STRUCTURING RESEARCH UNIVERSITIES IN TURKEY: A PHENOMENOLOGICAL CASE STUDY

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NESLİHAN CÜRE

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submitted by NESLİHAN CÜRE in partial fulfillment of the requirements for the degree of Master of Science in Educational Sciences, Educational Administration and Planning, the Graduate School of Social Sciences of Middle East Technical University by,

Prof. Dr. Yaşar KONDAKÇI
Dean
Graduate School of Social Sciences

Prof. Dr. Hanife AKAR
Head of Department
Department of Educational Sciences

Assoc. Prof. Dr. Gökçe GÖKALP
Supervisor
Department of Educational Sciences

Examing Committee Members:

Assist. Prof. Dr. Duygun GÖKTÜRK (Head of the Examining Committee)
Middle East Technical University
Department of Educational Sciences

Assoc. Prof. Dr. Gökçe GÖKALP (Supervisor)
Middle East Technical University
Department of Educational Sciences

Assist. Prof. Dr. Hasan Yücel ERTEM
Zonguldak Bülent Ecevit University
Department of Educational Sciences
I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last Name: Neslihan CÜRE

Signature:
ABSTRACT

STRUCTURING RESEARCH UNIVERSITIES IN TURKEY:
A PHENOMENOLOGICAL CASE STUDY

Cüre, Neslihan
M.S., The Department of Educational Sciences, Educational Administration and Planning
Supervisor: Assoc. Prof. Dr. Gökçe Gökalp

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Research universities first emerged in the 19th century with the establishment of Humboldt University to solve social problems. The classification of research universities in the United States began in 1970 with the Carnegie Classification. The research university process started for the first time in Turkey in 2017 to increase the international prestige of Turkish universities, produce qualified knowledge and research that will enrich the socio-economic level of the society. This study aims to examine the current situation of research universities in Turkey, to find solutions to their obstacles and to offer suggestions for the future of research universities from academicians’ point of view.

This phenomenological case study covers a research university in Ankara. The context of the study will be given as a pseudonym as the International Research University (IRU). The data were collected through online semi-structured
interviews with 16 academicians using maximum variation sampling method. Data were analyzed according to phenomenological case analysis techniques. The findings suggest that research universities are essential for socio-economic progress; but it showed that the concept of a research university is not yet fully formed among academicians in research university institutions. Research universities face with a lack of autonomy, challenge to find funding, high course load, and student numbers. The results revealed that a necessary research infrastructure should be provided, and innovative, interdisciplinary and international studies should be encouraged. For this, the research university process should be considered as a whole with interaction of the higher education policy makers, government, industry and university stakeholders.

**Keywords:** Mission of the university, research function, research university, administration of research university process
ÖZ

TÜRKİYE'DE ARAŞTIRMA ÜNİVERSİTESİ YAPILANMASI:
FENOMENOLOJİK BİR VAKA ÇALIŞMASI

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Anahtar Kelimeler: Üniversitenin misyonu, araştırma işlevi, araştırma üniversitesi, araştırma üniversitesi sürecinin yönetimi
Dedication to my mother, Şefika CÜRE,
Who always found a reason to smile and kept going on even in tough times bravely and enthusiastically.
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LIST OF ABBREVIATIONS

AAU The Association of American Universities
ABD The United States of America
AEARU The Association of East Asian Research Universities
CoHE The Council of Higher Education
EHEA the European Higher Education Area
HEI Higher Education Institution
IRU International Research University
IARU The International Alliance of Research University
LERU The League of European Research Universities
METU Middle East Technical University
ÖSYM The Measuring, Selection and Placement Center
R1 Highest Research Activity
R2 Higher Research Activity
R3 Moderate Research Activity
ODTÜ Middle East Technical University
STEM Science, Technology, Engineering, Mathematics
TARAL Turkish Research Area
TAÜG Alliance of Turkish Research Universities
TÜBİTAK The Scientific and Technological Research Council of Turkey
UAÜ International Research University
US The United States
USA The United States of America
U15 Group of Canadian Research Universities
YLSY Scholarship Program for Graduate Studies Abroad
YÖK The Council of Higher Education
WCU World Class University
CHAPTER 1

INTRODUCTION

Recent developments in the 21st century has led the academia to reflect more on the functionality of higher education institutions and to explore new paths to provide quality education for students (Altbach, 2008). Within this globalized universe, science, technology, and innovations are considered as the most fundamental elements to sustain the power of a country’s economy.

On the one hand, the core business of university can be defined as the discovery, dissemination, and application of new knowledge. On the basis of the arguments, the need for universities stems from the idea that universities can directly and effectively enhance the economic growth as well as social and cultural richness (Maasen, Andreadakis, Gulbrandsen & Stensaker, 2019). This is necessary in order to meet these individuals’ needs of continuous training and development in the new paradigm of a knowledge-based society. Universities contribute to society by providing services for the initiatives of the economy, the environment, the public and private enterprises (Albulescu & Albulescu, 2014). Over the last decades, the demand from policy and society for universities to have broad impact on all kinds of societal challenges has become even stronger, due to dramatic changes in the context in which universities operate. Because of globalization (economically speaking, but also in terms of global societal challenges including climate change, sustainability, food security, intensifying competition world-wide and related socio-economic developments such as the migration crisis and political insecurity), the world has become so dependent on new and reliable knowledge and a highly educated workforce that policy makers have intensified their demands for impact (Akker & Spaapen, 2017). As Chen (2015) explained, the initial function of the higher education was to teach. Then, as a result of
some evolutionary trajectories in the history of higher education, universities started to focus more on conducting research than simply teaching and learning what is already discovered.

1.1. Background of the Problem

Novel procedures of research and innovation in tertiary education have evolved over the last 20 years (Santiago, Tremblay, Basri & Arnal, 2008). Within this context, Young (2006) stated that educational research may also promote the credibility of teaching and the community practices that could also be some other functions of the university.

Research is the key to a university’s reputation, especially in rankings and the basis of its academic and financial success. In recent years, with the increasing number of universities globally, the enthusiasm to obtain some independent analyses of the quality of universities have expanded rapidly across many nations, which has resulted in the idea of international ranking of the higher education institutions (Buela-Casal, Gutiérrez-Martínez, Bermúdez-Sánchez & Vadillo-Muñoz, 2007). Concerns about university rankings reflect the general recognition that economic growth and global competitiveness are increasingly driven by knowledge and that research universities play a key role in that context (Salmi, 2009).

The history of the research university idea dates back to early times. Atkinson and Blanpied (2008) briefly summarizes the history of research universities as follows; the first European universities that emerged during the 11th to 13th centuries (starting with Bologna, Paris, and Oxford) were, almost exclusively, teaching institutions. Germany, more particularly Prussia, was the site of the somewhat radical transformation of universities as teaching institutions were devoted to both the production and transmission of knowledge. Alexander von Humboldt incorporated these ideals into plans for a new university, the University of Berlin, founded in 1810. Wilhelm Von Humboldt wrote a memorandum that led to the creation of the University of Berlin
regarding the key functions of the university as the unity of research and teaching, freedom of teaching and academic self-governance (Boulton & Lucas, 2011). Johns Hopkins University, founded in 1876, was the first American university to be established from the outset as a research university followed by Clark University (1889), Stanford University (1891), and the University of Chicago (1892). In this respect, by the end of the century, several state universities had established their credentials as leading research institutions, including the universities of California, Michigan, Wisconsin, Minnesota, and Illinois in the USA. American research universities and their faculties have also been considerably more successful than their foreign counterparts in commercializing research. Graduate students continue to be attracted to US graduate schools by the reputation of their faculties. In contrast with the United States, universities in most other countries are the components of national systems regulated by a national ministry of education (Atkinson & Blanpied, 2008).

As universities have sought to increase and diversify revenue streams and reduce their dependence on governmental base-budget appropriations, and as the tuition fees approach maximum acceptable levels, externally sponsored research has achieved greater prominence (Fenwick, 2012). Within this perspective, research universities and their popular existences around the world have been gaining importance. Even though the number of research universities is not high, they perform the majority of the tasks; raising the highest number of graduate students and post-doctoral researchers.

While research universities educate undergraduates, train professionals for a wide range of positions, provide service to society, and engage in applied work and technology transfer, their distinguishing feature is to produce new knowledge especially (but not exclusively) in the areas of science and technology (Mohrman et al., 2008). The top American research universities, both public and private, have enjoyed remarkable success, capturing significant shares of federal dollars available to support research and expanding their influence and significance within American higher education (Capaldi et al., 2010). In an interconnected and rapidly changing world, the United States requires an educated citizenry to support a constant flow of
research and innovation and to sustain its international competitiveness (Matter, 2015). For underdeveloped and developing countries—as well as some industrial nations—a major challenge for building and sustaining successful research universities is to determine the mechanisms that allow those universities to participate effectively in the global knowledge network on an equal basis with the top academic institutions in the world (Altbach & Salmi, 2011). Stevens (2018) identified that research universities also are ideally positioned to help the nation adapt to a future in which the relationships between education, work, and economic security will be much different than they were a generation ago.

Among Turkey’s goals are to create and disseminate the knowledge as well as increasing the number of doctorate graduates. The Council of Higher Education (CoHE) is an institution that gathers all public and private universities as well as foundation vocational schools under its own roof. The Council of Higher Education is established by the 1982 Constitution of the Republic of Turkey and is a constitutional institution established in accordance with the basic principles and regulations (CoHE, 2019c). In 8-9 October 2015, at the “Turkish Universities in the European Research Area” conference in Ankara, 6 universities have declared a shared decision to find the Alliance Union of Turkish Research Universities in Turkey. The goals of this alliance were emphasized to increase the international research and innovation capacity as well as the competence of Turkish Higher Education (TAÜG, 2016).

In 2016, CoHE declared Turkey is a developing country that has recently started to investigate the idea of research universities in order to create a bright future for the next generations. The research university project was initiated by CoHE in 2017 encompassing those universities that were established before 2006. This project aimed to increase the international recognition of Turkish universities and to strengthen the universal collaboration of Turkish universities with other notable higher education institutions all over the world. Many criteria for classification have been considered by CoHE such as encouraging the interdisciplinary studies, national and international
supports, conducting national and international projects, the number of attributions, the performances of universities in 100/200 Doctorate Project. In addition, regarding the criteria such as producing qualified knowledge, supplying qualified human resources who have research competence, a total of 58 Turkish universities applied for this project in total (CoHE, 2018). Erdoğan (2017), the president of the Republic of Turkey declared the name of the top 11 main research universities and 5 candidate research universities at the opening ceremony of 2017-2018 Academic Term.

The main research universities are listed alphabetically as follows; Ankara University, Boğaziçi University, Erciyes University, Gazi University, Gebze Technical University, Hacettepe University, İstanbul University, İstanbul Cerrahpaşa University, İstanbul Technical University, İzmir Institute of Technology, and Middle East Technical University. Also, the candidate research universities are Bursa Uludağ University, Çukurova University, Ege University, Selçuk University, and Yıldız Technical University (CoHE, 2020). The head of Council of Higher Education, Saraç (2017) stated that main universities and candidate universities were defined by considering the current situation of universities, reference studies and future plans related to the privileges of Turkish Higher Education as well as leadership, research and development studies. Almost 4 years have passed since the research universities were founded. In the next chapter, the developments from the first established time to the current period will be discussed in detail.

1.2. Statement of the Problem

Higher education classifications are descriptive tools that allow categorisations and comparisons of higher education institutions on the basis of a set of dimensions and indicators. Internationally several stakeholders are already attempting to understand higher education systems by developing classifications and typologies of institutions (Van Vaught et al., 2010). Classifications of higher education institutions can serve a range of purposes. From a research standpoint, they can offer fresh insights into the structure and function of a nation’s higher education system, for example by facilitating investigation into the flows of inputs and outputs (McCormick, 2013). Van
Vaught et al. (2010) states that there are two type of classification systems as the European Classification System and the Carnegie Classification System of Higher Education in the United States. European Classification System is the binary systems that exist in many European countries that group higher education institutions into categories that are subsequently treated differently in terms of various policy-instruments (funding, legally defined permissions, and prohibitions). The European higher education classification is focused on individual European higher education organisations. It is aimed at institutions that are oriented towards higher education activities and that are recognized as separate and legally identifiable organisations in their own (national) systems. Over the years, the design of the European higher education classification has been based on an analysis of the design principles that appear to have been of crucial importance in the various US Carnegie classifications over the years.

The Carnegie Classification is a framework used to identify and recognize institutional differences of U.S. universities and colleges in supporting programs and research, including classifying research universities into three levels: highest research activity (R1), higher research activity (R2), and moderate research activity (R3) in 1970 by the Carnegie Commission on Higher Education (Yan & Zang, 2018). The Carnegie Classification for research universities is based on research expenditures, number of research staff, and number of doctorates granted. All values are annual. Research expenditures are divided into two categories: science, technology, engineering, and mathematics (STEM) spending and non-STEM spending. Doctorates are split into four categories: humanities, social science, STEM, and “professional.” (Kosar & Scott, 2018, p.2). However, a special irony of the Carnegie Classification—which called attention to institutional diversity—is the homogenizing influence it has had, as many institutions have sought to “move up” the classification system for inclusion among “research-type” universities. When category labels mirror broad cultural categories within higher education—such as “research university” and “liberal arts college”—classification and identity are easily confused. Significant problems arise when
classification is seen as an adequate representation of an institution’s identity or character. Colleges and universities are complex organizations that differ on many more dimensions than the handful of attributes used to define the classification’s categories, and of course the very act of asserting similarity among institutions runs counter to the rhetoric of distinctiveness on our campuses. More important, the host of intangibles that constitute institutional identity could not possibly be incorporated into an empirically based classification system (McCormick & Zhao, 2005). The Carnegie Classification system is marked by several statistical concerns. First, it is based on highly variable single-year snapshot data. Second, it uses unsupervised dimension reduction, leading to information loss. Finally, its methodology is not entirely transparent (Harmon et al., 2019). According to the National Research Council (2012), research universities are institutions with high quality human resources, high research performance, and integrated research and education for undergraduate and graduate students (Erdoğan, 2017). Similarly, Salmi (2009) evaluated the main characteristics of research universities as having high-quality faculty and students, rich in resources and management, and flexible management structures. Güçlü and Acer (2017) supported the previous expression that having at least one prestigious research and graduate university for each discipline diversifies the higher education system in the competitive market environment.

The classification of Turkish research universities is a very new topic in Turkey. Stating the necessity of establishing the research university model in Turkey as well, Çetinsaya (2014) underlines that those universities holding a larger number of doctorate students should develop new mechanisms promoting the research and the research university model. Unlike the examples in the world, the research universities were not established from scratch in Turkey in contrast to the existing structure selected universities are taking a new mission in addition to their identity. Especially academics, who are the makers of the research discipline, can be caught between teaching and research missions. When the literature is examined, there is only one study that evaluates research and candidate research universities from the perspective of academics. In their study, Çağlar and Gürler (2020) examined the measurement of
the effectiveness of research and candidate research universities operating in Turkey. According to the results of the study, it was determined that 4 universities were effective in terms of total technical efficiency score and the remaining 11 universities could not carry out effective activities. As a result of their studies, it was revealed that only 4 of the 15 research universities were effective. In light of the Carnegie Classification system, this study will analyze the issues and challenges of Turkish Research University Classification.

1.3. Purpose of the Study

The objective of this study is to identify and raise the level of understanding of the challenges and opportunities of newly established Turkish research universities. The goal of this study is to assess the current situation of the nation’s research universities by conducting a phenomenological case study at a research university in Turkey. More specifically, the purpose of the study is to examine how faculty members in a newly declared research university perceive the phenomenon of a research university assessing the degree to which they consider their university a research university. This study will examine the phenomena of research university in Turkey by conducting interviews with research university scholars (Fenwick, 2012).

1.4. Research Questions

Research universities are at the core of the socio-economic policies of a country, and they increase the welfare of the nation and international competitiveness. The production of economic products and the implementation of welfare policies depend on scientific studies. In this vein, this study attempted to shed light on the current topic of research universities and will help scholars follow a more efficient way during the process of adaptation to research universities. Thus, the present study aimed to reveal the status of research universities in Turkey based on the international literature which is critical in determining the efficiency of research universities. This study examined
the status and the factors affecting the efficiency of research universities in Turkey. The research questions are as follows:

1- How do scholars perceive and evaluate the process of research university classification in Turkey?

2- How do academicians experience the research university classification and characteristics?

3- What do scholars suggest for the development of the research university classification process in Turkey?

1.5. Significance of the Study

Research universities in the knowledge-based economy are the central institutions of the global information society at the beginning of the 21st century and they are defined not only as pioneers in technological products but also as the production center of knowledge and analysis, which aim at improving the living conditions of society and social and human sciences (Salmi, 2009). The most important feature of these universities is that they recruit the best and the brightest (academics and students alike) and educate a larger number of graduate students (especially doctorate) rather than undergraduates. Academicians focus on applied research, and all students, including undergraduates, have the opportunity to work in research-oriented centers. These universities spend more on their students and have higher funds compared with other universities. One of the features of research universities is academic freedom. Thus, stakeholders can freely produce research, publication, and thoughts (Altbach, 2011). Research universities have the importance of providing research on the academic and professional disciplines including the physical, life, social, and behavioral sciences, engineering, the arts and humanities as well as educational sciences (National Research Council of the National Academies, 2012). Various countries see research universities as a tool for solving social problems and develop strategies accordingly, and there is an increasing trend in other countries to establish research universities (TAÜG, 2016). For this reason, there emerged different research university models throughout the history. Some of these models are the Humboldt model, where research
is important and research universities are supported by public resources. The US research university model emerged from the Humboldt model and came to the fore especially in the fields of science and engineering (Gülbak, 2020). Today, especially developing countries tend to apply the American research university model because many see the American research university model as an influential contemporary model that combines both British and German research ideas (Altbach, 2015).

In the Eleventh Development Plan, it is stated that Turkey is a growing and developing country and it will become stronger in the future and be effective in areas such as global production, trade, and technology. The growth and development goals in the Development Plan are closely related to the research universities, which play an important role in the development of societies by carrying out studies in the fields of technology, research, and knowledge. In the Eleventh Development Plan, the support to be given to research universities is mentioned. (1) The Research University program will be strengthened so that universities can carry out R&D and innovation activities. (2) The capacities of research universities will be increased with financial supports. (3) The employment of post-doctoral researchers will be given priority in research universities. (4) Research universities will be matched with related sectors considering their competencies and business models based on projects will be implemented to achieve the determined targets with collaboration (Başkanlığı, 2019). Council of Higher Education (CoHE) pointed that all universities should not be the same except for basic values and teachings, that they should be structured with different thematic areas and different missions, and turned towards diversity in the structuring of universities; It was decided that some of them should be directed towards education, some of them towards research and technology production, and some of them focused on contributing to regional development. In order to increase prestige of universities in global competition, the research university classification process started in Turkey in 2017 (Saraç, 2017). Officially granting universities a “research university” status is a relatively new phenomenon in Turkey (Mammadov & Aypay, 2020). Even though classifying universities is regarded as an efficient strategy for developing institution-
based policy for different types of universities, in Turkey, there is no widely accepted classification or official classification of universities for researchers and policy makers (Erdoğan & Esen, 2016). Decision criteria affecting the evaluation process, such as the mission of research universities in Turkey, their capacities and performances, were not shared with the public. The process of classifying some universities as research universities was perceived as a way to achieve higher university rankings, rather than perceived as a long-term investment in the social and economic development of the country among the public and higher education stakeholders (Erdoğan, 2017). In this study, the features of international research universities and research university alliances are presented based on the literature, and the research university process in Turkey is discussed according to the opinions of academicians. This study is important in many ways to get to know the research university process in Turkey. The research university process is a new practice in Turkey, so there have been limited number of studies that have been conducted related to recent research university classifications in Turkey. This study is important because data were collected from a deep-rooted, research-oriented university, which is also recently declared a new research university. The data collected is important as it has the potential to contribute to the determination of policies on how research university classification can be improved and what can be done to achieve Turkey's goal of placing at least 2 universities in the top 100 in international rankings. The current study is significant as it explores how the research university classification is being experienced by faculty members of a research university. In addition, this study is important in terms of contributing to the literature as the first study in the field of research university in terms of being comprehensive of the whole university as a case study. I contributed to the literature with new patterns that emerged as a result of this study, which weren’t previously found in the literature. For this reason, this study will shed light on the initiative, development and future process of research university mechanism in Turkey to determine what research university classification means in Turkey, how academicians experience this process, and what are the policies and strategies to be followed in order to identify the obstacles faced by research universities and develop recommendations for these obstacles.
1.6. Definition of Key Terms

Research University is a central institution of the 21st century providing access to global science, producing basic and applied research, and educating key leaders for academe and society (Altbach, 2007). Research universities, both public and private alike, are the leading producers of science and engineering bachelor’s, master’s, and doctoral degrees. They are contributors to economic development at the local, state, and national levels, performing over half of the Nation’s total basic research in 2009, and they educate and train our Nation’s next generation of scientists and engineers (National Science Foundation, 2012).

University rankings are used to measure their global competitiveness, being simultaneously criticized and lauded (Pavel, 2015). University ranking tables are a global phenomenon began in 1983, when the US News and World report started to publish the annual America’s best colleges review. The goals of ranking tables include directing an entrant to higher educational programmes, evaluating the phenomena of the international higher education market. It also includes introducing market directions for universities at national levels and enhancing a positive competition for students, professor (Lukman et al., 2010).

World-class university is to become among the foremost in the ranking around the World. Excellence in research underpins the idea of world class. In a world-class university, there is the environment where academic freedom and an atmosphere of intellectual excitement, internal self-governance, adequate facilities exist for academic work. Tertiary Education in higher education is also known as tertiary education in some countries, refers to all post-secondary education, including both public and private universities, colleges, technical training institutes, and vocational schools (World Bank, 2018).
CHAPTER 2

LITERATURE REVIEW

In this chapter a review of the literature will be provided related to universities and their classifications into different types of universities. To begin with, the development process of universities over time will be explained. The missions of universities in various periods were mentioned. Research mission was emphasized by focusing on the research universities all over the world. Through the end of the chapter, the research university establishment process in Turkey will be discussed based on the literature available.

2.1. Historical Background

In literature, there have been many discussions on the historical development of the university. A considerable amount of literature has been published in history to clarify and understand the periods that universities have come across from the past to modern times. Some historians divide the development process into four as the birth of the university (12th century to 16th century), the decline period (16th and 18th century), the recovery of the university and the German transformation period, and finally, the expansion and diversification of the university from the end of the Second World war to the end of the 1970s (Geuna, 1996, p.11). Similarly, with the same aim to understand the university development process in a more concrete way, Wissema (2009) divides the historical period into three: first, second, and third-generation universities. In his article, the first generation refers to the medieval period. The second generation begins with the German Humboldtian reform. The third generation is called
the entrepreneur and the modern university. In addition to these divisions, Geuna (1996) also asserts that we can also add the fifth period in the university's redefinition. In this chapter, Wissema's division will be considered.

2.1.1. The Medieval Period

As mentioned before, there have been many discussions on the origins of the university, so there is no exact date when the university idea began in the past. Duranti (2004) points out that the archives of the medieval universities were not tightly ordered; instead, the knowledge we can get through the archives was kept as fragmented or rigorously structured, making it hard to reach out the archives of that era towards our modern times. However, Haskins (1923) stated that in the early ages as ancient Greece, Byzantine, and Arab World had examples of a kind of their own higher education institutions that focus on law, philosophy, and rhetoric. However, they were different from the university institutions' standard notations, and it wasn’t until the 12th and 13th centuries that an organized institution emerged in Europe (Haskins, 1923). On the other hand, one of the first examples of university discussed in Cobban (1975) is that the first emergences in the medieval period date back to the school of Athens in the 4th century, B.C., the law school of Beirut in the 6th century and the imperial university of Constantinople in 425. When we consider the question “what is a university?”, Haskins (1923) states that “it is a society of masters and scholars”. When the terminological meaning of university is considered, there are different views on the university's correct terminological use. Rashdall (1895) points out that using the Latin term “Universitas,” meaning university as an institution as a false impression. The terms used for university in Rashdall (1895) book are “Universitas facultatum,” which means that the branches of knowledge, “universitas vestra” meaning as the whole of you, a body of persons, and he asserts that the word used to point out the university as an institution is “studium” rather than universitas. However, the closest term which is very close to today's university meaning is “studium generale” meaning that “not a place where all subjects are studied, but a
place where all subjects are received.” (Rashdall, 1895, p.7). Later, “studium” or “studia” were used for the university in history. It wasn’t until after the title of the master in studium generale that “jus ubique docendi” came as a privilege meaning that “the principal object of papal or imperial creation” (Rashdall, 1895, p.16).

Based on the literature on this period, two great universities of history, generally accepted as the first examples and becoming the descendants of the medieval university, emerged; Bologna and Paris (Haskins, 1923). Following Bologna and Paris, many other universities such as Oxford, Cambridge, Arrrezo, Palencia, Napoli, Salerno, and others in Europe until the end of the 13th century (Çiftçi, 2015). Bologna and Paris represented a model for the following universities to be established. Bologna is a “student university,” meaning that students hire the professor, whereas Paris is a “professor university,” referring to that professors had a strong authority in the governance of the institution (Wissema, 2009). The curriculum of medieval universities was most affected by the doctrines of churches because the church’s power is extreme, and the curriculum of the medieval universities was based on teaching on the liberal arts such as grammar, rhetoric, logic, lectures and quantitative disciplines (Wissema, 2009; Overman, 1999). Wissema (2009) summarizes this period as; in that period, universities had their privileges, and they were strong institutions aiming to protect the knowledge of the past and keeping obedience to the doctrines of churches. Towards the 14th and 15th centuries, the sparkles of humanism and the Renaissance emerged, which was the era many radical transformations occurred in society, and humanistic thoughts evolved all around Europe and many parts of the world instead of Scholastic thought. This rebirth resulted in the birth of applied sciences at universities (Wissema, 2009).
2.1.2. The Humboldtian Period

Despite the effects of the Renaissance and humanistic thoughts, the modern scientific method did not occur in the universities until the end of the 18th century (Wissema, 2009). After the Medieval period, the university's view as an institution changed according to the perspectives of different intellectuals of society (Östlig, 2018). In 1810, Wilhelm Von Humboldt and several of his contemporaries laid the foundations of the University of Berlin (in some resources also referred to as the Humboldt University and its current name is the interaction of both - the Humboldt University of Berlin) for academia, the integration of natural and social sciences and humanities regarding the points of "free research," "free education" and "free knowledge" (Humboldt-Universität Zu Berlin, 2020; Savvina, 2016; Östlig, 2018). This period also focused on universal education by integrating it into the research after the French Revolution and Napoleon Wars (Çiftçi, 2015). Before the Humboldtian period, universities were mainly qualified to teach and raise law, medicine, and theology professionals. Humboldt University was based on two terminologies, which is "Lernfreiheit" meaning freedom to learn and "Lehrfreiheit" referring to the freedom to teach, which is expressed in Altbach's (2001) article that the concept of freedom, specifically the academic freedom, encouraged professors within the classroom and their expertise fields (Altbach, 2001). What is meant by academic freedom here is that university professors had the right to define the courses that they would attend or the research that they would conduct (Savvina, 2016).

On the other hand, Altbach (2011) identifies that the main focus was on research, and the developments in research understanding resulted in the emergence of different disciplines such as chemistry, physics, and social sciences. In line with Altbach, Nybom (2003) defines this period's three critical characteristics as the unity of research and teaching, the holistic nature of knowledge, and the research itself. Humboldt University was established on the roots of rationality, experimentation, argumentation, and transparency (Wissema, 2009). Besides, one of the influential characteristics of
this period was the establishment of departments, institutes, as well as the specialization of the universities (Kerr, 2001). Specialization meant that universities knew society's needs and organized themselves according to monodisciplinary faculties (Wissema, 2009). For example, when the Humboldt university was founded, it comprised faculties such as law, medicine, philosophy, and theology (Humboldt-Universität Zu Berlin, 2020). According to Altbach (2001), Humboldt universities also were founded in the roots of nationalistic developments. Perkin (2007) points out that this model evolved in many parts of the world from Northern to Eastern Europe, from Scandinavian to Greece, from Turkey to Tsarist Russia by combining teaching and research to meet nations' needs. However, this model was not perceived in the same way for all nations. Instead, every nation adapted this model according to its cultural, social, geographical, and political characteristics. For example, in the United States and Japan, "their universities took over the professorial principle and the research function without the German professor's independence of the university because this independence first belonged to the university, second state and thirdly, it was divided between the state and the university board (Perkin, 2007, p.178). In his book, Timur (2000) puts forward that the establishment of the modern universities was based on the foundation of Humboldt University. In this regard, Altbach and Salmi (2011) identify that the Humboldt model is also accepted as the beginning of research universities with its significant contribution to society's freedom to teach and learn, substantial autonomy, and academic freedom. Savvina (2016) summarizes the Humboldt University's characteristics as the integration of traditional values of nations within the frame of combining research and teaching, which was a demand to upgrade the medieval university understanding that had not changed for ages.

2.1.3. Third Generation Universities

This period is also the era which we have come across currently. Kwiek (2016) states that today's university understanding is that universities serve as change agents; they are no longer stable. Instead, they take over the responsibility of transforming
societies, not only for national borders but universities today go beyond the national borders by becoming international. This might also be the reformulation of the university's Humboldtian ideas, and he also discusses that universities are more connected to the industry as the industry's research fundings increase. On the one hand, Wittrock (1993) points out the third generation as the modern university because it emerged due to individuals' efforts to understand the effects of industrialization, urbanization, and technology. Through the 1960s, universities experienced a change from a monodisciplinary understanding of the Humboldtian period to an interdisciplinary or a multidisciplinary period, which means that universities started becoming more open to developing collaborations with other disciplines and industries regarding innovation studies (Çiftçi, 2015). According to Wissema (2009), universities are changing from the science-based understanding to the third generation period, which reflects the modern era. Ghorbani et al. (2020) suggest that third-generation universities should be flexible and, both internally or internationally, should enable financial efficiency and infrastructure success.

Wissema (2009) pointed out that universities should transform themselves into structural, functional, managerial, and cultural dimensions to reach global success. He expresses the reason universities need to transform from the Humboldt idea to a modern university understanding involves; first, the increasing number of the students on the Humboldtian model has become a critical barrier causing the professors not spare enough time for the students and exams individually. As a result of the increasing student number, many universities started applying for budget-tightening programs. Second is globalization, which caused competition among universities. Third is that growing interdisciplinary studies among professors decreased the need for monodisciplinary Humboldtian model. Another limitation of Humboldt's idea was the rising cost of performing research. In the years when much interdisciplinary research became necessary, and many top universities looked for other funding resources and state funding because interdisciplinary studies also brought about needing qualified professional resources. After the Second World War, there emerged a trend that some
special research institutes were founded. Especially in the modern era, universities have been evaluated as the cradle of new economic activities because society also expects universities to supply qualified employees for industry and government. Universities have started developing collaborations with industry to meet society's needs, whereas the industry also needs fundamental research from university institutions. In summary, Wissema (2009) presents the three periods' overall characteristics in the table below.

Table 1 Characteristics of three generations of university

<table>
<thead>
<tr>
<th>Universities</th>
<th>The Medieval Period</th>
<th>The Humboldtian Period</th>
<th>The emergence of the Modern University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aim</td>
<td>Teaching, education</td>
<td>Teaching, education, research</td>
<td>Education, teaching, research</td>
</tr>
<tr>
<td>Role</td>
<td>Protecting the truth</td>
<td>Discovering nature and research</td>
<td>Creating values</td>
</tr>
<tr>
<td>Method</td>
<td>Scholastic church doctrines</td>
<td>Monodisciplinary, science</td>
<td>Multidisciplinary interdisciplinary, modern science</td>
</tr>
<tr>
<td>Function</td>
<td>Growing up professionals</td>
<td>Growing up, both professionals and scientists</td>
<td>Growing up professionals, entrepreneurs</td>
</tr>
<tr>
<td>Organization</td>
<td>Nations, faculties, colleges</td>
<td>Faculties, departments</td>
<td>Faculty institutes</td>
</tr>
<tr>
<td>Management</td>
<td>The highest authority such as the chancellor</td>
<td>Academics</td>
<td>Professional Management</td>
</tr>
</tbody>
</table>

(Wissema, 2009)

As shown in Table 1, mentioned as the first period is also named as the medieval period. At that time, universities have the role of science itself. The main aim is to defend the truth, and the teaching method was scholastic under the effect of church doctrines. The universities' function was to raise professionals on science, and the chancellor had the highest authority for the management. In the second generation, known as the Humboldtian period Research was prioritized rather than teaching. Universities adapting the Humboldtian model integrated the research and teaching.
The role of the university was to discover nature and research. Science and monodisciplinary studies were very common in that period. As a result of the nationalistic understanding, national languages were applied as the language of instruction. Faculties, departments, and institutes were established during the Humboldtian period within the frame of specialization mentioned in the previous pages. The third generation is the one that is the closest one to our modern understanding. Apart from research and teaching, universities of this generation also look for know-how demands. What we can understand from the know-how nexus is the fact that universities collaborate with industrial corporations. As a result, there arise technopolis contributing significantly to the birth of new firms. Since this era is based on the global trend, the university's orientation is global and international. Management is done through professional collaborative systems. As stated in the table above, universities have played different roles in different periods of history. Universities have always been intertwined with social developments and have been influenced by social actions. Community service, teaching and research activities are among the most important task of universities. In the next section, the missions of the universities will be mentioned and the transition from the research mission to the research university will be presented.

2.2. Mission of the Universities

Since the universities' establishment, they are appreciated for fulfilling many roles, even with fewer resources (Altbach, 2008). They carry out many roles under the perspective of their foundation purpose. Scott (2006) points out that universities aimed to respond to emerging demands from medieval to postmodern times due to the evolving technology and transformations in university history, so they defined their mission statements when they had been established. For instance, Dan (2012) states that universities have experienced change throughout history, and now they are facing globalization and adapting their mission in this regard. However, since the first origins, the universities' actual functions have always been a discussion among scholars and historians. On the other hand, the modern term was applied to the university's purpose
as the mission (Allen & Allen, 1988). The universities' mission statements might be broadly summarized as teaching, research, public service, nationalization, democratization, and internationalization.

Table 2 Summary of mission statements

<table>
<thead>
<tr>
<th>Teaching</th>
<th>Teaching services were so general during the middle ages at the University of Bologna and Paris in the medieval period.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>Emerging first in the reformed University of Berlin, research was for the first time integrated into teaching.</td>
</tr>
<tr>
<td>Public service</td>
<td>Universities should provide the public with a free national service as a regular mission of American Higher Education through Morrill Acts in 1862.</td>
</tr>
<tr>
<td>Nationalization</td>
<td>Nationalization emerged during early modern times to serve the government efficiently</td>
</tr>
<tr>
<td>Democratization</td>
<td>Democratization was first created to serve in the U.S. colleges</td>
</tr>
<tr>
<td>Internationalization</td>
<td>It means that universities need to internationalize their mission of teaching, research, public service, or other mission statements based on the postmodern era</td>
</tr>
</tbody>
</table>

(Scott, 2006)

As shown in Table 2, Scott (2006) explains how mission statements of universities have evolved over time. In the era, when University of Bologna and Paris were famous, the emphasis was on teaching. With the foundation of University of Berlin in Germany, universities changed their mission into research activities. Public service mission statement emerged in the U.S with the idea that universities should provide a free contribution to the society. The nationalization statement emerged as a result of the global competence among the countries in order to motivate universities to serve the government efficiently. Democratization serves for the fulfillment of individual and society needs. Nowadays, in any mission statement of any university, it's emphasized that internationalization is given a great priority for making universities known globally.

Mission is differentiated from the mission statement of the university. Beginning in the 1930s, American universities were the first to publish mission statements in their
catalogues. In recent decades, British, Canadian, and other universities have followed suit by publishing mission statements in order to prove themselves accountable to the public. Today’s mission statements are often based on the triad (20th-century) mission of the university: teaching, research, and public service (Scott, 2006). The first reason was the development of medieval European universities focusing on teaching under the effect of scholastic church doctrines. Second to develop was the nationalization concept, which brought a nationalization mission to universities. Thirdly, the U.S college of the 19th century, after the Morril Acts, improved the democratization of higher education. The USA has become the first to apply liberalism to education. Next, three well-known missions of universities will be reviewed as Moore and Ward (2010) suggest universities' missions are teaching, research, and other community services.

2.2.1. Research Mission

The university mission might be expressed through teaching, research, and public service (Moore & Ward, 2010). As a regularly funded mission, research first emerged in the preindustrial German states (1800s), before national unification. Starting at the University of Berlin, original inquiry was the primary goal. In the German (Humboldtian) universities, research was regularly integrated with classroom teaching-mission interplay. Research arose as a distinct professional activity, testing assertions of truth, raising problems of ignorance, and searching for new knowledge and insights in a systematic manner (Pfeffer & Stichweh, 2015). Beyond basic research, the applied research mission also emerged (Scott, 2006, p.4). The literature regarding the relationship between teaching and research in higher education is both complex and contradictory (Roberston & Bond, 2001). For instance, in one study Feldman (1987) showed that research productivity slightly affects and benefits teaching. While another study conducted by Hattie and Marsh (1996) shows that even though there is a common belief that teaching and research are closely related to each other this is not true, because according to their study, they do not affect each other at all.
Neuman (1994) previously discusses that students get the benefit, but they are generally unaware of the notion of the research when they are undergraduates and argues that the period of learning how to do research is generally between the ages of 21 and 25 when students are completing their graduate degrees. He also adds that research is also a connection to the industry because universities get funding from outside corporations via fundamental research consultancy.

2.2.2. Teaching Mission

Teaching mission services were first provided during the later Middle Ages at the Universities of Bologna and Paris. Scholastic method was state-of-the-art in Europe for both teaching and research; thus, these missions or ideals fused. For example, Roger Bacon taught classes as well as performed scientific experiments. The medieval university teaching mission embodied the undergraduate liberal education and graduate (professional) education missions. (Scott, 2006, p.4). Before beginning the teaching and research differentiation, it is necessary to state that there have been many discussions on whether universities should focus on teaching or research mission. Some state that the universities' first mission is teaching over research, whereas others argue that both teaching and research should be conducted and managed simultaneously (Hattie & Marsh, 1996). Braxton (1996) identifies that there are two perspectives on this topic. The first one is the null perspective meaning that there is no relationship between teaching and research because they are independent. The second one is the complementarity theory, which means that teaching and research complement each other. In other words, they are dependent on one another’s role. The last perspective is in favor of integrating both teaching and research missions because they mutually enhance the learning environment. When it comes to teaching as an individual mission, its history began in the medieval period universities.

According to Scott (2006), teaching at medieval universities was operated through lecturing or debating, and it was so common among the contemporaries of that period. Haskins (1957) states that “medieval universities were the school of the modern spirit,” and teaching methods and roles remained similar to modern times (Haskins, 1957,
Parker (2008) points out that in the UK, for instance, there is a current strong trend to improve rewards for teaching to enhance promotion. Even though the great efforts to endorse teaching in the UK, it remains blurred when compared to research in the UK. In the past, rewards in higher education, particularly promotion, was linked to research more. Indeed, teaching has been seen by some as an extra source of income to support the main business of research, so research was recognized as a lower position than teaching in terms of the mission status (House of Commons, 2003). For this reason, the criteria “teaching only” was brought, and many initiatives were developed to enhance the status of teaching in academia (Parker, 2008). In one study, each university’s promotion criteria were analyzed from their websites (DIUS, 2008). Results showed that former polytechnics or post-1992 universities were established as teaching institutions while traditional universities which have strong teaching-research nexus became inclined to rewarding research (Parker, 2008). In his book The Idea of University, John Henry Newman declared that “a university is a place of teaching universal knowledge rather than seeking advancement” (Newman, 1907, p.106). Newman expresses that the university should have the privilege of teaching first of all.

### 2.2.3. Community Service Mission

Under modern, independent nation-state circumstances, three distinct missions of universities emerged. The nationalization, democratization, and public service missions developed to serve the needs of nationstates. Ultimately, the missions of teaching and research were superimposed upon each of these missions (Scott, 2006, p.4). In line with Scott (2006), service-learning can be defined as the third mission related to working with the community. In essence, both the community gets to benefit from this working, and the faculty members enrich their teaching methods. Dan (2012) puts forward that the universities' third mission has been discussed since the 1990s and has been used as a way of promoting strategies to evaluate and recognize the quality excellence of university performance. He also gives specific expressions on the pros and cons of the public service mission of the universities.
According to Dan (2012), community service mission refers to “services to society” and has three notations: first, the university supplies service to the public without a monetary benefit. Second, universities provide services to increase their income through consultancy to the industry, patent registration, and collaborative studies. Third, universities find innovation opportunities by directly contacting the community. According to Soeiro et al. (2012), the universities' third mission includes many activities such as involving the generation, application, and exploitation of knowledge. According to this paper, the third mission, namely “public service,” enhances many benefits such as influencing and enriching the culture of both society and university, motivating the faculty members and students, and supplying recommendations for both the university and the community., the community service mission focuses on the community's social needs, enhancing research, and teaching modes addressing both sides’ benefits (Soeiro et al., 2012).

2.3. Research Universities

In this section of the literature review the emergence of the research university, the development process, and the current issues regarding research universities will be emphasized. It was clear in the previous literature studies that research has always been evaluated in a different category from teaching and public service even though some say they are interrelated to each other. According to Chen (2015), there are some reasons why higher education institutions place research over teaching; first, teaching does not bring recognition or income to academic staff, second the academics introducing him or herself as a researcher grabs more opportunities. Dunkin and Precians (1994) also suggests four reasons on the same issue that research has concrete results and research is more related to technology and innovation methods when compared to teaching. Also, Young (2006) underlines that research universities have become more reputed because governments generally fund research-driven projects. Here a definition and historical background of the research universities will be presented.
Research universities are the key institutions of the 21st century society because of their capability in creating research on issues about the global science, society. That is why, they are essential, especially to those developing countries (Altbach, 2007; Altbach, 2013). Salmi (2009) argues that in the globally competitive world, there is an increasing trend to establish one or more research universities in the developing countries. Salmi (2009) define research universities as world-class universities. According to Salmi (2009), WCU consists of concentration of talent, favourable governance, abundant resources. Altbach (2004) states that “everyone wants one, but no one knows how to get one”. Becoming a world-class university is achieved when the outside world recognizes the university, for instance, Harvard, Yale, Columbia, Oxford, and Cambridge in the United Kingdom, the University of Tokyo in Japan are counted among the exclusive group of elite universities, but no direct and rigorous measure was available to substantiate their superior status in terms of outstanding results such as training of graduates, research output and technology transfer (Salmi, 2009, p.273). Figure 1 below shows the characteristics of world-class universities. In an attempt to propose a more manageable definition of world-class universities, the figure above shows what is meant by the WCU definition. WCU is formed by the combination of factors such as abundant resources, favorable governance, concentration of talent.

For abundant of resources, Salmi (2009) stated that running a research-oriented university can come at great costs. Research universities have four main sources of funding; funding from the state budget for operational expenditure and research, financial returns from donations and gifts from public institutions and private firms, and tuition fees. In summary, Salmi (2009) states that abundant resources allow research universities to attract more top professors and researchers.
In concentration of talent scheme, Salmi (2009) attributes the first and decisive step to WCU being top students and an outstanding faculty and emphasizes the importance of international wealth when choosing outstanding students. In this regard, Salmi (2009) stated that for WCU to be a pioneer of intellectual development, it should include outstanding international students and researchers.

Salmi (2009) stated that the third dimension concerns the overall regulatory framework, the competitive environment, and the degree of academic and managerial autonomy that universities have. Research universities encourage competitiveness, unlimited scientific inquiry, critical thinking, innovation and creativity in the environment in which they operate. Also, institutions with full autonomy are more bureaucratically flexible, even in light of the legitimate accountability mechanisms that bind them. The elements of autonomy outlined above are necessary, if not
sufficient, to establish and maintain world-class universities. Other important governance attributes are needed, such as inspiring and enduring leaders; a strong strategic vision of where the organization is headed; philosophy of success and excellence; and a culture of continuous thinking, organizational learning and change is needed.

At the intersection of these three factors, there are graduates, research outputs and technology transfer. In the combination of these three feature sets; concentration of talent, ample funding and proper governance are what make the difference. The dynamic interaction between these three sets of factors is the hallmark of research universities. Finance and governance affect performance together. They clearly point out that higher ranked universities tend to have increased management autonomy, which in turn increases spending efficiency and results in higher research productivity.

Erdoğan (2017) uses this model as the characteristics of research universities, as well because research universities have the characteristics of highly qualified research publications, students and academics, high research income, academic freedom, and abundant resources. This figure above shows that a world class university, namely a research university comprises of the combination of many actors such as students, teaching staff, researchers, public budget resources, leadership team. In the junction of actors, there stands graduates, research output and technology transfer.

2.3.1. Historical Background of Research University

Considering the previous literature, on the development of the university, the first organized university structure emerged in Europe in the 11th century and 13th century (starting with Bologna, Paris, and Europe). As mentioned before, the first medieval universities engaged in teaching and it was in the 19th century that Germany more particularly, Prussia, was the place of some radical transformations from teaching to research. The origin of the university goes back to the establishment of Humboldt University (Altbach & Salmi, 2011). In their book, they underline the key
characteristics of Humboldt university when it was founded; it was a state institution funded by the state and the structure of the academic organization was based on a hierarchical chair system. The idea of shaping the university was “freedom to teach” and “freedom to learn” in the university. These two freedom concepts provided the university with great academic freedom and autonomy. In line with the developments, the first scientific laboratory was established in Germany during the 1860s and 1870s, so research faculties were thought to be essential (Atkinson & Blanpield, 2008). Originally, the reformed university aimed to contribute to Germany’s national benefits (Altbach, 2008). In the light of history, Humboldt University sparked a research transformation at universities and it has become a model accepted by many countries later such as the United States and Japan (Nybom, 2003; Altbach & Salmi, 2011). For instance, there are nearly 220 research universities in the academic system of the USA’s 400 post-secondary education institutions. Classification is an important organizing principle in social life. When classifications are widely adopted, they create the categories of thought through which people orient their actions.

Doyle and Brady (2018) describe the essential characteristics of this modern organisational form as having a distinct identity and a rational approach to directing organisational change and resource management so as to better align the institution with societal demands. The approach assumes a clear statement of institutional goals and strategy and a structured leadership with sufficient autonomy and capacity to deliver such change.

2.3.2. The U.S. Research Universities

Altbach and Salmi (2011) point out that the US research universities are a variant of the German research university which emerged during the Humboldtian period in the 19th century. According to Atkinson and Blanpield (2008), research universities in the US are accepted to be significant centers for conducting research and advance knowledge in all science disciplines by contributing to both national and regional economies. The values and characteristics of US research universities are intellectual freedom, initiative and capacity, excellence, openness, scope and size, undergraduate
experiences, high caliber graduate education, competition for research resources among faculty, research for scholarship, economic productivity, and world leadership, and leadership. Research universities exist in a conducive environment for further development (Mammadov & Aypay, 2020). Land Grant Acts briefly, it was an attempt initiated by Justin Smith Morrill to give the community a practical education in their lives (Goldmann, 2005). There emerged a term called as “Land-Grant” college or university, which aims to teach agricultural issues, military methods, and the mechanic arts as well as the classical studies to enable the working class to benefit from a liberal and practical education. During those times, the Land-Grant status allowed universities to get federal support on agricultural research and other extended research. The example of Land-grant colleges might be listed as Arizona, Florida, Massachusetts, Michigan, Utah, Kentucky etc. Today, America’s Land-Grant universities continue to fulfill their democratic mandate openness, accessibility, and service to people and many of these institutions have been listed as the nation’s most distinguished public research universities. He adds that American universities have applied science to agriculture, the workforce, and industrial expansion. US universities started emphasizing on research, agriculture, and the new emerging industries, which made research universities more common at the beginning 20th century.

The US research university model emphasized service to society as the key function; second, the organization of the academia was more liberal with a liberal discipline-based department understanding as well as applying a hierarchical chair system. Third, governance and administrative issues were more based on participative decision-making. The US research university became the popular global model preferred by many all over the world (Altbach & Salmi, 2011). Through a combination of significant expenditure on research provided by the US department of defense because many great efforts were provided by research university especially during the Cold War, which led to the creation of a differentiated academic system in most states and affected different academic fields; therefore, research universities of the US became the international “gold standard” (Altbach & Salmi, 2011). The first research
universities were established after the Civil War, then during the colonial period, these universities started to mainly focus on the research function. John Hopkins University was the first research university that gave more PhD doctorates than Harvard and Yale followed by Clark University, Stanford, University of California, Michigan, Wisconsin, Minnesota etc. (Atkinson & Blanpield, 2008, p.33). Capaldi et al. (2010) state that the top American Research Universities, both public and private made great contributions to the nation. According to Eckel and King (2004), American research universities were highly affected by the British undergraduate education and German research university model, but it was different in the name of freedom of expression, capitalism, the belief in the rationality of markets meaning that diversity and high quality are best achieved through competition rather than centralized planning.

2.3.3. The Carnegie Classification of Institutions of Higher Education in the U.S.

The Carnegie Commission on US Higher Education was founded by the Carnegie Foundation for the development of teaching in 1967 to provide recommendations on the issues facing U.S. higher education. The Carnegie Classification of Institutions of Higher Education is the basis by which all institutions of higher education in the United States are typically ranked based on empirical data (Shulman, 2001).

This classification was established and implemented to address the existing complex panorama among different institutions of higher education in the U.S. (McCormick & Zhao, 2005) and to encourage research activities within institutions by classifying areas of colleges and universities that would be, “roughly comparable institutions into meaningful, analytically manageable categories. It enabled researchers to make reasonable comparison among “similar” institutions and to contrast them with groups of “different” ones” (McCormick & Zhao, 2005, p. 4). The aim of Carnegie Classification is to support research in higher education by classifying institutions through making comparisons among similar institutions and contrasting institutions with group of different institutions. Carnegie also aimed to group colleges and universities based on variables such as activity, number of degrees awarded per year, amount of federal research funding awarded to the institution per year, curricula
specialization, and admissions process for colleges offering only undergraduate degrees (McCormick & Zhao, 2005). As a result, it was determined that the best structure for organizing the diversity of institutions was to do so by degree level and specialization: Doctoral/Research Universities, Masters Colleges and Universities, Baccalaureate Colleges, Associate Colleges, Specialized Institutions, and Tribal Colleges and Universities. Of a total of over 4500 HEIs considered in the 2015 classification, the number of Research Universities is about 7% of the total (Becerril, 2019). Derived from empirical data on colleges and universities, the Carnegie Classification was originally published in 1973, and subsequently updated in 1976, 1987, 1994, 2000, 2005, 2010, 2015 and 2018 to reflect changes among colleges and universities. This framework has been widely used in the study of higher education, both as a way to represent and control for institutional differences, and also in the design of research studies to ensure adequate representation of sampled institutions, students, or faculty. For classifying research universities, a two-stage process is used. A simple basic criteria for a Research University is used to separate research universities from the rest—a university is defined as a Research University if it has graduated more than 20 PhDs per year in the recent past (in an earlier classification, this number was 50 PhDs per year). Based on this basic criterion, 335 universities are classified as RUs in the 2015 edition. The basic classification separates research universities from the rest. However, this class itself contains a range of universities. In the second stage of classification, the RUs are grouped into three sub-categories: R1 (highest research activity), R2 (higher), and R3 (moderate). The following features related to their research activity are considered while grouping the Research Universities into the three subcategories, R1, R2, and R3. Number of faculty members, research manpower, number of PhDs granted, and research funding features are considered to be the most defining features of a research university and, therefore, used for the purpose of classification. In addition to research faculty, an RU also requires research manpower. Hence, this factor is included. Globally, the main research manpower (besides faculty) is the PhD students. In advanced countries such as the USA, however, RUs also employ a considerable number of post-doctoral staff
for research. In Carnegie Classification, post-doctoral fellows are counted as research manpower. A fundamental difference between an RU and a teaching-focused institution is the size and importance of the PhD program in the RU. In fact, Carnegie Classification considers this feature only for basic classification of a university as an RU. For sub-classification, it considers number of PhDs granted in STEM fields. Published approximately every 5 years since 1973 and most recently in February 2016, the ranking currently assigns each of 335 US universities to one of three clusters: R1/R2/R3 or Highest/Higher/Moderate Research Activity, respectively (Kosar & Scott, 2018).

2.4. Structuring Research University Alliances Around the World

There are national or international research university alliances established by the research universities in different countries to develop and enable research universities to meet the desired socio-economic goals, and thus these alliances collaborate to put strategic steps on the enhancement of research universities (TAÜG, 2016).

2.4.1. The International Alliance of Research University (IARU)

Established in 2006, IARU is an international research university alliance with eleven members across the world such as the Australian National University, ETH Zurich, National University of Singapore, Peking University, University of California, Berkeley, University of Cambridge, University of Cape Town, University of Copenhagen, University of Oxford, the University of Tokyo and Yale University. IARU’s vision is to present the current challenges of the world such as environmental problems, climate, health, longevity, etc., to provide opportunities to students and staff on their research studies and to promote institutional interdisciplinary collaborative working (IARU, 2020). IARU defines research university as the institutions applying research, education and (knowledge exchange) technology transfer. The purpose of research-intensive universities is to make ground-breaking discoveries and to seek and transmit knowledge and new understanding in its own right and to the benefit of society. This research should of course be independent and respect the fundamental
principles of academic freedom. And this applies to all areas of human endeavour from the medical and natural sciences to the arts and humanities. And it involves both education and research. A common way to describe output of research intensive universities today is by measuring the output of the three main value streams of research intensive universities:

a. Research (production and distribution of new knowledge through articles, publication and access to research)

b. Education (the knowledge and “soft skills” of candidates)

c. Technology transfer/knowledge exchange (collaboration with the outside world, hiring of graduates by industry, consultancy, patent/licensing/spinoff companies)

IARU believes that a good part of the value of research intensive universities lies in the fact that their three value flows, research, education and knowledge exchange coexist in the same physical space and that they are thereby closely interrelated, constituting a knowledge ecosystem. It will never be possible to quantify every aspect of the entire value produced by research-intensive universities by simple metrics. It is however necessary for the universities to be able to document their value to society, including taxpayers and politicians. Today, this is done by applying a wide range of metrics in order to measure the three elements which constitute the core of research-intensive universities: Research, education and (knowledge exchange) technology transfer. It is mainly done by measuring input flows such as money and the number of students and output flows such as citations, number of publications and graduates.

The principles of IARU are listed as follows; The Alliance will act strategically in the name of creating research by sharing a global vision by all members regarding academic diversity and international collaboration; The Alliance will offer a framework that will guide the members and member candidates about the necessities and responsibilities of collaboration; there is no obligation that all the members will attend all activities, instead, every member will determine his involvement in the
activities. However, decisions regarding the whole alliance will be made by all members (IARU, 2009). In brief, IARU is an international platform enabling the exchange of all kind of discussion topics from teaching, social, migration, energy, security, etc. However, the great focus will be on the research to find solutions to the current major problems of the globe.

2.4.2. The League of European Research Universities (LERU)

In 2013, in a city of China in Hefei, research university groups (Association of American Universities, Group of Eight, League of European Research Universities and Chinese 9 Universities) came together to identify the key characteristics that make research universities effective; and to promote a policy environment which protects, nurtures and cultivates the values, standards and behaviors which underlie these characteristics, and which facilitates their development. These groups declared the Hefei statement, which clearly shows the characteristics of research universities. According to their definition, research universities are defined by their serious and pervasive commitment to research; the excellence, breadth and volume of their research outputs; and the way in which a research culture permeates all of their activities, from teaching and learning to their engagement with business, government and the broader community. Undergraduate education in research universities benefits greatly from the opportunities these institutions provide students to explore and learn in the classroom and in the lab with faculty and graduate students working at the frontiers of knowledge. Graduate education in research universities is enriched by the direct, intensive engagement of graduate students in the conduct of research, while the quality and productivity of university research benefits greatly from the creativity and energy of graduate students. Research universities typically make up only a small portion of a nation’s colleges and universities but account for a substantial proportion of a nation’s higher education research effort. Governments provide critical support for research universities through a combination of block and merit-based, competitively allocated funding for research and graduate education but also through recognizing and supporting their status through appropriate regulatory environments.
The status of a research university is ratified by its capacity to win competitive research funds, by its production of internationally recognized research and scholarship, and by the caliber of its undergraduate and graduate students. These achievements create the demand from other universities for research collaboration, staff exchange and sustainable strategic relationships.

Established in 2002, LERU is an association of some of the most renowned research universities in Europe with its 23 members across all over Europe such as the University of Amsterdam, Universitat de Barcelona, University of Cambridge, University of Copenhagen, Trinity College, Dublin University of Edinburgh, University of Freiburg, Université de Genève, Universität Heidelberg, University of Helsinki University of Leiden, KU Leuven, Imperial College London, University College London, Lund University, University of Milan Ludwig-Maximilians-Universität München, University of Oxford, Sorbonne University, Université Paris Saclay University of Strasbourg, Utrecht University, University of Zurich (LERU, 2020). The mission of LERU is to support education through research on creating new knowledge in society with the collaboration of industry in an alliance and it is governed in a way that each member is represented by its head of the institution; therefore, the rectors’ assembly makes decisions as to the highest decision-making mechanism (LERU, 2020). On the other hand, membership happens by invitation, and it is evaluated by many criteria such as research volume, impact and funding, strengths in PhD training, size and disciplinary breadth, and peer-recognized academic excellence (LERU, 2019).

According to Hefei Statement (2013), a research university should have ten characteristics as follows:

1. The pursuit of excellence across all its operations, calibrated though informed, independent, disinterested assessments from peer organisations and individuals from outside the university; and a commitment to transparent, meritocratic systems for selecting faculty, staff and students, creating an internal environment that nurtures
learning, creativity and discovery, and will unleash and develop the potential of its staff and students, both undergraduate and (post)graduate.

2. A major research effort which has both depth and breadth, producing internationally recognized research results which are broadly disseminated through publication, teaching and community engagement.

3. A commitment to research training, especially through PhD programs, which provides a continuing flow of highly competent and respected graduates (as assessed by researchers of international standing) who are able to advance the frontiers of knowledge and understanding and to contribute to national and international innovation and development across all sectors.

4. A commitment to teaching at both the undergraduate and (post)graduate levels, to produce broadly educated graduates able to contribute to the national welfare across a wide range of activities.

5. A dedication to the highest standards of research integrity and its associated ethical obligations, which ensures the probity of data collection, assessment and analysis independent of any considerations of funding source or of personal or institutional benefit, and which is supported by explicit and effective processes to investigate and respond to any allegations or perceptions of unethical research or behaviour.

6. The responsible exercise of academic freedom by faculty to produce and disseminate knowledge through research, teaching and service without undue constraint within a research culture based on open inquiry and the continued testing of current understanding, and which extends beyond the vocational or instrumental, sees beyond immediate needs and seeks to develop the understanding, skills and expertise necessary to fashion the future and help interpret our changing world.

7. A tolerance, recognition and welcoming of competing views, perspectives, frameworks and positions as being necessary to support progress, along with a commitment to debate and discussion to advance understanding and produce new knowledge and technologies.
8. The right to set its own priorities, on academic grounds, for what and how it will teach and research based on its mission, its strategic development plans, and its assessment of society’s current and future needs; and the right to determine who it will hire and admit, including an ability to recruit internationally to attract the best people to achieve these priorities.

9. A commitment to support its local and national communities and contribute to international wellbeing by taking actions and developing a culture which works to maximise the short and long-term benefits of the research and education it performs.

10. An open and transparent set of governance arrangements which protect and support a continuing commitment to the characteristics that define and sustain world-class research universities, and, at the same time, assure that the institution meets its public responsibilities.

2.4.3. **Group of Canadian Research Universities**

The U15 Group of Canadian Research Universities is a collective of some of Canada’s most research-intensive universities. Although each institution advances its own research and education mandate, the U15 Directorate works for the collective interest of all our members. They define research universities as the institutions fostering the development and delivery of long-term, sustainable higher education and research policy, in Canada and around the world. The U15’s role is to foster a research environment where universities can continue to drive this ground-breaking research.

The U15 Group of Canadian research universities was established in 1991 and since then it has enhanced the development of sustainable higher education and research policy with its 15 members especially in Canada and all around the globe such as the University of Alberta, The University of British Columbia, University of Calgary, Dalhousie University, Université Laval, University of Manitoba, McGill University, McMaster University, Université de Montréal, University of Ottawa, Queen's University, University of Saskatchewan, University of Toronto, University of Waterloo, Western University. Its mission is to lead the national research
developments and give support and advice on the governmental programs regarding research and higher education. In that, U15 universities conduct about $8.5 B worth of research annually and 79% of all competitively allocated research funding in Canada as well as U15 universities hold 85% of Canadian university technology licences. In addition, governance and administration is done with different units of committees such as academic affairs, executive, data exchange and research committee (U15, 2020).

2.4.4. The Association of East Asian Research Universities (AEARU)

AEARU defines research universities as the strong organizations with the goals of forming a forum for the presidents of leading research-oriented universities in East Asia and of carrying out mutual exchanges between the major universities in the region. Expectations are that this regional union, on the basis of common academic and cultural backgrounds among the member universities, will contribute not only to the development of higher education and research but also to the opening up of a new era leading to cultural, economic and social progress in the East Asian region.

AEARU is a regional organization founded in 1996 to create a regional platform for the presidents of the leading research-oriented universities in East Asia with its 17 members Fudan University, Hong Kong University of Science and Technology Hong Kong, Korea Advanced Institute of Science and Technology, Kyoto University, Nanjing University, Osaka University, Peking University, Pohang University of Science and Technology, Seoul National University, Taiwan University, Tohoku University, Tokyo Institute of Technology, Tsinghua University - Beijing, Tsing Hua University - Hsinchu, University of Science and Technology of China, University of Tokyo, University of Tsukuba. Its mission is to create a common academic and cultural background among the member universities as well as pioneering cultural, economic and social progress in the East Asia region. It is governed by the board of directors consisting of the heads of member universities and they gather annually in order to deepen trust and collaboration among the member universities.
2.4.5. Research University 11

Research University 11 is a consortium which was established in November 2009 consisting of 11 of the top Research Universities in Japan and Research University 11 is made up of 9 national and 2 private universities such as Hokkaido University, Tohoku University, University of Tsukuba, The University of Tokyo, Tokyo Institute of Technology, Nagoya University, Kyoto University, Osaka University, Kyushu University. They define research universities as the institutions. They define research and “base of knowledge. Research universities take on the responsible roles of attracting top-class personnel who produce advanced knowledge and diverse culture, contributing innovations and solutions. In order to survive against international competition, investing in top level research universities help promote the development of other universities through mobility of human resources and joint researches.

Investing in top level research universities help promote the development of other universities through mobility of human resources and joint researches. It would boost the level of higher education in Japan and thus the national strength. the world such as Europe, the United States, China, South Korea, and Singapore in the name of attracting researchers and qualified students from all over the world. Therefore, its other goal is to make universities in Japan change into prominent research universities, thus enriching the level of higher education and national strength in Japan (RU11, 2020)

2.4.6. The Association of American Universities (AAU)

Founded in 1900, the Association of American Universities is composed of America’s leading research universities. AAU’s 66 research universities transform lives through education, research, and innovation. AAU defines research universities as the institutions rooted on the three academic principles such as, institutional autonomy, academic freedom and shared governance.

These essential rights rest on the separation of the university in academic matters and in governance from outside groups, particularly federal or state governments but also
industry and other external interest groups. Both public and private universities remain linked to the government through federal financial aid policies, research grants, and state funding of public universities. The links among industry, corporate and philanthropic foundations, and higher education continue to expand. Public institutions, moreover, have an explicit obligation to serve their state, most importantly through the education of the residents of the state but also by providing professional expertise, such as through the agricultural extension services. Institutional autonomy, nevertheless, remains a cornerstone of American higher education and a necessary condition to secure academic freedom. The autonomy of American universities and colleges has allowed a wide diversity of institutional types to develop. That diversity is a great strength for higher education and for the nation.

The second one is the academic freedom. Institutional autonomy allows for the exercise of academic freedom by maintaining the integrity of the learning environment. Academic freedom is the freedom of university faculty to produce and disseminate knowledge through research, teaching, and service, without undue constraint. With this freedom comes academic responsibility: faculty members have a duty to provide their students with the freedom to learn, that is, the freedom to acquire accurate knowledge and to form independent judgments based on that knowledge. As professionals, faculty members are further accountable to their peers and to society at large for the quality and rigor of their scholarly inquiry.

The third principle is shared governance. The traditional concept of shared governance encompasses the joint efforts of the governing board, administration, and tenured faculty to govern a university internally. The composition of governing bodies varies among institutions; for example, some but not all governing boards include seats for student trustees. However, the division of responsibilities among the board, the administration, and the faculty remains broadly similar across institutions. Led by the president, the administration oversees the operation of the university, making the day-to-day decisions and implementing institutional policies. The faculty holds the primary responsibility for matters related to education and research, such as setting the curriculum, while fiduciary responsibility and legal authority rest with the board. This
shared governance model can also be affected by the relationships between the board and entities outside the university that retain some discretionary power over the institution’s governance. An example is a state governor who appoints board members or a system-wide governing board. While the ultimate legal authority of the university rests with the governing board, the success of shared governance lies in communication and cooperation among the different groups involved. The components of the institution are interdependent. By including multiple constituencies in decision-making processes, the university can ensure that different voices are heard and integrated into a cohesive vision. Shared governance thus provides the mechanisms to support the university’s autonomy, enabling the institution to fulfill its educational, research, and service missions. Member universities earn the majority of competitively awarded federal funding for research that improves public health, seeks to address national challenges, and contributes significantly to our economic strength while educating and training tomorrow’s visionary leaders and innovators.

AAU universities create jobs, produce innovative technologies, and boost local economies. In 2018 alone, AAU paid $82 billion in salaries to 780,060 employees, produced 4,826 patents, and fostered the creation of 663 start-ups. In 2017, AAU institutions awarded 50% of all research doctoral degrees and 18% of all undergraduate degrees in STEM and Social Sciences. Federal agencies rely on universities to perform critical research in the national interest AAU universities perform the majority of that research. $25.6 billion in federally funded basic research, or 61% of the total amount funded, is performed by faculty at AAU universities. Agencies such as the Department of Health and Human Services, the National Science Foundation, and the Department of Defense alone funded $21.3 billion in university research to improve the lives of Americans. 41 AAU universities are in the top 50 for producing venture capital-backed entrepreneurs, and 427 start-up companies were generated in the university's home state in 2018. AAU member universities collectively help shape policy for higher education, science, and innovation; promote best practices in undergraduate and graduate education, and strengthen the
contributions of leading research universities to American society. AAU universities conduct a majority of the federally funded university research that contributes to economic competitiveness, health and well-being, and national security. AAU works with its member universities to advocate for sensible federal policies that support student access to higher education, affordability, and completion. Faculty at research universities are engaged in a wide array of research and scholarship activities that inform and broaden knowledge in and across academic disciplines. Research conducted at America’s research universities creates the foundation for major advances in such areas as health and medicine, communications, food, economics, energy, and national security.

2.5. A Brief Historical Background of Turkish Education System

In this part, mainly the key turning points will be considered, especially the era after the declaration of Turkish Republic in 1920s. Kılıç (1999) divides Turkish higher education into three periods; Ottoman period, the period from the establishment of the Republic of Turkey to the establishment of Council of Higher Education (CoHE) known as YÖK in Turkish and the period that includes the developments that took place after CoHE’s establishment.

2.5.1. Ottoman Period

According to CoHE (2019c), the roots of higher education emerged with the establishment of “Sahn-ı Seman” in 1453, which was the most prominent and significant madrasah of that time. Until the 19th century, the Ottoman educational institutions consisted of the madrasahs, which served as the centres of higher education (Sönmez, 2013). However, major developments happened towards the 18th century when universities got the responsibility of meeting the needs of the society such as education, research and human resources. In this sense, in 1773 “Hendesehane” (the school of engineering) was established and accepted as becoming the first higher education institution in the Ottoman Empire and this era was followed by the foundation of Mühendishane-i Berri-i Hümayün and other institutions (Kılıç, 1999,
Kılıç (1999) also clarifies that the first university which might be called as the western modern university “Darülfünun”, which means the school of science, started education in 1863 after the declaration of Tanzimat in the 19th century. Sahnı Seman madrasah turned into “Darülfünun” in a western education understanding. Aydemir (2020) summarizes the place of Darülfünun in the history of Turkish education in the next paragraph as follows. With the establishment of the Darülfünun, the traditional madrasah education was switched to Western-style education in the Ottoman Period.

At the time of Darülfünun, the most developed library consisted of laboratories and three faculties (Faculty of philosophy and literature, faculty of law, faculty of natural sciences and Math). In the morning, classes were being taught to students and in the evenings, conferences were being held for educating the public. However, in a public conference, as a result of a religious discussion by the class teacher, Darülfünun drew reaction. Due to the negative atmosphere in the public and insufficient opportunities, Darülfünun was closed. Thus, the transition to Western-style education paused. With the efforts of the minister of education of that time, it was reopened in Beyoğlu, named Darülfünun Sultani, in 1874, away from groups opposed to western-style schools, but this time there were no public classes. The education was given in Turkish and French, and it also consisted of science, law and literature faculties. With the effect of the Ottoman-Russian war in 1877-1878, Darülfünun was closed again. It was reopened by Abdulhamit II, the sultan of the period, in order to prevent young people who came to higher education in 1900 from escaping abroad for education. As a result of the close relations established with Germany during World War I, 20 German faculty members were assigned to Darülfünun. With their contributions, Research Institutes, which formed the first core of contemporary academic research, began to be established in 1915.

The Ottoman higher education system in the centuries, until the Republic Period, continued the dual structure of traditionalism and Western style. The modern higher education system has been put into practice in the real sense with the Republic Period. Madrasahs and other religious education institutions were closed in 1924 with the
Unification Law, immediately after the proclamation of the Republic, and unity in education was ensured. In the 1924 changes, the school was granted scientific autonomy as well as administrative autonomy. With the 1933 University Law, Darülfünun turned into İstanbul University.

2.5.2. From the Establishment of the Republic of Turkey in 1923 to 1981

Albert Mache, the Swiss professor came to Turkey in 1933 and suggested reforming Darülfünun; therefore, it was closed in 1933 and İstanbul university was opened as a continuation of Darülfünun as the modern western institution in the name of university (Namal & Karakök 2011). The reformist minister of Turkish National Education, Hasan Ali Yücel made great reforms between the years 1938-1946 for the development of higher education in Turkey. On those years, higher education in Turkey was being managed by the ministry of National Eduaction (Gündüz, 2016). The most significant reform of Hasan Ali Yücel was “Universities Act” in 1946. This act played a a significant role in planning of disbanding universities’ dependency to Ministry of National Education; becoming autonomous institutions in terms of budget, education and management; giving importance to research rather than espousing traditional education; development of Turkey and solving problems of higher education Yücel period also corresponds to foundation of today’s most respected universities such as Istanbul Technical University (1944) and Ankara University (1946) (Kılıçoğlu et al., 2014).

In the following years more universities were established such as Ege (1955), Karadeniz Technical University (1955), Middle East Technical University (1956) and Atatürk University (1957). By the 1970s, the number of universities in Turkey was eighteen. 1981 was a turning point for the development of Turkish higher education, which was the time when CoHE was founded. When it came to 2000s, the number of both public and private universities increased. Today, there are 129 public universities 74 private universities, and 4 vocational high school as higher education institutions in Turkey. Within the system of 207 higher education institutions, approximately 8 million students receive education, of which approximately 3.7 million are associate
degree, 4.5 million undergraduate, 297 thousand graduate and 101 thousand doctoral students. In addition, 155 thousand international students from 181 countries study in the Turkish higher education system. Considering the number of academicians, there are 30486 professors, 17706 associate professors, 41488 assistant professors, 38285 instructors, 51538 research assistants. In total, approximately 180 thousand academicians work in Turkish higher education institutions.

2.5.3. The Establishment of the Council of Higher Education in 1982

The Council of Higher Education (CoHE) was established with the Law No. 2547 in 1981. A restructuring process of academic, institutional and administrative aspects in higher education has started since that date. All higher education institutions in Turkey have gathered under the roof of CoHE; academies, universities, educational institutions have been transformed into the faculties of education, and conservatories and vocational higher schools have been affiliated to universities. CoHE became responsible for all higher education institutions as an institution that has autonomy and public identity within the framework of powers and duties given to it with the Article 130 and 131 in Constitution and the said provisions of Law. CoHE has focused on being mainly responsible for the strategic planning of higher education, the coordination between universities, and most importantly establishing and maintaining quality assurance mechanisms.

According to Tekeli (2010), there were two dynamic problems before the establishment of CoHE; one is the increasing demand on higher education. In 1981, every university was giving its own student selection exam for university entrance; however, with the establishment of The Measuring, Selection and Placement Center (ÖSYM) in 1974, which is student selection and placement center, university entrance exams were managed by one institution. The second problem was, according to Tekeli (2010), Turkish higher education system didn’t have their own innerself mechanisms to decrease the effect of social movements especially during the 1960s student movements. For instance, when the student movements started in 1968, some
criticized universities in the name of inequality of education, undemocratic attitudes of scholars towards students (Tekeli, 2010).

Kılıç (1999) suggests that the higher education system in Turkey before 1980s was not in a constant wholeness and had many regulations defined by the laws, which led to lack of autonomy of higher education institutions and lack of academic freedom in the 1960s and 1970s. When it came to 1980s, CoHE was established with the legislation of 2547, so all the higher education institutions were gathered under a roof, and thus CoHE focuses on strategic plans and quality assurance mechanisms of higher education (CoHE, 2019c). In addition, academies were transformed into universities, educational institutes were changed as the education faculties and vocational high schools and conservatorie became related to the universities. According to Baškan and Sincer (2014), CoHE 2547 legislation aims to prevent problems such as the quality vs quantity, capacity limitation as well as the drawbacks meeting the needs of the nation.

On the other hand, there are also many scholars who criticise the establishment and the functions of the Council of Higher Education. Tosun (2020) mentioned that higher education in Turkey is far from being homogeneous and productive institutions. Tosun (2020) evaluated the problems in higher education as follows: (1) Legal Gap and Confusion - Today, universities in Turkey are governed by a central institutional structure established by the law numbered 2547 enacted in 1981. However, this law has been changed many times over time, and a strong central administration has been formed. That is why, resources cannot be used equally. (2) Massization- Higher Education System has grown very rapidly in Turkey. In the current years, the increase in the number of faculty members has decreased and the quality of teaching has decreased significantly. (3) Decentralization - Universities should not be places where international values are localized, but where local values are universalized with an intellectual understanding (4) Politicization - Politicalization is at the highest level in the higher education system today. Universities started to operate as a standard public institution, especially after the election system in appointment of rectors was abolished. It is imperative that politics be far from higher education institutions. (5) Deterioration and Corruption in Administration a university should be governed by a
transparent and accountable corporate structure that is fair, believes in competence, emphasizes common sense, sheds light on the history of humanity, accepts diversity as wealth. There are some developments related to higher education in Turkey that are relevant that will be discussed.

2.5.4. The Bologna Process

In line with the developing aim and plans of CoHE, participating in the Bologna cooperation is one of the primary steps of CoHE’s internationalization process. According to Çetinsaya (2014) Turkish higher education was defined to transform from the quantity to quality, development of human resources and internalization of higher education. Within the internationalization perspective, the Bologna declaration was signed by 29 European countries in 1999 aiming to establish the European Higher Education Area by 2010. In addition, this is important because EHEA allows students, graduate and higher education staff to benefit from the mobilization and equitable access to qualified higher education units (CoHE, 2020). The six principles of Bologna process is summarized by the CoHE (2019a) as it follows.

- to develop an easy and understandable higher education diploma or degrees (for this purpose, diploma supplement was developed)
- to apply European Credit Transfer System
- to make the mobilization of students and scholars common
- to create a quality assurance system in higher education
- to improve the European perspective on higher education
- to found a two-stage degree by defining the diploma/degrees/education years
- to enhance the relation between EHEA and European Research Area

2.5.5. National Qualification Framework

As mentioned before in the literature, this framework was shaped in line with the Bologna process. National Qualifications framework express the qualifications for a national educational system with the aim of outlining the degrees, clarifying the aim
and purpose of qualification framework, helping develop new qualifications in accordance with the changing social needs, raising the awareness of citizens and employing higher education in national and international levels, promoting lifelong learning, strengthening the cooperation between higher education stakeholders and the industrial labour market (CoHE, 2020).

2.5.6. Higher Education Quality Council

According to Özer (2017), Turkey is experiencing a new era in higher education with the establishment of a quality council. With this framework, the institutional evaluation of the higher education institutions will be specific to every institution. Established in 2017, the duties of this institution might be summarized as making the outwards evaluation of CoHE, defining the authorization process of the accreditation institutions, and internalizing the quality assurance culture among higher education institutions.

2.5.7. Mission Differentiation and Specialization of Universities

As mentioned in the previous literature, specialization of the universities began as a necessity of modern times. Altbach and Salmi (2011) identify that modern research universities endorsed specialization on disciplines deeply. According to Bastedo and Gumpert (2003), especially when there is a constraint on the resources, higher education institutions can concentrate on different campuses to achieve different missions and they also add that mission differentiation of higher education has become prominent beginning from the 1950s and 1960s. What is meant by mission differentiation in the US higher education is to develop policies that increase the stratification of student and academic programs by enhancing resources to “strong” academic programs and by terminating “weak” academic programs to reduce duplication (Bastedo & Gumpert, 2003). On the other hand, CoHE also is applying a higher education program on the mission differentiation and specialization of universities and there are two types within the program; one is “regional development-oriented mission differentiation and specialization” and the second one is research-
oriented mission differentiation and specialization” program. Since the focus of this research is on the research universities here we will only focus on the research-oriented mission specialization program.

2.6. Research-Oriented Mission Differentiation and Expertise Program in Turkey

In line with the mission differentiation and specialization of the programs, defining the research universities is also another highlighted project. In TAÜG’s report (2016), it is stated that research universities are different from teaching-oriented universities. In that, it is underlined in the report that research universities have a large variety of functions and have a significant role in the development of economy and society both nationally and regionally. According to the definition of TAÜG (2016), research universities are the institutions that have a variety of doctorate programs and doctorate degrees, as well as benefiting from the research. Also, research performance criteria might be used as the defining criteria when employing its professors. The concept of research university, which was brought to life with these applications carried out by CoHE, defined universities that determined their purpose in a more research-oriented way, unlike education-oriented universities. It is aimed to strengthen the position of the country in the international arena, to ensure the high level representation of the country with financial, administrative and academic support, and thus to become universities on a world scale (Gülbak, 2020). Saraç (2018) states that universities should keep themselves updated by asking the what, how, and why questions to maintain the development, the quality assurance. Ertüzün (2018) identifies that the world does not only need research on the disciplines between science, engineering, and technology but also needs the studies for the social and human sciences to search and transform the knowledge. Özok (2018) underlines that the number of our universities ranking among the first 400 worldwide is far beyond becoming sufficient. He also underlines that even though there are great scientists and scholars at universities, it is not enough to be successful individually when there is no effort
together as the institution or as the system. In the journal of CoHE, Saraç (2018) states that research universities are the main objectives of CoHE to raise effective researchers and to found successful research centers in years to come. In line with the mission differentiation program, to produce qualified knowledge, to raise a number of the doctorate researchers, to strengthen the national and international collaborations, research-oriented universities program was initiated in 2016 as a call for the public universities established before 2006 (CoHE, 2019b). The president of CoHE, Saraç declared the establishment of research universities in Turkey in the opening ceremony of 2017-2018 higher education academic year as it follows;

“Research universities will be the cornerstone of our country's independent stance in the world, the will to protect the oppressed and the desire to make the world a better place. The research university has determined its mission and strategic road map and is an institution that can carry out the university's working discipline in accordance with this plan. By learning in the research culture, students develop their knowledge and dominate the functioning of academic research. The research activities that take place enable universities to develop their budgets when they find value, to get more shares from the research funds that exist with efficient research, and to have a share in the future of the society they are part of with the social value they create. Our ideal research university is institutions with doctoral programs that train powerful researchers and contribute to the development of the world science and the country. Our belief is that the Turkish higher education system, which has developed greatly in recent years, will show the leap that has been missed by this project. Of course, our associate and undergraduate programs are important, it is the cornerstone of the future of our country. Today, 10 Research Universities that will be announced and 5 Candidate Research Universities that will be a source of motivation are the first big steps of this project, which is important for the future of our country.” (Saraç, 26 September 2016 Press Release)

The president of CoHE, Saraç also summarizes the research university process in an interview for a university newspaper that this specialization process is significant for both using the national resources efficiently and increasing the scientific development. However, he adds that the number of the research universities will not be increased because the idea of research university might be lost under the populism. There might be up and down changes among the list, some universities might be excluded from the
research university program when they do not meet the criteria and some might be added when they are found to be sufficient regarding parameters and thus there will be always competition among the universities (Şentürk, 2019).

Established in 2015 at the conference of “Turkish Universities in the European Area”, Alliance of Turkish Research Universities consisted of six leading universities of Turkey such as Boğaziçi, Bilkent, Istanbul Technical, Koç, Middle East Technical, and Sabancı University (TAÜG, 2016). Boğaziçi, Middle East Technical, and Istanbul Technical University are public universities while Bilkent, Koç and Sabancı University are private universities. The reason why those six universities developed an alliance is related to the fact that those six universities have the largest number of projects in the European Council Research. According to TAÜG’s report (2016), the aim and functions of this alliance might be listed as;

- to enable the collaboration and coordination of Turkish research universities.
- to constitute a closer affiliation with the institutions supporting research and innovation work
- to prepare a complementary and appropriate strategic guide on the higher education research policies
- to create mechanisms unique to national values in the light of university-industry collaboration
- to form programs and models to increase the number of researchers and the quality of research and develop recommendations for fostering research, innovation, and higher education
- to collaborate with the national scientific and technological research council, TÜBİTAK, and to initiate programs special to research universities for promoting research
• develop international alliances or to have collaboration with other international institutions such as LERU, European Research Area, European Union

• to enhance relations with European institutions and stakeholders by participating in more European union programs such as Horizon 2020

• to advance collaborations with other international alliances signing the Hefei Statement and other similar statements

• to actualize the mission, which is to increase the success of Turkish research universities and TARAL

Accepted as the first step of establishing research universities in Turkey, we might say that this alliance model has been shaped by modeling in light of the League of European Research Universities and Association of American Universities. It has been underlined in TAÜG’s report (2016) that LERU is one of the examples that Turkish universities get benefit from. On the other hand, we might clarify that the American research university model has affected TAÜG more than LERU. For instance, there are strong ties between the US’s and Turkey’s higher education units. In that, many students from Turkey see the US as a primary destination over Europe, and the reason is both related to language of instruction being English in the USA and the fact that Turkey’s top private universities were modeled after American research universities (CoHE, 2020).

2.6.1. Selection Process of Research Universities

Fifty-eight public universities delivered the statement of intent to become a research university to CoHE in 2016. Research Universities Performance Monitoring Index and Research and Candidate Research Universities are ranked according to 33 indicators in total under 3 headings: "Research Capacity," "Research Quality," and "Interaction and Cooperation." While evaluating the first heading, "Research Capacity," the number of scientific publications in the university, the number of citations, the number of national projects, the number of funds obtained from national projects, the number of international project funds, the number of national and international patent
applications, the number of national patent documents, the number of international patent documents, the number of utility models / industrial design documents, number of doctoral graduates and the number of doctoral students were checked. In the second title, "Research Quality" dimension; Scientific publication rate within 50% of Incites magazine impact value, scientific publication rate within 10% of Incites journal impact value, number of national science awards, number of faculty member companies, number of student/graduate companies, CoHE 100/2000 Ph.D. Project students, TÜBİTAK 2244 Industrial Doctorate Program students, fund amount received under TÜBİTAK 1004 Technology Platform Project, open access percentage of scientific publications and theses, first in the world academic success rankings. The indicators of the number of entries in 500 and the number of accredited programs were taken into account. In the third dimension under the title of "Interaction and Cooperation"; University-university collaborative publication rate, university-industry collaborative publication rate, international cooperation publication rate, university-industry cooperation patent documents, number of international cooperation patent documents stand out.

The ratio of the number of projects, the ratio of the number of funds received from the contracted university-industry collaborative R&D and innovation projects to the number of relevant projects, the ratio of international students, the ratio of international faculty members, and the number of academic staff/students in circulation are taken into account. Based on these parameters 25 of 58 universities were defined. A commission was founded consisting of Ministry of Science, Industry and Technology, Ministry of Development, TÜBİTAK, Quality Board, representatives from public and private universities. In the second phase 19 out of 25 universities were requested to present self-assessment reports. After all, based on the decision made by the commission the first ten main research universities and five candidate research universities were defined (Saraç, 2016). Table 3 shows the main and candidate research universities with their establishment years.
According to the legislation of the division of İstanbul University, İstanbul Cerrahpaşa University is also considered as the 11th research university in that context. And thus, the research university process in Turkey has started officially. According to Erdoğanuş (2017), however, there is not that much information shared with the public on how the research university process will continue. Similarly, whether these universities have become a real research university will be understood in the future; however, the workings of CoHE and the government will certainly have an important role in defining the future targeted goals of research universities. Reports on the performance of research universities will be shared with the public every year, at the end of three years, some universities;

(a) May lose its research university classification due to its low performance

(b) While the candidate is a research university, it can rise to the top due to its superior performance

(c) Even though there is no research university, a process has been set up in which candidates can become a candidate research university based on their performance.

In this setup, there will be no increase in the number of research universities and candidate research universities. There will be new universities that maintain their position, lose, and rise to lost positions. On the one hand, a performance evaluation process has been operated through a performance monitoring index consisting of 33 criteria on research capacity, research quality as well as interaction and collaboration (CoHE, 2019b).
Table 3 *Research universities in Turkey*

<table>
<thead>
<tr>
<th>Main Research Universities</th>
<th>Year</th>
<th>Candidate Research Universities</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ankara University</td>
<td>1946</td>
<td>Çukurova University</td>
<td>1973</td>
</tr>
<tr>
<td>Boğaziçi University</td>
<td>1863-1971</td>
<td>Ege University</td>
<td>1955</td>
</tr>
<tr>
<td>Erciyes University</td>
<td>1978</td>
<td>Selçuk University</td>
<td>1975</td>
</tr>
<tr>
<td>Gazi University</td>
<td>1926-1982</td>
<td>Uludağ University</td>
<td>1975</td>
</tr>
<tr>
<td>Gebze Technical University</td>
<td>1992</td>
<td>Yıldız Technical University</td>
<td>1982-1992</td>
</tr>
<tr>
<td>Hacettepe University</td>
<td>1967</td>
<td></td>
<td></td>
</tr>
<tr>
<td>İstanbul University</td>
<td>1453-1933</td>
<td></td>
<td></td>
</tr>
<tr>
<td>İstanbul Cerrahpaşa University</td>
<td>1453-2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>İstanbul Technical University</td>
<td>1773-1944</td>
<td></td>
<td></td>
</tr>
<tr>
<td>İzmir Institute of Technology</td>
<td>1992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle East Technical University</td>
<td>1956</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(CoHE, 2019b)

**2.6.2. Support To Research Universities**

Some supports were given to research universities both on funding and staff issues. These supports will be discussed below.

**2.6.3. Doctorate Education Abroad Within the Scope of the YLSY Program**

The information on how many people will study abroad on behalf of Research Universities with the "Scholarship Program for Graduate Studies Abroad (YLSY)"
was published in the 2018 YLSY guide. Within this scope, a total of 272 quotas were given to Research Universities and Prospective Research Universities. In 2019, 104 quotas were given to Research Universities within the scope of Law No. 1416; 38 quotas were given to Prospective Research Universities.

2.6.4. 100/2000 Project and Increasing the Quantity and Quality of Doctorate Degree Human Resources Support

CoHE has been paying great attention to postgraduate studies especially doctoral education. To meet the needs of the country in some areas defined as a priority, CoHE supplies 2000 doctorate students studying at domestic public universities in 100 thematic fields (CoHE, 2018). These thematic fields consist of science and engineering, social sciences, and health sciences with its sub-branches (see Appendix D) In this context, a total of 270 additional research assistants have been allocated to research universities, 10 per every candidate research university, 15 per main research university. In addition, research universities that have faculty of medicine were granted 45 additional appointments. The head of CoHE describes 100/2000 doctorate scholarship project as “Raising Strong Generations for the Next 10 Years Program”.

Saraç also adds that the selected 100 doctoral fields have been decided by taking the ideas of "Intelligent Specialization-Smart Specialization in Higher Education" and dozens of scientists who participated in the world science literature since 2013. Therefore, the main purpose of this project is to produce the studies and research of high technology, innovation as well as necessary human and social values that stand out in the 21st century and to bring scientists to the country in these fields. According to the recent report by CoHE (2020), In the design and implementation of 100/2000 doctoral programs, 4 basic items are carefully emphasized:

a) 100 selected doctoral fields are the fields that our country needs and that includes the professions of the future.
These areas are dynamically renewed in line with the suggestions from the sector and the public in each call period,
b) Cumulative audiences are created in these areas, it is required that at least 3 doctoral students apply to the same field in each call period, so that a subject-based research area is being created.
c) These PhD students are obliged to work full time, provided that they are related to doctoral studies at their university.
d) Students are required to publish at least 2 studies in high-impact journals related to the academic subject they work on during their doctorate education.

In addition to 100/2000 Project, in 2018, in the calls made by TÜBİTAK within the scope of the "Center of Excellence Support Program - 1004 Program", the priority of Research and Research Universities was made, and the Research and Prospective Research Universities that applied were supported. In 2019, a special exception was defined for research / prospective research universities in the institutional share rates determined by TÜBİTAK based on the research performance of universities. In this context, in addition to the project budgets, research/candidate research universities receive 50% institutional shares, which is the highest share of the institution. In the technological research sector allocations of our research university, which is among the top 5 in the ranking made according to the 2017 and 2018 performances of our research universities. An additional increase was made by the Presidency Strategy and Budget Directorate.

2.6.5. Suggestions for Strengthening Research Universities in Turkey

Suggestions of CoHE for Research Universities, concrete expectations:

- In our universities, academic and administrative staff believe in the concept of a research university and its values (a strong research and excellence ecosystem),
- In particular, research universities should head towards thematic areas where they can stand out in the next 3 years,
To continuously encourage international exchanges and cooperation, high-quality research universities in joint programs or joint projects in Turkey and abroad to invite to play (in the top 500 universities in international scientific cooperation activities to choose priorities)

Our research universities should lead the programs planned to be opened on Future Professions and contribute to progress in this regard in the coming years,

To invite high-quality academicians and researchers to our country to carry out their research and give lectures (not using this quota mostly for foreign language education classes),

To train international competitive talents in teaching staff,

Keeping the foreign language score high in the appointment promotion criteria (80 and above),

To accept more international students,

To be thematic and cumulative in the context of the scientific subject while educating doctoral students (PhD.),

To ensure that the books written in our universities find value in the international arena,

In the next 5 years, 30% increase in the publications in the top 10 journals in terms of quality, 50% increase in the citation effect of the publications, high impact publishing preference in book publications, receiving funds from FP9 EU projects, in short, strengthening in research performance,

In Turkish universities;

The establishment of an independent quality board in higher education is an important reform. The rapid increase in the number of universities and its spread throughout the country puts the quality problem in front of the academy, education and research. It is important that all universities, especially research universities, take the issue of quality seriously on their agenda.

Academic mobility is very low, where they must spend a certain amount of time gaining experience at another university, especially abroad, after finishing
their major solution expertise. With CoHE scholarships, TÜBITAK supports these studies with various international scholarships.

- It is obvious that we are not at a sufficient level in industry-oriented research. In addition, the results obtained do not seize the opportunity to commercialize the technology. In short, research cannot turn into products.
- Focusing on the subject or focusing on a thematic area (niche-seeking strategy) in research and practice is not sufficient.

2.6.6. Summary of Literature Review Related to the Classification of Research Universities in Turkey

There are many studies embarking on the history, development, efficiency of research universities in the world. Research university definition is a very brandnew term in Turkey. As a result, the literature variety about research university development is very limited. In this section, studies addressing on research university perspective in Turkey will be summarized. A research university is defined as the institution having the mission of research and production of knowledge (Andreatta, 2012). Research universities are also determined as institutions that lead research, the development of the scientific and social structure. They also focus on the quality as a priority and have high research supports (Altbach, 2011). Research universities prioritize raising doctoral students and discovering new knowledge in many disciplines (Mohrman et al., 2008). On a worldwide scale, according to National Research Council (2012), research universities have the following characteristics (Erdoğanuş, 2017 p.7);

- Being broad and encompassing: Although there are exceptions, these universities are multi-departmental and extensive institutions.

- Undergraduate education: Students have in-class and out-of-class learning experience and have the opportunity to participate in academics' research.
- Postgraduate education: Postgraduate education has the high ratio of postgraduate students with high quality.
• Academics: Research performance plays a critical role in academic promotion of academics who mostly focus on research based studies and look for external research funding.
• Research: Research is done through with a high economic efficiency.
• Leadership: Highly qualified human resources are managed.

Salmi (2009) describes the basic characteristics of research universities on three key elements as (a) faculty and students, (b) resource and management, (c) talented faculty members. With the combination of these three characteristics, research universities provide a rich learning and research environment as well as a flexible management structure. The harmonious operation of these three factors within the research university brings success with it (Salmi, 2009). The concept of a research university in Turkey was mentioned by the presidency in 2017 within the scope of "Mission Differentiation and Specialization Project". Some state universities according to certain criteria was declared as research universities (CoHE, 2017b). Based on their 2017 and 2018 performance, 11 main research universities and 5 candidate research universities were determined by CoHE in 2019 (CoHE, 2019b). Research universities are institutions that aim to produce, transfer and share qualified knowledge, train people with a high degree of research competence, train their students in research culture by including them in research, and contribute to world science and country development (CoHE, 2017).

In their study, Bakioğlu and Tatık (2020) aimed to reveal the views of faculty members on the regulation of teaching and research responsibilities in the context of structuring research universities. To put forward the views of faculty members within the scope of structuring research universities, semi-structured interviews were made with the 13 faculty members. Content analysis was used to analyze the data obtained through interviews in the research. According to the analysis, it was revealed that faculty members in research universities should also attend classes, but they should have a research-oriented workload. It was also revealed that research and teaching are complementary to each other, so faculty members have difficulty in finding time to do
research. As suggestions, the course load should be reduced, and teaching and research responsibilities should be arranged according to the preference and request of the faculty member.

In his study, Gülbak (2020) aimed to examine the views of the academicians of a private university on the development of research university in Turkey. The data of the study were collected through semi-structured interviews with eight experienced faculty members working. The results revealed that the faculty members addressed the challenges of the research university rather than the possibilities. These difficulties are issues such as the excess of educational-oriented themes such as deficiencies in graduate education, course load, and lack of managerial motivation. Adapted from the research universities abroad, this new research university system in Turkey leads some problems for the universities gaining a new identity as a research university. In order to overcome the problems, it has been suggested that an extra structure such as the board of trustees can be included in the process of institutional motivation and decision-making.

The purpose of Çağlar and Gürler (2020) research is to examine and measure the effectiveness of research universities in Turkey. Data Envelopment Analysis was used to measure the efficiency of research universities. The efficiency performance diagrams of the universities were created and the performance levels of the universities were examined simultaneously. As a result of the analysis, it was determined that only 4 research universities are effective in terms of the total technical efficiency score and the remaining 11 research universities are not able to operate effectively. These results showed that research university initiative in Turkey failed to reach the level of effective operation. Öztekin et al. (2020) examined the views of scholars of faculty of education on conducting research at a research university in Turkey. While 14 research assistants participating in the study answered the questions in the semi-structured questionnaires, semi-structured interviews were conducted with 10 faculty members. The data analyzed through qualitative analysis. The results showed that both groups of
participants believed that the faculty had strengths such as qualified faculty members, qualified students, and quality research. The findings also emphasized that improvements should be made in areas such as balancing the workload of faculty members and research assistants in order to increase the current research potential.
CHAPTER 3

METHODOLOGY

This chapter provides information about the research questions, research design, study context, participants, instruments, validity and reliability of the study, ethical issues and limitations of the study. A qualitative research design was used so as to explain the perspective of scholars on research university establishment and development. In order to get deeper on the thoughts and experiences of the participants, phenomenological case study was applied as one of the common approaches of the qualitative methods and semi-structured online interviews were conducted to reveal academics’ thoughts about the research university progress. Collected data were analyzed through discourse analysis in the first place by creating codes and themes Maximum variation sampling was applied in this study in order to reach multiple perspectives of individuals. Snowball sampling was also used to identify other participants by asking participants who have already been selected for the study to recruit other participants. To achieve maximum variation, academics from a wide variety of departments and with different academic titles were included in the study. All participants had either completed their doctoral education abroad or had taught courses abroad.

3.1. Design of the Study

As mentioned in the introduction chapter, this study is established on the perspectives of scholars of a research university. It is accepted that research studies that try to explain the quality of relationships, situations, problems, and activities are often
conducted as qualitative research. Astalin (2013) states qualitative design is a scientific way of expressing narrative, social, and cultural phenomenon from a holistic perspective, the design of the study is qualitative as it is based on individual viewpoints and experiences of participants gained through interviews. Creswell (2014) identifies that in qualitative design, maximum variation sampling, data collection with open-ended questions, a detailed analysis of the text, representation of information in figures and tables, and personal interpretation of the findings are common characteristics. Since this is a qualitative exploration, I tried to collect data from as many (sixteen participants) different participants as possible as a requirement for maximum variation. I asked open-ended interview questions to reveal participants' ideas in depth (see Appendix A). I first transcribed the data that came up with the interview questions and then analyzed it according to the qualitative design analysis theories. These findings were open to interpretation as they emerged from the ideas and experiences of the participants. While writing the findings and discussion part, I created the themes by making my voice heard and adding my comments as a qualitative researcher and an observer of the study, as well. The purpose of qualitative research is to describe and interpret the issues or phenomena systematically from the points of view of the individual or the population being studied, and to generate new concepts and theories accordingly (Haradhan, 2018). In this study, a sub-branch method of qualitative design, phenomenological case study, was applied. Phenomenology as theoretical framework and methodology was developed for studying individuals’ lived experiences of phenomena, rooted in the work of German philosopher Edmund Husserl (Çilesiz, 2010; Husserl, 1969; Moustakas, 1994).

A phenomenological study describes the common meaning for several individuals of their lived experiences of a concept or a phenomenon. Phenomenologists focus on describing what all participants have in common as they experience a phenomenon (Creswell, 2013). Case study is an intensive description and analysis of a phenomenon or social unit such as an individual, group, institution, or, community (Merriam, 1998 p.8). The decision to use the phenomenological case study approach resulted from the interest in discovering the viewpoints and experiences of academicians at a research
university to gain an in-depth understanding about the experiences of academicians (Creswell, 2013). Yin (2018) supports the decision to use the case study method for research as the “how and why” questions presented to allow for the explanation of a contemporary circumstance (p. 8). Additionally, the relevancy of using a case study method is a more practical approach as the questions posed “will require extensive and ‘in-depth’ description” of the phenomenon (p. 2). The combination of the characteristics of a case study as described should render a clearer understanding of the current situation of research universities from the perspective of scholars.

3.2 Research Questions

Starting with the declaration of regional development-oriented mission differentiation and specialization project in 2016, the Turkish Higher Education emphasized the importance of differentiation and specialization of the universities (Erdoğan, 2017). In line with the mission differentiation program, in order to produce qualified knowledge, to raise number of the doctorate researchers, to strengthen the national and international collaborations, research-oriented universities program was initiated in 2016 as a call for the public universities established before 2006 (CoHE, 2019b). The president of CoHE, Saraç declared the establishment of research universities in Turkey in the opening ceremony of 2017-2018 higher education academic year. However, based on the researcher’s observation, there is a knowledge gap on the research university process among the academic atmosphere. That is why, in order to deeply delve into the purposes of the study, the following research questions were defined.

1- How do scholars perceive and evaluate the process of research university classification in Turkey?
2- How do academicians experience the research university classification and characteristics?
3- What do scholars suggest for the development of the research university classification process in Turkey?
3.3. Study Context

Qualitative research aims to explore the experience or a phenomenon experienced by one or more people in order to understand the social reality of individuals (Haradhan, 2018). Social context of the study is of great importance because phenemonology must reflect the context from which the themes emerged (Hycner, 1999; Moustakas, 1994). Social context of the participants or the setting data collected is meaningful because phenemonology is exploratory, and seeks to explain how and why a particular social phenomenon operates as it does in a particular context (Penner & McClement, 2008). One of the most important tasks of the qualitative researcher is to observe, specifying the unique and common features of the socially organized contexts, as well as analyzing the implications of institutional structures and process for people’s experiences or social issues (Miller & Dingwall, 1997 p.5). Aspects of the social context might be summarized as abilities, beliefs, values and norms, culture, networks, knowledge, identity, motivations and economics (Cowan & Murdoh, 2006). All of the participants in this study come from a different social context in terms of gender, age, years of experience, the university they experienced abroad and the unit they work in. As far as the institutional context is concerned, it is a research university with a deep-rooted history, pioneering many scientific and academic studies, and a strong organizational culture with its graduates, students and academicians. In the study, the pseudonym will be used instead of the name of the university where the data was collected, which is International Research University (IRU). This pseudonym will be used throughout the study where the name of the university is mentioned.

IRU’s mission is to attain excellence in research, education and public service for society, humanity and nature by nurturing creative and critical thinking, innovation and leadership within a framework of universal values. A pioneer university at international level, which transforms its region and the world. The language of instruction at IRU is English. Especially during the early years of its establishment, IRU’s presence brought about new methods and introduced innovations to Turkish higher education system as a pioneer of modern education nationwide.
IRU has 41 undergraduate programs within 5 faculties. Additionally, there are 5 Graduate Schools with 105 masters and 70 doctorate programs and a "School of Foreign Languages" which includes the English Preparatory Department. IRU currently has about 27,000 students. The total number of the alumni now is above 120,000. Owing to the quality academic education that emphasizes merit and excellence in scientific, cultural and intellectual studies as well as owing to the accomplished and qualified IRU graduates, the University has become one of the distinguished and respectable institutions of Turkey. Today, the University is proud to employ about 791 faculty members (professors, associates professors etc.), 225 academic instructors and 1,273 research assistants. It is a great pleasure to offer education to over 28,000 students.

IRU is one of Turkey's most competitive research universities. Each year, among the students taking the National University Entrance Examination, over 1/3 of the 1000 applicants with the highest scores attend IRU. Due to high demand towards IRU being so great, most of its departments accept only the top 1% of approximately 1.5 million applicants taking the National University Entrance Examination. Over 40% of IRU's students go on to graduate school. Since its foundation, as an international research university, has been the leading university in Turkey in terms of depth and breadth of international ties and the amount of funds generated from international research projects. IRU has 19 international joint degree programmes with European and American universities at undergraduate and graduate level. Undergraduate and graduate students from many countries attend a semester or a year-round at IRU as "Special Student" or "Exchange Student". IRU is currently conducting Student Exchange Program activities with many foreign universities. English as the language of instruction in all its degree programs has greatly facilitated IRU's efforts to accommodate international students and researchers. IRU hosts over 1,700 international students from nearly 94 different countries studying toward myriad of academic degrees.
IRU, with 168 Erasmus agreements and 182 bilateral exchange and cooperation agreements with universities in third countries (i.e., in Central Asia, Middle East, North America, Australia, Far East and Pacific Region), annually sends 350 students and 60 teaching staff and hosts 300 students and 50 teaching staff/researchers. IRU is a member of many associations and networks dealing with international education and Exchange and internship programs. IRU has always sought external assessment, accreditation and certification by international organizations, and been committed to a "quality culture". As a part of its efforts to ascertain world-quality education, in 1991 IRU initiated a long-term program to have all its engineering programs accredited by the United States Accreditation Board for Engineering and Technology.

3.4. Sampling and Participants

This study was designed to shed light on the establishment and developmental process of research universities in Turkey. For this reason, the original population of the study is scholars working at the research universities which are currently declared as the research universities. However, as a phenomenological case study, the present study was conducted at IRU with 16 participants. In this study, maximum variation sampling was used in order to reach the appropriate participants. According to Sandelowski (1995), maximum variation sampling is one of the most frequently used purposeful sampling designs. In this method, a wide range of individuals, groups, or settings is purposively selected such that all or most types of individuals; groups or settings are selected for the inquiry. This allows for multiple perspectives of individuals to be presented that exemplify the complexity of the world (Creswell & Miller, 2000). In addition, snowball sampling was applied to reach other participants by using the participant network. The researcher asks participants to identify others to become members of the sample (Creswell & Miller, 2000). This is also known as network sampling and usually comes to the fore after data collection has begun. Snowball sampling involves asking participants who have already been selected for the study to recruit other participants (Omona, 2013). In this study, maximum variation sampling was applied with 16 participants with different gender, age, academic and
administrative experiences from different research areas. Snowball sampling was applied by asking the participants whether they knew of other academicians who could participate in the study. In addition, I reached some teachers through the network during my undergraduate years. In order to determine participants, I included participants who were either holding or have held administrative positions in the university and the participants who had international experience and completed his/her doctorate. First of all, the faculties and the institutions were determined. It was aimed to reach a minimum of five academicians from each faculty such as the Faculty of Architecture, Faculty of Arts and Sciences, Faculty of Economic and Administrative Sciences, Faculty of Education, Faculty of Engineering, Graduate School of Social Sciences and Graduate School of Informatics. However, faculty and department names of the participants were not given to ensure the confidentiality of the participants. Instead, the research areas of the participants were specified as social sciences, natural and applied sciences, and informatics. The working years of the participants include the period they have been working as a researcher, lecturer or both in Turkey and abroad, starting from the year they completed their doctorate. In this study, participant names were determined as P1, P2,…,P16 etc. instead of real names. Table 4 shows the the participant codes, gender, academic titles and years of academic and administrative experience of the participants.
<table>
<thead>
<tr>
<th>Participant Code</th>
<th>Gender</th>
<th>Title</th>
<th>Graduate School</th>
<th>Academic Experience</th>
<th>Administrative Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Female</td>
<td>Assist. Prof. Dr.</td>
<td>Social Sciences</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td>P2</td>
<td>Female</td>
<td>Prof. Dr.</td>
<td>Social Sciences</td>
<td>23</td>
<td>17</td>
</tr>
<tr>
<td>P3</td>
<td>Male</td>
<td>Assoc. Prof. Dr.</td>
<td>Social Sciences</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>P4</td>
<td>Male</td>
<td>Assoc. Prof. Dr.</td>
<td>Natural and Applied Sciences</td>
<td>21</td>
<td>5</td>
</tr>
<tr>
<td>P5</td>
<td>Female</td>
<td>Assoc. Prof. Dr.</td>
<td>Social Sciences</td>
<td>32</td>
<td>-</td>
</tr>
<tr>
<td>P6</td>
<td>Male</td>
<td>Assoc. Prof. Dr.</td>
<td>Natural and Applied Sciences</td>
<td>17</td>
<td>-</td>
</tr>
<tr>
<td>P7</td>
<td>Male</td>
<td>Assoc. Prof. Dr.</td>
<td>Informatics</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>P8</td>
<td>Male</td>
<td>Prof. Dr.</td>
<td>Natural and Applied Sciences</td>
<td>30</td>
<td>21</td>
</tr>
<tr>
<td>P9</td>
<td>Female</td>
<td>Prof. Dr.</td>
<td>Natural and Applied Sciences</td>
<td>27</td>
<td>5</td>
</tr>
<tr>
<td>P10</td>
<td>Male</td>
<td>Assoc. Prof. Dr.</td>
<td>Natural and Applied Sciences</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td>P11</td>
<td>Male</td>
<td>Prof. Dr.</td>
<td>Social Sciences</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>P12</td>
<td>Male</td>
<td>Prof. Dr.</td>
<td>Social Sciences</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>P13</td>
<td>Male</td>
<td>Assoc. Prof. Dr.</td>
<td>Social Sciences</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>P14</td>
<td>Female</td>
<td>Prof. Dr.</td>
<td>Natural and Applied Sciences</td>
<td>19</td>
<td>-</td>
</tr>
<tr>
<td>P15</td>
<td>Male</td>
<td>Assoc. Prof. Dr.</td>
<td>Social Sciences</td>
<td>24</td>
<td>19</td>
</tr>
<tr>
<td>P16</td>
<td>Male</td>
<td>Prof. Dr.</td>
<td>Social Sciences</td>
<td>45</td>
<td>30</td>
</tr>
</tbody>
</table>
P1 is a female assistant professor at the Graduate School of Social Sciences. P1 has been teaching for 13 years and has no managerial experience. P1 earned both the masters degree and PhD degree at a very well-known international research university in Europe.

P2 is a female professor at the Graduate School of Social Sciences. P2 also has been teaching for 23 years and conducting managerial duties for 17 years. P2 has been to a very prestigious research university in the USA.

P3 is a male associate professor having 15 years of academic and 3 years of managerial experience at the Graduate School of Social Sciences. P3 has been to a research university in the USA.

P4 is a male associate professor at the Graduate School of Natural and Applied Sciences. P4 has 21 years of academic experience and 5 years of managerial experience. P4 has been to the USA for doctorate education.

P5 is a female associate professor doctor at the Graduate School of Social Sciences. P5 has 32 years of academic experience and has no managerial experience. P5 has been to an Asian university for research studies.

P6 is a male associate professor at the Graduate School of Natural and Applied Sciences. P6 has 17 years of academic experience and no managerial experience. P6 has been to both a European and USA research university.

P7 is a male associate professor at the Graduate School of Informatics. P7 has 11 years of academic and 8 years of managerial experience. P7 has been to a research university in Europe for doctorate.

P8 is a male professor at the Graduate School of Natural and Applied Sciences. P8 has 30 years of academic and 21 years of managerial experience. P8 has been to a USA university for doctorate.
P9 is a female professor at the Graduate School of Natural and Applied Sciences. P9 has 27 years of academic and 5 years of managerial experience. P9 has been to a research university in the USA.

P10 is a male associate professor at the Graduate School of Natural and Applied Sciences. P10 has 13 years of academic experience and no managerial experience. P10 has been to different countries in the USA, Europe and Asia.

P11 is a male professor having 16 years of academic and 13 years of managerial experience at the Graduate School of Social Sciences. P3 has been to a university in Europe for doctorate.

P12 is a male professor having 23 years of academic and 23 years of managerial experience at the Graduate School of Social Sciences. P12 has been to a university in the USA for doctorate.

P13 is a male associate professor having 16 years of academic and 8 years of managerial experience at the Graduate School of Social Sciences. P13 has been to a university in the USA for research studies.

P14 is a female professor at the Graduate School of Natural and Applied Sciences. P14 has 19 years of academic experience and no managerial experience. P14 has been to Europe for research studies.

P15 is a male associate professor at the Graduate School of Social Sciences. P15 has 4 years of academic and 19 years of managerial experience. P15 has been to USA for research studies.

P16 is a male professor at the Graduate School of Social Sciences. P15 has 4 years of academic and 19 years of managerial experience. P16 has been to USA for doctorate and research studies.

In summary, the aim of the sampling was to recruit participants from diverse departments of different faculties and institutes. Maximum variation sampling was mostly applied to reach the appropriate participants in line with the aim and goals of
the study. Snowball sampling was used to reach the networks of the participants, as well. The sample of this study consists of scholars at IRU in different departments of the university. In total, 16 participants from each department were interviewed. Participants are highly knowledgeable informants with many having had administrative positions in the university. The criteria sought to participate in this study was to hold a minimum of doctoral degree and to have at least one year of study abroad experience at any time period in their academic career. I paid attention to choose from different academic titles and departments in order to enrich the diversity of the perceptions. In total 5 female and 11 male participants took part in the study. Seven of 16 scholars were professors. One participant was assistant professor and 8 participants were associate professors.

3.5. Data Collection

A mostly preferred data collection instrument in qualitative research is interview. Interviews provide in-depth information pertaining to participants’ experiences and viewpoints of a particular topic. In this study, semi-structured interviews were conducted with each participant. Semi-structured interviews do not only partially shape the course of the interview through questions set beforehand by the researcher but also leave enough room for the participants’ interpretations. This method is commonly used in qualitative research and interpretive research in particular. Balushi (2018) suggests that semi-structured interviews are effective research tools because they deeply deal with the experiences, stories and thoughts of the participants. A semi-structured interview enables a purposeful interaction and permits the investigation of the participant’s thoughts to get more in-depth information. Similarly, Davison (2014) clarified that interview questions comprise of a few essential questions and are followed by supporting questions, which are broad enough as they can enable participants to state their ideas from a broader perspective. Semi-structured interviews were used for data collection. These interviews were conducted as online semi-structured interviews. I developed the interview questions after examining sources
such as CoHE (2020) report on “Research University Studies in Turkey”, TAÜG’s (2016) report on “International Competition in Research Universities and Higher education; Research and Innovation, Altbach & Salmi’s (2011) book "The Road to Academic Excellence The Making of World-Class Research Universities". After reading these resources, I had a general idea about the research universities in the world and the goals of the research university classification in Turkey. In order to investigate research university classification in Turkey from the point of view of academicians, I asked explanatory, exploratory and interpretative research questions to define research university's mission and vision, determine the characteristics of the research university, and identify the obstacles faced by the research university academicians and suggestions from academicians' opinions. I created open-ended interview questions within the framework of research questions (see Appendix A for interview questions). Also, when creating interview questions I asked for the expert opinions of three faculty members and I finalized my interview questions based on the suggestions made by the experts.

Traditionally face-to-face interview methods have been used to generate qualitative interview data (Creswell, 2013) and I also aimed to conduct face-to-face interviews. Because of the COVID-19 pandemic, travel out of town was forbidden, and universities started to apply online education, and therefore, all the interviews were carried out online via either Zoom or Skype. However, when social distancing requirements in many countries have greatly accelerated a move towards greater online data collection. As the qualitative research community continues to come to terms with these changes, we consider the opportunities and challenges of online data collection that pandemic conditions have made evident (Carter et al., 2021). Thus, when modifying face-to-face methods to be conducted online, it is critical to first consider the practical elements of online data collection including: (1) technical difficulties and accessibility, (2) the interview environment (3) time and costs (Topping et al., 2021). For technical difficulties and accessibility, I mostly used my laptop while conducting the interview. In order not to experience any technical difficulties, I tested whether my computer was up-to-date and whether the sound and camera system was working
before the interview started. In order not to interrupt the interview in case of any internet disconnection, the mobile internet of my phone was on throughout the interview. However, no matter how much I took all the precautions, sometimes the internet slowed down or disconnected. But in general, I did not experience any technical problems that could prevent me from completing the interview. For the interview environment, before making the interview, I paid attention to be in a quiet place with appropriate physical equipment where I could take notes during the interview and I was alone throughout the interview. Interviews were conducted in a silent and confidential setting. The places/settings where the subjects participated in the interviews varied from their home to their office, etc., where they were able to fully concentrate on the questions and respond to them in a healthy manner. For time and costs, as Bolderston (2012) emphasized that the participants are volunteering their own time; therefore, the researcher should ensure that the interview begins and ends at the agreed time, I opened the Zoom platform on time for all interviews and even five minutes before the interview, and waited for the participant. Before the interview, I emailed the participants to clarify the time of the interview. While the interview time was being determined, I adjusted to a time when the participants were available, and when the time became clear, I shared the Zoom meeting link. All participants arrived on time for the interview and the interview took 40-45 minutes as planned. Online methods are cost and time efficient compared to face-to-face interviewing, due to the elimination of travel (Topping et al., 2021). If there was no pandemic, I would have had to travel to interview with the participants, but with the online interview, my travel expenses were eliminated. The only difficulty I had here while reaching the participants was that I had to send e-mails to participants again because they were busy on their academic and administrative duties. As Topping et al. (2021) stated that the perceived ease of scheduling can result in more cancellations and rescheduling, some participants wanted to change the interview day and time. In this case, I rearranged my own program according to the hours suitable for the participants.
Before I started collecting data, I designed how I would collect data and how I would reach the participants. I sent e-mails to the participants. In the content of the e-mail, I shared the purpose of my study, how the interview will take place, how many minutes it will take, and the interview questions. Egan et al. (2006) suggest guidelines to consider ethical issues when online interviewing people such as informed consent and withdrawal, privacy and confidentiality. I started collecting data by sharing an informed consent form in the attachment of the e-mail I sent, by obtaining the consent of the participants voluntarily and stating that they could withdraw from the interview whenever they want. In order to ensure the privacy and the confidentiality of the participants, I kept the information and the identity of the participants confidential.

3.6. Data Collection Procedures

In this study, the following data collection procedure was applied. First of all, the sample group was defined by the researcher and the supervisor’s contacts at different faculties at International Research University. After the sample group was defined, potential participants were informed about the study’s purpose through e-mails, along with an informed consent form and ten interview questions defined by the researcher. Participants replied to the researcher through phone, text messages or e-mails by stating whether they were available for an interview. Due to COVID-19, the researcher offered online interviews to potential participants. Individual interviews were arranged depending on the participants’ availability. As for the connection method, some participants preferred phone interview whereas some others preferred Zoom or Skype. The majority of the participants preferred Zoom. Only a few people opted for Skype. This may be due to the following statement that typical issues associated with using Skype reported in previous studies include dropped calls and pauses, poor audio or video quality and Skype does not currently offer the ability to record sessions securely and instead requires use of third-party providers (Archibald et al., 2019 p.2). On the other hand, Zoom is a collaborative, cloud-based videoconferencing service offering features including online meetings, calls, videoconferences. A key advantage of Zoom is its ability to securely record and store sessions without recourse to third-party
software. This feature is particularly important in research where the protection of highly sensitive data is required (Archibald et al., 2019, p.3). However, I did not experience any technical malfunctions or recording, audio or video malfunctions during Zoom or Skype calls. All participants participated the session on time. Before starting the interview, the researcher asked whether she could keep recording during the interview or not. In total, 16 participants were interviewed. Anonymity of the participants was maintained with participant codes. The interviewer used a list of ten questions to guide the interview. The questions on the interview guide varied subtly as the project progressed but they were generally maintained the same as they covered the following questions: (1) What are the prior knowledge of faculty members about research universities?; (2) How can the process of training scholars in research universities be designed?, (3) How can the criteria for selecting a faculty member and appointing an academic be arranged in research universities?; (4) what roles and responsibilities do research universities have in order to produce a large number of quality projects?; (5) what are the responsibilities of universities in organizing national/international scientific activities in research universities? Each interview lasted approximately 40-45 minutes. The interview sessions were recorded upon each participant’s consent.

3.7. Data Coding and Data Analysis Procedures

I started data analysis by immersing myself in the data. Engaging deeply into the data process means rereading the transcripts and the researcher becomes more familiarized to the data (Belotto, 2018). I repeatedly read and took notes while reading the transcripts in light of my research questions. Throughout the interview questions, all participants gave detailed explanation of their thoughts. I realized that participants were also eager to share their thoughts about this topic and they said they wanted to hear about the result of the study. The purpose of data coding is to understand the complexity of the meanings rather than measuring the frequency like in a quantitative study (Sundler et al., 2018). I grabbed meanings from the coding the transcripts.
Graneheim and Lundham (2004) states that words and sentences that have similar meaning units were labeled as codes. Each interview was assigned a code for instance P1 for Professor Jane, P2 for Associate Professor Hillary. The researcher made up these pseudonym participant codes for each participant separately in order to keep the anonymity of the participants. Throughout the process of detailed reading, underlining and note taking, I drafted codes. Belotto (2018) highlighted that coding enabled the researcher to narrow down the last segment of long transcript texts, at the end of coding categorizes and themes emerged. What I had difficulty in labelling codes was to attach the codes the various parts of the text in an appropriate way. That is why I came back to the literature. According to Saldana (2013) a code is a researcher-generated construct that symbolizes and thus attributes interpreted meaning to each individual datum for later purposes of pattern detection, categorization, theory building, and other analytic processes. Just as a title represents and captures a book, film, or poem’s primary content and essence, so does a code represent and capture a datum’s primary content and essence. I read each participant’s transcript and took notes on the margins. After finishing reading all the transcript, I edited my margin notes and categorized them under similar headings. Then, I categorized these codes into categories as Granehim and Lundman (2004) defined a category refers mainly to a descriptive level of content and can be seen as an expression of the manifest content of the text. When codes are applied and reapplied to qualitative data, you are codifying – a process that permits data to be “segregated, grouped, regrouped and relinked in order to consolidate meaning and explanation” (Saldana, 2013).
While doing data coding, firstly interviews were transcribed. Transcribed data was read repeatedly. Similar statements were underlined. Sub-codes appeared under some codes. Categories were created by bringing together the most repeated expressions, namely codes. Similarly, sub-categories may appear under categories. However, this study focused only on the main categories. Themes were formed by combining the categories. The resulting codes and themes will be presented in detail in the findings section with tables and examples from interview transcripts. A major question addressed by this research is the concept of research university. The existing literature is quite limited about the idea of research university since it is a recently debated issue.
in the fields of education and research. Therefore, the aim of the study is to investigate the perceptions of scholars working at IRU, a high-ranking research university in Turkey.

This section describes the procedures for preparing and analyzing the data after finishing the data collection. Various qualitative analysis techniques were present in the literature. To illustrate, Hycner (1999) suggested bracketing the data and making reduction, delineating units of meaning, clustering units of meaning, summarizing each interview, validating and modifying (Gronewald, 2004 p.49). In this technique, Hycner (1999) filtered out the data, underlined the important sections, collected the meanings under a cluster and modified the meanings. Another technique by Colazzi (1978) for phenomenological analysis is mentioned in Morrow et al. (2015) article. This technique consists of six steps as familiarization, identifying significant statements, formulating meanings, clustering themes, developing an exhaustive description, and producing the fundamental structure. Colazzi’ technique is very similar to the one of Creswell (2014) analysis technique in seven steps as collecting the raw data, organizing and preparing data, reading the whole data, coding the data, interrelating theme, interpretation of the meaning of themes and validating the accuracy of the data.

In Moustakas (1994) analysis technique all research participants are described as co-researchers because the essence of the phenomena is acquired from the experiences of the participants. Their narrative expression give the meaning of the phenomenon. The co-researchers are not involved in the study in terms of analysis or interpretation; however, the researcher gives information about the co-researchers’ place in phenomenological research that answers the research questions based on the co-researchers experience and their narratives (Yüksel & Yıldırım, 2015).

After every transcription was finished, the researcher read the whole data and took margin notes. Meanings were extracted from the data. Since codes were the tags or labels used to assign meaning to the chunks of data, key repeated answers were coded in the transcripts. When coding a sentence or paragraph, the coder tried to briefly
capture the major idea and the message conveyed throughout the whole sentence and/or paragraph. Codes and sub-codes were often refined iteratively by the researcher in order to categorize them in an organized way. Themes were created and interpreted. At the end, the researcher checked the accuracy of the data by re-reading and re-listening the interview recordings.

To detail more on the analysis technique, the researcher preferred applying the phenomenological analysis steps of Moustakas (1994) in the following part. Table 5 below presents Moustakas (1994) data analysis steps. In this analysis type, four major processes exist as epoche, phenomenological reduction, imaginative variation, essence while it also includes 8 minor processes as horizontialization, invariant constituents, cluster of meaning units, validation of invariant constituents, individual and composite structural descriptions, and shared essence. Phenomenological data analysis process terms by Moustakas (1994) and application to this study were described respectively.
Table 5 The steps of Moustaka’s data analysis

<table>
<thead>
<tr>
<th>Minor Process</th>
<th>Major Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Horizontalizing all related expressions</td>
<td>Phenomenological Reduction</td>
</tr>
<tr>
<td>2. Reduction of invariant constituents</td>
<td></td>
</tr>
<tr>
<td>3. Clustering meaning units</td>
<td></td>
</tr>
<tr>
<td>4. Comparison of multiple data sources to validate the invariant constituents</td>
<td></td>
</tr>
<tr>
<td>5. Defining individual textual descriptions</td>
<td></td>
</tr>
<tr>
<td>6. Construction of individual structural descriptions</td>
<td>Imaginative Variation</td>
</tr>
<tr>
<td>7. Construction of composite structural descriptions</td>
<td></td>
</tr>
<tr>
<td>8. Synthesis the texture and structure into an expression</td>
<td>Essence</td>
</tr>
</tbody>
</table>

After analyzing the transcripts according to the technique of Moustakas (1994), I created the themes and codes. In total, 2 main themes and codes emerged. Table 6 shows the resulting themes and codes. Details on themes and codes will be presented in the findings section.
### Theme 1: What is a Research University?

- No idea on the definition
- A science and research oriented teaching university
- No effect of academicians on the definition
- An international university
- Autonomous research university
- Research university alliances
- No idea about the vision and mission of the research university
- A vision and mission expression is not meaningful for research universities
- Teaching, research and community mission and vision perspective all together
- Leading a way to the innovative studies in the society

### Theme 2: Characteristics of a Research University and Academicians’ Experiences

#### Stating the Characteristics of a Research University Internationally

- No difference on teaching methods
- Carnegie Classification stands out
- Entrepreneurial university
- Heterogeneous university
- Innovative culture
- A balanced university on teaching and research
- Abundant resources
- A flexible bureaucracy perspective
- A strong organizational structure
- Autonomous university structure
- Competitive universities

#### Stating the Characteristics of a Research University and Academicians’ Experiences in Turkey

- A continuation of existing university structure
- Well-known qualified universities of the higher education system
- Funding keeps its importance
- Imbalance in course load
- A limited number of international students
- No post-doc research programs
- Qualified alumni
- University-industry collaboration

#### Stating the Criteria Defined by CoHE

- A central bureaucratic system of CoHE
- Publication committee and specialization needed
- Feeling insecure about the future of the support

### Theme 3: Specifying How an Ideal Research University Should Be?
### Table 6 (continued)

<table>
<thead>
<tr>
<th>Obstacles for Research University</th>
</tr>
</thead>
<tbody>
<tr>
<td>High course load</td>
</tr>
<tr>
<td>Lack of autonomy</td>
</tr>
<tr>
<td>Norm-staffing rule and lack of human resources unit</td>
</tr>
<tr>
<td>Enough funding problem</td>
</tr>
<tr>
<td>Lack of academicians autonomy on course curriculum</td>
</tr>
<tr>
<td>Lack of qualified academicians and students</td>
</tr>
<tr>
<td>Quality problem of the publications</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suggestions for the Problems Faced in Research Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suggestions for the quality of publication</td>
</tr>
<tr>
<td>Suggestions for the autonomy</td>
</tr>
<tr>
<td>Suggestions for the funding of research universities</td>
</tr>
<tr>
<td>Suggestions for the recruitment and evaluation of the staff</td>
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<tr>
<td>Suggestions for the research issues</td>
</tr>
<tr>
<td>Suggestions for the university administration and planning</td>
</tr>
</tbody>
</table>

#### 3.7.1. Epoche

The phenomenological analysis starts with bracketing the researcher’s subjectivity throughout the analysis process, which is described as *epoche*. In this step, the researcher describes her own experiences to increase alertness of the researcher’s underlying feelings about the research topic. The researcher relinquishes biases, the researcher’s prejudgments and predispositions towards the phenomenon. In the study, the researcher applied epoche by setting aside prejudgements before and after interview. The researcher stayed neutral throughout the interview. The researcher did not make any comment or direction that would affect their opinions before asking the interview questions to the participants and after receiving the answer. The data analysis was performed with an unbiased, receptive presence.

#### 3.7.2. Phenomenological Reduction

As it is clear form the title, this process is about eliminating the sentences that are not directly related to the experience of co-researchers. Through phenomenological
reduction, it is the aim to eradicate overlapping, repetitive and unclear expressions. It is somehow to sort out the raw data. This reduction process of the data is operated in five steps; horizontalizing all related expressions of the participants, reduction of invariant constituents, clustering meaning units, comparison of multiple data sources, defining individual textual descriptions.

1. Horizontalization: In this initial step, every statement is regarded as having initial equal value. Then the researcher creates a list from the transcripts and deletes the irrelevant expressions. After sorting out the data, the remaining useful part of the data is called as horizons. Horizons are the textural meanings or constituent parts of the phenomenon (Yüksel & Yıldırım, 2015). For horizontalization, the researcher took notes from the transcripts, created a draft notecard list for defining the horizons.

2. Reduction of invariant constituents: In this step, researcher should cluster horizons into themes. The translated data should be split into meaning units so that each of the themes has only one meaning. This step of the phenomenological reduction describes the phenomena in “textural language”. Pare down horizon statements to non-repetitive, non-overlapping constituents.

3. Clustering meaning units: in this step, the researcher should cluster and thematize the invariant constituents, which are the horizons defined as the “core themes of the experience” of the phenomenon (Moustakas, 1994, p. 121).

4. Comparison of multiple data sources to validate the invariant constituents: The themes derived from participants’ experiences collected by a particular data collection method, such as interview, are compared to other methods, such as researcher observation, field notes, focus group interviews, and literature to verify accuracy and clear representation across the data sources.

5. Defining individual textual descriptions: Descriptive integration of invariant meaning units and textural description of each participant. The textural description
is a narrative that explains participants’ perceptions of a phenomenon. In this step, researcher describes the experiences of his/her co-researchers using verbatim excerpts from their interview. Moreover, the researcher explains the meaning units in a narrative format to facilitate the understanding of participants’ experiences.

3.7.3. Imaginative Variation

6. Construction of individual structural descriptions: This step is based on the textural descriptions and imaginative variation. By using imaginative variation, researcher imagines how experience occurred and then, he creates the structures. Integrate structural themes into an individual structural description for each participant.

7. Construction of composite structural descriptions: After researcher writes the textural description for each co-researcher, researcher should incorporate the textural description into a structure explaining how the experience occurred. Researcher adds the structures at the end of each paragraph in order to create structural description. This process helps researcher to understand co-researchers’ experiences with the phenomena under investigation.

3.7.4. Shared Essence

Researcher should create two narratives for each co-researcher, including textural describing “what” occurred and structural describing “how” it occurred. Researcher lists the meaning units for each co-researcher. After that, researcher should create meaning units common to all co-researchers and create a composite textural and structural descriptions based on these shared meaning units. In the composite textural and structural descriptions, researcher can eliminate individual meaning units in order to create the essence of the phenomena. Researcher should write composite narratives from the third person perspective representing the group as a whole. This step is the synthesis of all the narratives for the group as a whole. The composite structural description is combined into the composite textural description to create a universal description of the phenomenon of the investigation. The purpose of this step is to reach
the essence of the opinion of the phenomenon and integrate textural and structural descriptions of all participants to develop a synthesis of the shared essence of the experience of the phenomenon.

3.8. Trustworthiness

There is an ongoing debate on the validity and reliability of the study in qualitative design. Qualitative research is generally criticized by some researchers in the points of lacking scientific discussion with poor justification methods as well as lacking transparency in the analysis process and some scientists find validity and reliability insufficient. That’s because qualitative studies are assumed to be based more on personal opinions rather than mere facts (Rolfe, 2006). However, other researchers agree that in qualitative research design, reliability and validity are expressed as trustworthiness, accuracy, and quality (Golafshani, 2003). Before proceeding with the analysis, I aimed to validate the accuracy of the study. As a matter of fact, Creswell (2012) recommends that the researcher pay attention to the accuracy of the findings and interpretations during data collection and analysis. Trustworthiness targets to ensure the rigour of the qualitative findings (Guba, 1981). In qualitative studies, validating findings means that the researcher determines the accuracy or credibility of the findings through strategies such as member checking or triangulation (Creswell, 2012). Lincoln and Gulba (1985) states that several definitions and criteria of trustworthiness exist, but the best-known criteria are defined as credibility, transferability, dependability, and confirmability. Korstjens and Moser (2018) briefly explains these terms as follows. Credibility is about establishing a credible bridge between the research findings and the data drawn from the participants' original views. Transferability in qualitative research is the ability to transfer the results of the study to other contexts and to other participants. Dependability refers to the stability of findings over time. Confirmability means confirming the findings of the study by other researchers, as all the findings are taken from the data of the study.
To ensure the trustworthiness of this work, I applied credibility techniques. There are some strategies to ensure credibility such as prolonged engagement, peer debriefing or peer review, persistent observation, triangulation and member checking (Korstjens & Moser, 2018). I used triangulation, member checking and peer review strategies to ensure the trustworthiness of this work. Triangulation is the process of corroborating evidence from different individuals (e.g., a principal and a student), types of data (observational fieldnotes and interviews), or methods of data collection (e.g., documents and interviews) in descriptions and themes in qualitative research (Creswell, 2012 p. 259). Triangulation, depending on the epistemological perspective of individual researchers, can also enhance research quality, and provide a broader understanding of complex phenomena (Lincoln & Guba, 1985). As triangulation strategies in the study, I applied the triangulation of participants and triangulation of sources in literature. In the study, I conducted online semi-structured interviews with multiple different participants at different times and in different contexts. Participants participated in conversations on different platforms such as Zoom or Skype. I reviewed every piece of information from the participants and created the themes from the information provided by sixteen participants. The data were analyzed using the Moustakas (1994) qualitative analysis technique. I uncovered intersecting and divergent findings in the information given by different participants. Shenton (2004) states that these different data obtained from different participants are a way of triangulating via data sources. Because individual perspectives and experiences can be verified against other participant data. Finally, based on the data, the required attitude, behavior or structure can be revealed with the participation of many different people (Shenton, 2004). This wealth of information provided by the participants in different and independent environments made this study accurate and credible. Besides, I benefited from the sources in the literature by making triangulation of documents. I reviewed the literature on this subject. Shenton (2004) states that a range of materials may also be used as source material such as those institutionally produced by each participating organisation, or official documents published in a wider context. In particular, I looked at the research university criteria in the LERU, Carnegie
Classification, and CoHE resources. By presenting the common and different aspects of these criteria, I examined the literature studies put forward during the research university process in Turkey. I compared the results of the literature study with the findings of this study. I have described the results that are consistent with the literature and the findings of the study. In addition, I contributed to the literature with new patterns that emerged as a result of this study, which were previously found in the literature. Moreover, in order to ensure the credibility of the study, I also applied member checking. Member checks mean that the “data and interpretations are continuously tested as they are derived from members of various audiences and groups from which data are solicited” (Guba, 1981, p. 85). Thus, both the researcher and the participant will look at the data from different perspectives and increase the credibility of the study (Korstjens & Moser, 2018). In this study, after the interview, I first shared the audio recording with the participant, and when I transcribed the recording, I shared the transcripts with the participant. Some participants suggested new sources or made new suggestions for the responses in the transcript. As well as triangulation and member checking, I used peer review to confirm the credibility of the study. A peer review or debriefing is the review of the data and research process by someone who is familiar with the research or the phenomenon being explored (Creswell & Miller, 2000 p. 129). In addition to allowing the researcher to look at the researcher from a different perspective, peer review challenges the researcher with questions asked by the peer about how the researcher will shape the research questions, methodology or data analysis part (Lincoln & Guba, 1985). In this study, before starting the research, I received feedback from an academician about the purpose of the study, research questions, importance, literature, methodology, research design, and how to analyze the findings. Also, before the interviews started, I received feedback from two different academics about the interview questions. I made changes in the interview questions with the feedback they suggested. All these triangulation, member checking and peer review strategies provided the credibility of the study.
3.9. Ethical Issues

A study needs to be transparent enough to make it possible to be replicated by other studies. That is, another researcher should be able to conduct the study on the basis of the information provided in the procedure part. Therefore, the procedures are clearly explained in this study in a detailed way. That is, the ten questions are provided in the appendices. Additionally, the transcribed versions of each participant’s responses were confirmed by each scholar that requested. Also, the researcher’s supervisor reviewed and confirmed the transcriptions together with the researcher. When it comes to the data collection procedure, this study consists of key research action plans. First of all, the researcher selected IRU as the case among all research universities in Turkey. Thus, scholars at IRU are the participants of the present study. Second, each participant’s identity was kept confidential, and the recordings of the sessions were protected by the researcher. Participants were also informed that on the condition that they feel their confidentiality is disturbed, they will have the opportunity to withdraw from participating in the study.

3.10. Researcher’s Role In the Study

In this study, I conducted online interviews with the participants. During the interviews, the researcher presents the comments on the academicians’ perspectives on the research university from the perceptions and experiences of the academicians. The researcher followed the interview questions during the interviews; however, she also asked questions about the issues based on the comments of the academicians. The researcher took a neutral and objective attitude during the interviews and ensured that the answers given by the participants would be kept completely anonymous. The audio recordings would be used only for this scientific study. At the same time, the researcher is expected to trust the viewpoint or experience that the participants share about a phenomenon or an experience. Throughout the interview, the researcher’s role was to guide the questions, manage the interview time, coordinate the answers, and generate new questions in line with the progress of the interview. My role as the researcher in this study was that of an observer-as-participant, as I was the primary
instrument of data collection and analysis that collected, coded, and analyzed the data from interviews to uncover the emerging concepts and patterns. Thus, there is the potential for bias on my part, which could impact the outcome of the study. That was very challenging to be objective and nonjudgmental. That potential bias could be as follows; (1) Academicians may not spare time to reply to my e-mails because they are quite busy for the courses as a result of the pandemic situations, (2) Faculty members may not have any idea or very limited information on the topic, (3) They may not want to share their ideas on a very current debated topic, (4) Their perceptions may show a great variety because they are from different faculties and departments. In addition, the researcher is currently an IRU student and has been an IRU student since her undergraduate years and is currently doing research at the same university.

As a future researcher and academician, doing research at the same university may create bias. In order for this bias not to affect the outcome of the study, the researcher did not share any university experience with the participants on this subject or limited the familiarity connection with the participants by adhering only to the interview questions during the interview. On the other hand, doing research at the same university may create advantage. Because I was a student here and I was doing research at the same time, I was able to observe the field very well as part of many internal dynamics. I was a student as an observer and the participants were academicians. In this sense, there is a position difference between the observer and the participants. These differences made it easier for me especially when formulating the interview questions, determining which areas I would focus on in the literature, and how to analyze the data. Two different academicians were consulted to ensure trustworthiness in interview questions. I had never done any qualitative work before. Thanks to this study, I made a literature review about this design, what are the instruments, how the interview techniques should be, how the data should be analyzed, and thus I gained experience in this field. As a result of the study, most of the academicians shared that the concept of research should be given importance rather than being labelled as research universities. In addition, they stated that they did not
have different feel that much change after the university turns out to be a research university.

This result gave me the perception that the study would result in negative results. However, this study does not aim to reach a negative or positive result at the end. Instead, it displays the existing situation of the research universities in Turkey. I believe that this study will contribute to the literature.
CHAPTER 4

FINDINGS

This study explored how scholars perceive and experience working at a research university. The establishment of the research university is a recent development in Turkey, and the classification of universities as research universities started in 2017, and this resulted in my interest in investigating the background, current situation of a research university and developing some future suggestions for the progress of it from the perspectives of the scholars in research universities. A qualitative framework was used to design my study. Methods related to phenomenological research guided data collection and analysis. The results are a collection of the scholars’ perceptions on the phenomenon of research university classification. In order to reach the perceptions of the scholars, the research questions were defined by the researcher as follows; (1) How do scholars perceive and evaluate the process of research university classification in Turkey? (2) How do academicians experience the research university classification and characteristics? (3) What do scholars suggest for the development of the research university classification process in Turkey?

Chapter 4 presents findings that evolved from the data collected through interviewing a total sample of 16 participants selected from different departments and faculties at IRU. The interviews were carefully transcribed and analyzes according to Moustakas’ (1994) analysis steps mentioned in the previous chapter.
4.1. Development of Themes

Upon completion of the coding of all 16 transcripts, I proceeded to the next step. I started developing themes by looking at all the data from a general perspective. For this purpose, I organized an Excel table showing themes, categories and codes mentioned in the previous part above. For the revelation of themes, thematic analysis was applied.

Theming refers to the drawing together of codes from one or more transcripts to present the findings of qualitative research in a coherent and meaningful way (Sutton & Austin, 2015). Thematic analysis is an appropriate and powerful method to use when seeking to understand a set of experiences, thoughts, or behaviors across a data set (Braun & Clarke, 2012). Themes were defined in light of the research questions. (1) How do scholars perceive and evaluate the process of research university classification in Turkey? (2) How do academicians experience the research university classification and characteristics? (3) What do scholars suggest for the development of the research university classification process in Turkey? In line of the research questions and aim of the study, three themes with sub-themes emerged in the analysis of the transcripts.

The first theme is “what is a research university” with sub-themes as “defining the research university” and “the vision and mission of the research university”. The second theme is “characteristics of a research university and academicians’ research university experiences” with sub-themes as “stating the characteristics and experiences of a research university internationally” “stating the characteristics and experiences of a research university in Turkey”, and “stating the criteria defined by CoHE”. The third theme is “specifying how an ideal research university should be” with sub-themes as “obstacles for research universities” and “suggestions for the future of research universities”, respectively. In the tables below, themes, categories and codes as well as participant quotation will be presented. In this chapter, I only presented the most astonishing and distinctive quotations.
4.2. What is a Research University? Theme That Emerged under Research

Question 1: How do scholars perceive and evaluate the process of research
university classification in Turkey?

In this section, the themes, sub-themes and codes created according to the research
questions will be mentioned. First of all, one theme emerged within the framework of
the first question. This theme is, according to the perspectives of the participants,
“What is a research university” with sub-themes as “defining the research university”
and “the vision and mission of the research university”.

4.2.1. Defining the Research University

Table 7 Sub-themes and codes that emerged under “What is a Research university?”
theme

<table>
<thead>
<tr>
<th>Sub-themes</th>
<th>Codes</th>
<th>Participant Perceptions and Expressions</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defining the Research University</td>
<td>No idea on the definition</td>
<td>There is no idea what a research university is.</td>
<td>P1, P4, P5, P6, P15</td>
</tr>
<tr>
<td></td>
<td>A science and research oriented university</td>
<td>The research university is a science-oriented leading university focusing especially on research</td>
<td>P2, P9, P7, P8, P12, P14</td>
</tr>
<tr>
<td></td>
<td>No effect of academicians on the definition</td>
<td>It is not a definition created by the academicians</td>
<td>P3</td>
</tr>
<tr>
<td></td>
<td>An international university</td>
<td>It is a university focusing on conducting international research studies</td>
<td>P10, P13</td>
</tr>
<tr>
<td></td>
<td>Autonomous research university</td>
<td>It is not only a research institution, but the one having a large scale of autonomy and funding resources, as well.</td>
<td>P11</td>
</tr>
<tr>
<td></td>
<td>Research university alliances</td>
<td>Research university makes alliances</td>
<td>P16</td>
</tr>
</tbody>
</table>
Five of 16 participants stated that they actually had no idea what a research university is. At the same time, they expressed that the research university definition does not recall something notable to them because a university already has to do research whether it is called as “research university” or just as a university. The meaning of the research university is not fully defined by academicians who work at a prestigious research university.


P1: Well, I don't know anything about research universities. I do not know which universities are research universities, what are research universities, what are the differences, and I am not interested in this subject. I honestly don't understand why I should care about this issue. Frankly, I don't know what I should do, that is, what a professor at a university should do about research university.

(P1, Female, Assist. Prof. Dr., Social Sciences, 13 Years Academic Experience)

P5: Araştırma üniversitelerini ne amaçla yaptılar ki araştırma üniversitelerinin tanımına baktığımızda kendileri bile ne olduğunu hatta belirmemişler. Hatta araştırma üniversitesi tanımda-UAÜ'yü anlatıyorlar, İTÜ'yü anlatıyorlar.

P5: To what purpose they establish research universities is not clear. When we look at the definition of research universities, they do not even specify what they are. They already describe IRU and ITU in the definition of a research university.

(P5, Female, Assoc. Prof. Dr., Social Sciences, 32 Years Academic Experience)

The definition of research university differed according to the genders of the participants. While female participants defined research universities as institutions that develop interdisciplinary and international cooperation, male participants defined research universities as institutions that should support individual research studies. In addition, while female participants gave long descriptions and details when describing research universities, male participants provided shorter descriptions.

P1: Ben de burada daha çok yayın yapma adına işbirliği temasını geliştirdim. Yani bir makale yazdığınız zaman yapacağınız iş ikiye ya da üç kişi yazdığınız
Some male respondents also talked about improving collaboration, but in terms of gender, these patterns were more pronounced among female participants. Most of the male participants, on the other hand, emphasized that for the future of the research university, first of all, the funds should be properly distributed and the physical and technological infrastructure should be complete in research universities.

(P12, Male, Prof.Dr., Social Sciences, 23 Years Academic and Administrative Experience)

The interpretation of the participants' little or no knowledge of the research university classification may be resulted from some reasons as follows. The process of research universities in Turkey emerged with the transformation of existing universities into research universities by evaluating them according to certain criteria. The literature and the answers given by the participants seem to be pointing out that there is no legislation specific to research universities in Turkey, that is, the functioning of the universities continued in the same order after they were identified as a research university. Of course, CoHE provided staff and budget support to research universities. However, this process remained in the background as these studies were not presented to all university stakeholders at a conference or other joint event with university stakeholders. Universities selected as research universities in Turkey are distinguished and successful teaching institutions and have the potential to rank high among world universities with a good management strategy and support. Also, P15 stated that the concept of research university is unique to Turkey and that there is no such distinction
based on the participant’s’ observations abroad. According to one one of the participants, this may have been caused by the fact that the universities there already do very good research and that extra funds are provided to the faculty members who conduct research, so there is no need for such a distinction. The lack of participants' knowledge on the definition of research universities can also be explained by the following pattern. Most of the participants, who stated that they had no idea, do not have managerial experience. Academicians who are not in the management department may stay away from this subject when the management part of the department does not provide information about the research university, joint work, or a guideline about the research university.

Six of 16 participants stated that research university is defined as the institution enabling the science and technology to improve for the welfare of the society. They stated that research universities are governed by the science. Participants defined research universities as institutions where research studies are high and research groups develop cooperation. They stated that the three main functions of the university are shaped around research. Academicians carry out teaching, research and community service at universities at the same time. The explanation for some of the participants' emphasis on research at the research university may be as follows. Research universities will actually make a difference by focusing on research, and thanks to this distinction, academicians who want to do research will be able to devote more time to research.

(P15, Male, Assoc.Prof.Dr., Social Sciences, 24 Years Academic and 19 Years Administrative Experience)
öncülük eden topluma hizmet edecek üniversitedir. P2: A research university is a science-oriented university that develops a science-oriented program, focuses on teaching, and pioneers new studies for the future, which will serve the society. (P2, Female, Prof.Dr., Social Sciences, 23 Years Academic and 17 Years Administrative Experience)

P14: Üniversitelerin eğitim, araştırma ve toplumsal hizmet olmak üzere 3 temel fonksiyonu olduğu düşünülse, araştırma üniversitesi denildiğinde benim aklıma tüm fonksiyonların “arastırma-geliştirme” ile desteklendiği bir yapı geltiyor. P14: Considering that universities have 3 basic functions, namely education, research and social service, when research university is mentioned, I think of a structure in which all functions are supported by “research and development”. (P14, Female, Prof.Dr., Natural and Applied Sciences, 19 Years Academic Experience)

One participant explained that research university is not definition created by the academicians or the university administration. My finding from this statement is that the research university structure is not a structure created by the academicians or the university administration. This process actually started with the participation of the Council of Higher Education and policy development by policy makers. Academics did not focus on the necessity of making such a distinction, as they carried out research and other duties before they became research universities as well. Instead of this distinction, they continued to do research by doing their current duties with devotion before and after a research university designation.

P3: Bu araştırma üniversitesi kavramı akademisyenlerin icat ettiği bir şey değil aslında. Ya da üniversite kurumunun kendisinden büyük ölçüde neşet eden bir şey değil. P3: This concept of research university is not something that academics invented. It is not something that derives greatly from the university institution itself, either. (P3, Male, Assoc.Prof.Dr., Social Sciences, 15 Years Academic and 3 Years Administrative Experience)

Two participants also underlined that research universities are international institutions sparing funds for research, as well. As the literature indicates, the world is moving towards an increasingly globalized, interconnected system. Nations are more in touch than ever before, and they are developing joint solutions to global problems.
In the field of internationalization, the Turkish higher education system has also shown great improvement in recent years.

Various strategies are being developed in order for the Turkish higher education system to become an international center of attraction and to gain more students and academic staff from more countries, and efforts are made to keep the dynamics of internationalization strong with the policies pursued in this area. Erasmus Project, Erasmus+ programs, Turkey Scholarships are important steps in terms of attracting international students and academicians in higher education and sending international students and staff. CoHE extended the period of stay of doctoral students in Turkey after their graduation, started to give scholarships to students and supported important initiatives that strengthen this process.

P10: Yani herhalde eğitimden ziyade lisans eğitimden ziyade uluslararası araştırma yapmaya daha fazla kaynak ayırán üniversitelerdir. P10: So it is probably universities that allocate more resources to international research rather than undergraduate education rather than education.

(P10, Male, Assoc. Prof. Dr., Natural and Applied Sciences, 30 Years Academic and 21 Years Administrative Experience)

P13: İlk uyanan problem odaklı, veriye dayalı düşünceye yoğun veren ve bünyesinde araştırma dayalı araştırma merkezlerini barındıran dolayısıyla araştırmacıların yoğunlaştığı uluslararası ilişkileri çok kuvvetli üniversite geliyor. P13: A research university focuses on problem-oriented, data-based thinking, and has research-based research centers, so international relations are very strong, where researchers work intensively.

(P13, Male, Assoc. Prof. Dr., Social Sciences, 16 Years Academic and 8 Years Administrative Experience)

One participant emphasized a very significant aspect of research universities, which is the fact that research universities have a good governance system, abundant resources, good talented scholars. In Altbach’s (2007) study, research universities in developing countries first need good funding and autonomy in order to compete with research universities in developed countries. This autonomy should be made available to research universities, not only in financial terms, but also in governance. Research universities must be able to shape their own programmes, carry out a long-term perspective, and manage their budgets and the academic community. Not only do
research universities require steady funding commitments, they also need governance to develop and maintain their strengths.

P11: Yani araştırma üniversitesi derken sadece böyle araştırma yönlü değil ama governance açısından biraz daha ayrıntılı governance olan, extra kaynakları olabilen biraz da yetenekli insanların talent çekme açısından avantaj sahip olan üniversite.

(P11, Male, Prof.Dr., Social Sciences, 16 Years Academic and 13 Years Administrative Experience)

Only 1 participant stated that research university definition began in Turkey previously based on the research alliances. This is related to the fact that this participant is one of the founders of this cooperation.

P16: Birçok ülkede farklı güçbirliği oluşumları var. 2015 senesinde de biz Türkiye'de başlattık fakat daha sonra devam etmedi.

(P16, Male, Prof.Dr., Social Sciences, 45 Years Academic Experience and 30 Years Administrative Experience)

Turkish Research Universities Association (TAÜG) has emerged as a result of the coming together of three private and three public universities in Turkey. Public universities are Boğaziçi University, Istanbul Technical University, Middle East Technical University, and private universities are Bilkent University, Koç University, and Sabancı University, respectively. These universities are among the leading universities in Turkey in national rankings. The purpose of establishing TAÜG is to ensure cooperation and coordination among Turkish research universities, to lead the way in developing researcher training models and programs, and to create models and mechanisms unique to our country regarding university-industry cooperation (TAÜG, 2016). However, this cooperation is not active for now. The fact that only one participant has an opinion about this cooperation.
4.2.2. Mission and Vision of a Research University

Table 8 Sub-themes and codes that emerged under “What is a Research University?” theme

<table>
<thead>
<tr>
<th>Sub-themes</th>
<th>Codes</th>
<th>Participant Perceptions and Expressions</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Vision and Mission of the Research University</td>
<td>No idea about the vision and mission of the research university</td>
<td>Participant has no idea about the mission and vision of the research university.</td>
<td>P1,P4, P5, P6, P15</td>
</tr>
<tr>
<td></td>
<td>A vision and mission expression is not meaningful for research universities</td>
<td>Participant find it meaningless</td>
<td>P15</td>
</tr>
<tr>
<td></td>
<td>Teaching, research and community mission and vision perspective all together</td>
<td>Research universities have three important roles teaching, research and community outreach.</td>
<td>P12,P13,P16,P14</td>
</tr>
<tr>
<td></td>
<td>Leading the way for innovative research to benefit the society</td>
<td>Research universities have the mission of creating innovative competitive technological developments.</td>
<td>P7,P8</td>
</tr>
</tbody>
</table>

Two participant stated that it seems meaningless to define the mission and vision of the research university because there is no an established research university structure differentiating from other universities.

*P1*: Evet, araştırma üniversitelerinin misyon ve vizyonu hakkında da bilgim yok. P1: Yes, I don't know anything about the mission and vision of research universities either.
(P1, Female, Assist. Prof.Dr., Social Sciences, 13 Years Academic Experience)

*P15*: Söylediğim gibi ben bunu doğru bulmuyorum üniversite olup bazı üniversitelere araştırma üniversitesi demek anlamsız bir şey. Dolayısıyla vizyonu misyonun anlamşız buluyorum. Kavram ortada kalı. Öğretim üyesinin seçiminden tutun da asistanların seçimine kadar temeldeki sorularımızdan dolayı bunlar havada kalıyor. P15: As I said, I don't find this right, it is meaningless to be a university and call some universities research
universities. Therefore, I find the vision and mission meaningless. The concept is stuck. From the selection of the lecturer to the selection of the assistants, these are left in the air due to our fundamental problems.

(P15, Male, Assoc. Prof. Dr., Social Sciences, 24 Years Academic and 19 Years Administrative Experience)

Five participant stated that the mission of the research university is to stand among the top universities in the rankings, and the vision is to become a university having a high impact internationally. The vision of the research university is to supply the society with the qualified, leader human resource.

Five participant stated that the mission of the research university is to stand among the top universities in the rankings, and the vision is to become a university having a high impact internationally. The vision of the research university is to supply the society with the qualified, leader human resource.

(P15, Male, Assoc. Prof. Dr., Social Sciences, 24 Years Academic and 19 Years Administrative Experience)

Two of 16 participants indicated that research universities have a mission of having leading the technological developments and the vision is to give an important role to the scientific understanding in every aspect as can be seen from P8’s response:

P8: Araştırma üniversitesinin misyonunu vizyonunu tanımlamak çok kolay. Çevre duyarlı teknolojiler araştırma daha doğruşu insan ve toplum gerçekliğine yaklaştırmak, taraflıtlık misyon olabilir. Vizyon bilimsel araştırma ön planda tutmak. Araştırma sonuçlarını paylaşmak ve bunların değişebilir olduğunu duymak. Daha gerçekçi daha uygulama ve bilim odaklı bir araştırma vizyonu olması lazım. İdeolojileri ve kuramları öğrenmek lazım. Geçirgenliği ve dönüşümü içine alan bir araştırma üniversitesi vizyonu var olan ile yetinmemek. Bütün üniversitelerin değerleri bilim olmalı bilimdir vizyon. Bilimsel değerler kültürel değerlerden önce gelir. açık toplum ve açık üniversite değişen zamana ve çağa ayak uydurabilen bir üniversite. P8: It is very easy to define the mission vision of the research university. Researching environmentally sensitive technologies, more precisely, approaching the reality of human and society, objectivity can be a mission. Our vision is to prioritize scientific research. Sharing research results

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and announcing that they are changeable. There should be a more realistic, more application and science-oriented research vision. It is necessary to learn ideologies and theories. The vision of a research university that encompasses permeability and transformation is not to settle with the existing. The values of all universities should be science, the vision is science. Scientific values come before cultural values. open society and open university is a university that can keep up with the changing times and ages. (P8, Male, Prof.Dr., Natural and Applied Sciences, 30 Years Academic and 21 Years Administrative Experience)

4.3. Characteristics of a Research University and Academicians’ Experiences

Theme That Emerged under Research Question 2: How do academicians experience the research university classification and characteristics?

In this section, the themes, sub-themes and codes created according to the research questions will be mentioned. First of all, one theme emerged within the framework of the second research question. The second theme is “characteristics of a research university and academicians’ research university experiences” with three sub-themes as “stating the characteristics and experiences of a research university internationally”, “stating the characteristics and experiences of a research university in Turkey, and “stating the criteria defined by CoHE”.

<table>
<thead>
<tr>
<th>Sub-themes</th>
<th>Codes</th>
<th>Participant Perception</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stating the Characteristics and Experiences of a Research University Internationally</td>
<td>No difference on teaching methods and no categorization as research university</td>
<td>There is no a notable difference on teaching techniques of scholars. There is no an institution categorized as the research university on abroad.</td>
<td>P1,P3,P6,P11,P16</td>
</tr>
<tr>
<td>Carnegie Classification stands out</td>
<td></td>
<td>The classification of the universities on abroad is based on the Carnegie Classification System in the USA.</td>
<td>P4,P16</td>
</tr>
<tr>
<td>Entrepeneural university</td>
<td></td>
<td>Research universities are also named as entepreneural university on abroad.</td>
<td>P16</td>
</tr>
<tr>
<td>Heterogeneous university</td>
<td></td>
<td>There are different kinds of research university with different characteristics</td>
<td>P16</td>
</tr>
<tr>
<td>Innovative culture</td>
<td></td>
<td>Research universities have the attitude of upgrading themselves</td>
<td>P14</td>
</tr>
<tr>
<td>A balanced university on teaching and research</td>
<td></td>
<td>The balance between the course load and research responsibility is adjusted.</td>
<td>P1,P2,P3,P4,P7,P10,P13,P15</td>
</tr>
<tr>
<td>Abundant resources</td>
<td></td>
<td>The research universities there can get abundant resources, funding, support from both governmental and private instutions.</td>
<td>P8,P9,P10,P11,P12,P13,P16</td>
</tr>
<tr>
<td>A flexible bureaucracy perspective</td>
<td></td>
<td>There are no strict bureaucratic legislations or rules, or paper works</td>
<td>P7,P14,P16</td>
</tr>
<tr>
<td>A strong organizational structure</td>
<td></td>
<td>There is a strong organizational structure in the university.</td>
<td>P2,P3,P8</td>
</tr>
<tr>
<td>Autonomous university structure</td>
<td></td>
<td>Universities are autonomous in many</td>
<td>P8,P11</td>
</tr>
</tbody>
</table>
Table 9 (continued)

<table>
<thead>
<tr>
<th>Sub-themes</th>
<th>Codes</th>
<th>Participant Perception</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stating the Characteristics and Experiences of a Research University Internationally</strong></td>
<td>Geopolitical and strategic location of research universities</td>
<td>Geopolitical and strategic location of research universities play an important role especially in international rankings</td>
<td>P9,P12</td>
</tr>
<tr>
<td>Comptitive universities</td>
<td>There is a challenging competition between the research universities.</td>
<td></td>
<td>P3,P6,P8,P9,P13,P15</td>
</tr>
<tr>
<td><strong>Stating the Characteristics and Experiences of a Research University in Turkey</strong></td>
<td>A continuation of existing university structure</td>
<td>Research universities in Turkey have derived from the existing universities,</td>
<td>P8,P15</td>
</tr>
<tr>
<td>Well-known qualified universities of the higher education system</td>
<td>Research universities play a central role in producing new, diverse, scientific knowledge.</td>
<td></td>
<td>P4,P8,P13,P14</td>
</tr>
<tr>
<td>Funding keeps its importance</td>
<td>Funding plays a critical role in the characteristics of the research universities.</td>
<td></td>
<td>P5,P6,P8,P11,P12,P14,P16</td>
</tr>
<tr>
<td>Imbalance in course load</td>
<td>In Turkey, academicians’ course load and the number of students per academicians are high.</td>
<td></td>
<td>P2,P12,P15,P16</td>
</tr>
<tr>
<td>A limited number of international students</td>
<td>The number of international students and academicians is narrow in Turkey</td>
<td></td>
<td>P10,P13,P14,P16</td>
</tr>
<tr>
<td>No post-doc research programs</td>
<td>There is no post-doc research programs.</td>
<td></td>
<td>P7,P12,P14,P16</td>
</tr>
<tr>
<td>Qualified alumni</td>
<td>A qualified alumni is a characteristic of research universities</td>
<td></td>
<td>P4,P5,P8,P16</td>
</tr>
<tr>
<td>University-industry collaboration</td>
<td>Research universities in Turkey have university-industry collaboration</td>
<td></td>
<td>P3,P5,P14,P16</td>
</tr>
</tbody>
</table>
Table 9 (continued)

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<th>Participant Perception</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stating the Criteria Defined by CoHE</strong></td>
<td>A central bureaucratic system of CoHE</td>
<td>The centralized structure is an obstacle to the flexible and autonomous structure of the research university.</td>
<td>P2,P3,P8,P9,P10,P11,P15</td>
</tr>
<tr>
<td></td>
<td>A publication committee for publications</td>
<td>CoHE needs a publication committee when evaluating the publication criteria for defining research universities.</td>
<td>P1,P4</td>
</tr>
<tr>
<td><strong>Support by CoHE</strong></td>
<td>There is an uncertainty about the future of the support.</td>
<td></td>
<td>P1,P5,P6,P7,P8,P13,P14,P15,P16</td>
</tr>
</tbody>
</table>

For the second research question under sub-theme 1, five of 16 participants stated that there is not a notable difference on teaching techniques of scholars. Looking at their experiences abroad, the participants repeated that there was no research university on abroad. This finding sounds very interesting to me. Because the concept of research university first emerged in Europe, then reshaped in the USA and many countries followed the research university structure closely. The reason why there is no distinction or classification as a research university abroad may be as follows. Participants went abroad for doctoral or postdoctoral study. Therefore, they had the experience of constantly conducting research abroad and finding funding for their research. According to the experience and opinions of the participants, when an academician who is abroad conducts research or receives funding from research, she or he is also supported by the university administration. Whether it is a research university or not, the participants stated that they are not aware of such a distinction, as research is always the priority of the universities there.

*P6: Yurtdışında araştırma üniversitesi diye bir üniversite yok. Bu tamamıyla Türkiye de üretilen bir şey. There is no a university distinction classified as a research university. This term is entirely created in Turkey.*
Two participants stated that the classification of the universities abroad is based on the Carnegie Classification System in the USA. Different universities in different continents adapted the Carnegie Classification on their own way. The Carnegie classification, in its simplest definition, is the classification of higher education institutions in the United States according to their research degrees. Only two of the participants mentioned the Carnegie Classification system in the classification of research universities. This result is not widespread enough among the academicians that the research university system in Turkey is related to the Carnegie criteria. Since these two participants completed their master's and doctorate in the USA, it is usual for them to mention this issue.

P16: If you look at the Carnegie Classification, the number of doctorates is divided into at least two programs and 20 degrees. If I'm not mistaken, universities are divided into six groups in the Carnegies classification. If you spend more than five million dollars a year on research, then they include you in the intensive or highly intensive group. If you look at it now, it is a wide umbrella. In other words, five million dollars is not a very restrictive figure according to the Carnegie Classification.
from the Carnegie Classification in the USA. There is a research university alliance system established in Europe and America. For example, England established the Russel Group, Germany established 10 research universities. 

(P4, Male, Assoc.Prof.Dr., Natural and Applied Sciences, 21 Years Academic and 5 Years Administrative Experience)

One participant emphasized the importance of the entrepreneurial university abroad. Especially, universities became more research and technology oriented for the improvement and richness of the society. The participant emphasized that this accelerated the research university establishment especially in European and American higher education classification system.

(P16, Male, Prof.Dr., Social Sciences, 45 Years Academic Experience, 30 Years Administrative Experience)

Unlike the other participants, P16 talked about the entrepreneurial university model.

When we look at the literature, the university brought two academic revolutions, which led to significant changes in its mission and academic tasks (Etzkowitz, 2003). The first academic revolution led to the adoption of research as another university function in addition to the traditional academic task of teaching. The second academic revolution added a new academic task related to economic and social development and
led to the emergence of the entrepreneurial university (Yordanova and Felipe, 2019). The biggest reason why the participant talked about the entrepreneurial university and the university system in the USA is that he completed his master's and doctorate in the USA.

Participant 16 also compared his experiences and institutions abroad and in Turkey, and mentioned that research universities also consist of various features within themselves, and that each university has different limits and opportunities. For example, research universities in Turkey also have a heterogeneous structure within themselves. Although the budgets of research universities in Turkey are equivalent, institutions have a rich diversity in terms of culture, geography and human resources.

P16: Mesela benim doktora derecemi aldığım UPenn’ın bir yıllık araştırma bütçesi 1 milyar dolar. Dolaysıyla bir milyar dolardan, Harward MIT ye bakın 920 milyon dolardan 1 milyar dolara arge bütçeleri var.şimdi onlarla karşılaştığın zaman o beş milyon tam olarak bir şey ifade etmiyor. Dolayısıyla hani araştırma üniversitesi dediğiniz zaman da aslında kendi içerisinde çok heterojen bir gruptan bahsediyorsunuz. P16: For example, UPenn, where I got my PhD, has a one-year research budget of 1 billion dollars. Therefore, these universities such as Harvard, MIT, they have a R&D budget of one billion dollars, from 920 million dollars to 1 billion dollars. Now, when you compare them with them, that five million does not really mean anything.

(P16, Male, Prof.Dr., Social Sciences, 45 Years Academic Experience, 30 Years Administrative Experience)

While talking about his experience here, as one participant studied both in the USA and Europe, he mentioned the high level of funding support in research universities, the importance given to research and development, and the innovative culture of the university. This finding showed that research universities abroad coincided with keeping up-to-date and investing heavily in innovation and research development. I believe that a university with an innovative culture will never lose its research motivation, and will create new ideas and new inventions both for the needs of the time and for future generations.

Eight of 16 participants stated their experiences on the characteristics of a research university in terms of course focus and course load of the scholars. All 8 participants underlined that the course load was balanced based on their observations. And thus, the academicians there could spare more time on conducting research, master and PhD students. If the academician is conducting research, the department is behaving more supportive to the academician, and the department can arrange the course schedule and course load according to the research program. The subject of course load was mentioned by almost half of the academicians. This topic will be discussed in more detail in the next section of obstacles for research university. It is possible to say that in the experience of academics, the low course load in universities abroad has created opportunities both for academicians to do research and for the students to be included in the research.

P2: We were in a research all the time. Faculty members were expected to give a few lectures and publish in the direction of research. Although they were very intense, their intensity was in the direction of research, they were not very intense in the direction of teaching. In total, they teach a maximum of two or three courses a year. For example, we teach 6-7 lessons.

(P2, Female, Prof.Dr., Social Sciences, 23 Years Academic and 17 Years Administrative Experience)
While addressing the balance between academics' teaching and research load, one of the participants made an interesting point. In universities abroad, the number of undergraduate students was less than the number of graduate and doctoral students. In Turkey, on the other hand, because the undergraduate programs are crowded, the participants mentioned that they could not find enough time to do research. However, P10 mentioned that this seemingly disadvantageous situation can be turned into an advantage. In other words, it seems like a disadvantage that the undergraduate programs are crowded, but it is an advantage that the academician educates the undergraduate student and gets to know the student at the graduate level. Thus, the academician can make the research culture sustainable, starting from the undergraduate level to the graduate level or doctorate.

P10: Frankly, I used to work in research institutes, in the first two places I worked. They did not have undergraduate programs. It had graduate programs and was research-oriented. I don't think there is an institution in Turkey that can match this, but I think it would be nice if there were. In my opinion, research should continue at a certain level in all universities. Professors who found research project resources abroad were able to reduce their teaching load.
Again, they were teaching, they were not completely disconnected, but the course load was less.
(P10, Male, Assoc.Prof.Dr., Natural and Applied Sciences, 13 Years Academic Experience)

Seven of 16 participants mentioned that as a very distinctive characteristics of the research university abroad, the research universities there can get abundant resources, funding, support from both governmental and private institutions. As the quantity of the funding increases, the academicians become more autonomous and they can organize their research and teaching, and community service process easily. Academicians have the power to support their doctorate students or assistants with their own research projects or funding.

(P8, Male, Prof.Dr., Natural and Applied Sciences, 30 Years Academic and 21 Years Administrative Experience)

(P13, Male, Assoc.Prof.Dr., Social Sciences, 16 Years Academic and 8 Years Administrative Experience)

Three of 16 participants stated that there are no strict bureaucratic legislations or rules, or paper works when the academicians attempt to do research. Another significant characteristics of research university abroad is the university is being evaluated
independent from the bureaucracy and the governmental issues. It is very important that staff allocation or other university issues should be based on merit.

P7: Secondly, I did not see the political influence on universities. Merit is so important that universities cannot move forward in a place without a merit—based system understanding.

(P7, Male, Assoc.Prof.Dr., Informatics, 11 Years Academic and 8 Years Administrative Experience)

P16: Let me put it this way, there is a framework for the definitions of research universities abroad and the measurement of their performance, as well as the factors that differentiate the factors that will support the success of research universities. They have a frame and impact for research universities. In other words, when evaluating a research university, they have a guiding frame. When we say research university, we look at the inputs such as budget, the number of faculty members. It is related to how many publications have been made, how many projects have been managed and how many budgets are spared. It is both input and production.

(P16, Male, Prof.Dr., Social Sciences, 45 Years Academic Experience, 30 Years Administrative Experience)

Three of the 16 participants mentioned that research universities abroad have a strong institutional structure. First of all, they stated that the institutions, which are well equipped in terms of physical infrastructure, also produce a policy of joint development when conducting research or any work. From this finding, I can say that research universities abroad focus on interdisciplinary studies, and that both academicians and departments from different fields intersect at a common point on issues such as peer support, producing joint projects, benefiting from resources.
P2: There is an institutional approach. There is no discrimination such as this is my student or the student of this department, and there is a developing point of view. There is a collaborative perspective for raising the scientists for the future. Academicians come together at appropriate times and provide constructive support to contribute to each other’s study. Everyone was very successful, and they were asking each other constructively how we can do better. This kind of cooperation provides different perspectives and the opportunity to constantly renew yourself. A research university can not become a research institution by adhering to only one faculty, instead it becomes a real research university with all its units.
(P2, Female, Prof.Dr., Social Sciences, 23 Years Academic and 17 Years Administrative Experience)

P3: However, when we look at large research universities abroad, more research centers and laboratories try to work together with each other.
(P3, Male, Assoc.Prof.Dr., Social Sciences, 15 Years Academic and 3 Years Administrative Experience)

A visible different characteristics of the research universities abroad is expressed by the 2 participants that universities there have an autonomous structure, which increases the inner efficiency of university administration. All universities in Turkey are affiliated to the Council of Higher Education Institution. Since research universities are public universities, they depend on the regulation applied to other universities and on the government's budget. Here is what is meant by autonomy is that since research universities abroad have an autonomous structure in terms of management, the institution can determine its own rules when recruiting academicians or students. It can find richer funds for research and can carry out more comprehensive studies. This
does not mean that these universities are not audited. Research universities abroad have an accountability system, unlike the accountability system in Turkey.

P8: Özerk, bağımsız bir araştırma kurumunda bulundum. Muhteşemdi. Türkiye’de üniversite bitirdim. Orada araştırma kurumuydu ama neredeyse orada da bir üniversite bitirdim. P8: I was in an autonomous, independent research institution. It was amazing. I graduated from a university in Turkey. It was a research institution there, but I almost finished a university there.

(P8, Male, Prof.Dr., Natural and Applied Sciences, 30 Years Academic and 21 Years Administrative Experience)


P11: This was the case even in China. Traditionally, in the West, such as Harvard, Oxford, they had a specialized operation within themselves. Eastern universities, including us, have defined it for themselves based on this specialized process in the West. Although China is a little more central, it has given such universities the freedom of operating autonomy within themselves. The universities I have mentioned do not receive any intervention in terms of governance. In that, they are autonomous within themselves. The university has both an accountability within itself and an accountability towards the society, so it has autonomy academy freedom values and so on.

(P11, Male, Prof.Dr., Social Sciences, 16 Years Academic and 13 Years Administrative Experience)

Two of 16 participants also emphasized the strategic and geopolitical location of the universities affect the number of qualified publishing. Especially the universities located in the European, American and East Asia regions, they have the advantage of their publishing superiority over other universities in the world.


P9: If I remember correctly, only 3% of the total publications in the world come from the Middle East region. Thus, we begin with such an unfair
condition. Now it is very difficult to reverse this situation. In an institution with such a high budget, the experience is more and the outputs are more qualified. (P9, Female, Prof.Dr., Natural and Applied Sciences, 27 Years Academic and 5 Years Administrative Experience)

P12: Özellikle Çinin bu yayın sektörünü ele geçirmesiyle birlikte artık başka bir dünyadan başka bir kültürden bahsediyoruz. Dışardan kopyalamayla bir şey çözemezsin eğitimde doğrudan sana ait olması gerekiyor. P12: We are talking about a different culture from another world, especially with the takeover of this broadcasting industry by China. You can not solve anything by copying from outside, it has to be unique to your own university system and culture. (P12, Male, Prof.Dr., Social Sciences, 23 Years Academic and Administartive Experience)

Six of the participants mentioned that there is a very competitive approach in research universities abroad. For example, if you work well as an academic and show a good performance, you can hold on to the institution you work for. There is no egalitarian understanding. So the more research you do, the more funding you can get, but I think this is a serious problem. Because it is very normal for an academic who is not good in the field of research or who does not express himself fully in the field of teaching to lose his job abroad. I also think that this situation puts pressure on academics. There is a situation called norm-staff in Turkey. In other words, the rights and staff of the academician at the state university are protected by the regulation on the state side. Although academics experience a lot of effort and stress to be appointed to the staff, they can choose to live a more orderly and calm life after being appointed to the staff. The result of the norm-staff problem is that since the norm-staff keeps the academic staff stable, it does not undergo new academics or personnel mobility. The human resources are not update. Since the academician has a command of the corporate culture and the operation, he can continue his studies with more confidence. This could be a subject of another thesis yet, here I will briefly mention what two of the participants indicated about the issue as it relates to the current study.

P8: Dünyada ne yazık ki eşitlikçi bir anlayış yok. Eşitlikçilik yerine potansiyel ve bireysel performansları değerlendirme maaş. Çok iyi hoca yapıyorsa ona göre maaş çok iyi araştırma yapıyorsa ona göre fon ama bu çok zor. P8:
Unfortunately, there is no egalitarian understanding in the world. Evaluation of potential and individual performances are based on how much you produce. If you are a very good teacher, then the salary is good. If you are doing good research, you get more fund, but finding fund is very difficult.
(P8, Male, Prof.Dr., Natural and Applied Sciences, 30 Years Academic and 21 Years Administrative Experience)

P15: Bölüm başkanı hocası yazın ders veremediği için Amerika’nın öbür ucuna yaz okulunda ders verebilmek için ki maaş alabilsin. Unvanının profesör olması ve idari görevinin olması ne yazık ki onu orada tutamadı. Bunların görevleri ve maaşları da farklıdır. RA daha fazla maaş alır ve çok çok özel seçilirler. Bilim Türkiye'deki asistanlar mesela Teaching asistanttır. Research assistantımız hiç yoktur mesela bizim. Bazı öğretim üyeleri vardır ki gerçekten iyi bir araştırmacı da ya iyi bir öğreticidir. Yurt dışında hocalar da belirli bir saat ders vermek zorundadır. Ama araştırma olarak çalışmış para kazanır ve kendi yerine o dersi verecek öğretim üyesi kiralıyor. Türkiye'de ne yazık ki profesörümüz ve ne yazık ki profesör haftada 8 saat derse girmek zorundadır. Şu nu yapamayorsunuz ben araştırma yapmak istiyorum ya da ta m tersi sadece eğitim yapmak istiyorum. P15: Since the head of the department cannot give lectures in the summer, he can receive a salary in order to teach in the summer school on the other side of America. Unfortunately, his title as a professor and his administrative duties could not keep him there. Their duties and salaries are also different. RA gets paid more and they are very very special. The assistants in Bilim Turkey are, for example, Teaching assistants. For example, we do not have a research assistant. There are some lecturers who are really good researchers or good teachers. Professors abroad are also obliged to teach for a certain number of hours. But if we don't have time for research, he earns some money from research and hires a lecturer to teach that lesson instead. In Turkey, unfortunately, we are professors at unfortunately the professor has to attend classes for 8 hours a week. I cannot do this, I cannot say that I want to do research or vice versa, I want to study in research.
(P15, Male, Assoc.Prof.Dr., Social Sciences, 24 Years Academic and 19 Years Administrative Experience)

Three of 16 participants stated that research universities in Turkey have derived from the existing universities, which means that a new research university structure has not been created by the authorities. Turkish intellectuals can suggest or build a framework on how a research university unique to Turkish higher education system should be. Similarly, in the previous section, while academics in Turkey talked about the definition of research university, some participants mentioned that they did not know what distinguishes research universities from other universities. This finding is closely
related to the quotation below. As the participants mentioned, the development of a research university occurred by transforming existing universities into research universities according to certain criteria. In particular, P15 mentioned that there is no clear distinction in this regard, and there is a dilemma about doing research or teaching. P8, on the other hand, mentioned that the research university system is not unique to Turkey, but is determined according to the criteria of other international research universities. I can say this about it. The Turkish higher education structure is quite different from other foreign universities with its centralized management approach. When defining a research university, the culture, structure, potentials and risks of the institution should also be considered. Institution-specific policies should be developed as an institution, not a general structure for all research universities. P11 participant stated that there is no research university in Turkey and that there is no feature that distinguishes research universities in Turkey from other universities. So much so that whatever the opportunities and difficulties faced by universities without research universities are, he mentioned that existing research universities face the same situation. These findings show that criteria to distinguish research universities from other universities should be introduced and the research university process should be shared with all stakeholders of the university.

P8: Türkiye’nin kendisinin karar vermesi lazım Türk entelektüellerin. Kendimize ait bir şey yaratalım ama bu öyle olmuyor işte. Bunu yapacak kapasite yok şu anda. Ya bunu yapacağız kendimize özgü ya da Batı'dan araştırma üniversitesi düzenini uygulayacağız. P8: Turkish intellectuals have to decide for themselves in Turkey. Let's create something of our own, but that's not how it works. There is currently no capacity to do this. Either we will do this ourselves or we will apply the research university process from the West.
(P8, Male, Prof.Dr., Natural and Applied Sciences, 30 Years Academic and 21 Years Administrative Experience)

P15: Türkiye bazı üniversiteleri araştırma üniversitesi diye ayırdı. Bunların da araştırma ve kadro olarak ayrıcalık tanıdı. Yeni kurulmadı bu üniversiteler. Var olan üniversiteler araştırma üniversitesi oldu ama bu şekilde ne kadar doğru diğer üniversiteler araştırma yapmayacak mı demek ya da bu üniversiteler öğretim yapmayacak mı demek. Araştırma üniversitesi var olan
üniversitelere imkanlar tanındı ve ben bunu olumlu olarak karşıyorum çünkü diğer üniversitelere de bu imkanlar verilseydi. P15: Turkey has classified some universities as research universities. A privilege in terms of staff and also recognized them as research and staff. These universities were not newly established. Instead, existing universities have become research universities, but how true is this, will other universities not do research or will these universities not teach? Universities with research universities were given opportunities, which sounds good. I wish these opportunities were also given to other universities.

(P15, Male, Assoc.Prof.Dr., Social Sciences, 24 Years Academic and 19 Years Administrative Experience)

P11: Kaynakları yok işte araştırma üniversitesi olmuşlar ama governance bakımından ayrıntılmadıkları için yanında diğer bütün üniversitelerden hiçbir farkları yok. Diğer üniversiteler ne sorun yaşadırsa bu üniversiteler de yaşadı. Norm kadro sorunu, kaynak sorunu, uzaktan eğitim vesaire yöneti̇şimsel, governance, ikincisi kaynak üçüncüşi yetenekli insan çekme bakımından diğerlerinden mutlak bir şekilde ayrılamaz. Yani sorduğun sorular aslında şu açıdan siktı Türkiye’de araştırma üniversitesi yok. P11: They do not have the resources, they have become research universities, but since they are not separated in terms of governance, they are no different from all other universities. Whatever problems other universities are having, these universities are also experiencing it. Norm staff problem, resource problem, distance education, etc., should be separated from the others in terms of governance, governance, management, second resource, and thirdly, attracting talented people. In other words, the questions you asked are actually troublesome in this respect.

(P11, Male, Prof.Dr., Social Sciences, 16 Years Academic and 13 Years Administrative Experience)

One of the participants mentioned that there is no research university in Turkey and that the support of CoHE is quite limited.

P9: Dolayısıyla şu anki araştırma üniversiteleri araştırma üniversitesi değil Türkiye’de. Araştırma üniversitesi için yasa lazım. O kadar az ki desteği YÖK’in. Ben bu desteklerin işte kadro desteği asistan desteği olduğunu okuyarak öğrendim. Kulaktan dolma olarak bilmiyordum. Siz söyleyince internetten baktım. P9: Therefore, current research universities are not research universities in Turkey. A research university needs a law. So little support from CoHE. I learned by reading that these supports are staff support and assistant support at work. I didn't know by hearsay. I looked online after you mentioned it.

(P9, Female, Prof.Dr., Natural and Applied Sciences, 27 Years Academic and 5 Years Administrative Experience)
Three of 16 participants defined the characteristics of research university is as that research universities play a central role in producing new, diverse, scientific knowledge. These universities also render knowledge on the community’s level and benefit. The basic functions of the research university are to provide opportunities to approach scientifically to the solution of the country's problems throughout the country, and then to lead by trying to solve it in a collaborative network with other scientific institutions and organizations at the global level. These findings can be interpreted as follows. When the research university first emerged, it was committed to a research mission, aiming to advance nations to a higher level. Research universities cannot be considered independent of society and social duty. In particular, one of the founding purposes of research universities in Turkey was to contribute to the progress of the state, to compete with international universities at the top of the rankings, and to use well-trained and qualified manpower by targeting the welfare of the society.

*P13: Araştırma üniversitesinin temel fonksiyonları öncelikle ülke genelinde ülkenin problemlerin çözümüne bilimsel olarak yaklaşma olanakları tanıma sonrasında da küresel alanlarda diğer bilimsel kurumlarla kuruluşlarla ortak çalışma ağında çözmeye çalışarak liderlik etmek. P13: The main functions of the research university are primarily to provide opportunities to approach the solution of the country's problems scientifically throughout the country. Then, research university has the characteristics of leading to solve problems in a joint working network with other scientific institutions and organizations in global areas.*

(P13, Male, Assoc. Prof.Dr., Social Sciences, 16 Years of Academic Experience, 8 Years of Administrative Experience)

*P14: Araştırma üniversiteleri eğitimin ikinci öncelikli olduğu kurumlar olmamalı, ağırlıklı olarak araştırma faaliyetlerinin yürütüldüğü ve bu faaliyetlerin etkisinin eğitimine yansıtıldığı, toplumsal faydaya dönüştüğü kurumlar olmalıdır diye düşünüyorum. P14: I think that research universities should not be institutions where education is the second priority, they should be institutions where research activities are carried out mainly and the effects of these activities are reflected in education and transformed into social benefit.*

(P14, Female, Prof.Dr., Natural and Applied Sciences, 19 Years Academic Experience)
Eight of 16 participants stated that the funding plays a critical role in the characteristics of the research universities. However, after the declaration of research universities, the ambiguity in funding issues kept its status. Research is extremely fed from the internal resources of the university, governmental supports and private initiatives. When there is no abundant funding, the funding that will be used for graduate and doctorate students becomes limited. All research universities in Turkey are public, so the funding mostly comes from the public institutions such as TÜBİTAK, BAP Projects (Scientific Research Projects). When the research universities have a more autonomous governance or budget, they can operate their research function to serve the community better. Funding is essential for starting, advancing and concluding research. The research culture at the research university should start from the undergraduate level and continue after the graduate and doctorate. In fact, the post-doc culture, which is not very common in our country, can be supported with a good funding. When the researcher does not have a shortage of resources, he can better focus on his work. He can involve his students in his work. As I mentioned, state universities in Turkey receive a large share of their resources from the state. Some universities also find private funds and scholarships by developing cooperation with industry. In order for a university to receive funding, an awareness should be developed that makes serious investments in research.

P16: Bir tarafıyla tamam araştırma üniversiteleri olsun isteniyor sonucunda araştırmacı yetiştiriliyor. Bilim üretsin, teknoloji geliştirsin ama bunun parasını kim verecek. Türkiye’de bu biraz lafta kalan bir konu. P16: On the one hand, it is desired to have complete research universities. As a result, researchers are trained. They can produce science and develop technology, but who will pay for this? In Turkey, this is a topic that remains a bit of talk.

(P16, Male, Prof.Dr., Social Sciences, 45 Years Academic and 30 Years Administrative Experience)

P5: Araştırma üniversitesi kuruyorsanız funding çok önemli. Sen funding sağlamamışsın araştırma üniversitesi kuruyorsun hadi araştırma yapın diyorsun. Araştırma üniversitesi diyorsan bütün imkanlarıyla araştırmaya açık olmasi lazım. Bu imkanlar ya devletin katkısıdır ya da başka kurumlardan bu imkanların sağlanmasıdır. Benim gördüğüm kadardıyla hep TÜBİTAK’tan bu imkanlar sağlaymentır işte ya da BAP projeleri. P5: If you are establishing a research university, funding is very important. You did not provide funding, you are establishing a research university, you say, let's do research. If you say
a research university, it should be open to research with all its possibilities. These opportunities are either the contribution of the state or the provision of these opportunities from other institutions. As far as I can see, these opportunities are always provided by TÜBİTAK or BAP projects.

(P5, Female, Assoc. Prof. Dr., Social Sciences, 32 Years Academic Experience)

P14: Araştırma için yeterli finansal kaynaklara sahip (hem sanayi ile işbirliği yapılarak geliştirilen, rekabetçi fonlardan yüksek düzeyde faydalanan, devletten araştırma desteklerini yoğun olarak alan vb.). P14: Have sufficient financial resources for research (both developed in cooperation with industry, benefiting from competitive funds at a high level, receiving intensive research support from the government, etc.).

(P14, Female, Prof. Dr., Natural and Applied Sciences, 19 Years Academic Experience)

Four of 16 participants underlined that research universities have the characteristics of balancing teaching and research services of the academicians. When there is a well organized balance, academicians have the opportunity to include the bachelor students into the research, as well. However, in Turkey, academicians’ course load and the number of students per academicians are high, so it is hard to discuss research functions or research collaborations that academicians build. While four of the participants talked about the features that distinguish the research university from other universities, they mentioned that the number of undergraduate students is low and the number of graduate and doctoral students is high.

(P15, Female, Prof. Dr., Social Sciences, 19 Years Academic Experience)

P15: Türkiye’de akademisyenlerin eğitimi ile araştırmaları içi içe girmiş durumda. Bir koltuğa iki tane karpuzu sıkıştırmaya çalıştığımı ve arasındaki dengeyi de kuramadığında mesela şu anda akademisyenler verdiği derslerden
One of the participants talked about the vitality and sustainability of the research culture as the features that differentiate the research university from other universities.

In a research university, it is not enough to just do research, it is also necessary to establish a research culture in that institution.

**P16:** Araştırmacı üniversitelerin ayrıtırıcı özelliklerinden bir tanesi de araştırma kültürünün yahut araştırma ilkelerinin ne kadar paylaşıldığı bir üniversite içerisinde. Ve buna bağlı olarak da araştırma üniversitelerini ayrıtırıcı özelliklerden bir tanesi de araştırma ve sorgulamayı ne kadar lisans düzeyinde eğitim içine sokabildiği ve öğrencileri ne kadar araştırmaçılık ve sorgulayıcılık girdisini verdiği önemli bence. Araştırma’nın vitality si ve sustainability si. P16: One of the features that distinguishes a research university is the research culture or how much research principles are shared within a university. And accordingly, one of the features that distinguishes a research university is how much research and questioning can be included in undergraduate education and how much research and inquiry input it gives to students. The vitality and sustainability of research.

(P16, Male, Prof.Dr., Social Sciences, 45 Years Academic Experience, 30 Years Administrative Experience)

Four of 16 participants stated that a very significant characteristics of research universities is being open to international studies. However, the number of international students and academicians is narrow in Turkey when compared to a European or American research university. In the globalizing world, the importance of international cooperation and internationalization has become much more palpable. Research universities should be open to international collaborations and have the potential of international academicians and students. According to the results of the findings, the wealth of international academicians and students has been increasing in Turkey recently, but it remains quite limited when compared to other research
universities in the world. Internationalization issue will also be mentioned in the problems and suggestions theme.

P13: İlk uyanan problem odaklı, veriye dayalı düşünceye yoğunluk veren ve bünyesinde araştırma dayalı araştırma merkezlerini barındıran dolayısıyla araştırmacıların yoğunlukla çalıştığı uluslararası ilişkileri çok kuvvetli üniversite geliyor. P13: The first to wake up is the university that focuses on problem-oriented, data-based thinking, and has research-based research centers, so international relations are very strong, where researchers work intensively.

(P13, Male, Assoc.Prof.Dr, Social Sciences, 16 Years Academic and 8 Years Administrative Experience)

P16: Onun dışında yaptığı yayınlar, onun dışında aldığı projelerin hacmi ne kadar uluslararası işte ne kadar uluslararası düzeyinde iş yaptığı, ne kadarı uluslararası düzeyde ortak projeler yürüttüğü, biraz daha uluslararası düzeyde araştırma üniversitesi olma şansını yakalıyoruz. P16: Apart from his publications, the volume of projects he took apart from that, how much of it is in international business and how much of it does business at the international level. You get the chance to become a research university at an international level, how many of them carry out joint projects at an international level.

(P16, Male, Prof.Dr., Social Sciences, 45 Years Academic Experience, 30 Years Administrative Experience)

Four of 16 participants stated that a very significant characterics of research universities is to have the doctorate and post-doc researchers. However, there is no post-doc programme in Turkish research universities. When I looked at the statistics about our higher education system, I realized that the highest number of students was undergraduate, then graduate and finally doctoral students. According to the answers of the participants, the post-doc culture in Turkey primarily comes from the limitations of opportunities and staff.

P7: Araştırmamanın doğrudan kötesi doktora ve post-doc olması gerekir ama Türkiye’de doktora sonrası araştırma kültürü olmadığı için doktora öğrencilerine yapılan araştırma projelerine sıkışmış bir alanda faaliyet göstermeye çalışıyor şu anda üniversiteler. Olması gereken ne diye soruyorsan o backtrack tabii. Araştırma üniversitesi deyince aklaşma gelen öğretmenlik dışında araştırma yapan hocalar ve doktora ve üst doktora öğrencileri. Mesela asistanlar aklaşma gelmiyor benim. P7: The direct audience of the research should be doctorate and post-doc, but since there is no post-doctoral research
culture in Turkey, universities are currently trying to operate in an area that is stuck with research projects with doctoral students. If you are asking what should be, it is different, of course. When I think of a research university, what comes to my mind are professors who do research other than teaching, and PhD and post-doctoral students. For example, I do not think of assistants.

(P7, Male, Assoc.Prof.Dr., Informatics, 11 Years Academic and 8 Years Administrative Experience)

P12: Eğer araştırma üniversitesi olmak makale sayısını arttırmaksa UAÜ'nu artırabilir çünkü dergi sayısı on yedi kat artrtu. Yani şu anda on on beş yıla kadar çok fazla dergi var, bir de open journallar, web of science başladı. Artık basılmayan bir şey yok ki. Ne popülerse gerçek o bu dönemde öyle bilimsel bilgi faltan gerektirmiyor. P12: If being a research university is to increase the number of articles, then IRU can increase it because the number of journals has increased seventeen times. In other words, there are so many journals up to fifteen years now, and open journals, web of science started. There is nothing unpublished anymore. Whatever is popular, the truth does not require such scientific knowledge in this period.

(P12, Male, Prof.Dr., Social Sciences, 23 Years Academic and Administrative Experience)

Three of 16 participants stated that a qualified alumni is a characteristics of research universities. In Turkey, the universities declared as the research universities raise qualified human resources for the sectors. However, it is still not enough in terms of supplying qualified graduates for different job specializations.

P16: Bunun bir göstergesi şu olacak. Sizin lisans mezunlarınızdan yüksek lisans ve özellikle doktora devam etmeleri söz konusu. Siz sonucunda piyasanın istediğine becerileri verip öğrenci mezun ediyorsanız tamam bu bir kazanç ama bir araştırma üniversitesi olarak bunu biraz daha sorgulayabiler. P16: An indication of this will be this. It is possible for your undergraduate graduates to continue their master's and especially doctorate degrees. If you are giving the skills that the market demands and graduating the student as a result, this is a win, but as a research university, you can question this a little more.

(P16, Male, Prof.Dr., Social Sciences, 45 Years Academic Experience, 30 Years Administrative Experience)

Four of 16 participants stated that research universities in Turkey have university-industry collaboration. These universities produce the operational knowledge for the sectors and the industrial sectors fund the universities’ projects. It is actually attempted to build an entrepreneur university. I think this initiative will be very effective in terms of finding funding, especially for state-sponsored research universities. In this section,
the participants stated that the university's cooperation with the industry while maintaining its own mission would be a good opportunity for students to get to know the sector and for academics to find project funds.

*P5:* Dolayısıyla Türkiye koşullarına bakığımız zaman buraya bir tane daha dışkı sanayi-üniversite iş birliği arttıracak bir hareket. P5: Therefore, when we look at the conditions in Turkey, one more choice here is a move that will increase industry-university cooperation.

(P5, Female, Assoc.Prof.Dr., Social Sciences, 32 Years Academic Experience)

Seven of 16 participants stated that they were aware of the support and studies of CoHE as an academic, but the centralized structure of CoHE was an obstacle to the flexible and autonomous structure of the research university. They also mentioned that CoHE is a bureaucratic institution and that the fact that CoHE manages all universities from its own roof creates a serious burden and responsibility on CoHE, as well. In addition to these, CoHE should share this responsibility and burden of the necessity to work in coordination with other organs of the state such as finance and national education.

*P2: YÖK’in yaptığı çalışmalar anlık olarak haberimiz oluyor takip ediyoruz. Biraz daha kontrolcü olmakan ziyade biraz daha epey bir özerklik vermesi gerektiğini inanyordum. Ve o özerklikle var olabileceğine inanıyorum. Hem sınırlar var hem de mekanizma olarak bir şekilde gökten bağlıyz YÖK’e.* P2: As an academician, we hear about the studies of YÖK and we follow it. That it should give a little more autonomy rather than being a little more controlling. What I believed. And I believe it can exist with that autonomy. There are both limits and we are somehow connected to YÖK as a mechanism.

(P2, Female, Prof.Dr., Social Sciences, 23 Years Academic and 17 Years Administrative Experience)

*P10: Tabii ki YÖK yine Cumhurbaşkanlığına bağlı bir devlet organı. Ama bunun esgündüm içinde olması gereken diğer organlar var Maliye Bakanlığı, MEB gibi. Bu esgündüm sayesinde bir araştırma üniversitesinden bekleniye uygun olarak destekler gelir. Örneğin bizim kadrolarımızı direkt YÖK’in sağladığı bir şekilde olmuyor yani.* P10: Of course, YÖK is also a state organ under the Presidency. But there are other bodies that need to be coordinated, such as the Ministry of Finance and the MoNE. Thanks to this coordination, support comes from a research university in line with expectations. For example, our staff is not directly provided by YÖK.
Three of the 16 participants mentioned the need to develop an autonomous policy regarding research universities. He mentioned that the development of autonomous policies by YÖK would be effective in reducing the problem of finding resources, especially in research universities.

P11: Şimdiki sistemde Cumhurbaşkanlığına bağlı. Şimdi YÖK tasarlıyor politikayı ama politikayı yürüteceği kaynağı yok. Dolayısıyla bu fikir birkaç üniversite işleyiş bakımdan özelleşmesi projesi 2000lerin başından beri vardı. P11: In the current system, it depends on the Presidency. Now YÖK is designing the policy, but it has no resources to carry out the policy. Therefore, this idea has existed since the early 2000s in the privatization project of a few universities.

P3: Uzunca bir zamandır YÖK üniversitelerdeki sorunları tespit ediyor ve bunun için de üniversitelerin özerkliğe dair bir şeyler de söylüyoruz. P3: For a long time, YÖK has been identifying the problems in universities and for this reason, it has been talking about the autonomy of universities for a long time. But I have an observation there that there are 200 three universities right now, so it is not possible to manage them from a single source anyway.

Two of 16 participants mentioned that the studies of YÖK should be done on the basis of universities, and even that there should be areas of specialization on the basis of departments. In addition, they expressed the lack of a publication committee in YÖK in order to ensure the quality of publication.

P1: Yayın kalitesi belki üniversiteler bunla ilgili bir birim oluşturabilir. Bunlar için YÖK'te komite kurulmalı. Sayıdan öte kalite de önemli bazı alanlarda yayın yapmak uzun sürüyor. Alanlara göre değerlendirilmeli ve kriterler belirlenmeli bence. P1: Publication quality, maybe universities can create a unit about it. For these, a committee should be established in YÖK. It takes a long time to broadcast in some areas where quality is more important than numbers. I think evaluations and criteria should be determined according to the fields.

(P10, Male, Assoc.Prof.Dr., Natural and Applied Sciences, 13 Years Academic Experience)
P4: In my opinion, some of the studies carried out by YÖK had to be done on the basis of the university and it had to be done on the basis of the department, that is, instead of giving special assistants to individuals, not on an individual basis. In my opinion, YÖK should give all universities a fixed staff. For example, 50 PhD scholarships to the Chemistry department. That staff will stay there. The department should be able to choose its research assistantship on its own with completely objective criteria, namely scientific criteria, without obtaining permission from YÖK.

(P4, Male, Assoc.Prof.Dr., Natural and Applied Sciences, 21 Years Academic and 5 Years Administrative Experience)

Eight of 16 participants stated that YÖK has difficulty in supporting newly founded research universities financially, in terms of, budget and guiding for the future of research universities.

P7: There is nothing that YÖK has given me as a research university. There is no research budget, no human resources, nothing. But it could be that there are 100/2000 doctoral scholarships. In other words, it was said at one time that teachers who bring such a large amount of funding projects to the school should be exempt from a course, but that did not happen either. In other words, he says that the professors give two or three lessons at IRU, and you will teach. Why did YÖK make these research universities? After opening so many universities, he realized that there was no money, so he said that I will cut out the gangrenous ones and highlight my best 5-6 universities so that I can compete with the universities in the world league. This is my personal opinion so I don't know.
One of the participants mentioned YÖK's definition of a research university and mentioned that this definition is incomplete. These deficiencies are innovation, intellectual property, patent, freedom of publication.

P8: They focus on research funds over PhD, in the definition of YÖK. All of these already exist in Turkish universities. A casual, unexciting definition. In this definition, there is no freedom of innovation, idea, patent, publication. In 1981, the university reform was made.

Academicians also differed considerably in years of experience. The participant P16 (Prof. Dr.), who had the most experience in both academic and management fields. During his forty-five years of academic experience, P16 served as a manager for at least thirty years. The academics with the most experience after P16 are P5 (Assoc. Prof. Dr., 32 years academic experience) and P8 (Prof. Dr., 30 years academic and 21 years administrative experience). In particular, these three participants, who have the highest years of experience, mentioned that one of the most important features of research universities is having quality graduates. Participants with the greatest years of experience stated that research universities should be considered as a whole, starting from undergraduate education, with graduate, doctoral and even post-doctoral programs, and that a research culture should be given not only to graduate or doctoral students, but also to undergraduate students.
P16: Türkiye’deki araştırma üniversitelerinde veya yurtdışında da mezunlarının bence önemli. Bir araştırma üniversitesi mezunlarının lisans mezunlarının ne oranda yüksek lisans ve doktora yaptığı gösteren bir gösterge olmalı çünkü araştırma üniversitesi yani biraz soft tarafta kaçıyor. Araştırma üniversitesini ayırtdığı özelliklerden bir tanesi de araştırma kültür yahut da araştırma ilkelerinin ne kadar paylaşıldığı bir üniversite içerisinde. Ve buna bağlı olarak da araştırma üniversitesini ayırtdığı özelliklerden bir tanesi de araştırmayı ve sorgulaymayı ne kadar lisans düzeyinde eğitim içine sokabildiği ve öğrencileri ne kadar araştırmacılık ve sorgulayıcılık girdiği önemli bence. P16: I think it is important for graduates in research universities in Turkey or abroad. It should be an indicator of the proportion of graduates of a research university, undergraduates, and graduates. One of the features that distinguishes a research university is the research culture or how much research principles are shared within a university. And accordingly, one of the features that distinguishes a research university is how much research and inquiry can be included in undergraduate education, and how much research and inquiry input the research university gives to students.

(P16, Male, Prof.Dr., Social Sciences, 45 Years Academic Experience, 30 Years Administrative Experience)

Since all of the participants had overseas experience, there were also quite a few differences in their overseas experiences. Eleven of the participants have been to reputable universities in different states in the USA for doctoral and postdoctoral studies. Two of the participants have been to European universities in different countries for doctoral and postdoctoral studies. One of the participants completed academic studies at one of the South Asian universities. One participant was at a European university for doctoral work and an American university for postdoctoral work. One participant was at a European university for doctoral studies and at an East Asian and American university for post-doc, respectively. The countries where the universities are located and the names of the universities are not specified in the table in order to protect participant confidentiality. The pattern that arises from the fact that universities are located in different countries can be summarized as follows. Academics studying at American universities mentioned that the funds of the universities there are very high and that the universities are autonomous in terms of management and finance. Unlike the other participants, they talked about the publication pressure and staffing problem in American universities. In other words,
when an academic at an American university cannot meet the criteria and cannot make sufficient publications or projects and therefore don’t receive tenure, he may have to work at another university even if he is in the academic staff. In other words, there is no guarantee for an academic to receive tenure and be in the academic staff.

While academics at European universities talked about the diversity and richness of scholarship support, especially for doctoral and post-doctoral students, European universities mentioned that they invested heavily in international studies and collaborations.

The participant who had been at a university in South Asia previously talked about the university's efforts to develop and transform society by making serious investments in
social and scientific studies, despite the fact that the system structure of the university where he is located is managed with a strict system.


P5: In my opinion, science is for social purposes, and as a result, you should share all the research you do with the community. There will be university-industry cooperation, of course. Accordingly, there will be trainings, but if you try to respond to expectations only with industrial or capitalist logic, the society will not develop. When you go there, you can easily see the poverty of that system.

(P5, Female, Assoc.Prof.Dr., Social Sciences, 32 Years Academic Experience)

The participant, who has been in both European, American and East Asian universities, mentioned that serious importance is given to research abroad and that academics who conduct research are exempt from teaching courses. He also mentioned that academicians working in research institutes of universities spend more time on research and conduct wider studies because they only focus on research. However, he stated that working with only graduate and doctoral students in research institutes is also a disadvantage because research is sustainable when the undergraduate students are included.

P10: Açıkçası araştırma enstitülerinde çalışiyordum ilk iki çalıştığım yerde. Bunların lisans programları yoktu. Lisansüstü programları vardı ve araştırma odaklıydi. Türkiye’de buna denk gelebilecek bir kurum yok sanırım ama bence olsa güzel olurdu. Bence bütün üniversitelerde araştırmannın belirli bir düzeyde sürmesi gerekıyor. Lisans programlarının kalabalık olmasından bir miktar şikayet ettim ama bunun bir avantajı şu öğrenciyi lisansından yetiştirip lisansüstü seviyede de devam etirebiliyorsunuz. Yurttaşında araştırma projesi kaynağı bulan hocalar üzerindeki ders verme yükünü azaltabiliriyorlardı. Yine ders veriyorlar tamamen kopuk değişirdi ama ders yükü daha azdı. P10: I worked in research institutes, in the first two places I worked. They did not have undergraduate programs. It had graduate programs and was research-oriented. I don't think there is an institution that can match this in Turkey, but I think it would be nice if there were. In my opinion, research should continue at a certain level in all universities. I complained a little about the overcrowding of undergraduate programs, but one advantage is that you can train students from undergraduate and continue at graduate level. Professors who found
research project resources abroad were able to reduce their teaching load. Again, they were teaching, they were not completely disconnected, but the course load was less.
(P10, Male, Assoc.Prof.Dr., Natural and Applied Sciences, 13 Years Academic Experience)

4.4. Specifying How an Ideal Research University Should Be? Theme That Emerged under Research Question 3: What do scholars suggest for the development of the research university classification process in Turkey?

In this section, the themes, sub-themes and codes created according to the research questions will be mentioned. First of all, one theme emerged within the framework of the third research question. The third theme is “specifying how an ideal research university should be” with two sub-themes as “obstacles for research universities” and “suggestions for the future of research universities”.

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### 4.4.1. Obstacles for Research Universities

Table 10 *Sub-themes and codes that emerged under “Specifying How an Ideal Research University Should Be?” theme*

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<tr>
<th>Sub-themes</th>
<th>Codes</th>
<th>Participant Perception</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defining the Obstacles of Research University</td>
<td>High course load</td>
<td>The course load of the academicians is quite high for the academicians to conduct research.</td>
<td>P1,P2,P3,P7,P8,P9, P10,P12,P14,P15,P16</td>
</tr>
<tr>
<td></td>
<td>Lack of autonomy</td>
<td>Research universities need autonomy and a well planned structure.</td>
<td>P2,P3,P4,P7,P8,P11, P15,P16</td>
</tr>
<tr>
<td></td>
<td>Norm-staffing rule and lack of human resources unit</td>
<td>The lack of a human resources section and norm-staffing issue are serious problem in higher education institutions.</td>
<td>P3,P4,P5,P6,P7,P8,P9, P10,P11,P12,P13,P14, P15,P16</td>
</tr>
<tr>
<td></td>
<td>Enough funding problem</td>
<td>Funding problems seem an obstacle for academicians to conduct research</td>
<td>P3,P4,P5,P6,P7,P9, P10,P11,P12,P13,P14, P16</td>
</tr>
<tr>
<td></td>
<td>Lack of academicians autonomy on course curriculum</td>
<td>Academicians need autonomy on defining the course schedule.</td>
<td>P2,P3,P13,P14</td>
</tr>
<tr>
<td></td>
<td>Lack of qualified academicians and students</td>
<td>As the number of incoming students increase every year, the quality of academicians and students decrease.</td>
<td>P5,P9,P11,P13,P14, P15</td>
</tr>
<tr>
<td></td>
<td>Lack of accountability</td>
<td>Academicians feel far from accountability</td>
<td>P6,P7,P8,P12,P15</td>
</tr>
<tr>
<td></td>
<td>Quality problem of the publications</td>
<td>There is not a scale about how to measure the quality of the publications.</td>
<td>P3,P4,P5,P7,P9,P12, P13,P15,P16</td>
</tr>
</tbody>
</table>

Eight of the participants shared their perceptions on the issue of autonomy. Particularly, the participants mentioned that there should be autonomy in curricula and that academics should develop programs with academic freedom. Doing research is a
time-consuming process. Research universities are institutions where scientific discoveries are made, scientific research is carried out, and scientific studies are pioneered. Academics stressed the importance of academic freedom so that the pressure to publish can be relieved.

P3: Bilimsel özerkliğe ket vuran şeylerden biri dışardan neyi üretmen gerektiğini neyi yapman gerektiğini neyi yapmaman gerektiğini dair konan kısıtlardır. Dolayısıyla bu yayın baskı denen şeyin bilimsel araştırma şeyine ve bilimsel üretim katkıda bulunma sürecine katkıyı elinden alıyor. O nedenle diyorum bilimsel araştırmadaki bu akademik özgürlük o yayın derdiyle ve ölçüle bilirlik baskıyla yakından alakalıdır. O özgürlüğümü benim elinden alıyor şu kadar zamanda şu kadar şeyi çıkart. Kamu üniversitelerinde daha rahat özel üniversitelerde senede iki tane SSCID makalesi çıkart deniliyor. Recognition olmadan olmaz, para iççin yapılan bir şey değildir ki bilim insanlığı. P3: One of the things that hinders scientific autonomy is the constraints on what you should produce from the outside, what you should do and what you should not do. So this takes away the contribution of what is called publication pressure to the scientific research thing and the process of contributing to scientific production. That's why I say that this academic freedom in scientific research is closely related to the problem of publication and the pressure of measurability. He's taking my freedom away from me, take out so much in all this time. It is said to be more comfortable in public universities and to issue two SSCID articles a year in private universities. Not without Recognition, it's not something made for money, science humanity.

(P3, Male, Assoc.Prof.Dr., Social Sciences, 15 Years Academic and 3 Years Administrative Experience)

P4: Freedom of speech. Yani düşünmede mesela eleştirel düşünceye açık olması lazım. Freedom of speech. That is, in thinking, for example, one should be open to critical thinking.

(P4, Male, Assoc.Prof.Dr., Natural and Applied Sciences, 21 Years Academic and 5 Years Administrative Experience)

Eleven of 16 participants stated that the course load of the academicians is quite high for the academicians to conduct research. Academicians are expected to do research projects and do teaching functions at the same time. Since the number of undergraduate students is high, academicians have difficulty in sparing enough time for graduate students and doctorate students. The imbalance between the course load and academician’s responsibilities in teaching and research lead academicians to spend time from their private life, which becomes exhausting for them.

A hem idari yükler hem ders yükleri olabiliyor. Ben işte en üst ürun alabildiğim halde belli bir deneyime ulaşabiliyorum. Yani orada ciddi bir burn-out süreçleri yaşamam. Şu anki araştırma yapısında bir yandan da öğrencininありがıza eğitim vermemиз gereken. Yani orada ciddi bir burn-out sürecleri yaşamam. Şu anki araştırma yapısının önünde iyi niyetli olduğunu düşünüyorum. P2: Yes, it is a research university, but a research university with a heavy course load. Therefore, it has a structure that violates the personal rights of faculty members. It's a structure where we have to spend our private time researching. There can be both administrative and course loads. Even though I can get the highest title at work, even though I have a certain experience, imagine that I teach 8 courses in a semester, and four of them are courses that I have newly developed. While we are dealing with research on the one hand, there are students, on the other hand, we need to provide education. So I'm having a serious burn-out process there. I think that the current research structure is well-intentioned and there are many obstacles.

(P2, Female, Prof.Dr., Social Sciences, 23 Years Academic and 17 Years Administrative Experience)

P16: Araştırma üniversitesinde bulunan ders veren faculty members dışında ciddi bir araştırmacı kadrosu gerekiyor. Bunda çok zayıflık, özellikle araştırma üniversiteleri için çok önemli konulardan bir tanesi çünkü öğretim üyeler için lisans dersi vericem, yüksek lisans dersi yöneticem, bir yandan proje yapicyam, vakitimi nasıl bölücmek dolayısıyla bunlar çok ciddi konular. P16: Apart from faculty members at the research university, a serious staff of researchers is needed. We are very weak in this, it is one of the very important issues especially for research universities because faculty members will teach undergraduate courses, I will manage graduate courses, I will do projects on the one hand, how I will divide my time, so these are very serious issues.

(P16, Male, Prof.Dr., Social Sciences, 45 Years Academic Experience, 30 Years Administrative Experience)

Fourteen of 16 participants explained that the lack of a human resources section and norm-staffing issue are serious problem in higher education institutions. Norm-staffing means the number of faculty members determined within the framework of CoHE regulation in order to maintain education, training, research and other services in a department or program in higher education institutions. Since norm-staffing defined the number of staff allocation, department can not decide whom they will select. In addition, as a result of norm-staffing, it is not possible to remove an academician from
the staff even when the academician becomes inefficient and less productive. Among those 14 participants, some participants also stated that the appointment and staff allocation criteria is not international, so when the doctorate degree is earned from an international university, sometimes they stated that it is hard to find equivalence for staff allocation because the number of publication is considered while recruiting the academician. They added that departments can not decide whom they will select or how many academicians they will hire. They stated that as the number of students and departments increase, the need in the number of academicians also increases; however, the number of academician staff in departments is not enough. Participants also stated that in some universities, there happen ineffective, not qualified staff allocation, which also leads to an obstacle in the quality. They highlighted that it is a serious obstacle not to be able to draw qualified international students and academicians. They defined their own experiences as being stuck among the norm staff. These findings indicate that departments are having difficulty in recruiting new staff and research assistants and academicians feel like as if they are stuck among the norm-staff.

P10: Şu anda biz norm kadro arasına sıkışmış durumdayız. Yeni öğretim kadrosu almakta zorluk yaşiyoruz. Öte yandan sürekli lisans öğrencisi sayısını artırıyorlar. Alt yapımız yani bölümlerin fiziksel imkanları, öğretim üyesi sayısı buna uygun değil. Bütün kaynaklarımızı lisans eğitimine harcamak durumunda kalkıyoruz. Öğretim elemanı sayısı 22-23 kişi. Yurtdışında bizim dengimizdeki bölümlerde öğretim elemanı sayısını neredeyse iki kat. Öğretim üyesi yoğun olarak kurumlarda araştırma çok daha etkiliyor yürüyor ama şey kadro almak Türkiye’de devlet üniversiteleri için başlı başına zor bir süreç. Yurtdışında bizim dengimizdeki bölümlerde öğretim elemanı sayısını neredeyse iki kat. Öğretim üyesi yoğun olarak kurumlarda araştırma çok daha etkiliyor yürüyor ama şey kadro almak Türkiye’de devlet üniversiteleri için başlı başına zor bir süreç. Yani kendi inisiyatifle UAÜ öğretim elemanı alabilmeli. YÖK bir kadro ilanına çıktığında iki hafta içerisinde bizim başvurumuz gerekıyor. Yani sizin aslında o kadro ilanı çıkmadan iki hafta önce birini ayarlamış olmanız gerekıyor. P10: Right now, we are stuck because of the norm staff limitation. We are having difficulties in recruiting new teaching staff. On the other hand, they are constantly increasing the number of undergraduate students. Our infrastructure, the physical facilities of the departments, and the number of faculty members are not suitable for this. We have to spend all our resources on undergraduate education. The number of teaching staff is 22-23 people. The number of faculty members abroad is almost double in our equivalent departments. Research is much more effective in institutions with
dense faculty members, but getting a staff is a difficult process in itself for state universities in Turkey. The number of faculty members abroad is almost double in our equivalent departments. Research is much more effective in institutions with dense faculty members, but getting a staff is a difficult process in itself for state universities in Turkey. In other words, they should be able to recruit IRU lecturers on their own initiative. When CoHE announces a cadre, we have to apply within two weeks. In other words, you should have arranged for one two weeks before that lineup was announced.

(P10, Male, Assoc.Prof.Dr., Natural and Applied Sciences, 13 Years Academic Experience)

P16: Şimdi bizim öğretim üyesimizin ve geçmişte de bizim şikâyet ettigimiz konulardan birisi buydu. Mesela öğretim üyesi kadrosu talep ettiğinizde hocam sizin kaç öğrenciniz var. Sizin kaç öğretim üyesiniz var. İsim vermeyeyim ama şu üniversite var ama şu kadar öğretim üyesi var ama öğretim üyesi istemiyor. Türkiye’deki bu personel politikasıyla artı verilen maddi destekle hep kullanılan kıstas öğrenci sayısı diploma sayısı olduğu müddetçe her zaman bu tercih ortaya çıkacak. Araştırma üniversitesinde bulunan ders veren faculty members dışında ciddi bir araştırma kadrosu gerekıyor. Bunda çok zayıfız, özellikle araştırma üniversiteleri için çok önemli konulardan bir tanesi çünkü öğretim üyesi lisans dersi vericem, yüksek lisans dersi yöneticem, bir yandan proje yapicam, vaktimi nasıl bölücem dolaşır; bunlar çok ciddi konulardır. Yani bir doktoralı araştırmacı ve destek kadrosuna ihtiyaç var. Bu konuda da çok ciddi adımların atılması lazım. Özellikle UAÜ’nün ve diğer araştırma üniversitelerinin problemi asıl burada. P16: This was one of the issues that our faculty members and we complained about in the past. For example, when you request a faculty member, how many students do you have? How many faculty members do you have? I will not name names, but there is this university but there are so many faculty members, but they do not want faculty members. With this personnel policy in Turkey, plus the financial support, this preference will always emerge as long as the number of diplomas is the criterion used. Apart from faculty members at the research university, a serious staff of researchers is needed. We are very weak in this, it is one of the very important issues especially for research universities because faculty members will teach undergraduate courses, I will manage graduate courses, I will do projects on the one hand, how I will divide my time, so these are very serious issues. In other words, a PhD researcher and support staff are needed. Serious steps need to be taken in this regard. Especially the problem of IRU and other research universities is here.

(P16, Male, Prof.Dr., Social Sciences, 45 Years Academic Experience, 30 Years Administrative Experience)

Thirteen of 16 participants stated that lack of enough funding, financial deficiencies, limited budget, lack of financial autonomy, lack of research budget, lack of funding
for international network, so overall lack of funding stand out as one of the most notable problems in higher education institutions. Academicians try to do their research studies on their own supports, which decreases the academicians’ motivation to do further research. Academicians stated that there is not enough funding from conferences to international research collaboration studies. Academicians meet their financial spendings on their own when they want to attend an international or national conference. Also, there is no a promotion or a financial award between the academicians when they achieve an important research. According to the academicians’ view, CoHE has difficulty in providing academicians with alternative funding resources apart from TÜBİTAK, BAP fundings. Especially as a research university, academicians expect more funding for their research, master’s and doctorate students.

P5: Burada yapılacak en güzel iş bütün üniversitelerde gerçekten bilimsel temelli araştırma yapmak isteyen öğretim üyelerine destek sağlanması eksiklik. Mesela burs kaynağından tutun da konferanslara kadar birçok sorun var. Diyorlar ki efendim her bölüme ayrılmış konferans desteği var. Ama benim daha başvuru yapmadan fona başvuramam mümkün değil ki. UAÜ gibi bir üniversitede bana bu destek verilmeyorsa, fonu ilk kapan almayı mantıklı değil. P5: The best thing to do here is to provide support to faculty members who want to do science-based research at all universities. For example, there are many problems from the source of scholarship to conferences. They say sir there is conference support dedicated to each department. But it is not possible for me to apply for the fund without applying yet. If this support is not given to me at a university like IRU, it does not make sense if the first person to receive the funding.

(P5, Female, Assoc.Prof.Dr., Social Sciences, 32 Years Academic Experience)

P16: Dolayısıyla buranın maliyetleri karşılanmıyor, dolayısıyla ciddi masraflar içerisinde. Bilmiyorum belki siz daha yakından bakmışsınız. Son yıllarda özellikle UAÜ’nün bütçesi toplam bütçesi nedir bilmiyorum siz baktınız mı? Ben yanılmıyorsam 580,590 milyon lira civarında olduğunu tahmin ediyorum ama siz bir bakın lütfen. Bu hem 4-5 senedir 6 senedir belki hem enflasyona, dövizin artışına ciddi gerileyen bir rakam. Dolayısıyla maddi sıkıntısı ciddi olarak var. UAÜ’nün bu ödenek içerisinde araştırmaeya dayalı faaliyetini de karşılaması gerekliyör. Yani bilişimden bahsedebilirsiniz, yani kütüphane kaynaklarından bahsedebilirsiniz. Laboratuvarlar işte bilmem teknik personel birtakım masrafları bütün bunlar araştırma üniversitesini çok daha büyükta maddi bir tabloyu gösteriyor. P16: Therefore, the costs of this place are not covered, so it is in serious expenses. I don't know,
maybe you took a closer look. In recent years, I don't know what the total budget of IRUU is, have you checked? If I'm not mistaken, I guess it is around 580,590 million liras, but please take a look. This is both 4-5 years, 6 years, maybe even inflation and the increase in foreign currency.

(P16, Male, Prof.Dr., Social Sciences, 45 Years Academic Experience, 30 Years Administrative Experience)

Five of 16 participants stated that there is not a rector's or department accountability mechanism over the academicians. What is meant by accountability here is that some academicians do not feel responsible for the studies once they receive tenure. Those two participants also underlined that when an academician gets the norm-staffing, he/she can lose the amateur soul of conducting research and the academician can get used to the comfort, which is mostly because of the CoHE and 657 regulations, they explained. These findings made me think that while there is enough teaching and research burden on the academicians, an evaluation mechanism to be brought by the department or university administration will create an extra burden on the academicians. However, this does not mean that academics should not be subject to supervision and evaluation, on the contrary, the studies and projects of academicians should be evaluated without leading extra stress, quality projects should be rewarded, or academicians should be supported to improve themselves.

P6: İki tane problem var accountability insanlara hesap sorulabilmesi gerekipse unvanı elinden alınıp bir alt unvan düşürülebilir. YÖK ve üniversitesinin kendisi rektörlük denetim mekanizması uygulamalı hatta bölümlerin kendisi denetlenmeli. Yükseköğretim kurumları insanların kendi motivasyonlarına bırakıyor, desteklenmiyorlar. 7-8 yılda desteklenmeyen asistanlar var. Asistanların da denetlenmesi lazım Adam 8 yıldır hiçbir şey yapmıyor mesela hiçbir şey sorulmuyor. Yani liyakate önem vermek gerekiyor. Bir kere Türkiye de akademisyen olmanın ortalama bir Standard var. Kimse o standardın üzerinde de bir şey yapmıyor. Alınan ortalama kalite ortalama maaşı belirtiyor. Ama bir chancellor veya vice chancellor olursa YÖK üç kurduğu hesap sorması lazım bu chancellordur. Hesap soracak bir yönetim kurulu. P6: There are two problems: accountability, people can be held accountable, if necessary, the title can be taken away and a sub-title can be dropped. CoHE and its university should implement the rectorate control mechanism, and even the departments themselves should be inspected. Higher education institutions leave people to their own motivation, they are not supported. There are assistants who are not supported in 7-8 years. Assistants
also need to be supervised. The man has not done anything for 8 years, for example, nothing is asked. So it is important to pay attention to merit. For one thing, being an academic in Turkey has an average standard. Nobody does anything above that standard. The average quality received indicates the average salary. But if there is a chancellor or a vice chancellor, this chancellor should ask the account set up by CoHE. A board of directors to hold accountable.

(P6, Male, Assoc.Prof.Dr. Natural and Applied Sciences, 17 Years Academic Experience)

P15: Türkiye’de 657 ve YÖK kanunu olduğu süreci özellikle profesörlerin araştırma motivasyonu yok. Kadronun gerekli olduğu olarak mesle de yardımcı doçent veya doçent için var bu. Doçent olduktan sonra kadro dan kimse seni atamıyor, biz mi bu yaşta sonra veri toplayacağız moduna giriyor insanlar.

(P15, Male, Assoc.Prof.Dr., Social Sciences, 24 Years Academic and 19 Years Administrative Experience)

Six of 16 participants stated that the lack of qualified academicians in the faculties is a serious problem. Research universities in Turkey might fail to bring qualified international scholars to the departments because this process requires funding. Similarly, every year many qualified Turkish students and academicians go abroad for their studies in the future, which is also named as the brain drain.

(P5, Female, Assoc.Prof.Dr., Social Sciences, 32 Years Academic Experience)

P14: Beyin göçü ve genç nitelikli öğretim üyesi istihdamında zorluklar (ülkenin genel problemleri, ekonomik-sosyal problemler nedeniyle). P14: Brain drain and difficulties in employing young qualified lecturers (due to general problems of the country, economic-social problems).

(P14, Female, Prof.Dr., Natural and Applied Sciences, 19 Years Academic Experience)

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Four of the participants had only academic (P1, P5, P10, P14) and twelve people (P2, P3, P6, P7, P8, P9, P11, P12, P13, P15, P16) had both academic and managerial experiences (see details on Table 4 p.76). Participants with both academic and managerial experiences continued these two tasks at the same time. The participants with only academic experience mentioned the academic course load and the high number of undergraduate students as obstacles instead of the systemic problems.

*P10: Ne kadar çok lisans öğrencisi var ise o kadar bir yükü oluyor. Sizin asıl işiniz araştırma yapmaksa lisans programlarını azaltmanız küçülményor. En azından bizim bölümümüz için istediğiniz sayının sistematik olarak üzerinde.* P10: The more undergraduate students there are, the higher the course load. If your main job is to do research, you need to reduce undergraduate programs. The number of students is at least systematically above the number we want for the department.

(P10, Male, Assoc.Prof.Dr., Natural and Applied Sciences, 13 Years Academic Experience)

Academicians with both academic and administrative duties have a centralized management approach, and units such as the human resources office in recruitment to the university, in short, addressed administrative issues.

*P11: Bence Türkiye’deki araştırma üniversitesi tanımı kâğıt üzerinde bir tanımdır. Yani araştırma üniversitesi ilan edip norm-kadro getiremezsiniz bir üniversiteye. Norm kadro sorunu, kaynak sorunu, uzaktan eğitim vesaire yönetimisel, governance, ikinçisi kaynak üçüncüisiz yetenekli insan çekme bakımından diğerlerinden mutlak bir şekilde ayrılması lazımdır.* P11: I think the definition of research university in Turkey is a definition on paper. In other words, you cannot declare a research university and bring norm-staff to a university. Norm staff problem, resource problem, distance education, governance etc. Research universities must be distinguished from others in terms of attracting resources and talented people.

(P11, Male, Prof.Dr., Social Sciences, 16 Years Academic and 13 Years Administrative Experience)
4.4.2. Suggestions for the Future of Research Universities

Table 11 Sub-themes and codes that emerged under “Specifying How an Ideal Research University Should Be?” theme

<table>
<thead>
<tr>
<th>Codes</th>
<th>Participant Perception</th>
<th>Participants</th>
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<tbody>
<tr>
<td>Suggestions for the quality of publication</td>
<td>A scale should be developed to measure the quality of publication.</td>
<td>P1,P2,P3,P7,P8</td>
</tr>
<tr>
<td>Suggestions for the autonomy</td>
<td>A more autonomous university is needed for financial, curriculum, administration of the university.</td>
<td>P2,P3,P4,P8,P11,P16</td>
</tr>
<tr>
<td>Suggestions for the funding of research universities</td>
<td>There should be enough funding for the research universities to compete among the national and international rankings.</td>
<td>P3,P5,P6,P10,P11,P12,P14,P16,P16</td>
</tr>
<tr>
<td>Suggestions for the recruitment and evaluation of the staff</td>
<td>There should be control mechanism established by either the university or CoHE for the evaluation of the academicians.</td>
<td>P6,P7,P8,P12,P15</td>
</tr>
<tr>
<td>Suggestions for the research issues</td>
<td>There should be more post-doc researchers</td>
<td>P2,P8,P10,P11,P13,P14,P15</td>
</tr>
<tr>
<td>Suggestions for the university administration and planning</td>
<td>there should be a new law regulating the administrative, financial, curriculum issues of higher education.</td>
<td>P8,P9,P15</td>
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</table>

As the participants stated before, the teaching load should be reduced in order for academics to devote enough time to research and academicans should be supported when they published qualified articles with an award, appreciation or funding. Some participants stated that academics should work more collaboratively in order to increase the quality of publication. According to the opinions of the participants, these findings showed that through joint studies and activities, academicians can read each other's publications, peer-review and increase interdepartmental interaction. Some participants stated that a publication and quality committee should be established in universities and that publications should be filtered by this committee. Participants also stated that the madness in the measuremt of the quality of the publication should
be slowed. They emphasized the fact that it is not only the number of articles that makes an academic successful, but also there is beyond the number such as the quality. They stated that the measurement and ranking lists, the number of the publication should not be the only criteria. These findings show that academics are willing to increase the quality of publications and work in collaboration, and that there will be improvements in publication quality when appropriate conditions are provided for academicians.

P1: Araştırmacı zaten yapmamız gerekiyor, yapmaya çalışıyoruz elimizden geldiğince. Üniversitenin yayın sayısını artırmak önemli ama aynı zamanda yayın kalitesini de artırmak lazım. O konuda da bence bir şeyler yapılmalı. Teşvikler iyi olabilir bu sadece para değil. Mesela diğer fakültelerle işbirliği içerisinde yayın yapana bir kütüma, ödül, plaket verilebilir. Yani bu şekilde teşvikler takdirler olabilir. Bence en önemli yapılması gereken şey üniversitedeki insanlarının birbirlerinin yayınlarının okumasi gerekiyor. Birbirlerinin çalışma alanlarını bilmeleri gerekiyor. İkincisi de bu insanları bir araya getirip konuşturmak gerek, yemekler düzenlenebilir. Daha çok yayın yapmamız için de daha çok yayın odaklı çalışmalar olmamız gerekiyor. Biliyorum yani yayın kampları yapınlar. Kamplara bizi kalacak yer yeme içme yani bir sürüş şey yapılabilir. Yayın kalitesi belki üniversiteler bunla ilgili bir birim oluşturulabilir. Bunlar için YÖK’te komite kurulmalı. Sayidan öte kalite de önemli bazı alanlarda yayın yapmak uzun süriyor. Alanlara göre değerlendirilmeler ve kriterler belirlenmelene bence. Bizi bu konuda bilgilendirmeliler ve ne yapmamız gerektiğini onu yapalım. P1: We need to do research anyway, we try to do it as much as we can. It is important to increase the number of publications of the university, but it is also necessary to increase the quality of publications. I think something should be done about that. Incentives can be good it's not just money. For example, a celebration, award, plaque can be given to the broadcaster in cooperation with other faculties. So in this way incentives can be appreciated. I think the most important thing to do is that people at the university should read each other's publications. They need to know each other's workspaces. Secondly, it is necessary to bring these people together and talk, meals can be arranged. In order for us to broadcast more, we need to be more broadcast-oriented. I don't know, so let them do broadcast camps. Let them take us to the camps, place to stay, eat and drink, so a lot of things can be done. The quality of the broadcast, maybe universities can create a unit about it. For these, a committee should be established in CoHE. It takes a long time to broadcast in some areas where quality is more important than numbers. I think evaluations and criteria should be determined according to the fields. Let us know about it and let us do what we need to do. (P1, Female, Assist. Prof.Dr., Social Sciences, 13 Years Academic Experience)
One of the participants talked about increasing the quality of publications in research universities and mentioned the importance of field normalizations. What I understand from this finding is that field normalization means focusing the studies of academicians on certain fields, conducting research in line with the goals of that field and contributing to the literature.

One of the participants mentioned that academic freedom should be given to faculty members in order to improve the quality of publication in research universities. The fact that the research university is open to new ideas and that flexibility is given to the academician who wants to improve himself or the academician who has scholarship and project support allows the academician to develop himself, and thus the academician shows both professional satisfaction and academic success by developing both national and international collaborations.

In other words, the creation of departments and programs in such universities...
should be encouraged. Such universities should be flexible, that is, they should be open to new ideas arising from the synergies of university faculty members and various academic groups. You know, it came in a solid way, not like that. Whenever possible, it is necessary to pave the way for new knowledge and new fields. Those who say I have found a scholarship, I will go and work, should be allowed. There should be criteria such as opening a course, publishing, asking for an account on return. For example, everyone promotes teaching, but it is necessary to balance this contribution to the research institution. Some professors may not be very good at research, this should be tolerated.

(P8, Male, Prof.Dr., Natural and Applied Sciences, 30 Years Academic and 21 Years Administrative Experience)

Eight of 16 participants suggested that in order to increase the quality and ranking of research universities internationally, there should be financial incentives to enable the academicians to focus on their research without feeling stressed about money. A research university should not have a resource shortage. It should be able to receive support from both the project and the general budget. The academic should not be worried about money. Not only academics, but also graduate and doctoral students should be supported. There should be resource incentives for increasing researcher motivation and studies of a scale that may affect rankings in international rankings.

P3: Herkese temel bir basic destek vermek lazım, o rahatlığı verebilme lazım. Üniversite özverliği dediğim bu academic freedom ikincisi üniversitelerin özverliği meselesine maddi olarak nasıl desteklenebileceği meselesi. P3: It is necessary to give basic basic support to everyone, to be able to give that comfort. This academic freedom, which I call university autonomy, is the second issue of how universities can be financially supported for the issue of autonomy.

(P3, Male, Assoc.Prof.Dr., Social Sciences, 15 Years Academic and 3 Years Administrative Experience)

P11: Yani kaynak sıkıntısı olmayacak bir araştırma üniversitesinin. Hem projeden hem de genel bütçeden de destek alabilmemiz lazım ama bunun yanında araştırma üniversitesini norm kadro yapamazsınız bu saçmalık. P11: In other words, a research university with no shortage of resources. We need to be able to get support from both the project and the general budget, but besides, you cannot make a research university a norm staff, this is nonsense.

(P11, Male, Prof.Dr., Social Sciences, 16 Years Academic and 13 Years Administrative Experience)

P16: UAÜ’nün araştırma üniversite olması ve uluslararası düzeyde bir iddia sahibi olması için yeni yapılması gereken mevcut kapasiteyle hangi tercihi
In order for IRU to be a research university and to have a claim at an international level, no matter what choice we should make with the current capacity, IRU should be supported both in terms of staff, financial resources and management model, that is, only staff and financial resources should be given.

(P16, Male, Prof. Dr., Social Sciences, 45 Years Academic Experience, 30 Years Administrative Experience)

Five of 16 participants stated that there should be a control mechanism in the universities. Both academics and research assistants should be controlled by this control mechanism. CoHE and the university itself should implement the rector's control mechanism, and even the departments themselves should be supervised. The Rector's Office should introduce transparent rules that enable faculties and departments to monitor themselves. And within the framework of these rules, certain criteria that control the teachers should be brought. Recruitment should be based on merit. Support should be given to successful professors and successful doctoral students. There should be punishment and reward. Doctoral projects should be audited and successful ones should be appreciated. The researcher has to do research in a professional manner with an amateur spirit.

(P7, Male, Assoc. Prof. Dr., Informatics, 11 Years Academic and 8 Years Administrative Experience)

(P8, Male, Prof. Dr., Natural and Applied Sciences, 30 Years Academic and 21 Years Administrative Experience)

(P12: Görüyor musun hep iki şeyde tıkanıyoruz. Bir araştırma üniversitesi işin liyakate dayalı işe alma politikanın olması lazım bu çok kritik iki bu insanları
Three of 16 participants stated that there should be a new law regulating the administrative, financial, curriculum issues of higher education. The law needs to be prepared. There should be a guide on how the ideal research university should be. At least it should demand autonomy. It is necessary to pave the way for undergraduate programs and graduate programs. Faculty members should be rewarded with new programs. The management needs to gather the teachers and collect how they can be improved in this institution. The management should encourage and make the necessary evaluations.

The research university should be a research university with its management. It needs to be renewed from top to bottom or you need to establish new universities. There should be good management. It should be managed even better both in terms of coordination and in terms of strategic management and planning. Data-based studies should be done by the policy makers. In addition, IRU should suggest a new legislation to the responsible. This is the duty of the CoHE.

P8: Yasa hazırlığı yapması lazım. YÖK bir şey yapıyor UAÜ tepki gösteriyor. Bu tepkisellikten ziyade bir kitap çıkart mesela ideal üniversite nasıl olmalı. IRUnün bir yasa önerisi getirmesi lazım. En azından önerliği talep etmesi lazım. Lisans programlarının, yüksek lisans programlarının önünü açmak lazım. Hocaları ödüllendirmeke lazım, önünü açalım hocam ne görüyorunuuz buc araştırmanın, bu meslegen geleceğinde diye sorardım. Sorulması ne isterim bundan sonra, hocalardan öngörülebilir programların neler rapor olması lazım. Öğretim üyelerinin yeni programlarla ödüllendirilmişesini lazım. P8: It has to prepare the law. CoHE is doing something, IRU is reacting. Instead of this reactivity, publish a book, for example, what the ideal university should be like. IRU needs to propose a law. At the very least, it should demand autonomy. It is necessary to pave the way for undergraduate and graduate programs. We need to reward the teachers. I would like to be asked from now on, what
predictable programs should be reported from the professors. Faculty members should be rewarded with new programs.

(P8, Male, Prof.Dr., Natural and Applied Sciences, 30 Years Academic and 21 Years Administrative Experience)

P9: Hem eşgüdüm anlamında hem de stratejik yönetim ve planlama anlamında daha da iyi yönetebiliriz diye düşünüyorum. İkincisi de ekosistem içindeki etkili olabilmek diye düşünüyorum. Yani karar vericiler, yasa yapıcılara ve yürütümcülerle ile daha yakın ilişkiye girebiliriz diye düşünüyorum. Yani network içinde daha yoğun faaliyet gösterebiliriz diye düşünüyorum. Ekosistem boyunca da iyi bakmak lazım. P9: I think we can manage it better both in terms of coordination and in terms of strategic management and planning. Secondly, I think we can operate more intensively within the network. The problems of the ecosystem should also be taken care of.

(P9, Female, Prof.Dr., Natural and Applied Sciences, 27 Years Academic and 5 Years Administrative Experience)

P15: Veri temelli çalışmalar yapılmalı politika yapıcılar tarafından. YÖK ün görevinden bu. P15: Data-based studies should be done by policy makers. This is the duty of CoHE.

(P15, Male, Assoc.Prof.Dr., Social Sciences, 24 Years Academic and 19 Years Administrative Experience)

Seven of 16 participants stated that it is necessary to establish a very good business with the market because some professions are evolving with the market and it is important to see what is going on in the market and make them a subject of research. They also stated that one of the important things is the number of researchers in the post-doc level and the activity of semi-independent postdoctoral researchers is very important for increasing the research. They highlighted that in order to be able to call any institution a research institution, there must be at least twice the number of postdoctoral researchers, which is the most critical layer of an institution in terms of research. In addition to post-doc degree, participants stated that there should be more integrated doctoral programs to attract international scholars and students. They also stated that doctorate graduates should be able to find jobs easily and doctoral dissertations should be turned into publications and projects. There should be punishment and reward for the academicians in order to increase academicians’s
research motivation. Doctoral projects should be audited and successful ones should be appreciated. Participants also stated that collaborations should be so common that both undergraduate and graduate students can have the conscious of doing research and interdisciplinary team teamwork should be increased because participants mostly carry out individual projects. Participants highlighted that education curricula of research universities should be supported with research results, research outputs should be shared with the society (community service) and research outputs should be transformed into products and contribute to the economic and social development of the country.

P10: One of the important things is the number of researchers in the post-doc field. The activity of semi-independent postdoctoral researchers is very important in order to conduct healthy research. In other words, in most of the institutions I worked abroad, these institutions were leading the research. In Turkey, post-docs are not treated as employees. It is not possible for us to conduct serious research without the development of the post-doc research institution. In order to call any institution a research institution, there must be at least twice as many post-doctoral researchers as the number of professors. It could be compensated by increasing the number of post doc in Turkey. If the integrated doctorate program is a little more common, a young person can do his master's and doctorate here. A post doc can go abroad. The courses of the doctoral programs need to be changed. If the weight of the course was reduced, we could have been at a much different level if students 4-5 you worked here with us.

(P10, Male, Assoc.Prof.Dr., Natural and Applied Sciences, 13 Years Academic Experience)
P8: Doktora mezunlarının kolay iş bulması lazım. Doktora tezlerinin yayına ve projeye dönüştürülmesi lazım. Kişeye özgü yeni araştırma doktora tezlerinin olması lazım. Ceza ve ödül olması lazım. Doktora projelerinin denetlenmesi ve başarılı olanların takdir görmesi lazım. Araştırmacının amatör ruhla profesyonel bir şekilde araştırma yapması lazım. P8: Doctoral graduates need to find a job easily. Doctoral theses need to be converted into publications and projects. Individual new research doctoral dissertations must be available. There should be punishment and reward. Doctoral projects should be supervised and successful ones should be appreciated. The researcher should do research professionally with an amateur spirit.

(P8, Male, Prof.Dr., Natural and Applied Sciences, 30 Years Academic and 21 Years Administrative Experience)

P2: İşbirliklerini bölüm ya da okul ya da fakülteye girdiğinde bilim havası olmalı, lisans öğrencileri, yüksek lisans öğrencileri tartışıyor olmalı. Paylaşmalı olmalı, disiplinler arası ya da disiplinler içi takım ekip çalışması artırılmalı. Bizde daha çok bireysel olarak projeler yürütülmüyor. P2: When they enter the department or school or faculty, there should be an air of science, undergraduate students, graduate students should be discussing. There should be sharing, interdisciplinary or interdisciplinary team-to-team work should be increased. We carry out more individual projects.

(P2, Female, Prof.Dr., Social Sciences, 23 Years Academic and 17 Years Administrative Experience)

As I mentioned before, the aim of this study is to shed light on the research university process in Turkey from the perspectives of academicians, to try to understand the process and to express the experiences of academicians in research universities. In this section, the patterns that emerged according to the gender, academic and managerial experience and years of experience of the academicians will be specified. As gender patterns, 5 female and 11 male academicians participated in the study. While the female participants gave more detailed answers to the interview questions about the research university, male participants gave shorter answers to the questions. All the female participants said that for the future of the research university, interdisciplinary collaboration should be developed.

P1: Ben de burada daha çok yayın yapma adına işbirliği temasını geliştirdim. Yani bir makale yazdığını zaman yapacağıınız iş ikiye ya da üç kişi yazdığınız zaman ilçe bölümüyör. Yani daha hızlı yapabiliyorsunuz. Bence işbirliklerini artırmaları gerekıyor. P1: I also developed the theme of collaboration in order to publish more here. In other words, when you write an article, your work is
divided into two, or when you write with three people, it is divided into three. So you can do it faster. I think collaboration should be improved.

(P1, Female, Assist. Prof. Dr., Social Sciences, 13 Years Academic Experience)

Only seven participants (P1, P3, P7, P10, P11, P14 see Table 4) have less than fifteen years of experience. While these relatively less experienced participants argued that there should be a balance between research and teaching duties, they stated that there was a measurement frenzy because the number of publications was considered rather than the quality of the publication in the promotion criteria. They emphasized that a publication committee should be established to measure the quality of publications and that the criterion of the number of publications used in the assignment promotion criteria should also refer to the quality.

P10: Bilim derdiyle uğraşanların bir kısmı üniversite çatısı altında girmiştir. Hem doğa bilimleri hem toplum bilimleri açısından. Bilim insanlarının çoğu akademisyen değil ki. Şimdi sen bu insanları bugün alıp bir üniversiteye almasın doçentlik şeyine giremez, yayın yok diye, beğenmezler. Şu kadar yayın karşılamadın derler. Ben senin impactine bakıcam derler. Şu kadardan incecik bir kitap yazmışsın derler. Ama o incecik kitapla bilim tarihini değiştirmiş yeni paradigma getirmiş belki. P10: Some of those who deal with science also work in the university. Both in terms of natural sciences and social sciences. Most scientists are not academicians. Now, if you take these people to a university today, they won't be able to get into the assistant professorhip position because they don't have a publication. They say you couldn't meet the number of publication necessity. They say they want to look at your impact. They say you wrote such a tiny book. But maybe he changed the history of science and brought a new paradigm with that thin book, which is the quality.

(P10, Male, Assoc. Prof. Dr., Natural and Applied Sciences, 13 Years Academic Experience)

4.5. Summary of the Findings

In this section, the general findings of the study obtained from the data will be discussed, mainly based on the perceptions of the participants. Themes were created according to the research questions. In line of the research questions and aim of the study, three themes with sub-themes emerged in the analysis of the transcripts. The first theme is “what is a research university” with sub-themes as “defining the research
university” and “the vision and mission of the research university”. The second theme is “characteristics of a research university and academician’s research university experiences” with sub-themes as “stating the characteristics and experiences of a research university internationally” “stating the characteristics and experiences of a research university in Turkey”, and “stating the criteria defined by CoHE”. The third theme is “specifying how an ideal research university should be” with sub-themes as “obstacles for research universities” and “suggestions for the future of research universities”, respectively.

While the female participants gave more detailed answers to the interview questions about the research university, male participants gave shorter answers to the questions. All the female participants said that for the future of the research university, interdisciplinary collaboration should be developed rather than individuality. Some male respondents also talked about improving collaboration, but in terms of gender, these patterns were more pronounced among female participants. Most of the male participants, on the other hand, emphasized that for the future of the research university, first of all, the funds should be properly and the physical and technological infrastructure should be complete in research universities.

In the first theme, the participants expressed their thoughts about what a research university is. Two sub-themes and ten codes in total appeared in this theme (Appendix F). While some of the participants stated that they had no idea about the definition of research university or that this definition was not invented by academics, some of them defined research universities as international, highly autonomous, science and research-oriented institutions and by stating that research universities have established alliances in the international arena. The participants expressed their opinions on the mission and vision definitions of research universities. Some of the participants, especially those who did not have an idea about the concept of research universities, stated that they did not have any idea about the mission and vision approaches of research universities. Some participants mentioned that the research university did not find it meaningful to define a different mission, and that universities already have a
mission to conduct research. Some of the participants talked about the mission of research universities that follow innovative developments closely and their vision that aims to use technology extremely well.

In the second theme, the participants talked about the characteristics of the research university and their experiences at the research university. Three sub-themes and twentythree codes emerged here. The participants talked about the characteristics of research universities abroad, based on their experiences and observations abroad. They classified research universities to the participants as entrepreneurial, heterogeneous, innovative, highly funded, strong organizational and autonomous institutions, and balancing both the course and research load. While some participants mentioned that there was no difference in terms of teaching, they stated that research universities abroad outweighed the research aspect. While talking about the characteristics of research universities and experiences in Turkey, the participants first mentioned that research universities in Turkey are the continuation of existing universities, in other words, research universities are not established from scratch. This result showed that some of the participants mentioned that they did not feel any difference before and after becoming a research university. Participants also mentioned that the research universities currently in Turkey are prestigious institutions at the top of the national rankings and that they produce quality graduates. However, the participants mentioned that because the course load in universities is too high, they cannot allocate enough time to the research and they want to be supported with sufficient funding for the research. The participants mentioned that the number of international students and academicians in research universities is lower than in the universities they have experienced abroad, and that the post-doc culture has not yet become widespread in research universities in Turkey. Participants mentioned that university-industry cooperation programs in research universities in Turkey provide support to universities in terms of funding. The participants also mentioned CoHE while describing the characteristics of the research university. All universities in Turkey are gathered under the roof of CoHE. The participants mentioned that the management of all universities
from a single center increases the responsibility of CoHE, and therefore a centralized management style is applied and therefore a central government system has to be implemented. Participants mentioned that this centralized system affects the administrative and financial autonomy of the university. In addition, while some participants expressed their concerns about the support to be provided for the future of research universities, some participants stated that they have information about the support provided, and that with sufficient support, research universities in Turkey can rise to a higher level than they are at currently. Academicians studying at American universities mentioned that the funds of the universities there are very high and that the universities are autonomous in terms of management and finance. Unlike the other participants, they talked about the publication pressure and staffing problem in American universities. While academics at European universities talked about the diversity and richness of scholarship support, especially for doctoral and post-doctoral students, European universities mentioned that they invested heavily in international studies and collaborations. The participant in South Asia talked about the university's efforts to develop and transform society by making serious investments in social and scientific studies, despite the fact that the system structure of the university where he is located is managed with a strict system. The participant, who is in both European, American and East Asian universities, mentioned that serious importance is given to research abroad and that academics who conduct research are exempt from teaching courses. He also mentioned that academicians working in research institutes of universities spend more time on research and conduct wider studies because they only focus on research.

In the third theme, the participants expressed their opinions on what the ideal research university should be like. Two sub-themes and fourteen codes emerged as a result of the analysis. Participants first described the challenges faced by the research university academicians and then proposed solutions to these challenges. While the participants talked about the challenges faced by research universities, they mentioned the high course load in research universities, the difficulty of attracting quality academics and quality students, and the lack of autonomy of academics when designing course
curricula. They mentioned that the lack of flexibility of the academicians in the course curricula and the excessive course load brought along the difficulties of quality in teaching and publication quality. The participants also mentioned that research universities have an autonomy problem and this problem makes it difficult for research universities, especially in financial matters. Almost all respondents stated that the biggest challenge facing research universities is undoubtedly funding. Participants proposed solutions to the challenges faced by research universities. First of all, they talked about the necessity of developing mechanisms to improve the quality of publication within the body of CoHE and the university itself for the quality problem. They suggested that in order to increase the number of publications, the course load of the academics conducting research should be reduced, and that in order to increase the quality of publications, an award and support system should be introduced to the academicians who carry out projects or research. They suggested that new legislation should be created by policy makers so that universities can overcome the problem of autonomy and the difficulties they face in administration, and that universities should be given autonomy, especially in terms of administrative, financial and course curricula. Participants stated that recruitment should be based on merit in order to overcome the difficulty in finding quality human resources. On the other hand, they suggested that the difficulties experienced in recruitment brought about by the norm-staff should be subject to the evaluation process of academics with a system to be developed by policy makers. Although I thought that this proposal would reduce the autonomy of academics, the participants considered it an opportunity for academics to improve and update themselves. Participants suggested that in order to increase research studies and increase quality, and to solve the funding issue, first of all, university autonomy should be increased and the share of support given to universities by policy makers should be increased. In this section, different patterns emerged among academicians with only academic experience or both academic and administrative experience. The participants with only academic experience mentioned the obstacles for research university, are the academic course load and the high number of undergraduate students. Academicians with both academic and administrative
duties and experiences stated more administrative systematic obstacles for research universities such as lack of a centralized management approach, and units such as lack of the human resources office in recruiting academic staff. Academicians also differed considerably in years of experience. Participants with high years of experience stated that research universities should be considered as a whole, starting from undergraduate education, with graduate, doctoral and even post-doctoral programs, and that a research culture should be given not only to graduate or doctoral students, but also to undergraduate students.

While relatively less experienced participants argued that there should be a balance between research and teaching duties, and that more attention should be paid to quality of publications instead of the measurement frenzy focused on the number of publications being emphasized in the promotion criteria. They recommended to establish a publication committee to assess the quality of publications and to take into consideration both quantity and quality of publications in the identification of promotion criteria.
CHAPTER 5

CONCLUSION AND RECOMMENDATION

In this part, the results of the study obtained through semi-structured interviews with 16 academicians will be discussed in line with each research question. Then, the implications for theory, for research and for practice will be presented. Afterwards the limitation of the study will be referred. Finally, some recommendation for future research will be described and an overall summary of the study will be presented.

5.1. Discussion of the Findings

The present study aimed to investigate the experiences and perceptions of scholars on research university process in Turkey. The design of the present study is a qualitative phenomenological case study because the primary concern is to gain indept understanding of how the research university phenomenon is understood by the academicians at a research university (Creswell, 2013). As a result of their experiences and perceptions, it is aimed to deduce some recommendations for the future and improvement of research university process in Turkey.

5.1.1. Discussion of the Findings for the First Research Question

The primary purpose of this study is to examine the research university initiative in Turkey from the perspective of academicians. For this reason, within the framework of the first research question in this section, “How do scholars perceive and evaluate the research university establishment process in Turkey?”, the results of the research will be discussed. Two themes emerged within the scope of the first research question.
These themes are, respectively, the definition of research universities from the perspective of academicians, and the vision and mission of research universities.

In the scope of the first theme, academicians expressed their opinions about what comes to their minds when the research university is mentioned as a definition. The majority of the participants mentioned that they did not know about the definition of research university. The lack of participants' knowledge on the definition of research universities can also be explained by the following pattern. Most of the participants, who stated that they had no idea, do not have managerial experience. Academicians who are not in the management department may stay away from this subject when department administration does not provide information about the research university, joint work, or a guideline about the research university. Looking at the literature, the concept of a research university in Turkey was first discussed by the government in 2017 within the scope of "Mission Differentiation and Specialization Project". Some state universities according to certain criteria were declared as research universities (CoHE, 2017). Based on their 2017 and 2018 performance, 11 main research universities and 5 candidate research universities were classified by CoHE as research universities in 2019 (CoHE, 2019b). Officially granting universities a “research university” status is a relatively new phenomenon in Turkey and there is very little awareness of this issue among the higher education stakeholders (Mammadov & Aypay, 2020). In addition, one reason why the majority of the participants do not have an idea about the research university is that research universities are a continuation of existing universities. In this aspect, Erdoğmuş (2017) highlighted that the transformation of the existing universities into research universities is more difficult than the establishment of new universities. In order to manage this transformation, Erdoğmuş (2017) proposed effective and transparent transformation principles.

A high frequency of the participants also defined research universities as institutions that focus on mostly research task. Mammadov and Aypay (2020) defined research universities as the research-intensive and research –based institutions. The results showed similar patterns with the literature in this context. Similarly, Sarli (2002)
defined research universities as organizations defining the priorities of research areas, producing a balancing policy for basic and applied research, focusing on local development, and adopting social responsibility and operational transparency in public and private finance. While defining the research university, almost all participants emphasized the same expresions of Sarli (2002). In that, all participants stated that a research university should be an instution that has the ability of transforming society into a more prosperous one by coordinating the social responsibility and research areas.

Altbach (2013) defined research universities as the instutions having the capability of creating research issues not only in national areas, but also in international context, and having good funding from both private and government as well as keeping its autonomy. In the same way, participants also defined research universities as the instutions having autonomy, high funding and focusing on internationalization. In line with Altbach (2013), Erdoğanuş (2017) also highlighted that research universities have the characteristics of highly qualified research publications, students and academics, high research income, academic freedom, autonomy. All of the participants agreed that if there is a change in the future of higher education, that might be ensured with a well-funded, autonomous, international research universities; however, all the participants underlined that a research university management structure is needed apart from the existing legislation for all universities.

While talking about the mission and vision of research universities, a great majority of the participants mentioned that research universities have three important roles teaching, research and community outreach. In addition, they added that they had to teach, conduct research and make community projects at the same time in their own instution. This finding is consistent with the findings of Altbach (2004) study, where research universities have the mission of excellence in research, quality of teaching and learning, and benefits for the national development. While some of the participants underlined that research universities are research-oriented instutions gaining
momentum in innovation and technology, some other participants mentioned that they did not have an idea on the mission and vision of research universities. Damar et al. (2020) underlined that in the current system, there may be uncertainty in the missions and visions of research universities and universities striving to become research universities. It may be necessary for our universities to differentiate in their institutional mission and basic existence goals, and to update their corporate strategic goals, strategic plans and objectives.

5.1.2. Discussion of the Findings for the Second Research Question

When making classifications and showing the characteristics of research universities, two sub-themes emerged in the study; which are the classification of research universities with their characteristics internationally and in Turkey. All participants had some experience abroad either at a research university or a research institute. In addition, all the participants are still both teaching and conducting research at a prestigious research university in Turkey.

While talking about their experiences abroad and characteristics of research universities abroad, most of the participants shared similar issues such as abundance in funding, autonomy and academic freedom at the university, a balanced program of both teaching and research, less bureaucratic issues and paper work. They clarified that (research) universities there were bureaucratically flexible institutions having rich resources, had a competitive and collaborative research culture both in the international and national arena, so the scholars in universities abroad can blend both education and research in a balanced way because they had a well planned program with fewer undergraduate courses. In addition, governance systems of research university tend to be less tight than that of teaching-focused university because academic freedom is critical in enhancing research productivity. Universities contribute to the development of competitiveness among countries by establishing scientific centres; thus universities and industry are becoming powerful partners in new development concepts leading towards higher competitiveness (Kabók et al., 2017). Similarly, according to Salmi (2009), research universities have public budget
resources, endowment revenues, research grants, qualified students, teaching staff, researchers, and internationalization, academic freedom and autonomy, strategic vision. Some of the participants figured out that there was no distinction at the university before and after becoming a research university. Those participants shared that there is no differentiation or categorization of research universities and criticized the classification of research universities in terms of the fact that they already had to do research and produce research projects as a scholar at the universities abroad. This finding was surprising to me because a central characteristic of mass higher education systems worldwide is differentiation. Academic systems are increasingly large, with hundreds or even thousands of institutions serving a varied student population. Differentiation and massification are perhaps the main hallmarks of the end of the 20th century and the beginning of the 21st (Altbach, 2015). Only two participants shared their ideas that the classification of the universities abroad is based on the Carnegie Classification System in the USA. Those two participants had the PhD experience at prestigious universities in the USA. Since academicians have been to different countries such as the USA, European countries and Asian countries, different patterns of research university definitions have emerged based on which country the participants went to for graduate or post-doctoral work. Academicians studying at American universities mentioned that the funds of the universities there are very high and that the universities are autonomous in terms of management and finance. Unlike the other participants, they talked about the publication pressure and staffing problem in American universities. While academics at European universities talked about the diversity and richness of scholarship support, especially for doctoral and post-doctoral students, European universities mentioned that they invested heavily in international studies and collaborations. The participant in South Asia talked about the university's efforts to develop and transform society by making serious investments in social and scientific studies, despite the fact that the system structure of the university where he is located is managed with a strict system. The participant, who is in both European, American and East Asian universities, mentioned that serious importance is given to research abroad and that academics who conduct research are exempt from teaching.
courses. He also mentioned that academicians working in research institutes of universities spend more time on research and conduct wider studies because they only focus on research.

While talking about their experiences and perceptions on the characteristics of research universities in Turkey, most of the participants agreed that research university development is a current topic in the higher education system policies. As Salmi (2009) stated that there is an increasing trend to establish one or more research universities especially in the developing countries in the globally competitive world. This tendency is also valid for Turkey as a developing country where its young and dynamic population is one of the most important advantages in this competitive world (Damar et al., 2020). The participants made various predictions while talking about the features that make research universities different from other universities. Some of the participants found it necessary for the development of the national research studies; however, they said there should be a guide on how to adapt to this transformation and what to do as a research university scholar for the future of the research university. In this aspect, this study is with the findings of Damar et al. (2020) and Erdoğanuş’s (2017) study. Damar et al. (2020) highlighted that research universities approach is such a critical issue that cannot be put into populist policies and should be turned into national higher education policy. Erdoğanuş (2017) also stated that for the future of the research, changes in legislation and laws are required. A change in the legislation issue was also shared by three participants, as well and that there is no detailed study on how and in what ways they will differ from other universities, and the society has not been sufficiently informed about this issue. In addition, it is seen as a subject worthy of discussion that a similar uncertainty continues about the structural transformation of other universities, which are not research universities. In line with these findings, Erdoğanuş and Esen (2016) also underlined that there is no widely accepted classification or official classification of universities for researchers and policy makers and universities are classified according to their institutional size and performance. Similarly, some of the participants mentioned that there is a gap between scholars’ current knowledge on the research university development and the current situation of
research universities. A great majority of the participants emphasized that funding plays a critical role in the characteristics of the research universities. In his study, Erdoğan (2017) mentioned the following as an important challenge faced by research universities. The fact that the resources of the research universities determined in Turkey come from the budget given by the state and the diversity of other resources is quite low, limits the research universities in terms of funding. Altbach and Salmi (2009) underlined that research universities are expensive institutions. They require more funding than other universities to attract the best staff members and students and to provide the infrastructure necessary for top research and teaching. The cost per student is inevitably higher than the average across an entire higher education system. Adequate salaries for faculty, well-equipped libraries and laboratories, and scholarship assistance for bright but needy students are examples of the expenditures required.

Salmi (2009) identified three main approaches adopted by governments when establishing research universities. The first of these is to update universities that can be research universities with excellent potential and good prestige as research universities. The second is to combine several existing universities and transform them into a new university, aiming to achieve success as a research university. The last approach is when governments decide to establish new research universities from scratch. Among these approaches, Turkey chose the first one. Research universities in Turkey have derived from the existing universities (Aypay & Mammadov, 2020).

5.1.3. Discussion of the Findings for the Third Research Question

Within the framework of the second research question in this section, “What do scholars suggest for the development of the research university process in Turkey?”. The results of the research will be discussed. Two themes emerged within the scope of the second research question; obstacles for research universities and suggestions for the future of research universities. The challenges and obstacles that research universities have experienced will be discussed first, and then the suggestions for the solution of the problems will be discussed.

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The majority of the participants made the same points when identifying the current problems at the research university. As American Association of Universities defines research universities as the institutes rooted on the three academic principles such as, institutional autonomy, academic freedom and shared governance. Almost all respondents stated that research universities need autonomy and a well planned structure. In an era of accountability, research universities will be challenged to maintain their autonomy and to control their essential academic decision making. Research universities are in the uncomfortable position of being, for the most part, state institutions subject to bureaucratic rules and parts of complex bureaucratic academic systems. All of the participants stated that the bureaucratic steps and the paperwork while conducting a research project really takes too much time. All of the participants stated that research universities and other universities in Turkey need more autonomy in financial issues, in the preparation of academic programs and research and teaching courses. This finding is consistent with the necessity of research universities that require autonomy in charting their own paths to excellence. Altbach (2011) highlighted that developing academic programmes, managing their affairs, are of importance for the autonomy norms for many research universities (Altbach, 2011). Similarly, Salmi (2009) underlined that universities that have complete autonomy are also more flexible because they are not bound by cumbersome bureaucracies and externally imposed standards. As a result, those flexible research universities can manage their resources with agility and quickly respond to the demands of a rapidly changing global market (Salmi, 2009). A high majority of the participants mentioned that research universities in Turkey need more autonomy in order to reach their national and international goals. All the participants stated that a new structure is needed, so the higher education policy makers and the government should develop a new plan by giving priority to the autonomy issue of research universities. This finding is compatible with the findings of Estermann (2015). In the study, Estermann (2015) figured out that governments should empower institutions and strengthen their essential autonomy by providing stable legal and funding environments. Universities accept accountability and will assume the responsibility of implementing reform in
close cooperation with students and stakeholders, improving institutional quality and strategic management capacity (Estermann, 2015).

Most of the participants also mentioned that there should be more accountability. What is meant by accountability here is the actual measurement of the responsibility fulfilled or performed by an institution. Kai (2009) mentioned that accountability in higher education is a concept related to efficiency, effectiveness, and performance evaluation. Most of the participants agreed that there should be more accountability within the institution. Some participants gave an example such as when the scholars were not accounted for their performance or controlled regularly, especially after becoming a professor, the efficiency of the scholars decreased. However, some other participants agreed that the point of control or evaluation might lead to decrease in motivation and the control mechanism contradicts with academic freedom issue. This finding is compatible with the finding of Kadri’s (2015) study, which tells the fact that the concept of accountability is important because higher education needs to ensure each performance component of university to its stakeholders that the university has been providing good quality education.

Erdoğanuş (2017) indicated that in research universities, the number of students per lecturer and lecturer is expected to be low so that lecturers can focus on research. Similarly, most of the participants expected the number of undergraduate students and the undergraduate courses fewer at a research university. However, the number of students per scholar is quite high, and academicians spent most of their time on undergraduate courses and teaching, so they could not spare enough time to conduct research. It is useful to share the information that the average number of students per academic staff is 55 in Turkey, the average number of students per academic staff is 40, and the average number of students per academic staff is 15 in OECD (Erdoğanuş, 2017). The rate is quite high and that makes scholars more focused on teaching instead of conducting research even if they wanted to include undergraduate students into their research studies. In the study, the first point of attention regarding the research university initiative by the faculty members is the priority given to graduate education.
Considering that research universities are defined as universities with a research mission, the most important element to support this mission is postgraduate education and the goal of raising people with a doctorate that comes with it (CoHE, 2017). Therefore, in universities where the research university position is adopted, education should be concentrated in the postgraduate direction. Another issue mentioned by the faculty members participating in the study is the other responsibilities of the faculty members such as administration duties in the department. When all the responsibilities combined, they could not focus on producing research, sometimes they had to sacrifice from their private lives. This situation appears to be an important factor preventing the spread of research, and it also makes it difficult to produce research envisaged by the definition of research university by shaking the balance between research and education. In order to achieve a balance between education and research, universities that mostly play the role of "mass education universities" in Turkey should be separated more clearly with definitions such as research universities and education universities, and the structuring and resource separation should be shaped within the framework of this distinction (Erdem, 2005). A structuring and necessary arrangements will facilitate the control of factors that shake the balance of research and education, such as the number of students experienced individually by academics, course load. In other words, the distinction between research and education universities will pave the way for practices such as providing financial resources to universities according to their positions, world-class recruitment, and giving new roles to academic staff, as seen in examples around the world (Mohrman et al., 2008).

Among the problems, most of the participants stated that the lack of human resources and norm-staffing issue are serious problem in higher education institutions. Norm staff practice, difficulties in making job descriptions of faculty members, duties whose limits and duration cannot be drawn, the concept of time and overtime are not like in other areas of the public, etc. situations cause criticism about the implementation of the norm staff in universities and make its applicability in universities difficult. In addition, some uncertainties in the application of the norm staff and the problems that may be caused by applying it to all universities at the same level are frequently
mentioned (Demir & Demir, 2019). The finding of norm-staff obstacle is consistent with the literature. In TAÜG’s (2016) report, in order for qualified researchers to be employed in research universities, sufficient number of staff should be allocated and appropriate employee rights should be provided and performance measurement systems should be in place. It is necessary to create “research cadres” in a country and to allocate cadres to universities by considering mission differentiation (taking into account all education, research and knowledge transfer activities). For research to be a priority at universities, research performance must be an important criterion for recruitment and promotion. One of the biggest obstacles to research universities is the allocation of staff, which is only made according to the educational load and demands.

Almost all of the participants shared their opinion on the funding when describing the characteristics of the research university, funding obstacles for research university and solutions for the funding issue. While describing the characteristics, participants stated that research universities are the institutions having good funding resources. This finding is consistent with the literature. In that, common features of the world's top universities according to Salmi (2009) are qualified manpower, rich resources for education and research, and good management (strategic vision). At the same time, participants stated that research universities also experience the challenge for finding funding. As research universities spend and invest on research, they need more funding solutions. Some participants stated that as a structure, CoHE ’s research university initiative covers only state universities for now. For solutions to funding obstacles, participants stated that in order to find other funding alternatives, research universities should collaborate with industry. This finding is consistent with the literature that the basic cost of operating a research university has increased, placing more stress on traditional funding sources, mainly governmental, and forcing institutions and systems to seek new revenues (Altbach, 2007).
5.2. Implications

In this section, the contribution of the study to the theory, its contribution to the studies done and to be done on these issues, and its contribution to practice is discussed.

5.2.1. Implications for Theory

Universities are among the oldest existing organizations. In mediaeval times, they emerged as associations either of students (1088 in Bologna) or of teachers (1160 in Paris), while later both groups were regarded members of the university. At the beginning, universities were set up mainly as organizations of formal learning. Later, in the period of enlightenment, the amount of available knowledge hugely expanded, which led to the differentiation of academic disciplines. Research as a distinct professional activity emerged, testing claims of truth, raising questions of ignorance and systematically searching for new knowledge and insights (Pfeffer & Stichweh, 2015).

The concept of research university came to the world with Humboldt University, which was founded in 1818. At the beginning of the 19th century, Wilhelm von Humboldt had a vision of a university defined by the excellence of research, the importance of science, the integration of teaching and research. The reformers of American higher education in the second half of the 19th century, Daniel Coit Gilman of Johns Hopkins, William Eliot of Harvard, William Rainey Harper of Chicago, Henry Tappan of Michigan and others either did their studies in Germany or cited the German university as an example (Menand et al., p. 1-2). American research universities have developed in a different cultural and national context than their German predecessors (Menand et al., 2017). Today, the most important role that US research universities play in addition to knowledge production, advanced postgraduate education is to be both the primary source of information and to serve the public interest (Zerquera, 2011).
The number of advanced research universities, which are described as research universities, is not very high in the country or around the world. Although these universities are few in number, they conduct the majority of basic research at home or in the world; they train a high number of master's, doctoral and postdoctoral researchers; high-level scientific discoveries mostly take place in these universities (Ertüzün, 2018). Research universities were established in order to encourage the production of qualified knowledge within the scope of our country's primary objectives and fields, to increase the number of people with research doctorate, to encourage interdisciplinary studies and collaborations, to strengthen international collaborations and to increase the international visibility of Turkish universities (CoHE, 2019). Officially granting universities a “research university” status is a relatively new phenomenon in Turkey (Mammadov & Aypay, 2020).

The goal of the current study is to figure out the experiences and perceptions of scholars on research university process in Turkey. By considering the findings of the current study, there are some implications for theory. Research universities are the key institutions of the 21st century society because of their capability in creating research on issues about the global science, society. That is why, they are essential, especially to those developing countries (Altbach, 2007; Altbach, 2013). Salmi (2009) argues that in the globally competitive world, there is an increasing trend to establish one or more research universities in the developing countries. While these studies draw attention to the administration of universities, they do not fully address strategic management issues confronting universities.

Siegel and Leih (2018) state that few theoretical frameworks have been employed to address organizational changes and strategies in universities. Strategic management concepts such as competitive advantage, organizational capabilities, and sustainable performance will help university leaders identify problems, formulate strategies, and determine what capabilities they need as leaders to respond to challenges and achieve strategic goals (Siegel & Leih, 2018, p.15).
Given the uncertainty of the future, universities need to utilize management concepts and practices to deal with a new array of factors, such as competitive conditions and opportunities for growth (Siegel & Leih, 2018).

5.2.2. Implications for Research

The findings of this research indicate some implications for further research on the development of research university process in Turkey. Considering the results of this study, further research is necessary to find out how research universities adapt to this process. The concept of research university, which was brought to life with these applications carried out by CoHE, defined universities that determined their purpose in a more research-oriented way, unlike education-oriented universities. It is aimed to strengthen the position of the country in the international arena, to ensure the high level representation of the country with financial, administrative and academic support, and thus to become universities on a world scale (Gülbak, 2020).

As a matter of fact, Gök and Gümüş (2015) stated that academic studies on higher education in Turkey are insufficient in terms of developing the field and directing policies. In this direction, Gür et al. (2015) argued that the number of studies on more macro policies such as quality, competition and accountability should be increased. The participant group believes that although the research university has a research-oriented structure, the teaching staff within it should not focus entirely on research, and the teaching aspect should be given a little weight. It is stated that while teaching staff take responsibility for research, they should give lectures, albeit a little, and that one of the ways they share their research with the masses is to give lectures, that is, to provide teaching services. On the other hand, it is stated that it will be very difficult to transform into a research university with an excessive course load. Data triangulation is a method used by qualitative researchers to check and establish validity in their studies. Guion et al. (2011) define data triangulation as the use of different sources of data. A key strategy in data triangulation is to categorize each group or type of stakeholder for the program that the researcher is evaluating the data. Triangulation of data enables this study to embrace the various factors influencing research university
process. According to the study group, the effectiveness of the design should also be determined when the teaching staff of the research university put forward a new instructional design. One way to determine effectiveness is to bring this design together with the target audience in the classroom setting and research is only available in journals etc. It is underlined that it is not enough to publish them and their applicability in the teaching environment should be looked at. In summary, the views that teaching and research should complement and support each other come to the fore.

The working group emphasizes that lecturers working within the research university should be given course responsibilities, but that their research responsibilities should be weighted and, in the foreground, and underlined that course load should be given to them in a way that does not prevent them from doing research. The study group states that since the instructor has teaching responsibilities other than research, the instructor has to spare time for extra work such as preparing for the course/courses, reading reports and giving feedback, and taking exams. The lecturer at the research university spends most of his time on research, experiments and projects, etc. It is underlined that it is difficult for him to deal with research at a sufficient and necessary level due to the course load he undertakes.

The main responsibilities of universities in Turkey are research, teaching and community service, and for many years universities and therefore faculty members have focused on these three areas of responsibility, although their weights vary. In this context, the faculty members' desire to focus on research or teaching in line with their personal preferences also affects their thoughts. Universities in Turkey have roles and responsibilities in terms of research, teaching and community service. However, it can be said that focusing on these three areas and carrying out these three tasks simultaneously increases the workload of academics and makes universities cumbersome in general.

For this reason, discussions on the differentiation of the missions of universities according to these responsibility points in higher education have gained momentum.
5.2.3. Implications for Practice

With the research university process in Turkey, it is aimed to be more competitive in the international arena by differentiating the missions of deep-rooted universities with research focus, and it was announced in 2017 as a process that will go from good to perfection. Various supports have been provided to research universities since 2017. In the Eleventh Development Plan, it is stated that Turkey is a growing and developing country and it will become stronger in the future and be effective in areas such as global production, trade, and technology. The growth and development goals in the Development Plan are closely related to the research universities, which play an important role in the development of societies by carrying out studies in the fields of technology, research, and knowledge. In the Eleventh Development Plan, the support to be given to research universities is mentioned. (1) The Research University program will be strengthened so that universities can carry out R&D and innovation activities. (2) The capacities of research universities will be increased with financial supports. (3) The employment of post-doctoral researchers will be given priority in research universities. (4) Research universities will be matched with related sectors considering their competencies and business models based on projects will be implemented to achieve the determined targets with collaboration. These supports can be summarized as staff allocation, doctoral education abroad within the scope of the program, TÜBİTAK supports, additional research grants to the top 5 research universities with the highest performance. This study has some implications for the future of research university classification. The research university process is a new practice in Turkey, so there have been limited number of studies that have been conducted related to recent research university classifications in Turkey. This study has significant implications because the data were collected from a deep-rooted, research-oriented research university. This study has the potential to contribute to the determination of policies on how research university classification can be improved and what can be done to achieve Turkey's goal of placing at least 2 universities in the top 100 in international rankings. The One another important implication of the current study is that it explores how the research university classification is being experienced by faculty members of
a research university. Becoming the first study in the field of research university in terms of being comprehensive of the whole university as a case, this study contributed to the literature with new patterns.

The findings of the study and the policies implemented and targeted by CoHE for research universities are consistent. This shows that this study can be a source for future studies. For instance, while some of the participants in this study said that they knew about supports, some of them stated that they were not aware of the existence of such support. Some participants stated that staff support should be structured to attract quality lecturers instead of increasing the number of assistants, while some participants stated that they were not aware of staff support and they needed assistants in departments. One of the emerging findings of the study was that more budgets were allocated to research universities and more support for funding. YÖK announced the performances of research and candidate research universities in 2019 and additional budgets were allocated to the top 5 universities (Middle East Technical University, Istanbul Technical University, Boğaziçi University, İzmir Institute of Technology, Ankara University) by the Presidency of Strategy and Budget (CoHE, 2021). Participants suggested that university-industry cooperation should be developed to increase funding diversity in research universities. In this context, all sectors and sub-areas in the 11th Development Plan of CoHE were matched with one or more universities. No unpaired, exposed areas are left. The "chemistry, pharmaceutical, medical device, electronics, machinery-electrical equipment, automotive, rail system vehicles sectors, which are among the priority sectors in the Development Plan, and the food supply security sector, whose importance has emerged once again during the pandemic period, and 39 sub-fields within the scope of these sectors" competencies research and candidate research were matched with universities. Most of the participants emphasized the necessity of preparing a new legislation for research universities. CoHE, on the other hand, targets to prepare legislation so that research universities can carry out R&D and innovation activities that will support high value-added production for the development of research universities until 2023 (CoHE,
Participants suggested the establishment of a recruitment and human resources office within the university itself in order to resolve the norm-staff problem and to attract international quality lecturers. In this direction, CoHE plans to increase the employment of post-doctoral contract researchers at research universities and allocate research staff until 2023, as well. Participants mentioned the necessity of providing special support to research universities in order for Turkish research universities to compete in international rankings. As a matter of fact, it is planned to identify universities with high potential to achieve this goal, primarily CoHE (2020) research universities, and to implement a special support program for these universities for a period of 5 years.

5.3. Limitations

The biggest limitation in this study, as with many other studies conducted throughout the COVID-19 pandemic, was to work during the tiring and stressful days caused by the uncertainty experienced all over the world. Although I initially planned face-to-face interviews, she had to switch to online interviews due to the pandemic. During the online interview of the present study, like in many other online interviews, there was a risk of disconnection from time to time. However, the researcher used multiple technological devices simultaneously, i.e., phones and computers in order to avoid such problems. Another criterion of the study is the difficulty in reaching out to the participants. There were delays in scheduling the interview due to the hectic schedules of the participants. Another limitation is that this research subject is very current up-to-date and the sources used in the literature review were insufficient. Thus, the researcher needed to explore various methods through experimenting on her own without enough resources available in the literature. Another limitation is that this study remained with only 1 university. Briefly, data were collected from 1 university from a research university. Also, since it was a qualitative study, data from larger participants could not be collected. Also, the number of participants among the top management of the university was limited.
5.4. Recommendations for Future Research

The goal of this study is to assess the current situation of the nation’s research universities by conducting a phenomenological case study at a research university in Turkey. More specifically, the purpose of the study is to examine how faculty members in a newly declared research university perceive the phenomenon of a research university assessing the degree to which they consider their university a research university measured for the future. For further studies, not only one research university, but other research universities can be included in the study comparatively. Since this study is a qualitative study, it reached a limited number of academics. Subsequent studies can be further detailed with quantitative design. This study focused only on the perspective of academics. In the future, studies may be conducted with undergraduate or graduate, doctorate students at a research university.

5.5. Summary

The subject of this study is to examine research universities that are widely accepted in the world from a general perspective. When evaluated more specifically, the aim of the study is to evaluate the process of the research university classification in Turkey, which has emerged in our country in recent years, from the point of view of academics. In line with the answers given by the participants to the interview questions, the current status of research universities was evaluated under the following headings. Structure of the university system, administrative and financial autonomy of universities, increasing the research budget and providing sufficient financial resources, the quality and balanced distribution of faculty members and students at the research university, flexibility of the university curriculum and consideration of academic freedom, distribution of basic sciences and applied sciences in research studies.

All higher education institutions in our country were gathered under the umbrella of the Council of Higher Education (CoHE), academies were transformed into universities, education institutes were transformed into education faculties, and
As a result of the research findings, the participants mentioned that all higher education institutions, approximately 200 universities affiliated to CoHE, would create a serious burden on CoHE. Therefore, they mentioned that the high number of universities and their gathering under a single institution created a centralized structure.

This centralized understanding of the structure provides convenience in terms of regulation and functioning, and on the other hand, it is seen as a restrictive structure to the diversity of universities with different characteristics, different physical and human resources, and to the autonomous monitoring of universities within their own bodies. The great majority of the participants stated that developing university-specific specialization programs rather than the centralist policies of CoHE would provide a solid level for Turkish higher education. They mentioned the necessity of increasing the autonomous character of universities and the need for universities and CoHE to work in coordination with other public institutions and organizations, provided that the suggestions of the participants are always open to the universities and their accountability.

The majority of the participants indicated that that in order to be considered as a research university there has to be economic support autonomy, interdisciplinary coordination, funding, a new flexible regulation for research universities. Economic support in academic studies, autonomous structure of universities, interdisciplinary coordination and internationalization, quality publications and quality human resources. Many of the participants mentioned that research universities are generally fed from a single financial source because they are state universities, and this attitude leads to complacency in many academics and that the effort to seek new resources has decreased. Since it is necessary to support research and doctoral students to stay in universities as post-doctorate trained manpower, it is necessary to support academicians who do research in academic terms both financially and socially. According to the information revealed in line with the answers given by the participants, the participants approached this issue from two angles. The first is the
student quality, and the second is the academician quality. Some stated that with the increasing population, more students are admitted to the departments every year and the success ranking of the students taken by the central placement exam to universities is gradually decreasing. They mentioned that this situation firstly affected the success on the basis of the department and then the international ranking of the universities decreased. Some participants noted that since one of the strengths of the IRU can attract selected students, they can make great progress when the various undergraduate and graduate infrastructures are established.
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APPENDICES

A. INTERVIEW QUESTIONS

MÜLAKAT SORULARI

1. Araştırma üniversitesi deyince aklınıza neler geliyor?
   a. Lisans programları, yüksek lisans programları
   b. Öğrenci sayıları, kadrolu öğretim üyesi sayıları
   c. Üniversite sıralamaları

2. Araştırma üniversitesinin misyonu, vizyonu neler olabilir?
   2.1. İşleyiş olarak araştırma üniversitesini diğer üniversitelerden farklı kılan
         özellikler neler olabilir?

3. Sizce araştırma üniversitesinin temel fonksiyonları nelerdir, bu konudaki
   görüşlerinizi paylaşır mısınız?
   3.1. YÖK’ün araştırma üniversitesi tanımı biliyor musunuz?
   3.2. YÖK araştırma üniversitelerine ne tür destekler sağlıyor biliyor musunuz?

4. Sizce Türkiye’de araştırma üniversitesi olarak tanımlanan üniversitelerin
   sorunları nelerdir? Bu sorunlara nasıl bir çözüm önerileriniz nelerdir?

5. Yurtdışında eğitim gördüğünüz herhangi bir dönemde araştırma üniversitesinde
   bulundunuz mu?
   5.1. Yurtdışındaki araştırma üniversiteleri hakkında fikirleriniz nelerdir?
   5.2. Farklar, benzerlikler konusunda deneyimlerinizi paylaşır mısınız?

6. Türkiye’de araştırma üniversitesi olarak aklınıza gelen üniversite/üniversiteler
   hangileridir?

7. Sizce UAÜ bir araştırma üniversitesi mı?
7.1. UAÜ’nün araştırma üniversitesi olmasında sızce hangi etmenler etkili olmuştur?

8. UAÜ’nün araştırma üniversitesi olarak sorunları veya karşılaştığı güçlükler nelerdir?

8.1. UAÜ’nün araştırma üniversitesi yönünün gelişmesi için tavsiyeleriniz neler olur?
ARAŞTIRMAYA GÖNÜLLÜ KATILIM FORMU

Bu araştırma, UAÜ Eğitim Yönetimi ve Planlaması Bölümü Yüksek Lisans öğrencisi Neslihan Cüre tarafından yüksek lisans tezi kapsamında, Dr. Öğr. Üyesi Gökçe Gökalp danışmanlığında yürütülmektedir. Bu form sizi araştırma koşulları hakkında bilgilendirmek için hazırlanmıştır.

Çalışmanın Amacı Nedir?

Araştırmının amacı UAÜ akademisyenlerinin araştırma üniversiteleri yapılandırmanın bakış açılarını incelemektir.

Bize Nasıl Yardımcı Olmanızı İsteyeceğiz?


Sizden Topladığımız Bilgileri Nasıl Kullanacağız?

Araştırmaya katılımınız tamamen gönüllülük temelinde olmalıdır. Çalışmada sizden kimlik veya kurum belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamıyla Gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir. Katılımcıdan elde edilecek bilgiler toplu halde değerlendirilecek ve bilimsel yaymlarda kullanılacaktır.

Katılımmızla ilgili bilmeniz gerekenler:

Araştırmayla ilgili daha fazla bilgi almak isterseniz:

Mülakat sonunda, bu çalışmaya ilgili sorularınız cevaplanacaktır. Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için;

Eğitim Programları ve Öğretim Programı öğretim üyelerinden Dr. Öğr. Üyesi Gökçe Gökalp (E-posta: _________________ ya da yüksek lisans öğrencisi Neslihan Cüre (E-posta: _________________ ile iletişim kurabilirsiniz.

**Yukarıdaki bilgileri okudum ve bu çalışmaya tamamen gönüllü olarak katıldırım.**

(Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

İsim Soyad    Tarih    İmza

---/----/-----
C. APPROVAL OF THE METU HUMAN SUBJECTS ETHICS COMMITTEE

16 MART 2020

Konsu: Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (IAEK)

İlgı: İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Dr.Öğretim Üyesi Gökçe GÖKALP


Saygilarınıza bilgilerinize sunarız.

Prof. Dr. Mine MISIRLIŞOY
Başkan

Prof. Dr. Tolga CAN
Üye

Doc. Dr. Pınar KAYGAN
Üye

Dr. Öğr. Üyesi Ali Emre TÜRGUT
Üye

Dr. Öğr. Üyesi Şehirle SEVİNÇ
Üye

Dr. Öğr. Üyesi Müge GÜNDÜZ
Üye

Dr. Öğr. Üyesi Süreyya Özcan KABASAKAL
Üye
D. THEMATIC FIELDS OF 100/2000 DOCTORATE SCHOLARSHIP

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**SOSYAL BİLIMLER**

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**SAĞLIK**

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| 3   | Dil ve Konuşma Terapisi                                 |
| 4   | Doğal ve Bitkisel Ürünler / Kozmetik Ürünler             |
| 5   | Epidemiyoloji                                          |
| 6   | Ergoterapi                                             |
| 7   | Fizik Tedavi ve Rehabilitasyon                          |
| 8   | Hastane Eneksiyonları ve Antimikrobiyal Direnç          |
| 9   | Hemsirelik (Cerrahi Hastalıklar Hemsireliği, Çocuk Sağlığı ve Hastalıkları Hemsireliği, Doğum ve Kadın Hastalıkları Hemsireliği, İç Hastalıkları Hemsireliği, Hemsirelik Eşaslan) |
| 10  | İmmunoloji                                              |
| 11  | İnsan Beyni ve Nörobilim                                 |
| 12  | Klinik Eczacılık                                        |
| 13  | Küük H心血 Çalışmalar                                   |
| 14  | Metabolizma ve Kronik Hastalıklar (Obezite, diyabet ve ateroskleroz) |
| 15  | Moleküler Biyoloji ve Genetik (Gen tedavisi ve Genom Çalışmaları) |
| 16  | Moleküler Farmakoloji ve İlaç Araştırmalar               |
| 17  | Moleküler Onkoloji                                      |
| 18  | Moleküler Pataloloji ve Laboratuvar Tibbi                |
| 19  | Nüfus Hareketliliği ve Göçmen Sağlığı                    |
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**100 / 2000 DOKTORA BURSU PROJESİ PANDEMİ DÖNEMİ ÖZEL ÇAĞRISI ALT ALANLAR**

- Aşçı Çalışmaları
- Bireysel ve Toplumsal Psikoloji
- Biyogüvenlik
- Biyomedikal Teknoloji ve Ekipmanlar (Tasarım/Üretim/Tedarik)
- Blokzincir
- CBS ve Bilişim Uygulamaları
- Dijital Platformlar ve Sosyal Medya (Sosyal Medya Yönetimi dahil)
- Enfeksiyon Hastalıklarının İmmünolojisi
- Genişbant Teknolojileri (SG ve ötesi dahil)
- Gıda Üretim ve Tüketim Zincirleri
- Halk Sağlık (Klinik Epidemiyoloji, Biyoistatistik, Sağlık Politikaları ve İdaresi)
- İlk-Çalışmaları
- Koruyucu Tibbi Malzemeler (Tasarım/Üretim/Tedarik)
- Lojistik
- Sağlıkli Beslenme ve Sağlıkli Yaşam
- Siber Güvenlik (Kriptoloji, Bilgi ve Veri Güvenliği dahil)
- Tarım ve Hayvancılıkta Dijital Teknolojiler (Tarım Teknolojisi, Tarımda Yapay Zeka, Akıllı Tarım Uygulamaları)
- Tıp Bilişimi (Teletıp Uygulamaları dahil)
- Ticaret ve Finans Sektörlerinde Dijital Dönüşüm
- Uzaktan Çalışma Yöntemleri, İstihdam ve İş Modelleri
- Uzaktan Eğitim Uygulamaları (Sanal Laboratuvar Uygulamaları, Eğitim ve Öğretimde Dijital Oyun Teknolojileri dahil)
- Yapay Zeka ve Makine Öğrenmesi
E. SELECTION CRITERIA OF DEFINING RESEARCH UNIVERSITIES

** Araştırma Kapasitesi (%25)**
1. Atlas Sayısı
2. Bilimsel Yayın Sayısı
3. Ulusal Ar-Ge ve Yenilik Destek Programlarından Alınan Proje Sayısı
4. Ulusal Ar-Ge ve Yenilik Destek Programlarından İlgili Yılda Kuruma Aktarılan Fon Tutan
5. Uluslararası Proje Fon Tutan
6. Ulusal ve Uluslararası Patent Başvuru Sayısı
7. Ulusal Patent Belge Sayısı
8. Uluslararası Patent Belge Sayısı
9. Faydalı Model ve Tasarım Belgesi Sayısı
10. Doktora Mezun Sayısı
11. Doktora Öğrenci Sayısı

**Etkileşim ve İş Birliği (%35)**
1. Üniversite-Üniversite İş Birliği Yayın Oranı
2. Üniversite-Sanayi İş Birliği Yayın Oranı
3. Uluslararası İş Birliği Yayın Oranı
4. Üniversite-Sanayi İş Birliği Ulusal ve Uluslararası Patent Belge Sayısı
5. Uluslararası İş Birliği Ulusal ve Uluslararası Patent Belge Sayısı
6. Kamu Fontanında Platformda Üniversite-Sanayi İş Birliği ile Yapılan Ar-Ge ve Yenilik Projelerinden Alınan Fon Tutanının İlgili Proje Sayısının Oranı
7. Kontrolü Üniversite-Sanayi İş Birliği ile Yapılan Ar-Ge ve Yenilik Projelerinde Alınan Fon Tutanının İlgili Proje Sayısının Oranı
8. Uluslararası Öğrenci Oranı
9. Uluslararası Öğretim Üyesi Oranı
10. Dolaşım Daki Öğretim Üyesi/Oğrenci Sayısı

** Araştırma Kalitesi (%40)**
1. Incites Dergi Değerlendirmesi İktisat (%)100% Dilde Giren Bilimsel Yayın Oranı
2. Incites Dergi Etki Değerlendirmesi İktisat (%)100% Dilde Giren Yayın Oranı
3. Bilim Odaklı Sayısı
4. Öğretim Üyesinin Teknopark, Kuluça Merkezi, TÜBİTAK'da Ortak veya Sahip Olduğu Faal Firma Sayısı
5. Öğrenci / Son 5 Yıllık Mezunların Teknopark, Kuluça Merkezi, TÜBİTAK'da Ortak veya Sahip Olduğu Faal Firma Sayısı
6. YÖK 100/2000 Doktora Burs Programı Öğrenci Sayısı
7. TÜBITAK 2244 Sanayi Doktora Programı Öğrenci Sayısı
8. TÜBITAK 1004 Programi Kapısında Desteklenen Teknoloji Platformu Projesi Kapısında Alınan Fon Tutan
9. Yayınların Açık Erişim Yıktı
10. Yazarların Açık Erişim Yıktı
11. Dünya Akademik Genel Başdan Seçilmesinde İlk 500'e Girmesi Sayısı
12. Akrediteli Editilmiş Program Sayısı
GİRİŞ


Araştırmannın Amacı ve Önemi

Dünya ülkeleri arasında uzun bir süredir ivme kazanmış olan araştırma üniversiteleri, yakın dönemde ülkemizde de yükseğe getirmiş kurumları arasındaki yerini almıştır. Bu çalışmanın amacı akademisyenlerin Türkiye'de yeni bir gelişme olan araştırma üniversitesi yapılamasına olan bakış açılarını ve düşüncelerini ele aldık. Bu sebeple bu çalışmada temel üç araştırma sorusu ortaya çıkıktır.

1- Akademisyenler Türkiye'deki araştırma üniversiteleri sınıflandırma sürecini nasıl algılıyor ve değerlendiriyor?
2- Akademisyenler araştırma üniversitesi sınıflandırmasını ve özelliklerini nasıl deneyimliyor?

211
3- Türkiye'de araştırma üniversitesi sınıflandırma sürecinin gelişimi için akademisyenler neler önermektedir?

LİTERATÜR TARAMASI


YÖK Başkanı Saraç, bir üniversite gazetesine verdiği röportajda araştırma üniversitesi sürecini de özetleyor ve bu uzmanlaşma sürecinin hem ulusal kaynakların verimli kullanılması hem de bilimsel gelişmenin artması açısından önemli olduğunu söylüyor. Ancak araştırma üniversitesi fikrinin popülizm altında kaybolabileceğini için araştırma
üniversitelerinin sayısının artmayacağını da eklıyor. Listede yukarı ve aşağı değişiklikler olabilir, bazı üniversiteler kriterleri karşılamadığında araştırma üniversitesi programından çıkarılabilir, parametreler açısından yeterli gördüğüinde bir kısmı da eklenebilir ve bu nedenle aralarında sürekli rekabet olacaktır. üniversiteler (Şentürk, 2019).

**YÖNTEM**

**Model**

Giriş bölümünde bahsedildiği gibi, bu çalışma UAÜ araştırma üniversitesi akademisyenlerinin bakış açılarına dayanmaktadır. İlişkilerin, durumların, sorun etkinliklerinin niteliğini açıklamaya çalışan araştırma çalışmalarının genellikle nitel araştırma olarak yapıldığı kabul edilmiştir. Bireysel bakış açılarına dayalı olarak, çalışmanın tasarımı nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel tasarımın nitel 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Örneklem

Veri Toplama Aracı ve Süreci

görüşme sorularının birkaç temel sorudan oluştuğunu ve ardından katılımcıların fikirlerini daha geniş bir perspektiften ifade etmelerini sağlayabileceğini için geniş kapsamlı destekleyici sorularla takip ettiğini açıkladı.

Veri Analizi


**BULGULAR**

Araştırma soruları ve çalışmanın amacı doğrultusunda transkriptlerin analizinde alt temaları olan üç tema ortaya çıkmıştır. Birinci tema “araştırma üniversitesi nedir” olup, “araştırma üniversitesinin tanımlanması” ve “araştırma üniversitesinin vizyon ve misyonu” alt temaları bulunmaktadır. İkinci tema “bir araştırma üniversitesinin özellikleri ve akademisyenlerin araştırma üniversitesi deneyimleri” alt temaları ile “bir araştırma üniversitesinin hem uluslararası hem de Türkiye’deki özellikleri ve deneyimlerini belirtmek ve YÖK tarafından belirlenen kriterleri belirtmek” şeklindedir. Üçüncü tema “ideal bir araştırma üniversitesinin nasıl olması gerektiğini tanımlanması” ve sırasıyla “araştırma üniversitelerinin önündeki engeller” ve...
“ araştırmaya üniversitelerinin geleceğine yönelik öneriler” alt temalarıdır. Aşağıdaki tablolarda temalar, kategoriler ve kodlar ile katılımcı alıntıları sunulacaktır.

**Akademisyenlerin Araştırma Üniversitesi Kavramına İlişkin Tanımları**


**Akademisyenlerin Araştırma Üniversitelerinin Özelliklerine İlişkin Bakış Açıları ve Deneyimleri**


**Akademisyenlerin İdeal Araştırma Üniversitesi Nasıl Olmalı Üzerine Bakış**

değil, aynı zamanda araştırma kültürünün de verilmesi gerektiğini ifade etmişlerdir. Lisans öğrencilerine de. On beş yılda az deneyime sahip katılımcılar, araştırma ve öğretim görevleri arasında bir denge olması gerektiğini tartışarak, yükselme kriterlerinde yayının kalitesinden çok yayın sayısının dikkate alınması nedeniyle bir ölçüm çılgılığı olduğunu belirtmişlerdir. Yayınların kalitesini ölçmek için bir yayın komitesi kurulması gerektiğini ve atama yükselme kriterlerinde kullanılan yayın sayısı kriterinin kaliteye de aliqua bulunması gerektiğini vurguladılar.
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YA Zigin / AUTHOR

Soyadı / Surname : Cüre
Adı / Name : Neslihan
Bölümü / Department : Eğitim Bilimleri, Eğitim Yönetimi ve Planlaması / Educational Sciences, Educational Administration and Planning

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