstü tezlerin en fazla yüksek lisans düzeyinde tamamlandığını ve ilk tezin 2008 yılında yazıldığını göstermektedir. Tezlerin sayısında 2008 yılından itibaren artan bir trend gözlenmiş, özellikle 2019 yılından itibaren bu artış daha belirgin hale gelmiştir. Dr. Öğretim Üyesi unvanına sahip danışmanların diğer unvanlara göre daha fazla tez danışmanlığı yaptığı belirlenmiştir. En fazla tez, On Dokuz Mayıs Üniversitesi'nde gerçekleştirilmiş olup, tezlerin büyük çoğunluğu Beden Eğitimi ve Spor Anabilim Dalı bünyesinde yapılmıştır. Çoğunlukla nicel araştırma yöntemleri kullanılmıştır. Çalışma grubu olarak genellikle kadın futbolcular seçilmiştir. Tezlerin büyük kısmı 51-100 sayfa aralığında olup, kullanılan kaynaklar ağırlıklı olarak Türkçe'dir. Sonuç olarak, kadın futbolu konusundaki lisansüstü tezlerin sayısı sınırlı olmasına rağmen yıllar geçtikçe artış göstermektedir. Bu durum, kadın futboluna yönelik akademik ilgiyi ve bu alanda yapılan çalışmaların önemini ortaya koymaktadır. Araştırma yöntemlerinde çeşitliliğin artırılması ve uluslararası iş birliklerinin desteklenmesi, kadın futbolunun global bir perspektiften değerlendirilmesine katkı sağlayacaktır. Bu bağlamda, kadın futbolu konulu akademik çalışmaların kapsamının genişletilmesi ve farklı disiplinler arası iş birliklerine yer verilmesi önem arz etmektedir.

Anahtar Kelimeler: Kadın Futbolcular, Lisansüstü, Bibliyometrik Analiz

# Introduction

Despite being a sport involving millions of people worldwide, football has remained an arena predominantly dominated by men, both numerically and influentially. Since the early 20th century, modern football has evolved as a sport predominantly focused on men, leading to the exclusion of women from football as players or spectators for a considerable period. This process has shaped football within the framework of masculine relations, perceiving it as a male-dominated domain (Bozlu, 2019). Historically, football has been regarded as a game for men. The structural and discursive targeting of men by football has transformed it into a cultural space where hegemonic masculinity is constructed, and various forms of masculinity are exhibited. This has marginalised women, keeping them from football for a long time (Öztürk & Koca, 2015). The initiation of women into football in the early 20th century faced interruptions in countries like England, Germany, and Brazil due to various prohibitions. However, with the influence of changes in the international sports arena in the 1990s, women's football entered a process of institutionalisation. The most critical turning points in the significant momentum gained by women's football worldwide are often attributed to the first World Cup organised by FIFA in 1991 and the recognition of football as an Olympic sport for women in 1996 (Öztürk & Koca, 2018).

With its vast playing field, many players, and competitive structure, football is one of the most widespread and popular sports globally. Similarly, popular in Turkey, football garners significant interest among female athletes (Şahin & Kaya, 2021). In 2014, FIFA published a report stating that there were 4,801,360 licensed female football players worldwide, with 2,287,185 being from the United States. According to 2017 data, the number of licensed female football players in Europe reached 1,365,524. In Turkey, there are the Women's Football Super League, Women's Football 1st League, Women's Football 2nd League, and Women's Football 3rd League (Çevik & Bayarslan, 2023). In recent years, women's football in Turkey has rapidly grown and emerged as a discipline poised for popularity. With women actively participating in various sports, including football, women's football teams competing in leagues can be observed across all country regions. This indicates a significant increase in the impact of women's football compared to the past (İslam, 2023). The Turkish Football Federation also organises various events such as panels, seminars, the "Let's Go Girls, Football!" project, and women's football villages to enhance women's football. As a result of these efforts, there has been a noticeable increase in the number of female football players in recent years (Sezen Balçıkanlı et al., 2017).

The significant increase in participation in women's football and its increasing recognition by international governing bodies have attracted the attention of sports academics worldwide. Over the past twenty years, there has been a continuous increase in scientific publications, with researchers focusing on the development of women's football and its stakeholders. In particular, academic research on women's football has brought together various academic disciplines such as sports sciences, social sciences, humanities, and management. These studies contribute to a broader understanding of various aspects of this sport over time by examining interactions among players, coaches, fans, media, politicians, and football governing bodies (Valenti et al., 2018). In light of this information, examining and analysing women's football in detail in postgraduate theses conducted in Turkey, which are affiliated with the Higher Education Council, is necessary. From this perspective, the aim is to conduct bibliometric analyses of postgraduate theses on women's football available in the National Thesis Center. To achieve this goal, descriptive information such as the type of thesis, year of completion, advisor titles, universities, departments, research methods, sample groups, page numbers, and the language of the sources used in the theses have been presented.

## Method

#### Research Model

The research utilised a quantitative model known as bibliometric analysis. Bibliometrics is a quantitative research method that analyses books, articles, and other publications. Initially used to identify the sources of academic citations, this technique is now employed to understand the past and make predictions for the future (Demirgil, 2018). Bibliometric analysis is a research field that involves applying mathematical and statistical methods to written document formats. It is also defined as a discipline that examines the quantitative aspects of science and scientific research (Mejia et al., 2021; Yaraş & Göksel, 2023; Fu et al., 2023).

#### Study Group

The study group consists of postgraduate theses available in the National Thesis Center database affiliated with the Higher Education Council.

#### Data Collection Instruments

The study comprises 81 theses limited to the concepts of "Women's Football" and "Female Football" available in the National Thesis Center database. Research data were collected using the "Advanced Search" section of the National Thesis Center. In the Advanced Search section,

searches were conducted by entering keywords only in the "Search Term(s)" box, leading to access to postgraduate theses. Based on the conducted searches, 79 postgraduate theses were included in the study after excluding theses that could not be accessed or lacked publication permission.

# Data Analysis

The data obtained in the study were analysed using the bibliometric analysis method. The postgraduate theses obtained from the National Thesis Center database were coded using the Microsoft Office Excel program, and the results were tabulated.

## **Results**

The findings of the research should be given in this section. Tables, figures, and graphics, if any, should be explained by giving examples.

**Table 1.** Type of Graduate Theses

Туре	N	%
Master's Degree	67	84,81
PhD	12	15,19
Total	79	100

Table 1 displays the types of postgraduate theses written on women's football. According to the table, there are a total of 79 theses, with 67 of them being master's theses (84.81%) and 12 of them being doctoral theses (15.19%).

**Table 2.** Distribution of Postgraduate Theses by Years

Years	N	%
2008	1	1,27
2011	2	72,53
2012	1	1,27
2013	1	1,27
2014	4	5,06
2015	1	1,27
2016	3	3,80
2017	5	6,33
2018	5	6,33
2019	13	16,46
2020	5	6,33
2021	11	13,92
2022	10	12,66
2023	17	21,52
Total	79	100

Table 2 presents The distribution of postgraduate theses by year. The table shows that the first postgraduate thesis on women's football was prepared in 2008, while the highest number of theses was prepared in 2023.

**Table 3.** Distribution of Master's Theses According to the Title of Supervisor

Consultant	N	%
Prof. Dr. Lecturer Member/Asst. Assoc. Prof. Dr.	31	39,24
Assoc. Prof. Dr.	24	30,38
Prof. Dr.	24	30,38
Total	79	100

Table 3 shows the distribution of graduate theses according to the title of supervisor. According to the table, the highest number of postgraduate theses were conducted by 31 (39,24%) academic staff with the title of Dr. Lecturer. It is seen that most graduate theses were conducted by supervisors with the title of Dr. Lecturer with 31 (39,24%) academic staff.

**Table 4.** Distribution of Postgraduate Theses according to the Universities where they were prepared

Prepared by University	N	Prepared by University	N
Adnan Menderes University	2	Halic University	1
Agrı Ibrahim Cecen University	1	Hacettepe University	3
Akdeniz University	2	Hitit University	1
Anadolu University	1	Istanbul Aydın University	1
Ankara University	3	Istanbul Okan University	2
Atatürk University	2	<b>Istanbul Gelisim University</b>	4
<b>Bahcesehir University</b>	4	Istanbul University	1
Balıkesir University	2	Inönü University	2
<b>Batman University</b>	1	Karabük University	2
Celal Bayar University	2	Marmara University	6
Cukurova University	1	Necmettin Erbakan University	1
Canakkale On Sekiz Mart University	2	Ordu University	2
Dokuz Eylül University	2	On Dokuz Mayıs University	8
Dumlupinar University	4	Sakarya Uygulamalı Bilimler University	2
Firat University	2	Selcuk University	1
Gazi University	2	Sitki Kocman University	2
<b>Gaziantep University</b>	3	Trabzon University	1
Gedik University	1	Trakya University	2
Total			79

Table 4 shows 79 postgraduate theses on women's football were prepared in 36 universities. When Table 4 is analysed, it is seen that the highest number of theses (8) were prepared at On Dokuz Mayıs University, followed by Marmara University (6).

**Table 5.** Distribution of Master's Theses according to the Departments

Department	N	%
Department of Coaching Education	8	10,13
Department of Physical Education and Sport	40	50,63
Department Physiotherapy and Rehabilitation	1	1,27
Department of Nutrition and Dietetics	5	6,33
Department Exercise Physiology	1	1,27
Department of Journalism	1	1,27
Department of Movement Training Units	4	5,06
Department of Sociology	3	3,80
Department of Sports Therapist	1	1,27
Department of Recreation Management	2	2,53
<b>Department of Sport Sciences</b>	3	3,80
Department of Sports Health Sciences	1	1,27
Department of Sport Management	6	7,59
Department of Sport Management Sciences	1	1,27
Department of Sport Management	2	2,53
Total	79	100

As seen in Table 5, 79 postgraduate theses were included in the research and were prepared within 15 different departments. Most prepared postgraduate theses (50.63%) were carried out within the Department of Physical Education and Sports.

**Table 6.** Research Methods Used in Postgraduate Theses

Methods	N	%
Quantitative	62	78,48
Mixed	2	2,53
Qualitative	14	17,72
Total	79	100

According to Table 6, it is seen that the quantitative research method was used in the vast majority of the postgraduate theses examined (78.48%), while the qualitative research method was used in 17.72%.

**Table 7.** Sample Groups in Postgraduate Theses

Sample Groups	N	%
Female Football Players	62	78,48
Managers	3	3,80
Female Referees	2	2,53
Students	1	1,27
Coaches	1	1,27
Female and Male Football Players	5	6,33
Volleyball and Soccer Players	1	1,27
Male Football Players	1	1,27
Other Individuals	2	2,53
Total	79	100

According to the information in Table 7, when we look at the sample groups examined in the studies, it is seen that most studies were carried out in the sample groups of Female Football Players (78,48%), followed by Female and Male Football Players (3,33%) and Managers (3,80%).

**Table 8.** Number of Pages of Graduate Theses

Number Pages	N	%
0-50	13	16,46
51-100	61	77,22
101-150	3	3,80
151-200	0	0,00
201-250	1	1,27
251-300	1	1,27
Total	79	100

According to Table 8, when the number of pages of the analysed postgraduate theses is examined, it is seen that the highest page range (77.22%) is 51-100, followed by (16.46%) 0-50 page ranges.

**Table 9.** Distribution of Source Language Used in Graduate Theses

Source Language	N	%
Turkish Source	5983	62,58
Other Languages	3579	37,42
Total	9652	100

According to Table 9, Turkish sources are used in most postgraduate theses (62,58%), while other languages are used (37,42%).

### **Discussion and Conclusion**

This study aimed to conduct bibliometric analyses of postgraduate theses from the National Thesis Center database affiliated with the Higher Education Council, which contributes to developing women's football, an increasingly popular and globally expanding field. The types, completion years, advisor titles, universities, departments, research methods, sample groups, page numbers, and language of sources used in published postgraduate theses were subjected to bibliometric analysis.

Postgraduate theses on women's football were predominantly completed at the master's level, likely due to the evolving nature of women's football and the relatively limited research group. The first postgraduate thesis on women's football was identified as being completed in 2008. The number of theses has shown an increasing trend since 2008, correlating with the development of women's football. A significant increase has been observed since 2019, despite a decline in 2020 coinciding with the global impact of the Covid-19 pandemic. Following the containment of the pandemic, a notable increase in the number of postgraduate theses was observed.

Although there was no significant difference in the titles of advisors, faculty members with the title of Assistant Professor were found to provide more advisory roles. Most postgraduate theses were conducted at On Dokuz Mayıs University, followed by Marmara University. Women-related postgraduate theses were predominantly conducted within the Department of Physical

Education and Sports. Half of the theses included in the study were associated with the Department of Physical Education and Sports, possibly due to its status as a core department in many universities. Quantitative research methods were highly prevalent in postgraduate theses. The study group mainly consisted of "women football players." These were predominantly between 51-100 pages long, with Turkish sources being the primary language in women's football-related postgraduate theses.

# **Suggestions**

In conclusion, although the number of postgraduate theses on women's football is limited, it has been observed to increase over the years. Alongside the growing number of academic studies on women's football, there should be encouragement for more postgraduate theses to be written. Mainly, applied research should increase, such as policy recommendations for developing women's football, infrastructure projects, and training programs. Furthermore, diversifying research methods and including qualitative studies can contribute to a deeper understanding of women's football's social, cultural, and economic impacts. Encouraging inter-university collaborations and international studies can facilitate a global perspective on women's football. In this context, expanding the scope of research on women's football and incorporating interdisciplinary studies are essential.

### **Author Contribution**

Efe, K (Conceptual framework, Data Collection), A, Yaraş (Writing)

#### **Conflict of Interest**

There is no conflict of interest among the authors.

#### **Ethical Statement**

There is no need for the ethics committee's approval of the research.

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