

***THE EFFECT OF TALENT MANAGEMENT PRACTICES ON
RESEARCH PERFORMANCE OF JIMMA UNIVERSITY***

*A Thesis Submitted to the School of Graduate Studies of Jimma University in Partial
Fulfillment of the Required For the Award of the Degree in Masters of Business
Administration (MBA)*

BY:

GEDA HORDOFA YADATE



**JIMMA UNIVERSITY
COLLEGE OF BUSINESS & ECONOMICS
MBA PROGRAM**

JUNE, 2021

JIMMA, ETHIOPIA

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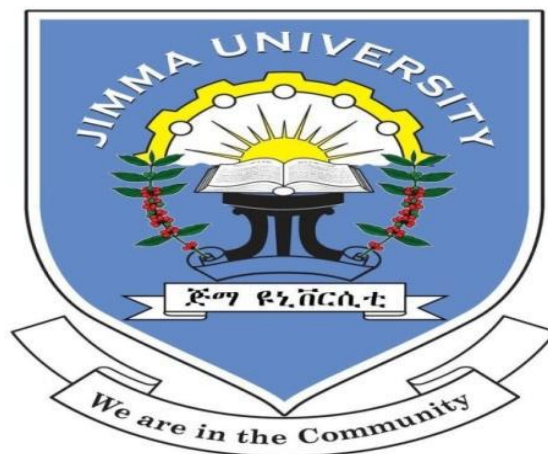
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**Under the Guidance of
Dr. Mekonnen Bogale (Ph.D)**

And

Miss. Tigist Waktole (MBA)



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CERTIFICATE

This is to certify that the thesis entitled “*The Effects of Talent Management Practices on Research performance of Jimma University*”, submitted to Jimma University for the award of the Degree of Master of Business Administration (MBA) and is a record of research work carried out by Mr. Geda Hordofa Yadata, under our guidance and supervision.

Therefore, we hereby declare that no part of this thesis has been submitted to any university or institution for the award of any degree or diploma.

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DECLARATION

I hereby declare that the thesis entitled “*The Effects of Talent Management Practices on Research performance of Jimma University*”, has been carried out by me under the guidance and supervision of Dr. Mekonnen Bogale and Miss. Tigist Waktole (MBA)

This thesis is my original work and has not been presented for a Degree in any other University.

Researcher’s Name

Date

Signature

Geda Hordofa Yadate

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Abstract

The main purpose of the study is to determine the effect of talent management practices on research performance at Jimma University. The study specifically aimed at explaining the effect of talent attraction, talent recruitment, talent cultivation, and talent retention on research performance at Jimma University. The cross-sectional survey design was used and a stratified simple random sampling technique was employed to enable select the respondents from the nine strata (College) of Jimma University. The study population was 617 assistance professors and above of Jimma University. A sample size of 243 respondents was picked from the nine strata of the college of Jimma University. A self-administered questionnaire was used as the main source of primary data collection and the university's periodical/website was the main source of secondary data. Data were analyzed using SPSS version 20. The correlation coefficient was used to test for the strength of the relationship between the dependent and the independent variables. Research findings were presented in form of graphs, tables, percentages, mean, frequencies, and standard deviations. The study found that talent management had a positive and significant effect on research performance. It is recommended that Jimma University should improve and emphasize its talent management practices; as doing so brings about greater research performance. The particular practices should include talent attraction, talent recruitment, talent cultivation, and talent retention.

Keywords: *talent ,talent management, talent management practices, Research performance, Jimma University.*

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ACRONYMS/ABBREVIATIONS

CIPD	Chartered Institute of Professional Development
HCT	Human Capital Theory
HR	Human Resource
HRM	Human Resource management
JIT	Jimma institute of technology
JU	Jimma University
NSE	Nairobi Security Exchange
RBT	Resource Based Theory
SPSS	Statistical Package for Social Sciences
TA	Talent Attraction
TBT	Talent Based Theory
TC	Talent Cultivation
TM	Talent Maintaining/Retention
TM	Talent management
TR	Talent Requirement
TRP	Research performance
VIF	Variance Inflation Factor

CHAPTER ONE

INTRODUCTION

The aim of this chapter is to provide background information on the study. The remaining parts of the chapter are organized as follows. The first section of the research presents background for the study, section two presents statement of problems, third section, fourth, and fifth section sets out objectives of the research, hypothesis, and significance of the study respectively. Finally, section sixth, seven, and eight presents scope, limitation and structure of the study respectively.

1.1. Background of the study

Organizations are accommodating frameworks where human resources are the most important components for organizational success, high performance, and proficiency. Organizations need experienced management, skilled, talented, and competitive employees to accomplish their goals and objectives. In today's hyper-competitive and increasingly complex global knowledge-based economy, the lack of clarity on the level of talent required to succeed is not exactly what organizations need to survive. But instead, having a meticulous, cyclical, and ongoing practice around talent management is going to be the simplest differentiate between success and failure. The organization's concern to manage talented persons as much as any other practices in the organization's professions decision-making will determine the organization's success or failure (Ramakrishnan, 2017).

Talent refers to “the sum of an individual's abilities it includes his or her intrinsic gifts, skills, understanding, experience, intelligence, judgment, approach, nature and drive. It also includes his or her ability to find out and grow”(Michaels et al., 2001). This definition was used in the context of this study to refer to researchers who have the special abilities to perform certain tasks, have high potentials, scarce knowledge, and skills, or who can successfully contribute transformation and alter within the university. Such individuals are frequently sought after in the market and their contributions to the company add direct value to its success or supper competitiveness (Michaels et al., 2001).

Talent management as a business success factor received attention in 1997 when the management consulting firm McKinsey & Company coined the phrase ‘the war for talent’ among winning organizations (Collings & Mellahi, 2009).

Talent management can be defined as a process that ensures that organizations have the proper number of individuals and therefore the proper of individuals at the proper place capable of meeting current and future business priorities (Iles et al., 2010). As Ashton & Morton (2005) noted that there “...isn't one consistent or concise definition of talent management”. It is worthy to note that up to date, there is a lack of consensus among researchers and human resource practitioners on the definition of talent management.

Talent management is one of the most significant issues in guaranteeing sustainable organizational performance (McDonnell, 2011). The capability of an organization to successfully attract, select, recruit, train, develop, recognizing, rewarding and retaining employees with the right skills and abilities at all levels is recognized to be an efficient tool for its success and survival (Silzer & Church, 2010). As stated by Michaels et al.(2001) that due to enduring economic and social forces, ‘the war for talent’ will persist for the next twenty years. Talent management practice is an approach used by organizations to attract, engage, develop, deploy and retain employees with the right skills, special abilities, high potentials, scarce knowledge or who can successfully contribute transformation and alter within the organization (Ramakrishnan, 2017). Talent management practices became the foremost crucial feature and the common term within the strategic and managerial glossary of all categories of organization for managing its talent pool (Saxena, 2013).

Talent management researchers have to deal with the unresolved issues surrounding talent management’s definition and its intellectual boundaries (Caligiuri et al., 2010). Some years ago, before the environment becomes hyper-competitive and Globalized, organizations give strong concerns for palpable resources, such as land, equipment, and money, as well as impalpable such as brands, image, and customer loyalty. However, the eras have changed. Organizations have now understood human capital is the backbone for performance, success, and super competitive. Unquestionably, for organizations to succeed in this complex universal knowledge-based business environment, they must have the best talent management practices in their core functions (Armstrong, 2011).

Jimma University has become a hub of intellectual and academic activity that attracts thought leaders, innovators, educators, and leaders from around the country (www.ju.edu.et). Jimma University is frequently named the top-ranked public institution in the nation, and this comes from the quality of each academic program.

Jimma University aspires to build a research environment that acknowledges the responsibility of academic staff, postgraduate students, and to be a most excellent producer of new knowledge in the country. Thus, it has been working on the following research areas that are of paramount importance to Ethiopia's social, economic, environmental, and cultural development.

1.2. Statement of the problem

Jimma University has long been expected to perform in education, research, and technology transfer, and community service. Its performance can be explained based on what it has been expected and what it has performed. Although these issues are significantly interrelated, their performance can be measured separately and determined by Excellence in Education, Excellence in Research and Technology transfer, and community-based services (JU Strategic planning, 2016-2020). Excellence in research and technology transfer plays a great role for the university performance. This study presents the performance of the university concerning excellence in research and technology transfer.

The university has set strategies and key performance indicators for the same purpose. The presence of research centers, the availability of repository systems, institutes, and field research sites is considered a strength, however, the number of existing research centers and institutes and their capacities are not sufficient, and most of them are one-man offices. However, the university's weaknesses are in terms of the efforts made to harness the available opportunities relative to its capacity, including the absence of online review systems for the JU-hosted journals, weak monitoring and evaluation, limited efforts to attract funds, absence of a rewarding scheme for research-based outputs generated by staff and students (scientific publication, policy brief...etc.), and weak internal and external collaborations (JU Strategic planning, 2016-2020).

Talent management is one of the most important issues in ensuring sustainable organizational success (McDonnell, 2011). Most organizations but not all are challenged by the deficit of talented employees in organizations found in developing countries, especially African countries (Spencer et al., 2015). Besides, the studies conducted on talent management practices are limited and many managers do not have enough knowledge about the effect of talent management practices on organizational performance.

As far as the investigator's knowledge concern, no more than one research, the research conducted by (Ramakrishnan, 2017) on Ethio-Telecom has been conducted on the topic in question in Ethiopia context. Even if studies conducted abroad help as a source, provide information, and strengthen awareness about talent management, but making a decision solely on abroad studies, is considered missing the organization's context. So, this study is goes to fill the existing gap related to this and used to support decision maker to make better decision with organization's context. The rational reason behind Talent management depends on the reality that an organization is run by people, those are the ones who generate values by using existed assets of an organization to make products and services that people want (Lyria, 2015).

Skoludova & Brodsky (2015) recognized that for an organization to be successful, it must have the following; competent employees, an increase in revenue, quality of services delivered, and improve market shares which are the indicators of a successful organization. However, these studies mainly emphasize the qualities and requirements that an organization must have to be successful. Thus, this study confines the understanding of talent management to these qualities and requirements but does not make awareness about the effect of talent management practices on research performance. Similarly, Bateman & Snell (2013) founds that, the absence of highly qualified, skilled and rivalry among competitors makes the way of attracting and retaining talents is one of the main concerns managers have globally. Till now, most studies suggest that talent management practices are either poorly practiced or not practiced in several organizations. The most problematic practices relate to the attraction and retention of talented employees, performance management and talent development (Du Plessis, 2010; Mtila et al., 2013). However, these studies did not include the recruitment of the right people at the right place. Thus, these studies are missed this critical variable in talent management practices.

Tandoh-Offin (2011) found that the performance of the employee is what leads to the survival and success of the organization. But much attention is not given to the study of talent management practices, hence, the key rationale behind this study. In addition, a large portion of the existing studies focus on expected results of talent management in terms of motivation, competitive advantage, employees' retention, commitment, or individual well-being (Cappelli, 2008; Collings & Mellahi, 2009; Vaiman & Vance, 2010; Waithiegeni Kibui, 2015) and not in terms of research performance. This encouraged the researcher to link talent management practices to research performance.

The previous studies were limited on business areas, the area their performance was measured by high returns, profits, market shares, product qualities; quality service delivery, wealth creation, etc. But this study focuses on a non-profit organization. Jimma University is one of the non-profit organizations and to be a preeminent producer of new knowledge in the country. So, the researcher wants to find the effect of talent management particularly on research performance. This study, therefore, pursues to fill the present research gaps and also provide a better understanding through the empirical evidence of the effect of talent management practices on the research performance particularly the research performance of Jimma University. The independent variables of this study were talent management practices, which incorporates; attracting talent researchers, recruiting talent researchers, cultivation of talent researchers, as well as retaining talent researchers and the dependent variable was research performance.

1.2.1 Research question

1. What is the effect of attracting talented researchers on the research performance of Jimma University?
2. What is the effect of recruiting talented researchers on the research performance of Jimma University?
3. What is the effect of cultivation talented researchers on the research performance of Jimma University?
4. What is the effect of retaining talented researchers on the research performance of Jimma University?

1.3. Objective of the study

1.3.1. General Objective

The general objective of this study was to investigate the effects of talent management practices on the research performance of Jimma University.

1.3.2. Specific Objectives

Specifically, the study seeks to achieve the objectives listed below.

1. To explain the effect of attracting talented researchers on the research performance of Jimma University.
2. To examine the effect of recruiting talented researchers on the research performance of Jimma University
3. To investigate the effect of cultivation talent researchers on the research performance of Jimma University

4. To explain the effect of retaining talented researchers on the research performance of Jimma University.

1.4. Hypothesis of the study

A hypothesis is a logical conjectured relationship between two or more variables expressed in the form of testable statements. The result of empirical studies worldwide indicates different outcome while using the same variables to investigate the effect of talent management practices on the research performance of Jimma University. Based on the theories and empirical studies stated in the literature review the study seeks to test the following hypothesis.

H01: Attracting talented researchers has no statistically significant effect on the research performance of Jimma University.

H02: Recruiting talented researchers has no statistically significant effect on the research performance of Jimma University.

H03: Cultivating talented researchers has no statistically significant effect on the research performance of Jimma University.

H04: Retaining talented researchers has no statistically significant effect on the research performance of Jimma University.

1.5. Significance of the Study

The conducting of this study will be of great benefit to Jimma University in examining the importance of talent management practices on its improvement in terms of research performance, academic quality, community-based services, and competitiveness. It will also be of high significance to the strategy developers of the university since its findings describe how the selected variables of talent management practices affect research performance and bring suggestions for refining the talent management practices of the university in line with universal best practices.

The study will not only benefit Jimma University, but it will be of great significance to other Ethiopian's Universities especially, for those universities that were selected to be research institutions.

The study will also be of great importance to the government of Ethiopia since it provides knowledge on the implementation of talent management practices of a public company.

The study will also benefit other African developing countries, especially, members of the East African community that are culturally, economically, and politically similar to Ethiopia.

Finally, this study will be of high assistance to academicians, scholars, and other stakeholders since it bridges the gap in existing literature works and increases the body of knowledge in the field of talent management practices. Lastly, but not least, it will serve as a reference source for further researchers.

1.6. Scope of the Study

The study was conducted at Jimma University, which is located in the southwest part of Ethiopia, Jimma town. It is limited to examine the effect of talent management practices on Jimma University research performance. The study specifically looks at how attracting talent researchers, recruiting talent researchers, cultivation talent researchers, as well as retaining talent researchers, affect research performance. The designs of the study were descriptive and explanatory research design. The targeted population employed under this study were academics, assistant professors, and above. The study used multiple linear regressions to analyze the data.

1.7. Limitations of the Study

The current study employed four elements as independent variables under talent management practices and investigated their effects on research performance. This implies that other variables relating to talent management practices were not considered. In addition, due to certain limitations, this study was restricted to Jimma University, which is one of the giants among state universities. It is, therefore, not known to what extent one can generalize the findings from this study to other state universities or even for private universities across the country. Another limitation was this study employed only multiple linear regressions to analyze the effect of talent management practice and used only quantitative analysis. This study did not use logic regression and qualitative analysis

Another limitation in this study was some respondents of the university were not also willing to reveal important or correct information. Some of the talented researchers were not put their minds on the study. This nearly posed a major problem to the research study. The study, however, overcame the limitations by having a letter of cooperation from the university to assure the respondents that the information provided would be used for academic purposes only and would thereby be treated with confidentiality.

Some respondents also spent a lot of time filling the questionnaires and some lost their copies of the questionnaires, hence extending the period of data collection for more than the intended duration. All questionnaires were not returned properly. Even though the returned responses were accepted and enough for analysis and conclusion, the lost response may change the current conclusion if all were properly returned. The researcher resorted to physically following up with them and replacing the questionnaires which were lost.

1.8. Organization of the Study

This study is structured in five chapters. Chapter one is the introduction and provides the background of the study, problem statement, research questions, research objectives, hypotheses, significance, scope, and limitations of the study as well as the organization of the study. Chapter two reviews the literature on the effects of talent management practices on research performance. It provides a theoretical framework on talent, talent management, the growing importance of talent management, factors affecting talent management, and talent management practices. It also provides an empirical review of the effects of talent management practices on research performance. The chapter ends with a conceptual framework of the study.

Chapter three encompasses the methods and methodology employed for the study. The research methodology outlines the research design, sources of data, target population, sample size and sampling techniques, data collection instruments, reliability and validity of the instruments, methods of data analysis, assumption tests, model specification, and ethical consideration. Chapter four contains the results, descriptions of the results followed by interpretation of the results, and a discussion on what the researcher subscribes to the results. Finally, Chapter five ends the study with a summary, conclusions, and set of recommendations derived from the research findings as well as suggestions for further researchers.

CHAPTER TWO

LITERATURE REVIEW

The aim of this chapter is to review existing literature in the area of talent management and its practices.. The remaining parts of the chapter are organized as follows. The first section of the research presents the definitions of talent, section two presents talent management, third section presents the growing importance of talent management and section four presents talent management practices. These section in general divided into three separate parts. These are the theoretical framework, empirical findings, and conceptual framework of the study.

2.1. Theoretical Framework of the Study

The theoretical framework is a collection of interrelated facts depend on theories. It attempts to justify why things are the way they are based on theories; it's a general assumption about nature and phenomenon (Kombo& Tromp, 2006).

2.1.1. Talent Management Theories

The uniqueness competency of the firm is concurrent to the resources, assets, and skills possessed by the members of the organization and the optimum utilization of these resources results in organizational performance. This study is an anchor on Talent Based Theory (TBT), Human Capital Theory (HCT), and Resource-Based Theory (RBT).

TBT states that talent is the only resource that may help in gaining and maintaining competitive advantage, and, therefore organizations must put a focus on attracting and maintaining the talented workforce (Rabbi et al., 2015). The role of firms is neither the creation of talent nor the acquisition of talent, rather; the firm is considered as a talent mixing institute, as talent resides in the heads of individuals and organization only integrates and provides a system and structural arrangements for bringing together and co-operation between the talented workers. It is a more recent theory of firms, which gives importance to develop and enhance the competency of the researchers of the university through a systematic process of talent acquisition and talent transfer and sharing to gain competitive advantage thereby leading to research performance.

The human capital theory emphasizes the value-added. Thus, investment in people by organization generates worthwhile returns. This theory began to be seen as a human investment in the 1960s and developed to embrace the growth theory in the late 1980s. From the late 1990s to the early 21st century, the theory has explored elements of talent, uniqueness, and individuality. Nafukho et al. (2004) viewed human capital theory as the main outcome from investment in people.

It is the change that is manifested at the individual level in the form of improved performance, and at the organizational level in the form of improved productivity and profitability, or at the societal level in the form of returns that benefit the entire society. This theory views human capital as a form of asset that organizations can invest in and is of value to the organization to the extent that it makes the organization productive (Lepak & Snell, 1999; Kessler & Lülfesmann, 2006).

The theory further suggests that investment in people leads to economic benefit for the individual and the organization as a whole (Sweetland, 1996). This theory can support future scholars in examining how organizations and individuals make decisions about investments in human capital (Tarique & Schuler, 2010). Additionally, investments linked to attracting, developing, and mobilizing talent can be viewed as investments in the human capital of the organization. The human capital theory is related to the resource-oriented perspective of the company, as described by (Barney, 1991).

2.1.2. The Concept of Talent and Talent Management

Talent has become a hot issue in Human Resource Management (HRM) and has stimulated the interest of many academicians and HR practitioners on this concept. Many studies that have addressed the concern of talent and talented individuals have tried to decide a clear meaning to the word talent and the talented, but there are clear differences among specialists and researchers about this field.

In theory, there is a group of researchers and experts who believe that some people are considered talented as they maintain special and potential capabilities through which they can influence the efficiency and effectiveness of the organization in which they work (Braic et al., 2012). While others suggest that in practice, anyone who can influence in achieving the organization's objectives may be called talented.

There is no common agreement on the definitions of talent and there are several definitions in the world of work (Beechler & Woodward, 2009; Schiemann, 2014; Gallardo-Gallardo, 2018). Gallardo-Gallardo (2018) summarized and revealed the composite form of all talent definitions in the academic literature and they encompass the conceptualization of talent through two approaches; the Object approach (talent as characteristics of people) and the Subject approach (talent as people).

“An object approach incorporates the ability, capacity, capability, commitment, competency, contribution, experience, knowledge, performance, and potential, patterns of thought, feeling or behavior, and skills that are interrelated to the characteristics of people” (P.293). The subject approach evaluates talent through two perspectives; while the first perspective includes all the people within the organization other perspective evaluates talent as an elite subset of the organization's population (Gallardo-Gallardo, 2018).

Another research was conducted to define the talent evaluated the theory of talent by five approaches-as giftedness, strength, competencies, high potential, and high performance (Meyer et al., 2004). Thus, the management shall not focus only on a small group of those who have distinctive capabilities as each individual has the capabilities and the possibilities that shall be inspired and cared for to achieve a competitive advantage for the organization. Many of the behavioral and psychological studies in the field of personal characteristics are for the gifted and has shown that the distinction between talented are represented in the difference in thoughts, skills, individuality, abilities, knowledge, experience that they possess, and the degree of influence of each of them on the work performed by each individual within the organization goes with the strategy of the organization (Fakhro, 2015).

Talent management is the application of integrated strategies or systems designed to increase workplace productivity by developing enhanced processes for acquisition, cultivating, maintaining, and utilizing people with the required skills and aptitude to meet current and future business needs (Muduli & Raval, 2018). According to Collings & Mellahi (2009), talent management refers to “activities and processes that involve the systematic identification of key positions which exceptionally contribute to the organization’s sustainable superior advantage, the development of a talent pool of high potential and high performing incumbents to fill up these roles, and the development of a unique human resource architecture to smooth the progress of filling these positions with proficient incumbents and to ensure their continual commitment to the organization”. This definition looks at the strategic dimensions of Talent management.

Talent management is an integrated set of processes, programs and cultural norms in an organization, planned and implemented to attract, develop, deploy and retain talent to achieve strategic objectives and meet future business needs (Silzer & Church, 2010). A series of good steps of identifying talent, attract and develop them (Uren, 2007). Implementation of interrelated strategies or systems planned to improve the recruitment and development of people and retain people with the necessary skills, and a willingness to meet current and future organizational needs (Li & Wang, 2010). The process of attracting and retaining profitable workers, as it is increasingly more competitive among firms and of strategic significance, has come to be known as "the war for talent (Michaels et al., 2001).

2.1.3. The Growing Importance of Talent Management

At present, talent management is on the minds of many Human Resource Practitioners and academicians. Recently, the conception and application of talent management are growing into what can be described as one of the most crucial and critical functions of HR and Business Management. For example, in 2005, searching the term 'Talent Management HR' received eight million hits via a well-known internet search engine (Heckman & Lewis, 2006) and by 2012, the same term got twenty-five million hits. The term is also receiving high interest and attention from most organizations around the globe. Some years back, organizations gave keen concerns for tangible resources, such as land, equipment, and money as well as intangibles such as brands, image, and customer loyalty. However, the times have changed.

Organizations have now realized human capital is the backbone for performance, success, and value and wealth creation. As Worley et al. (2016) recommended that leaders should accept a new talent mindset towards the workplace that is inspired by new leadership approaches, new business strategies, and new leadership capabilities. For organizations across the globe, talent management of knowledge workers and high potentials is of rising strategic importance (Tymon Jr et al., 2010; Vaiman & Vance, 2010). Talent management is one of the most important factors in ensuring sustainable organizational achievement (McDonnell, 2011).

2.1.4. Talent Management Practices

As stated by Michaels et al. (2001) that due to enduring economic and social forces, ‘the war for talent’ will continue for the next two decades. It is, therefore, vital for organizations in this modern business era to apply best practices for talent management to win this war and stay ahead of intense global competition. Talent management practices have become the most important aspect and common term in the strategic and managerial glossary of every type of organization for the administration of its talent pool (Saxena, 2013). Talent management practices fall into two distinct and equally dysfunctional camps: doing nothing or relying on complex and bureaucratic systems that grew up in an era when business was highly predictable.

The reason so many organizations struggle with talent management is that established practice doesn’t work (Cappelli, 2008). Talent management practice is an approach used by organizations to attract, engage, develop, deploy and retain employees with the right skills, special abilities, high potentials, scarce knowledge, or who can successfully bring about transformation and change in the organization. Wellins et al. (2009) state in a white paper identified best practices for effective talent management which can serve as a foundation for a talent management system.

2.1.5. The Effect of Talent Management Practices on Research performance

If an organization wants to be successful, it must invest in the talent management of its workers to obtain some conditions in the company like a good business environment (Kang et al., 2007). For talent to be cultivated; the employee must be able to experience both intrinsic and extrinsic reward from their job and should the employee find the job interesting and challenging, they will exert all necessary effort in doing the job and therefore lead to increased productivity (Davis et al., 2007). More than any other resources, talent provides the potential for long-term competitive advantage (Worley et al., 2016). It means that companies recognize the importance of talent management integration with business strategy to get organization excellence (Boudreau & Ramstad, 2007). Talent management is important when the firms would like to build winning teams that will be formed by talented people (Davis et al., 2007). They can use these teams to solve problems or weaknesses in their university because they have competent and experienced people in those fields.

Talent management practices can generate the most constant competitive advantages; new technologies and innovations can effortlessly be simulated by competitors and generate only temporary competitive advantages. Sustainable competitive advantage results from talent management practices. Thus, how the organization attracts, develops, retains, motivates, manages, and rewards its talent (Heinen& O’Neill, 2004). Like an instrument, a business will fail to function successfully if key elements such as processes, systems, and structure are misaligned by the resistance between those elements and like a machine, a business must be planned, operated, and sustained. These functions are implemented by the talent – the human resources employed by the enterprise. The collective skills of the talent exercised in an university largely comprise the university’s core research performance.

2.1.6. Theory on Talent Attraction

(Maslow, 1967) need hierarchy theory was used to illustrate the concept of talent attraction and is focused on the assumption that, human needs can be divided into five categories. At the bottom is the physiological need which is fundamental and must be satisfied before all other needs. According to Saleem, (2006) noted that an organization can help individuals satisfy their needs by providing good pay, proper working conditions, and other benefits. In the context of this study, the researcher argued that Maslow’s theory could be used by Jimma University to attract researchers through congenial working conditions as supported by (Wangethi, 2009) who discovered that organizations could provide basic needs through fair wages and safe working conditions.

Once the physiological needs are satisfied, safety needs become significant. These needs includes of physical safety or protection against fire, accident, and economic securities against unemployment rate. An organization can influence safety needs by providing job security, pension plans, insurance plans, safe and healthy working conditions (Nzuve & Bundi, 2012). It was deduced that employees could be attracted to organizations that satisfied their security needs by having job benefits such as pension plans and a safe working environment. Next in the hierarchy is the social needs; man is gregarious in nature and a social being, therefore he needs to belong and to be accepted by others. Social needs include the need for love and affection, association with and acceptance by various social groups (Saleem, 2006).

It could therefore, be inferred that employees were motivated to work for an organization that satisfied their social needs by having a good work-life balance as well as having good social networking (Kelly, 2013).

Self-esteem engages how others perceive us at work and can be enhanced by working for an organization with a good employer brand and allowing workers to gain qualifications and high positions at work. In addition to that, employees would be motivated to work for organizations that give them room to grow to their full potential thus realizing self-actualization (Wangethi, 2009). Hence, attracting talents to gain a competitive advantage is a challenge for organizations (Azara & Mohammed, 2013). Identifying employees based on their performance for the organization is a crucial process and ensuring different channels to attract them is required. Most of the companies are not successful at sourcing highly talented people for their organization, only a few numbers of them good at having pipelines. But some organizations don't notice who they want (Chambers et al., 1998).

To attract the talents, there are several key areas such as organizational culture (Twichell, 2012), employer brand, TM approach itself (Chung & D'Annunzio-Green, 2018) activities for managerial development of talents which includes training opportunities, succession planning, and a flexible compensation system, career opportunities, and vision of the organization (Lynton & Beechler, 2012; Twichell, 2012).

2.1.7. Theory on Recruitment

Ezeali & Esiagu (2010) defined recruitment as procedure organizations use to identify and employ competent staff to fill vacant positions aimed at driving the organization's strategic objective. Ekwoaba et al. (2015) on recruitment and selection methods of companies performance in Nigeria, established that despite having a policy that governs and guides the recruitment processes, the researchers concluded that both recruitment & selection criteria had a strong significant relationship on organizational performance. As Rynes & Barber(1990) stated that larger companies with large amounts of capital have an added advantage over their juniors (Smaller Organizations) when it comes to the implementation of highly complex yet effective recruitment processes. Smaller Organizations, on the other hand, focused more on cost-effective methods such as referrals and advertising through various means as their best alternative.

Rees & Smith (2021) revealed that seven in ten organizations focused their recruitment and talent management practices to find talents in niche areas. Moreover, 50 percent developed more talent in-house and used new modes of technology to recruit. The proponents further revealed that in 2017, most organizations anticipated a greater focus on developing more talent in house and shifting the focus on retaining rather than recruiting talents and investing more time and effort in the quality of candidates.

2.1.8. Theory on cultivation

Talent development is the practice of changing an organization, its employees, its stakeholders, and groups of people within it, using planned and unplanned learning, to achieve and maintain a competitive advantage for the organization (Harburg, 2003). Organizations that exercise effective learning and development start with their employees. This inferred that they recognize the employees who need learning and development, the level of learning and development they need, and the length during which learning takes place (Harburg, 2003). Training is the systematic process of altering the behaviors and attitudes of staff aimed at enhancing both individual and organizational performance.

Training is a learning process that involves the acquisition of skills, concepts, rules, or attitudes to raising employee performance (Byars& Rue, 2008). It is a key strategy for creating skills in people since it enables them to both learn and unlearn skills – in other words, to acquire new skills and change inappropriate skills (Pineda-Herrero et al., 2014). As Cascio(2015) observes that to promote efficient learning, long-term retention, and application of the skills or factual information learned, in training to the job circumstances, training programs should include principles of learning developed over the years. This is moderate because training positively influences employee performance due to the development of knowledge, behavior, abilities, skills, and competencies.

Training eliminates the performance gap in the implementation of tasks since it comes as interference for developing fastidious skills and competencies of employees thus improving their performance. Training, therefore, enhances researcher's competencies hence enables them to implement their job-related tasks efficiently thus facilitating the achievement of the firm`s objectives.

Moreover, cases of dissatisfaction, turnover, and absenteeism will be minimized if and only if employees are trained. In cases where there are deficiencies of technology, skills, improvement, and knowledge employees go through training, learning, and development programs to advance their talents and align their talents with the requirements for the business at the current position and in future times (Leisy & Pyron, 2009). Training of employees gives desired work safety thus optimistically influencing employee performance. Top organizations in various industries recognize the need for comprehensive training so that employees can improve their development skills (Njambi, 2014).

Development is a key issue that enhances good researchers' retention that in turn improves overall individual performance due to satisfaction. According to Puvitayaphan(2008) when the organizations give more attention to the development of the best talent, they not only benefit from improved individual employee performance but also gain from overall increased organizational productivity. Nyanjom (2013) opines that the purpose of employee development is to increase employees' morale as development programs improve employees' confidence in handling assigned tasks at the firm and reduce production costs as it leads to the economic use of material hence consequently remove waste during the production process.

Researchers development is the most important Human Resource Management function in university and it refers to developing researchers and the university's abilities as a whole. Therefore, there is a direct association between the development of researchers and their performance. When researchers become more developed, they tend to be more satisfied with the job, more dedicated to the job and hence research performance would eventually improve.

2.1.9. Theories on Talent Retention

The following theories were used to explain the issue of talent retention and research performance. Firstly, the equity theory of motivation is advanced by Adams (1965). The theory is interrelated to the potential rewards that are promised to an individual. The most important tenet of the theory is balance or equity. Forinstance, an individual motivation level is determined by how he/she perceives equity, fairness, and justice practiced by the management (Nzuve & Bundi, 2012). The implication is that the superior the degree of employees perceiving fairness, the more they are stimulated to perform, and also their levels of commitment increases and hence they are reliable to the organizations and are likely to stay there for long.

This theory is dependent on the assumptions that individuals are concerned both with their rewards and also with the reward of others in the same rank, and employees expect that an organization will treat them with fairness and equitability in terms of the input they make and the reward they receive. Moreover, Adams (1965) argues that those employees who perceive that their job input does not match the reward they get will seek to address this perception by either low performance or turnover.

In the context of this study, equity theory was important for researchers retention, as it influenced the perception of researchers working for Jimma University on whether they are getting fair and equal rewards. Drafke & Kossen (1998) in support of this relationship argue that employees are probable to compare the inputs they devote to the work with the outputs they receive from the organization. Once they feel they get less output for the work they have done, they recognize this as unfairness and unequal and tend to be unsatisfied or not motivated and hence are likely to go away from the organization. In another ways, if employees perceive fairness and equity they are unlikely to leave. In the context of the current study, it was inferred that university could maintain their researchers by having policies and strategies that researchers perceive as fair and equitable for example having a competitive remuneration system that has both internal and external equity.

The second theory of talent retention was expounded by the use of the Herzberg (1974) two-factor theory. It is based on the view that two factors need to be present in an employee's job situation; hygiene and motivation. According to (Herzberg, 1974) various job factors result in satisfaction while others prevent dissatisfaction. According to Herzberg, hygiene factors are those job factors that are significant for inspiration to take place at the workplace. If those factors do not exist, they lead to dissatisfaction. These factors include pay, working conditions, supervision, and company policies and administrative policies (Nzuve & Bundi, 2012).

Additionally, motivational factors are those factors that lead to satisfaction of workers. These factors motivate employees to perform. These factors include recognition, sense of achievement, growth and promotion opportunities, responsibility, and meaningfulness of the work (Nzuve & Bundi, 2012). In the context of this study, the researcher argued that hygiene factors such as competitive compensation system and university policies like having flexible working hours and offer of researchers insurance cover were associated with talent retention which leads to improved research performance, motivational factors too such as growth and promotion opportunities could be associated with talent retention strategies.

Retention aims to take measures to inspire employees to continue in the organization for the maximum period. Talent turnover is dangerous to an organization's productivity because costs of attraction are high. Direct cost refers to turnover costs, replacement costs, and transitions costs, and indirect costs relate to the loss of production, reduced performance levels, unnecessary overtime, and low morale (Echols, 2013). Vaiman & Vance (2010) define two classifications of retention tools to suffice employee's expectation: extrinsic and intrinsic incentives. Extrinsic incentives incorporate different sorts of monetary rewards which can persuade employees 'physiological needs, while intrinsic incentives refer to non-monetary rewards that can realize employees' psychological needs. Similarly, Mendes & Stander (2011) further suggests that an organization needs to invest in employee retention to be successful. As one element of talent management, talent retention refers to that the organization intends to retain its most talented employees or those employees that will likely leave (Armstrong, 2011). Organizations are not always successful at retaining talented workers but can use tried and tested strategies to retain their best employees (Armstrong, 2011).

2.1.10. Research performance

Talent-management practices can produce the most stable competitive advantages, new technologies and innovations can be simply be replicated by competitors and generate only short-term competitive advantages. Continual competitive advantage comes from talent management practices in other words, how the organization attracts, develops, retains, motivates, manages, and rewards its talent (Heinen& O'Neill, 2004). Indeed, talent (i.e., a university's researchers), typically is the single biggest lever for driving improvements in research performance. The collective skills of the talented researchers employed in a university largely comprise the university's core research performance. A university's talent researchers inject capabilities that are very difficult for competitors to benchmark and replicate. More than any other asset, talent brings the potential for long-term competitive advantage (Worley et al., 2016). It means that organizations recognize the importance of talent management integration with business strategy to get organization excellence (Boudreau & Ramstad, 2007).

Talent management is important when the organization would like to build winning teams that will be formed by talented people (Collings & Mellahi, 2009). They can use these teams to solve problems or weaknesses in their university because they have competent and experienced people in those fields. If an organization wants to be successful, it must invest in the talent management of its workers to obtain some conditions in the company like a good business environment (Kang et al., 2007).

For the talent to be cultivated the employee must be able to experience both intrinsic and extrinsic rewards from their jobs and should the employee find the job interesting and challenging, they will exert all necessary effort in doing the job and therefore lead to increased productivity (Collings & Mellahi, 2009). The differentiation point of any organization is the skills that its employees possess. Companies that are industrial leaders have devised the best plans in attracting, hiring and developing, and retaining top-performing talents (Kang et al., 2007). Three factors should be considered to sustain performance in the university, the first factor is the creation of the career paths and reward and development plan for the most talented researchers as this will ensure high research performance in the university. The second factor is the development of key positions in the university and the last factor is the segmentation of the talented pool into each investment category and managing the investment in each category appropriately (Ballesteros & Inmaculada, 2010).

2.2. Review of Empirical Findings

Several studies have been conducted on a related area – the effect of talent management practices on research performance. As far as the researcher's knowledge goes, no more than one research has been conducted on the topic in question in the Ethiopian context. Here are critical reviews of some of the related studies.

Bano et al. (2010) studied talent management in the corporate sector in Islamabad, Pakistan, and found out that talent management has a positive significant influence on employee attitudinal outcomes and organizational effectiveness like employee work engagement, turnover avoidance, and value addition. They concluded that organizations, which are enthusiastic about gaining a competitive advantage over their competitors, need to manage their talent in vigilant and effective ways. The company that manages its talents well delivers better results for shareholders.

Kahinde (2012) carried out a study on talent management's effect on organization performance in Nigeria and had the following findings; the results showed that there was evidence that talent management, profitability and return on investment were highly correlated. The questionnaires were used as the survey method of primary data collection. Correlation coefficient and t-student distribution were methods used in the analysis of data gathered.

Poorhosseinzadeh¹& Subramaniam's (2012) study that was carried out through a quantitative research design on Malaysian multinational companies found a positive and significant relationship between talent attraction and performance in an organization.

Azara & Mohammed's (2013) study on employee training and the organization's performance, revealed that a significant and positive relationship between training and organization performance. The study used both qualitative and quantitative research designs and questionnaires were the main data collection instruments.

Ekwoaba et al. (2015) on recruitment and selection methods of companies performance in Nigeria, established that despite having a policy that governs and guides the recruitment processes, the researchers concluded that both recruitment & selection criteria had a strong significant relationship on organizational performance.

Ifeoma et al. (2015) concluded in their research that an integrated talent management practice will help in recruiting and retaining essential talent that will work towards achieving organizational performance and sustainable growth. Thus, effective talent management ensures that organizations can successfully acquire and retain essential talent.

Lyria (2015) carried out a study on the effect of talent management on organizational performance in firms listed in Nairobi Security Exchange (NSE) in Kenya and revealed that talent management has a positive and significant impact on organizational performance. He then recommended that talent management practices should be emphasized, as doing so brings about superior organizational performance. A cross-sectional survey design was used and a stratified simple random sampling technique was employed by the researcher. Questionnaires were the main instruments of data collection and the NSE handbook (2014) was the main source of the secondary data.

Aurangzeb & Jana (2016) conducted a study on the influence of talent management in enhancing organizational performance in service sector companies of Pakistan.

Their results revealed that talent management has a significant effect on organizational overall performance. The researcher used the survey method to gather the data from the organization. Descriptive and inferential tests were also performed.

Ramakrishnan (2017) study on the effect of talent Management ractices on organizational success: experience from Ethio Telecom–Jimma town. The purpose of the study was to determine the effects of talent management practices on the success of Ethio Telecom’s business operations in Jimma town. The study population was three hundred and fifteen (315). A sample size of one hundred and seventy six (176) was used, consisting of top management, middle level management, lower level management and operational staff.

Both simple random and purposive sampling techniques were employed in selecting the sample size. A selfadministered questionnaire was used. The study found that talent management practices haspositive and a significant impact on organizational success. He recommended that Ethio Telecom should improve and emphasize its talent management practices; as doing so brings about greater organizational success.

Al-Qeed et al. (2018) study on the impact of talent management on organizational performance in Jordanian pharmaceutical companies and evaluates the mediating role of emotional intelligence in the relationship between talent management and organizational performance. A survey was distributed among managers of pharmaceutical companies in Jordan, and 1125 responses were collected. The respondent sample was constructed using random stratified sampling. The study result revealed positive relationships between talent management and organizational performance, talent management and emotional intelligence, and emotional intelligence and organizational performance.

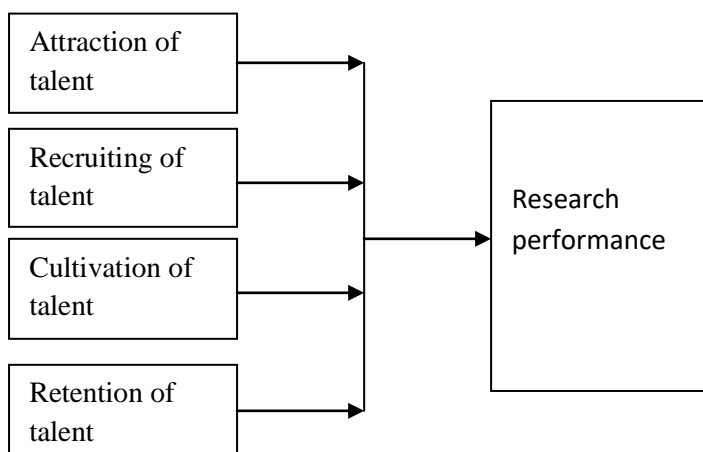
Obeidat et al.'s (2018) conduct on the effect of talent management on organizational effectiveness in healthcare sector.The study aim is to investigate the direct effect of talent management on organizational effectiveness in the health care sector. The study population consisted of all working employees at all levels, from the medical and the managerial domains with a total of 3512 employees, a quantitative research design and regression analysis were used to a convenience sample on a total of 251 valid returns that were gained in a questionnaire based survey. The findings showed that there is a strong positive correlation between the study variables; talent management and organizational effectiveness; talent management with its dimensions; attract talent, maintain talent, and develop talent, have a significant effect on organizational effectiveness.

Wairimu (2019) pointed out in their study that the financial value of organizations depends on the quality of their talents, and talents can quickly increase the financial value of the organization. As a result, talents have a positive impact on the performance and success of the organization.

Pa'wan & Said (2020) carried out a study on the strengthening talent management in enhancing organizational commitment in developing countries. The purpose of the study was to investigate the influence of talent management as a predictor of organizational commitment. The study used survey questionnaire for data collection. Judgmental nonprobability sampling is used for the data collection. The respondents were academicians from both the Public and Private Higher Education Institutions in Malaysia. Out of 300 questionnaires distributed, 298 were returned of which 288 were usable for data analysis. The results of the study revealed that there is a positive significant effect of talent management on organizational commitment.

2.3. Conceptual Framework of the Study

A conceptual framework is the diagrammatic presentation of variables, showing the relationship between the independent variables and the dependent variable. In this study, the independent variables are talent management practices, which encompasses; attracting talent researchers, recruiting talent researchers, and cultivating talent researchers as well as retaining talent researchers. The dependent variable is research performance. These variables were cautiously selected by taken cognizance of the theoretical review on talent management practices and the study area. The study sought to understand the effects of these independent variables on the dependent variable.



Source: developed by own researcher

Figure 2.1. The relationship is schematically presented in the conceptual framework.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

The aim of this chapter is to discuss the methodological approach for the study. The remaining parts of the chapter are structured as follows. The first section of the chapter is the research design of the study, section two presents research approach, third section presents the sources and type of data. Section fourth, and fifth sets out target population, and sample size of the study respectively. Finally, section sixth, seventh, eighth, ninth, tenth, and eleventh presents sampling procedures, data collection instruments, validity, and reliability, data analysis techniques, assumption tests, and ethical consideration of the study respectively.

3.1. Research Design

As Kothari (2004) revealed that research design is the arrangement of conditions for the collection and analysis of data in a manner that aims to combine relevance to research purpose with economy in the perspective. Research design is the abstract structure within which research is conducted; it constitutes the blueprint for the gathering, measurement, and analysis of data. The broad categories of research design were exploratory and conclusive research design. Considering the objectives and coverage of this study, the researcher used conclusive (descriptive and explanatory) research designs.

According to Cohen et al. (2002) descriptive survey, inquire helps to gather data at a particular point to describe the entire nature of the existing conditions in generalizing from a sample to the population. According to Saunders et al. (2009) reveals that explanatory research is about studying a situation or a problem to explain the relationships between variables. The explanatory research design was used to determine and explain the relationship between the dependent variable--research performance and the independent variables –talent management practices (Attracting talented employees, recruiting talent employees, cultivation employees as well as Retaining talented employees within the University). Thus, the explanatory research design was employed to accurately depict how talent management practices affect research performance.

3.2. Research approach

The researcher used quantitative data to gain an in-depth understanding of the situation about talent management practices and research performance. The quantitative approach was used to quantify the hypothesized relationship between the dependent variable (research performance) and the independent variables (talent management practices). Under the quantitative research method of data collection, a standard questionnaire with modifications to fit the context of the study was used to collect data for this study. The researcher used the measure with numbers and then analyses the data with statistics techniques by using SPSS software.

3.3. Sources and Type of Data

To generate relevant data for this study, both primary and secondary data sources were employed. According to Biggam (2018), primary data is the data that the researcher finds out by him/herself regarding a specific topic. As Cohen et al. (2002) primary data is those items that are original to the problem under study. The main advantage of primary data is that it is collected afresh and for the first time and thus happens to be original. Primary data for this study were mainly compiled from the questionnaire.

Zikmund et al. (2013) describe secondary data as data collected by others and found by the comparative researcher in ethnographies, censuses, and histories. Secondary data provided the researcher with the opportunity to better understand and explain the research problem. These data were used to establish the viable platform for the theoretical framework constituting the bases of this study, and to design the sample frame and questionnaire for collecting the primary data. Secondary data for this study were compiled from many sources like the JU periodical/website, JU library books, published journal and articles.

3.4. Target Population

The target population defines those units for which the results of the study are meant to generalize. A target population is the entire group of people to which a researcher intends the results of a study to apply (Aron et al., 2008). The population is a well-defined or set of people, elements, and events, groups of things, or households that are being investigated to generalize the results. Therefore, the target population for this study was academics, assistant professors, and above of Jimma University. In total, there are 617 numbers of assistant professors and above.

Table 3.1 Total target population of the study

Colleges and institutes	Total number of assistant professor and above
Business and economics	43
Institute of technology JIT	39
College of Agree culture	94
Social science and humanity	79
Law and governance	10
Natural science	60
Education and behavioral science	42
Sport academics	6
Institute of health	244
Total	617

Source: researcher survey, 2021

3.5. Sample Size

As Worley et al. (2016) defined that sample size is a way of selecting a portion of the population that adequately represents the entire population. The adequate sample size is important for identifying the correct factor structure. The total number of assistant professor, associate professor, and full professor of Jimma University in the two institutes (institute of health and Jimma institute of technology, JIT), and seven colleges (college of business and economics, college of agricultural and veterinary medicine, college of social science and humanity, college of law and governance, college of natural science, college of education and behavioral science and college of Sport academics) are 617. Determine the average number of respondents from assistance professors and above to be included in the sample was determined by using the formula, which was developed by Yamane (1967). The formula was applied with a five percent (5%) error and ninety-five percent (95%) confidence level to determine the sample size.

Hence

$$n = \frac{N}{1 + N * e^2} = \frac{617}{1 + 617 * 0.05^2} = \frac{617}{2.54} = 243$$

Where

N = population size

n = sample size

e = margin of error at 5% (standard value of 0.05)

3.6. Sampling Techniques

Riffe et al. (1996) described stratified sampling as an efficient choice because the means of the stratified samples are likely to be closer to the mean of the population overall and a stratified random sample usually reflects the characteristics of the population as a whole. According to Ross (1987), stratified sampling is an appropriate methodology to make proportionate (take part of the whole) and meaningful in the population. In this study, to draw a sample proportion for each college and institution, a proportionate stratified sampling design was used.

Table 3.2 sample size proportion of college and institute and assistance professor and above

Colleges and institutes	Total number of assistant professor and above	Total sample size proportion
Business and economics	43	$43 \times 0.394 = 17$
Institute of technology JIT	39	$39 \times 0.394 = 15$
Agree culture	94	$94 \times 0.394 = 37$
Social science and humanity	79	$79 \times 0.394 = 31$
Law and governance	10	$10 \times 0.394 = 4$
Natural science	60	$60 \times 0.394 = 24$
Education and behavioral science	42	$42 \times 0.394 = 17$
Sport academics	6	$6 \times 0.394 = 2$
Institute of health	244	$244 \times 0.394 = 96$
Total	617	243

Source: researcher survey, 2021

3.7. Data Collection Instruments

Zikmund et al.(2013) define data collection tools as the instruments used to collect information in research or the methods employed to collect research data. The choice of the methods to use is influenced by the nature of the problem and by the availability of time and money (Cooper et al., 2006).

3.7.1. Questionnaire

According to Ugboro et al.(2011) explains that a questionnaire is a “written instrument that contains a series of questions or statements called items that attempt to collect information on a particular topic”. It is a technique for securing answers to questions by using a form that the respondents fill by themselves. In this study, the researcher used a questionnaire, because it is a more efficient way of collecting data from respondents. It is not time-consuming and a more appropriate instrument to collect data from a large number of people at the same time. Questionnaires were distributed and collected by the researcher.

The questionnaire was prepared closed-ended and it was distributed to the respondents to elicit their views concerning the effects of talent management practices on research performance. The closed-ended questions are designed on an ordinal scale of measurement basis (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree). This gives insights on how the variables could be ranked to measure the degree of their strength or the agreement or the disagreement of the respondents on the variables.

3.9. Validity and Reliability of the Instrument

Reliability and validity are two significant qualities of any measurement procedure. Reliability refers to the confidence we can place on the measuring tool to provide us the same numeric value when the measurement is repeated on the same object. It is the degree to which one may expect to find the same result if a measurement is repeated. One method to ideally evaluate reliability is the test-retest method. It is completed by measuring the same object twice and correlating the results. If the measurement produces the same answer in repeated attempts, it is reliable.

The validity on the other hand means that the measuring instrument measures the property it is supposed to evaluate. The objective of assessing validity is to see how accurate the relationship between the measure and the underlying trait it is trying to measure (Gara, 2007). The validity of the questionnaires was checked with the advisors, experts of the field, and based on the test the relationship between the measure and the underlying trait. Table3.1 is a summary of the reliability test based on the Cronbach alpha coefficient for the five scale items in the data collection instrument.

Table 3.3 Summary of Reliability Test on Scale Items

Sub scale	Number of Items	Cronbach alpha
Attraction of talent researchers	6	0.873
Recruitment of talent researchers	6	0.884
Cultivation of talent researchers	6	0.866
Retention of talent researchers	6	0.902
Research performance	6	0.911
Collective Cronbach's Alpha		0.927

Source: researcher survey, 2021

From table 3.3 above, Cronbach's alpha coefficient values ranged from a low of 0.866 to a high of 0.911. Based on the findings of Cronbach's Alpha Reliability Coefficients value above in table 3.3, all the independent variables (attraction of talent researchers', recruitment of talent researchers', cultivation of talent researchers', and retention of talent researchers',) has Cronbach's alpha value of, 0.873, 0.884, 0.866, and 0.902 respectively, which are greater than 0.70. On the other hand, Cronbach's alpha value of the dependent variable (research performance) is also 0.911, which is also greater than 0.7. Similarly, the collective Cronbach's Alpha value of dependent and independent variables is 0.927, this is also greater than 0.7. As all alpha values are found to be above the threshold point of 0.7, the reliabilities of the measurement instruments are considered enough.

3.10. Data Processing and Analysis

In the data processing procedures; editing, coding, classification, and tabulation of the collected data were done. Data processing has two phases, specifically; data clean-up and data reduction. During data clean-up, the collected raw data were edited to detect anomalies, errors, and omissions in responses and to check that the questions were answered accurately and uniformly. The process of assigning numerical or other symbols came next which was used to minimize responses into a limited number of categories or classes. The data analysis was guided by the study objectives, questions, and hypotheses. The data were presented in a manner that allowed for easy analysis, interpretation, and testing. After the questionnaires had been administered, the mass of raw data collected from the field was systematically organized to facilitate data analysis.

Descriptive and inferential statistical analyses were carried out using Statistical Product and Service Solutions – SPSS version 20 (formerly known as Statistical Package for Social Sciences). Descriptive statistics generated such as frequencies, percentages, mean scores and standard deviations were presented in tables and figures. Descriptive statistics enable the researcher to meaningfully describe a distribution of measurements and also describe, organize and summarize data (Mot et al., 2012). Inferential statistics such as Pearson correlation coefficient, model summary, ANOVA, and coefficient of regression were used to test for the strength of the relationship between the dependent and the independent variables.

The study was used multiple linear regression analysis to test the statistical significance of the four independent variables (Attracting talent researchers, recruiting talent researchers, cultivating talent researchers, and retaining talented researchers) on the dependent variable (research performance). The basic purpose of using multiple linear regression analysis in this study is to make the study more effective at explaining, understanding, and predicting the relationship between the stated variables. It is also used to determine whether the null hypotheses were accepted or rejected. The Mathematical Model of multiple regressions below was used to determine the quantitative relationship between the variables:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where;

Y = Dependent variable (research performance).

β_0 is the intercept or the constant which is the value of the dependent variable when all the independent variables are 0.

ϵ is the error term or natural variation in the model.

$\beta_1, \beta_2, \beta_3, \beta_4$ = Regression coefficients of the predictors which measure the change induced by X_i ; $i=1, 2, 3, 4$ on Y .

X_1 = Attracting of talent researchers

X_2 = Recruiting talent researchers

X_3 = Cultivating of talent researchers

X_4 = Retaining of talent researchers

3.11. Assumption Tests

Beforehand applying multiple linear regression models, different assumption tests were measured to ensure the appropriate use of data analysis. These assumption tests were including the sampling test, Multicollinearity tests, normality test, linearity test, and homoscedasticity test.

3.12. Ethical Consideration

In this study the researcher deliberately measured ethical issues in seeking permission, keeping privacy, and caring about the secrecy of respondents that met during the study. Further to this, the researcher defined the purpose of the study to the respondents and ensures voluntary participation, as it is only for academic purposes with full confidentiality. To avoid any harm to the research participants, the researcher careful to abide by the general research ethics. This is because questionnaire participants may doubtful to be harmed with what they express to the researcher.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter describes the methods applied to achieve the study objectives or answer the research questions. It focuses on presenting, analyzing, discussing, and interpreting the results of the study. The chapter presented the empirical findings and results of the application of the variables using descriptive and inferential results. The chapter is organized under the following sub-headings; response rate, demographic characteristics of respondents, attracting talent researchers, recruiting talent researchers, cultivating of talent researchers, and retaining of talent researchers. Also, multiple linear regression analyses for the overall model and research performance were presented and discussed in this chapter.

4.1. Response Rate

The number of questionnaires that were administered was two hundred forty-three (243). A total of two hundred forty-three, two hundred four (204) questionnaires were properly filled and returned. This represented an overall successful response rate of 84%. The remaining 16% failed to properly fill the questionnaires and some declined to return them. Babbie (1998) asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. The achieved response rate was more than 70% which implied that the response rate was very good. The response rate is presented in table 4.1.

Table 4.1. Response Rate

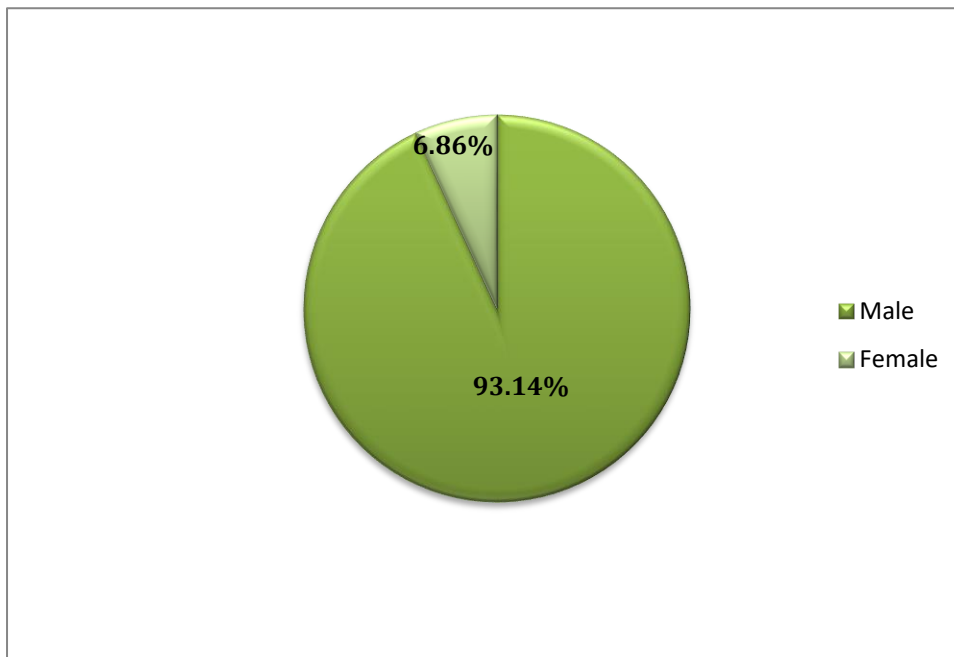
Response	frequency	Percent
Successful	204	84%
Unsuccessful	39	16%
Total	243	100%

Source: researcher survey, 2021

4.2. Demographic Characteristics of Respondents

The demographic data collected include gender, age, educational level, and years worked in the current University.

4.2.1. Gender of Respondents

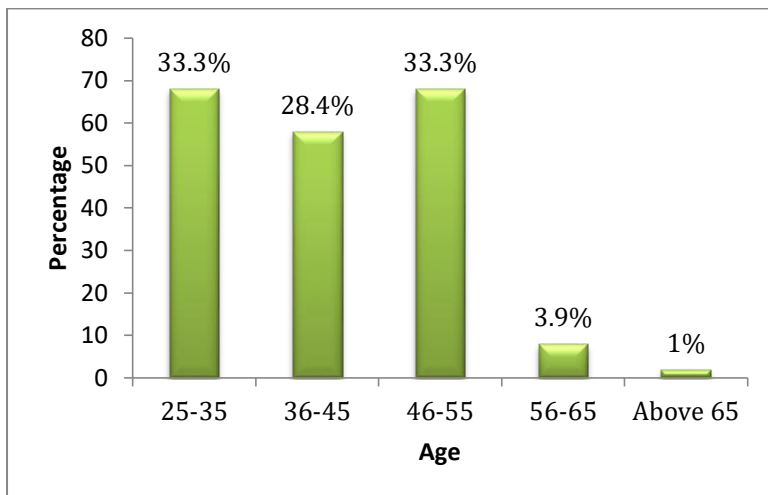


Source: researcher survey, 2021

Figure 4.1. Genders of Respondents

The study findings as presented in figure 4.2 revealed that 190 representing 93.14% of the respondents were males while 14 representing 6.86% of the respondents were females. Hence, the majority of the respondents were male. These findings concur with Aljunaibi (2014) who investigated the impact of talent management practices on employee engagement in semi-government organizations in Abu Dhabi, UAE and found that majority (participants were male and 29% of them case that majority are males due to the nature of work done at Jimma university. However, efforts should be made by the management of the university to convince or persuade more females to join the university. This will help promote equality. As Kireru (2013) stated that gender equality was very important as a trait, as it can be used to improve talent management of all the staff involved. He argued that it fosters teamwork and also creates a sense of unity and an aspect of working together with a common goal with every individual effort being important to the attainment of the overall objectives.

4.2.2. Age of Respondents

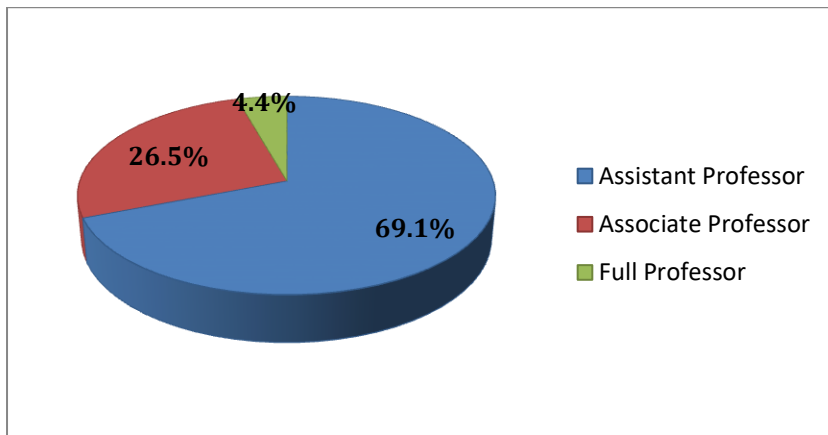


Source: researcher survey, 2021

Figure 4.2. Ages of respondent

The study sought to identify the different age categories of the respondents. As figure 4.2 shows, the majority of the respondents were aged between 25-35 and 46-55 years, as accounted for 136 of the respondents constituting 66.6%, followed by 58 of the respondents representing 28.4% in the age category of 36-45 years. While 8 of the respondents constituting 3.9% were between 56-65 years whereas, age categories of above 65 years were 2 respondents representing 1%. The findings indicate that majority of the respondents are in the economically active age group. These findings coincide with Waithiegeni Kibui (2015) who studied the effect of talent management on employees retention in Kenya's State Corporations and found that majority of the respondents were between the age of 36-40 years as accounted 35.1%, followed by 26.4% who aged between 31 to 35 years. In effect, she found a majority of the respondents in the economically and youthful age group.

4.2.3. Education ranks

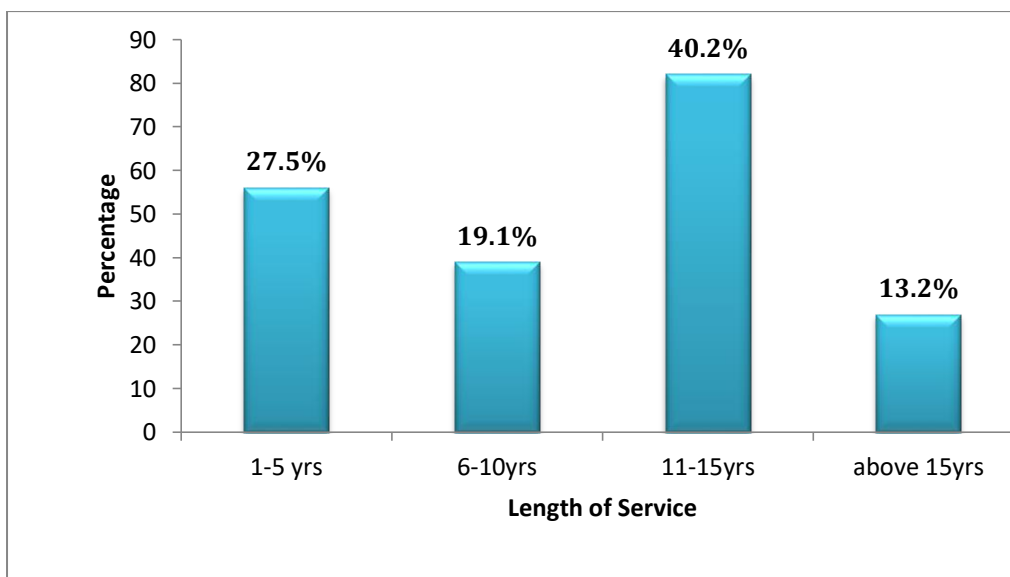


Source: researcher survey, 2021

Figure 4.3 Educational levels of respondents

The respondents were asked to indicate their education level in the university. Results in figure 4.3 revealed that 69.1% said they were assistant professors in their university, while 26.5% said they were associate professors, and 4.4% said they were full professors in the university. The findings revealed that the majority of the respondents were assistant professors and were followed by associate professors.

4.2.4. Length of Service



Source: researcher survey, 2021

Figure 4.4. Length of service

The respondents were asked to indicate how long they have been employed in the university. From the findings presented in figure 4.4, the majority (82) of the respondents representing 40.2% indicated they had served Jimma University for a period ranging between 11-15 years. The second highest value is 56 representing 27.5% of the respondents indicated they had served the university for 1-5 years. Whereas, 39 constituting 19.1% and 27 constituting 13.2% of the respondents specified they had served the university for periods ranging 6-10 years and above 15 years respectively. These findings differ with Waithiegeni Kibui (2015) who studied the effect of Talent Management on Employees Retention in Kenya’s State corporations and found that the majority (36.9%) of the respondents had served in the State Corporations for a period ranging between 4 to 6 years.

4.3. Descriptive Analysis

4.3.1. Talent Attraction

The first objective of the study was to investigate how talent attraction affects research performance.

Table 4.2. Attracting talent researchers

Statements	SD%	D%	N%	A%	SA%
My University has been actively involving in the communication and implementation of researcher's branding.	5.8	7.4	14.7	58.8	13.7
This University’s good working conditions and fair wages have enabled it to attract the right talents.	11.3	19.1	16.2	45.1	8.3
This University values a talent search matrix during selection to get the right researchers.	8.3	16.7	14.7	46.1	14.2
This University assures employees job security, to attract the right talent researchers.	5.9	16.7	16.7	51.5	9.3
Work-life balance in this University is a motivating factor to attract the right researchers.	9.8	10.8	14.2	53.4	11.8
Social networking facilities enhanced in this University motivating experienced researchers.	5.4	14.7	21.1	45.6	13.2

Source: researcher survey, 2021

Key: SD= strongly disagree, D= Disagree, N=Neutral, A=Agree, SA=strongly agree, and % =Percentage

NB: in the context of this study's analyses and discussions, agree and strongly agree are treated as one, so as disagree and strongly disagrees. Hence, all the findings that follow subsequently will be treated as such. However, the tables will display them separately.

a) Communication and implementation of researcher branding

The study sought to establish the extent to which the Jimma University was actively involved in the communication and implementation of the university brand. Active involvement of the university in communication and implementation of branding is crucial for talent attraction. Results in Table 4.2 show that 72.5% of the respondents positively agreed that their university was actively involved in communication and implementation of researcher branding. Results also revealed that 13.2% disagreed while 14.7% neutral with the statement. Findings agree with those in Kim (2008) who noted that talent attraction will be measured by communication and implementation of employer branding. The findings also agree with those in Armstrong (2011) who noted that the components of talent attraction included employer branding. The findings imply that the university is actively involved in communication and implementation of researcher branding and this may have contributed positively to talent attraction and the research performance of the Jimma University.

b) University's Good Working Conditions and Fair Wages

The study sought to establish the extent to which good working conditions and fair wages had enabled the university to attract the right talents. Good working conditions and fair wages in a university are determinants of talent attraction. Results in Table 4.2 show that 53.4% positively agreed that the university's good working conditions and fair wages had enabled it to attract the right talents. Results also reveal that 30.4% disagreed while 16.2% neither agreed nor disagreed with the statement. The findings agreed with those in Saleem (2006) who noted that an organization can help individuals satisfy their needs by providing good pay, proper working conditions, and other benefits. Findings also agreed with those in Wangethi (2009) who observed that organizations could provide basic needs through fair wages and safe working conditions. The findings imply that universities attract the right talents through good working conditions and this may have contributed positively to talent attraction. The findings also imply that favorable working conditions and fair wages may have contributed positively to research performance.

c) University Valued Talent Search Matrix

The study sought to establish the extent to which the university valued the talent search matrix. The matrix used during selection to get experienced, qualified, expertise, potential, and qualified researchers are important for talent attraction. Results in Table 4.2 shows that 60.3% of the respondents positively agreed with the statements that the university valued talent search matrix during selection to get experienced, qualified, and expert researchers results also revealed that 25% of the respondent disagreed with the same statements and 14.7% neither agreed nor disagreed with the statement. The findings agreed with those of Collings & Mellahi (2009) who noted that the talent search matrix allows recruiters to focus on the characteristics that are required on the job that has to be done.

The talent matrix elements to shape the image of the researchers needed includes experience, profile, qualification, expertise, and potential which can be summarized to experience, profile, and qualification. Expertise, potential, and qualification are important to the future development of the person who the university is seeking. The finding shows that the university' valued talent search matrix and this may have contributed positively to talent attraction. The findings also imply that the matrix used during selection to get experienced, qualified, expertise, potential, and qualified employees may have contributed positively to research performance.

d) Assurance of Employees Job Security

The study sought to establish whether there was an assurance of researcher's job security in university to attract the right talents. Job security in a company was a key determinant of talent attraction. Results in Table 4.2 shows that majority of the respondents 60.8% positively agreed with the statement that the university ensured researchers good Job security to attract the right talents while 22.6% of the respondent disagreed and 16.7% were said neither agreed nor disagreed with the statement. The findings agreed with those of Nzuve & Bundi (2012) who through his explanation of Maslow's motivation theory asserted that an organization can influence safety needs by providing job security, pension plans, insurance plans, safe and healthy working conditions. The findings also agree with Kelly (2013) whose findings indicated that the major components of talent attraction included salary packages, staff turnover among others. The findings imply that Jimma University is actively ensuring researcher's job security and this may have contributed positively to talent attraction and research performance.

e) Work-Life Balance and social networking facilities

The study sought to establish the extent to which work-life balance in the university was a motivating factor to right researchers. A work-life balance facility in a university was crucial for talent attraction. Results in Table 4.2 show that the majority of the respondents 65.2% positively agreed with the statement that work-life balance in the university was a motivating factor to their research employees. Results also revealed that 20.6% of the respondent disagreed with the statement and 14.2 were said neither agreed nor disagreed. In addition, the study sought to establish the extent to which social networking facilities in the university were a motivating factor to the right researchers. Results in Table 4.2 show that majority of the respondents 58.8% positively agreed with the statement that social networking facilities in the university were a motivating factor to their researchers.

Results also revealed that 20.1% of the respondent disagreed with the statement and 21.1 were said neither agreed nor disagreed. The findings concur with those of Kelly (2013) who surveyed 100businesses involved in engineering, finance, government, IT, manufacturing, and telecommunication sector, findings indicated that the major components of talent attraction included work-life balance, social networking, salary packages, benefits, company culture, recruitment styles, and staff turnover. The findings imply that Jimma University having a work-life balance and social networking facilities may have contributed positively to talent attraction and research performance in Jimma University.

4.3.2. Talent Recruitment

The second objective of the study was to establish how talent attraction affects research performance.

Table 4.3. Recruiting talent researchers

Statements	SD%	D%	N%	A%	SA%
This University's internal recruitment policy helps uplift researchers' morale.	7.8	24	17.2	46.1	4.9
Researcher applicants are fully informed about the qualifications required to perform the job before being hired.	3.7	17.6	16.2	46.6	16.2
There is a formal induction process designed to help recruits understand the University.	4.4	12.3	23	41.7	18.6
My university provides an orientation to me when I was applying to the university to make understand the University.	9.8	19.6	13.2	46.6	14.2

The University clearly defines the objectives of recruitment and specification in the recruitment process.	3.9	21.1	9.3	51.5	14.2
My University always recruits the best fit researchers to conduct research.	8.3	17.6	24.5	30.9	18

Source: researcher survey, 2021

Key: SD= strongly disagree, D= Disagree, N=Neutral, A=Agree, SA=strongly agree, and % =Percentage

a) Internal Recruitment Policy

The study sought to establish if the university's internal recruitment policy had helped to raise the loyalty and morale of their research employees. Internal recruitment policy in the university was crucial for talent recruitment. Results in table 4.3, show that 51% positively agreed that they had an internal recruitment policy that helped to raise the loyalty and morale of their researchers, 31.8% disagreed while 17.2% neither agreed nor disagreed with the statement. The findings agreed with those in Armstrong (2011) who noted that before going out the organization to look for talent, it is careful to consider in-house pool first as selecting an internal staff provides a moral boost for serving researchers and allows them to grow. This implies that internal recruitment policy may have contributed positively to talent recruitment and the research performance but, the management of the university needs to put measures in place to address these areas.

b) Inform requirement qualifications before being hired

The study sought to establish if the university fully provided information about the qualifications required to perform the job before being hired. Provide required qualifications to applicants in the university was crucial for talent recruitment. Results in table 4.3, show that 62.2% positively agreed that they had informed required qualifications to applicants in the university, 20.3% disagreed while 16.2% neither agreed nor disagreed with the statement. This implies that inform requirement qualifications to researchers before being hired may have contributed positively to talent recruitment and the research performance.

c) Formal induction process

The study sought to establish if the university's formal induction process had helped recruits to understand the University. The formal induction process in the university was crucial for talent recruitment. Results in table 4.3, show that 60.3% positively agreed that they had a formal induction process that helped recruits to understand the University, 16.7% disagreed while 23% neither agreed nor disagreed with the statement.

The study implies that a formal induction process designed to help recruits understand the University may have contributed positively to talent recruitment and the research performance.

d) Researchers orientation

The study sought to establish if the university provides an orientation to researchers when they were applying to the university to make understand the university. Provides orientation to researchers in the university was crucial for talent recruitment. Results in table 4.3, revealed that 60.8% positively agreed that the university provided orientation to researchers when they were applying to the university to make understand the university, 29.4% disagreed while 13.2% neither agreed nor disagreed with the statement. The study implies that the university provided orientation to researchers when they were applying to the university to make understand the university may have contributed positively to talent recruitment and the research performance.

e) Clearly defines the objectives of recruitment and specification

The study sought to establish if the university clearly defines the objectives of recruitment and specification in the recruitment process. Clearly defines the objectives of recruitment and specification in the recruitment process in the university was crucial for talent recruitment. Results in table 4.3, revealed that 65.7% positively agreed that the university clearly defined the objectives of recruitment and specification in the recruitment process, 25% disagreed while 9.3% neither agreed nor disagreed with the statement. The study implies that the university clearly defined the objectives of recruitment and specification in the recruitment process may have contributed positively to talent recruitment and the research performance.

f) Recruits best fit researchers

The study sought to establish if the university always recruits best fit researchers to conduct research. Always recruits best fit researchers in the university were crucial for talent recruitment. Results in table 4.3, revealed that 48.9% positively agreed that the university always recruits best fit researchers, 25.9% disagreed while 24.5% neither agreed nor disagreed with the statement. The study implies that the university always recruits best fit researchers may have contributed positively to talent recruitment and the research performance but, management of the university needs to put measures in place to address these areas.

4.3.3. Talent Cultivation

The third objective of the study was to establish how talent cultivation affects research performance.

Table 4.4. Cultivation of talented researchers

Statements	SD%	D%	N%	A%	SA%
In my University appropriate learning strategies have been put in place.	12.9	36.7	20.3	28.3	1.8
My University identifies the research employees who need training and development.	17.8	35.2	22.1	24.1	0.8
My University determines the level of learning and development research employees need before conducting training.	11.9	28.6	22.5	30.6	6.4
In my University research employees are continuously acquiring new knowledge, skills, and mastering new ways of doing things.	13.9	28.1	20.2	29.5	8.3
In my University in the house development program is commonly provided to researchers.	14.3	31.1	23.1	27.2	4.3
The researchers focus more on Teamwork skills Development in this University.	13.8	29.7	24.1	25.1	7.3

Source: researcher survey, 2021

Key: SD= strongly disagree, D= Disagree, N=Neutral, A=Agree, SA=strongly agree, and % =Percentage

a) Learning Strategies

The study sought to establish whether the Jimma University had put in place appropriate learning strategies. Appropriate learning strategies in the university boost research performance. Table 4.4 shows that 49.6% of the respondents disagreed with the statement that in their university appropriate learning strategies had been put in place, while only 30.1% of the respondents positively agree with the statement. Results also revealed that 20.3% of the respondents neither agree nor disagree with the statement. The findings disagree with those in Nda & Fard (2013) who emphasized the need for learning and development by saying that organizations which operated in fast-changing environment needed to adapt to stay at the forefront. The findings imply that Jimma University is not actively involved in putting in place appropriate learning strategies and this may have not contributed positively to cultivation and research performance.

b) Learning and Development Need Identification

The study sought to establish whether the Jimma University identified the researchers who needed learning and development. Appropriate learning and developments need identification in Jimma University was crucial to research performance. Table 4.4 shows that 24.9% positively agreed with the statement that their university identified the researchers who need learning and development they need before conducting training while 53% disagreed with the statement. Results revealed that 22.1% neither agreed nor disagreed with the statement. The findings disagree with those in Harburg (2003) who noted that the organizations which practice effective learning and development began with their employees. The findings imply Jimma University is not involved in identifying the researchers who need learning and development and this may have not contributed positively to learning and development. The findings also imply that Jimma University is not involved in learning and development need identification and that may have not contributed statistically effect on research performance.

c) Identification of level of learning and development

The study sought to establish whether the Jimma University identified the level of learning and development they needed before conducting training and the duration during which learning took place. Identified the level of learning and development in Jimma University were crucial to research performance. Table 4.4 shows that 37% positively agreed with the statement that their university identified the level of learning and development they needed before conducting training while 40.5% disagreed with the statement. Results revealed that 22.5% neither agreed nor disagreed with the statement. The findings disagree with Lyria (2015) who noted that the organizations involved in identified the level of learning and development had contributed positively to their company listed in NSE performance. The findings also imply that Jimma University is not involved in identified the level of learning and development and may have not contributed statistical effect to their research performance.

d) Acquiring new Knowledge and Skills

The study sought to establish whether the Jimma University research employees were continuously acquiring new knowledge and skills and mastering new ways of doing things. Acquisition of new knowledge and skill in the university was a key determinant of learning and development. Table 4.4 shows that 37.8 of the respondents were positively agreed with the statement that in their university research employees were continuously acquiring new knowledge and skills, and mastering new ways of doing things, while 42% of the respondents

disagreed with the statement and 20.2% of the respondents neither agreed nor disagreed with the statement.

The findings disagreed with those of Ballesteros & Inmaculada (2010) who indicated that the human resource department was involved in the attraction and evaluation of talented people with high potential in the organization, they also had to develop the talent pool meaning they train them in skills that the company needs at that time and in future to exploit their full potential and direct it to improve the organization. The findings imply that Jimma University research is not actively involved in providing new knowledge and skills and this may have not contributed statistical effect to cultivation. The findings also imply that mastering new ways of doing things may have not contributed statistical effect to research performance.

e) In - House Development Programme

The study sought to establish whether the Jimma University commonly used in-house (within the university) development program. House development programs are important learning and development strategy. Table 4.4 shows that 31.5% of respondents were positively agreed with the statement that in their university a house development program was commonly used, while 45.4% of the respondents disagreed with the statement and 23.1% of the respondents neither agreed nor disagreed with the statement. The findings disagree with those of the Ford et al. (2010) study on learning and talent development results which indicated that in-house development programs at 50% and ranked among the top effective learning and development practices. The findings imply that Jimma University does not use a house development program and may not have contributed statistical effect on learning and development. The findings also imply that Jimma University does not use of house development program and may not have contributed statistical effect on research performance.

f) Teamwork skills Development

The study sought to establish whether the Jimma University researchers focus more on teamwork skills development. Teamwork skills development was a key determinant of learning and development. Results in Table 4.4 show that 32.4% of respondents were positively agreed with the statement that in their university the researchers focused more on teamwork skills development, while 21.5% of the respondents disagreed with the statement and 18.1% neither agrees nor disagreed with the statement. The findings did not concur with those of Lockwood (2006) who found talent development as an important component in the maintenance of competitive advantage in the organization. The study identified that developing teamwork skills, retaining high performers, and developing a succession pool were among the challenges facing human resource managers.

The study implies that Jimma University researchers did not focus more on teamwork skills development and may not have contributed statistical effect on learning and development, and research performance.

4.3.4. Talent Retention

The fourth objective of the study was to determine the effects of talent retention on the research performed at the Jimma University.

Table 4.5. Retention of talent researchers

Statements	SD%	D%	N%	A%	SA%
The University ensures my University image remains well all the time to retain talented researchers.	6.9	9.8	22.5	53.4	7.4
My University has competitive compensation system than other Universities in the country to motivate tough researchers.	14.7	16.2	17.6	36.8	14.7
My University flexible working hour is a motivating factor to maintain the right researchers.	1.5	10.8	11.8	61.8	14.2
My University offers training opportunities to enhance career growth hence retain potential researchers.	10.8	18.1	12.7	44.1	14.2
In my University, there is an effective performance assessment that enhances the researchers' confidence.	6.9	17.6	25	38.7	11.8
My University ensures the researchers are satisfied and motivated all the time.	15.2	21.1	12.3	39.2	12.3

Source: researcher survey, 2021

Key: SD= strongly disagree, D= Disagree, N=Neutral, A=Agree, SA=strongly agree, and % =Percentage

a) University Image

The study sought to establish the extent to which the university image remained good all the time to retain talented researchers. A good university image was crucial to talent retention. Results in Table 4.5 show that the majority 60.8% positively agreed that their university ensured their university image remained good all the time to retain their talented researchers. Results also revealed that 16.7% disagreed while 22.5% neither agreed nor disagreed with the statement. The findings agreed with those in Armstrong (2011) who noted that other factors that influence talent retention are company image, recruitment, selection and deployment, leadership (employees join organizations and leave managers), learning opportunities as well as performance appreciation and rewards.

This implies that university image should be maintained to retain talented researchers as this will contribute positively to research performance.

b) Competitive Compensation System

The study sought to establish if the university had a competitive compensation system in comparison to other universities in the country. A competitive compensation system in the university was fundamental for talent retention. Results in Table 4.5 show that 51.5% positively agreed that their university had a competitive compensation system in comparison to other universities in the same country which was a motivating factor to their researchers, 30.9% disagreed while 17.6% neither agreed nor disagreed with the statements. The finding disagrees with those of McDonald & O'Callaghan (2008) who emphasize that the only way for organizations to retain talented employees is through making sure that the employees are competitively remunerated. He identified the strategies that can assist in the retention of employees to include signing bonuses, stock options with a maturity clause, and market-related incentives and pay. The findings also disagree with Vaiman & Vance (2010) who found the monetary reward as an essential tool to retaining talent. This implies that a competitive compensation system should be improved to retain talented researchers to achieve good research performance.

c) University Flexible Working Hours

The study sought to establish if the university working hours were a motivating factor to their researchers. University flexible working hours were crucial for talent retention. Results in table 4.5, show that 76% positively agreed that the university flexible working hours was a motivating factor to their researchers, 12.3 % disagreed while 11.8% neither agreed nor disagreed with the statement. The findings agree with those in Nzuve & Bundi (2012) who argued that company policies like having flexible working hours and offer of insurance and education for children cover are related to employee retention and hence talent management which leads to good organizational performance. The findings also agree with Tovar & Lockwood (2008) who said that offering an attractive competitive benefits package with components such as flexible working hours motivates employees to commit themselves to an organization. The findings imply that Jimma University having flexible working hours may have contributed positively to talent retention. The findings also imply that the company's flexible working hours may have contributed positively to research performance.

d) Researchers Training opportunity and Career growth

The study sought to establish the extent to which the university, supported researchers' training and career growth. Researchers' training and career growth in a university are crucial for talent retention. Results in Table 4.5 reveal that 58.3% said positively agree with the statement that their university supported researchers' training opportunities and career growth while 28.9% of the respondents disagreed with the statement while 12.7% were neutral of the statement. The findings were consistent with those in Oehley, (2007) who suggested that the employees measure value proposition based on training opportunities, flexibility, and reputation of the organization. It also positively agreed with those of World at work (2009) which revealed that development and career opportunities were most important to retain talented employees to all the big certified public accounting firms in the United States. The findings imply that Jimma University is involved in researchers' training and career growth and this may have contributed positively to talent retention. The findings also imply that training opportunities and career growth may have contributed positively to research performance.

e) University effective performance assessment

The study sought to establish to which extent the university's effective performance assessment was a motivating factor to their researchers. Results on table 4.5 clearly show that the respondents constituting 50.5% positively agreed that their university provides effective performance assessment to enhance the researcher's confidence while 24.5% disagreed and 25% of them were neutral. Hence, the management of the university needs to put measures in place to address these areas.

f) Researchers Satisfaction and motivation

The study sought to establish if the university ensured researchers were satisfied and motivated all the time. The researcher's satisfaction and motivation in university were crucial to talent retention. Results in Table 4.5 show that 51.5% positively agreed that their university ensured researchers were satisfied and motivated all the time while 36.3% disagreed and 12.3% neither agreed nor disagreed with the statement. The findings concurred with those of Nzube & Bundi (2012) who asserted that motivational factors are those factors that lead to satisfaction of employees. These factors motivate employees to perform. These factors incorporate recognition, sense of achievement, growth, and promotion opportunities responsibility, and meaningfulness of the work.

The findings also agree with those of Hughes & Rog (2008) who found that various organizations around the world have similarities and differences in the strategies they use to retain talent for example in Canada, the determinants of retention include employee satisfaction and motivation. The findings imply that Jimma University has emphasized on researcher’s satisfaction and motivation and this may have contributed positively to talent retention. The findings also imply that the researcher’s satisfaction and motivation may have contributed positively to research performance.

4.4.5. Research performance

The research performance was the dependent variable of the study. The elements that measured the research performance of Jimma University were: creativity and innovation, researcher’s productivity, improvement of community service and an increasing number of research centers, number of core research laboratories, number of research publications on internationally reputable journals. Descriptive results on this are presented in table 4.6.

Table 4.6. Research performance

Statements	SD%	D%	N%	A%	SA%
I believe the creativity and innovation performance of the university increases over the years.	8.3	10.8	11.3	56.4	13.2
I believe the researcher’s productivity is increasing.	5.9	10.3	17.6	53.9	12.3
I believe Jimma university is increasing community service through research findings.	3.4	7.4	16.2	52.9	20.1
I believe there is an increasing number of research centers.	3.9	11.3	11.3	57.8	15.7
I believe more attention is given to core research laboratories.	10.3	10.3	10.8	43.1	25.5
I believe research publication on internationally reputable journals is increasing.	2.9	6.9	10.3	52.5	27.5

Source: researcher survey, 2021

Key: SD= strongly disagree, D= Disagree, N=Neutral, A=Agree, SA=strongly agree, and %=Percentage

Creativity and innovation

The study sought to establish if the university’s creativity and innovation performance of the university increases over the years. Creativity and innovation performance of the university was crucial for research performance. Results in Table 4.6 show that 69.6% positively agreed that they believed that creativity and innovation performance of the university increases over the years, 19.1% disagreed while 11.3% neither agreed nor disagreed with the statement.

This finding concurs with JU Strategic planning (2016-2020) of excellence in Research and Technology Transfer. The findings imply that the increase of university's creativity and innovation performance has contributed positively to research performance.

Researcher's Productivity

The study sought to establish if the university's researchers increase their productivity. The researcher's productivity in the university was crucial for research performance. Results in Table 4.6 show that 66.2% positively agreed that they believed their university researcher's productivity was increasing, 16.2% disagreed while 17.6% neither agreed nor disagreed with the statement. This finding concurs with Lyria's (2015) study on the effect of talent management on organizational performance in companies listed in the Nairobi securities exchange in Kenya. Additionally, the finding agreed with Van Dam (2004) who asserted that people who experience more career support are more productive. The findings imply that the increase of researcher's productivity has contributed positively to productivity and hence, increase in research performance.

Increasing community service

The study sought to establish if the university is increasing community service through research findings. Increasing community service through research findings was crucial for research performance. Results in Table 4.6 show that 73% positively agreed that the university is increasing community service through research findings, 10.8% disagreed while 16.2% neither agreed nor disagreed with the statement. The findings imply that increasing community service through research findings has contributed positively to research performance.

Number of research centers

The study sought to establish if the university increasing the number of research centers. Increasing the number of research centers was crucial for research performance. Results in Table 4.6 show that 73.5% positively agreed that the university is increasing the number of research centers, 15.2% disagreed while 11.3% neither agreed nor disagreed with the statement. This finding concurs with JU Strategic planning (2016-2020) of excellence in Research and Technology Transfer. The findings imply that increasing the number of research centers has contributed positively to research performance.

Core research laboratories

The study sought to establish if the university was given more attention to core research laboratories. Core research laboratories were crucial for research performance. Results in table 4.6 majorities of the respondents show that 68.6% positively agreed that the university was giving more attention to core research laboratories, 20.6% disagreed while 10.8% neither agreed nor disagreed with the statement. This finding concurs with JU Strategic planning (2016-2020) of excellence in Research and Technology Transfer. The findings imply that giving more attention to core research laboratories has contributed positively to research performance.

Research publication

The study sought to establish if the university research publication on internationally reputable journals is increasing. Research publication on internationally reputable journals was crucial for research performance. Results in table 4.6 majorities of the respondents show that 80% positively agreed that the university research publication on internationally reputable journals was increasing, 9.7% disagreed while 10.3% neither agreed nor disagreed with the statement. This finding concurs with JU Strategic planning (2016-2020) of excellence in Research and Technology Transfer. The findings imply that research publications on internationally reputable journals have contributed positively to research performance.

Table 4.7. Five scaled Likert criterion

No	Mean range	Response option
1	1 to 1.80	Strongly disagree
2	1.8 to 2.6	Disagree
3	2.6 to 3.4	Neutral
4	3.4 to 4.20	Agree
5	4.20 to 5.00	Strongly agree

Source: (Silzer & Church, 2010)

Standard deviation is a commonly used measurement of variability or diversity used in statistics and probability assumptions. It indicates how much variation or dispersion there is from the average (mean, or expected value). The minimum standard deviation shows that the data points tend to be very close to the mean, whereas a high standard deviation indicates that the data are spread out over a large range of values.

Table 4.8. Descriptive summary of the overall

S.N	Variables	Number of items	Mean	Standard deviation
1	Attraction of talent researchers	204	3.696	0.88077
2	Recruitment of talent researchers	204	3.440	0.86110
3	Cultivation of talent researchers	204	3.363	0.93958
4	Retention of talent researchers	204	3.404	0.83257
5	Research performance	204	3.410	0.89613

Source: researcher survey, 2021

Table 4.8 presents the summaries of the independent and dependent variables of the study undertaken by their mean and standard deviation. The above table listed the numbers of sampled respondents of the study mean, and standard deviations values of the categorical variables of the study given the responses from the selected respondents of the study. As stated in the above table, attraction talent researchers' have 3.696 of mean and 0.881 of standard deviation and it is within the range of 3.4 and 4.20. It indicates that the respondents were positively agreed with their attraction of talent researchers exercised by the university and its standard deviation indicates that the data points tend to be very close to the mean. In the same way, the recruitment of talented researchers has a 3.440 mean value and 0.861 standard deviations. Still, it is within the range of 3.4 and 4.20. It shows that the respondents were positively agreed with their recruitment of talented researchers and its standard deviation indicates that the data points tend to be very close to the mean.

From the same table, the cultivation of talent researchers has 3.363 of mean value and 0.940 of standard deviation. It is found within the range of 2.6 and 3.4. It reveals that the respondents were neutral with their cultivating of talent researchers and its standard deviation indicates that the data points tend to be not close to the mean when compared with other variables. On the other hand, retention of talent researchers has 3.404 of mean value and 0.833 of standard deviation and it is within the range of 3.4 and 4.20. It pertains that the respondents were positively agreed with their retaining of talent researchers implemented by the university and its standard deviation indicates that the data points tend to be very close to the mean.

Lastly, the table indicates the dependent variable (research performance), it reveals that research performance has 3.410 of mean value and 0.896 of standard deviation. It is located within the range of 3.4 and 4.2. It indicates that the respondents were positively agreed with their improvement of research performance and its standard deviation indicates that the data points tend to be very close to the mean.

4.5. Inferential Analysis

4.5.1. Correlation Analysis

A correlation analysis was performed to determine if there were any relationships between the independent variables (talent attraction, talent recruitment, talent cultivation, and talent retention) and the dependent variable (research performance). To analyze the relationship between variables inferential techniques were used. As stated by Apalia (2017) descriptive statistics provides us with the techniques of mathematically and graphically presenting information that gives an overall picture of the data collected.

To analyze data Pearson's correlation analysis was used and the correlation is significant at 0.05 values. To depict the results of the correlation, there are standards. According to Miner (2015) the criterion for evaluating the magnitude of a correlation was as follows: If the correlation coefficient (r) 0.01 - 0.29 the strength of the relationship is weak when correlation coefficient (r) 0.30 - 0.49 the relationship is medium/moderate and when the correlation coefficient (r) 0.50 - 1.0, the strength of the relationship is strong. A correlation coefficient of 1 or -1 indicates the strong relationship and the Pearson correlation coefficient (r) of zero or if it is very close to zero, it shows us there is no relationship/very weak relationship between variables. So, the correlation results of this study are analyzed based on the above correlation coefficient standards of (Somekh & Lewin, 2005).

Table 4.9. Pearson's Correlation between Dependent and Independent variables

		TRP	TA	TR	TC	TM
TRP	Pearson Correlation	1				
	Sig. (2-tailed)					
TA	Pearson Correlation	.661**	1			
	Sig. (2-tailed)	.000				
TR	Pearson Correlation	.599**	.559**	1		
	Sig. (2-tailed)	.000	.000			
TC	Pearson Correlation	.652**	.644**	.724**	1	
	Sig. (2-tailed)	.000	.000	.000		
TM	Pearson Correlation	.730**	.747**	.608**	.753**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N					204

Correlation is significant at 0.05

Source: researcher survey, 2021

Note, TRP= Research performance, TA= Talent Attraction, TR= Talent Requirement, TC= Talent Cultivation and TM= Talent Retention/Maintaining

Independent Variables: TA, TR, TC, and TM

Dependent variable: TRP

Table 4.8 represents three correlations, (1) correlation between the independent variables, (2) correlation between independent variables (talent attraction, talent recruitment, talent cultivation, and talent retention) and dependent variable (research performance), and (3) correlation between the independent variables (talent management practices jointly) and dependent variable (research performance).

Talent attraction has relationship with talent requirement with $r = 0.559$, with talent cultivation with $r = 0.644$, and with talent retention with $r = 0.747$. Here talent attraction has a high relationship with talent retention. Similarly, talent requirement has a relationship with talent cultivation with $r = 0.724$, and with talent retention with $r = 0.608$. When we compare this correlation talent requirement has a high association with talent cultivation. At the last, talent cultivation has a relationship with talent retention with $r = 0.753$. This correlation is strong. Therefore there was a positive relationship between all the independent variables. As a result of the correlation table above, there is a relationship between talent attraction and research performance with $r = 0.661$, talent requirement and research performance with $r = 0.599$, talent cultivation and research performance with $r = 0.652$, and talent retention and research performance with $r = 0.730$. In this case, there is a statistically high strong relationship between talent retention and research performance.

4.5.2. Multiple Linear Regressions

Before applying multiple linear regression models, different assumption tests were tested to ensure the appropriate use of data analysis. Those assumption tests include the sampling test, Multicollinearity tests, normality test, linearity test, and homoscedasticity test.

4.5.2.1. Assumptions of Multiple Linear Regressions

1. Sample size

A sample must represent well the characteristics of the population. With a small sample size, one may obtain a result that does not generalize to the target population. If results do not generalize to other samples, then they are of little scientific value. Most researchers tend to use Tabachnick & Fidell's (2007) formula for calculating sample size requirements for multiple regressions.

These authors took into account the number of independent variables that researchers wish to use: $N > 50 + 8m$ (where N = sample size and m = the number of independent variables). In the case of this study, the number of independent variables is 4, and the sample size is 267. Substituting these values into the formula, we have; $243 > 82$. Hence, the assumption on sample size requirements for multiple regressions was met by the researcher before analyses.

2. Multicollinearity Test

Before the analysis, a multicollinearity diagnostic test was conducted to ensure that the data was suitable for regression analysis. Multicollinearity refers to the statement that the independent variables are uncorrelated. It occurs when several independent variables correlate at high levels with one another (Ferguson & Garza, 2011).

It is a problem that occurs with regression analysis when there is a high correlation of at least one independent variable with a combination of the other independent variables. Menard (1995) states that a tolerance value less than 0.1 almost definitely shows a serious collinearity problem and a tolerance value below 0.2 indicates a potential collinearity problem. Tolerance is an indicator of how much of the changeability of the particular independent is not explained by the other independent variables in the model. Meyer et al. (2004) also postulates that a VIF (Variance Inflation Factor) value greater than 10 calls for more concern on collinearity problems. In addition, a VIF value that exceeds 5 indicates a likely collinearity problem. As indicated in the table below, there is no existence of multicollinearity problem among the explanatory variables as tolerance values are greater than 0.2 and VIF values less than 5. The researcher concludes that there is no significant data problem that would lead to say the assumptions of multiple regressions have been violated.

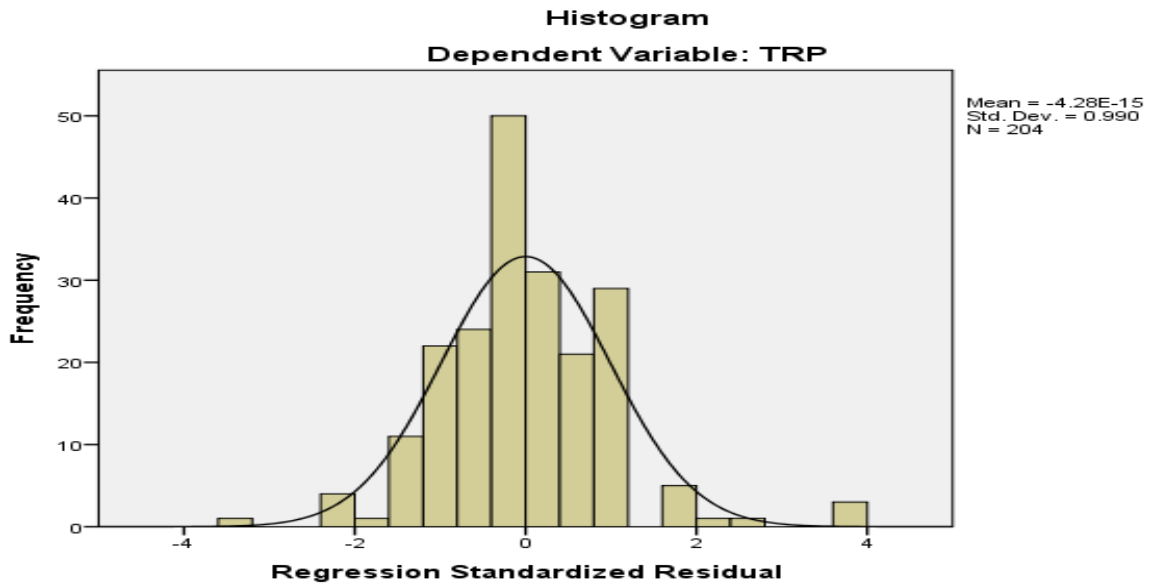
Table 4.10. Multicollinearity among Explanatory Variables

Variables	Tolerance	VIF
Attraction of talent researcher	.420	2.381
Recruitment of talent researchers	.460	2.176
Cultivation of talent researchers	.318	3.146
Retention of talent researchers	.314	3.180

Source: researcher survey, 2021

3. Normality

Normality refers to the normal distributions of the residuals about the predicted dependent variable scores. This assumption is based on the shape of normal distribution and gives the researcher knowledge about what values to expect (Keith, 2019). Normality tests are used to verify whether a data set is well-modeled by a normal distribution or not or to compute how probable an underlying random variable is to be normally distributed (Gujarati et al., 2012). Normality can be verified through histograms of the standardized residuals (Stevens, 2009). Histograms are bar graphs of the residuals with a superimposed normal curve that show the distribution. As depicted in the figure below; which is an example of a histogram with a normal distribution from the SPSS software, there is no normality problem on the data used for this study.

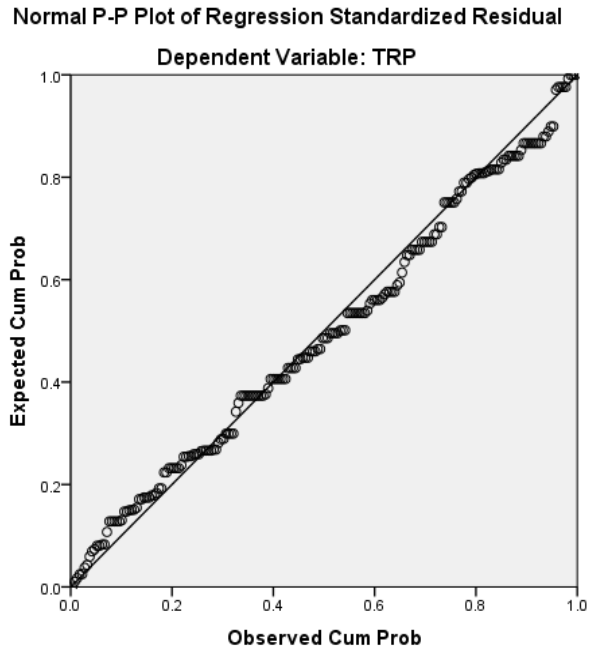


Source: researcher survey, 2021

Figure 4.5. Histogram for normality test

4. Linearity

Linearity has to with the residuals having a straight-line relationship with predicted dependent variable scores. It shows the dependent variable as a linear function of the predictor variables. Multiple regressions can exactly estimate the association between dependent and independent variables when the relationship is linear. If the relationship between the dependent and independent variables is not linear, the results of the regression analysis will under-or over-estimate the true relationship of the variables (Osborne & Waters, 2002). According to Stevens (2009), linearity can be best checked by normal p-plot residual. As shown in the figure below, the relationship between the dependent and independent variables is linear, hence, no linearity problem on the data used for this study.



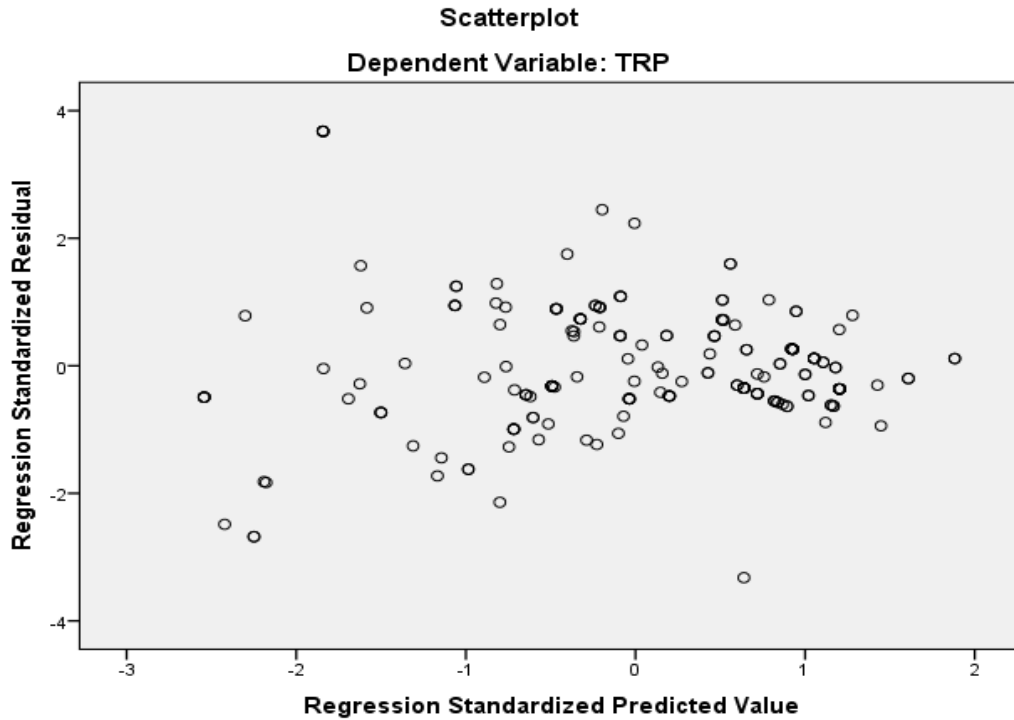
Source: researcher survey, 2021

Figure 4.6 P-P Plot for normality test

Figure 4.6: The regression model assumption of linearity in the study. As shown in figure 4.5 above, the change in the dependent variable is more related to the change in the Independent Variables. Therefore, there is no linearity problem on the data for this study and residual follow at a straight line.

5. Homoscedasticity

The statement of homoscedasticity refers to the same variance of errors across all levels of the independent variables (Osborne & Waters, 2002). This describes that researchers assume that errors are spread out consistently among the variables. Statistical software scatter plots of residuals with independent variables are the method for evaluating this assumption (Keith, 2019). Ideally, residuals are randomly scattered around zero providing even distribution (Osborne & Waters, 2002). To check this assumption scatter plot was generated for the model. As shown in the figure below, the error variance is constant since most scattered plot attributes are around zero and near the horizontal line. Therefore, there is no violation of homoscedasticity postulation in this study.



Source: researcher survey, 2021

Figure 4.7 scatter plot of homoscedasticity

The result of the above assumptions test reveals that this data is fit for multiple linear regressions. Generally, based on these tests there were no samples, Multicollinearity, normality, linearity, and homoscedasticity tests problem to precede to the multiple linear regressions analysis.

4.6. Multiple Linear Regression Analysis for the Overall Model

This section presents multiple linear regression analyses for the overall model to test the combined effects of the independent variables on the dependent variable. Thus, to assess the effects of talent management practices on the research performance of Jimma University. The regression equation is as follows;

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$$

Where;

Y= is research performance (dependent variable).

β_0 is the intercept or the constant which is the value of the dependent variable when all the independent variables are 0.

ϵ is the error term or natural deviation in the model.

$\beta_1, \beta_2, \beta_3, \beta_4$ = Regression coefficients of the predictors (independent variables) which measure the change induced by $X_i; i=1, 2, 3, 4$ on Y .

X_1 = Attraction of talented researchers.

X_2 = Recruitment of talented researchers.

X_3 = Cultivation of talented researchers.

X_4 = Retention of talented researchers.

At 5% level of significance and 95% level of confidence

When the p-value is greater than 0.05 reject the hypothesis (i.e. at $p > 0.05$)

Table 4.11. Model Fit for all the Independent Variables and the Dependent Variable

Model	R	R Square	Adjusted R Square	Std. error of the Estimate
1	0.770 ^a	0.592	0.584	0.527

Source: researcher survey, 2021

Regression results in table 4.10 indicate that the goodness of fit for the regression between the dependent variable and the independent variables is satisfactory. The correlation coefficient of 0.770 (77%) indicates that the independent variables have a significantly high positive relationship with research performance. An adjusted R squared of 0.584, implies that 58.4% of the variances in research performance can be explained by the combined effect of the predictor variables (Attraction of talent researchers, Recruitment of talent researchers, Cultivation of talent researchers, and Retention of talent researchers). The remaining variances on the dependent variable could be explained by other explanatory variables not included in this study.

Table 4.12: ANOVA for Overall Model

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	80.319	4	20.080	72.313	.000 ^b
Residual	55.258	200	0.278		
Total	135.578	204			

Source: researcher survey, 2021

From table 4.11, it is evident that the overall model was statistically significant, that is to say, the independent variables were good joint explanatory variables/determinants for research performance. This is so, given F statistic of 72.313 and a probability value of 0.000 (i.e. $F=72.313, P\text{-value} = 0.000$).

The probability value of (0.000) shows that there is a very low possibility that the statement “overall regression model was insignificant” was true and it was, therefore, possible to conclude that the statement was untrue. Hence, the overall regression model was significant.

Table 4.13. Regression Coefficients and Parameters of Estimates

Variable	Unstandardized		Standardized		T	Sig.
	Coefficients		Coefficients			
	B	Std. Error	Beta			
Constant	0.838	0.200		4.181	0.000	
Talent attraction	0.229	0.078	0.204	2.922	0.004	
Talent recruitment	0.163	0.063	0.173	2.588	0.010	
Talent cultivation	0.095	0.083	0.092	1.144	0.254	
Talent retention	0.357	0.072	0.403	4.997	0.000	

Source: researcher survey, 2021

From table 4.12 above, the possible value of Y (research performance) when all the independent variables are equal to zero is 0.838 at a p-value of 0.000.

The above table indicates that the attraction of talented researchers has a significant positive relationship with research performance. This is shown by the regression analysis value (t-value) of 2.922, which is greater than 2, and p-value of 0.004 which is less than 0.05 at a 95% level of confidence. The beta value of 0.229 implies that an increase in the effectiveness of attraction of talented researchers by 1 unit leads to an increase in research performance by 0.229 units, assuming the other variables are held constant. This implies that why the null hypothesis: “Attraction of talent researchers has no significant effect on the research performance of Jimma University” was rejected. This finding is in line with Poorhosseinzadeh¹& Subramaniam's (2012) study that was carried out through a quantitative research design on Malaysian multinational companies found a positive and significant relationship between talent attraction and performance in an organization at a p-value <0.05 and this result was supported by developed Maslow (1967) need of hierarchy theory to attract talented researchers.

It is also evident from the table that recruiting talented researchers has a significant positive relationship with research performance. This is so due to its t-value of 2.588, which is greater than 2, and p-value of 0.010 which is less than 0.05 at a 95% level of confidence. Its beta value of 0.163 indicates that an increase in the effectiveness of recruitment of talented researchers by 1 unit leads to an increase in research performance by 0.163 units. This implies that why the null hypothesis: “Recruitment of talented researchers has no significant effect on the research performance of Jimma University” was rejected. The study agrees with Obeidat et al.'s(2018)study on the effect of talent management on organizational effectiveness in the Healthcare Sector, which revealed that recruitment was statistically and significantly related to organization performance at a p-value<0.05.

However, the cultivation of talented researchers as seen from the same table has an insignificant positive relationship with research performance. This is shown by its regression analysis value (t-value) of 1.144, which is less than 2, and a p-value of 0.254 which is greater than 0.05 at a 95% level of confidence. The beta value of 0.095 implies that an increase in the effectiveness of cultivation of talented researchers by 1 unit leads to an increase in research performance by 0.095 units. It is very low influence indeed. Based on this, the cultivation of talented researchers had the least or insignificant influence on research performance. This further supports and explains why the null hypothesis: “Cultivation of talent researchers has no significant effect on the research performance of Jimma University” was accepted or failed to reject. This finding inconsistent with Lyria's (2015) study on the effect of talent management on organizational performance in companies listed in the Nairobi securities exchange in Kenya, which found that the relationship between learning and development and organizational performance was positive and significant at a p-value<0.05.

It can further be deduced that retention of talented researchers as seen from the table has a significant positive relationship with research performance. Retention of talented researchers has the highest influence on research performance as compared to attraction of talented researchers, recruitment of talented researchers, and cultivation of talented researchers. This is shown by the regression analysis value (t-value) of 4.997, which is greater than 2, and p-value of 0.000 which is less than 0.05 at a 95% level of confidence.

Its beta value of 0.357 indicates that an increase in the effectiveness of the retention of talented researchers by 1 unit leads to an increase in research performance by 0.357 units. This implies that why the null hypothesis: “Recruitment of talented researchers has no significant effect on the research performance of Jimma University” was rejected. These findings concur with Lyria's (2015) study on the effect of talent management on organizational performance in companies listed in the Nairobi securities exchange in Kenya, which found that talent retention had a positive and significant influence on organization performance at a p-value < 0.05. In addition, this result was consistent with the equity theory of motivation which was advanced by Adams (1965) and Herzberg (1974) two-factor theory; various job factors result in satisfaction while others prevent dissatisfaction.

After the critical analysis, the study model becomes;

$$\text{Research Performance (Y)} = 0.838 + 0.229X_1 + 0.163X_2 + 0.357X_4$$

Where

$$B_0 = 0.838 (\text{constant})$$

$$B_1X_1 = 0.229 (\text{Attraction of talented researchers})$$

$$B_2X_2 = 0.163 (\text{Recruitment of talented researchers})$$

$$B_4X_4 = 0.357 (\text{Retention of talented researchers})$$

At 5% level of significance and 95% level of confidence

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The aim of this chapter is to presents the summary of the study, conclusions, the necessary recommendations, and suggestions for further studies. The study sought to establish the effects of talent management on research performance at Jimma University. The summary is done in line with the research questions and objectives of the study based on the output of the descriptive and inferential statistical analyses used to test the research hypothesis of the study. Each recommendation traces directly to each conclusion.

5.1. Summary of the Findings

The main purpose of this study is to determine the effect of talent management practice on research performance and specifically aimed at analyzing the effect of attraction of talent researchers, recruitment of talent researchers, cultivating of talent researchers, and retention of talent researchers on research performance in Jimma University. A cross-sectional survey design was used and a stratified simple random sampling technique was employed to enable select the respondents from the nine strata (College) of Jimma University. The study population was 617 assistant professors and above. The study revealed that attracting talented researchers had a positive influence on the research performance.

Results of inferential statistics such as ANOVA presented that attracting talent which is a component of talent management has a positive and significant effect on the research performance in Jimma University. The findings further indicated that Jimma University has practiced talent attraction and this has an effect on research performance. This observation was arrived at because the majority of the respondents agreed with the statements that their university was actively involved in communication and implementation of researchers branding, the university's good working conditions and fair wages has enabled to attract the right talents, the university has value talent search matrix during selection to get talent researchers, in work-life balance as well as social networking facilities in their university was a motivating factor to their researchers and that they ensured job security to attract the right researchers. The null hypothesis was rejected by regression results and this implied that attracting talented researchers had a significant effect on research performance.

The result indicates that recruiting talented researchers had a significant effect on research performance. Results of inferential statistics such as ANOVA revealed that recruiting talent which is a component of talent management had a positive and significant effect on the research performance in Jimma University. The findings also further indicated that major of respondent agreed with the statement that, this university's internal recruitment policy helps uplift researchers' morale, researcher applicants are fully informed about the qualifications required to perform the job before being hired, there is a formal induction process designed to help recruits understand the university, the university provides an orientation to me when I was applying the university to make understand the university, the university clearly defines the objectives of recruitment and specification in the recruitment process, the University always recruits best fit researchers to conduct research. The null hypothesis was rejected by regression results and this implied that recruiting talented researchers has a significant effect on research performance.

The result indicates that cultivation has an insignificant positive on research performance. Learning and development had a lower influence on research performance than retention of talent researchers, the attraction of talent researchers, and the recruitment of talent researchers. Cultivation was measured by whether the university has appropriate learning, identification the researchers who need training and development, University determine the level of learning and development researchers need before conducting training, researchers were continuously acquired new knowledge and skills, mastered new ways of doing things, and the existence of in-house(cultivation within the university) development programs. The majority of the respondents disagreed with the measures and this was supported by regression results which indicated that the relationship between learning and development and research performance was positive and insignificant. The null hypothesis was failed to reject by regression results and this implied that cultivation has an insignificant effect on research performance.

The study found out that retaining talent has a positive and significant influence on research performance. Retaining talented researchers has the greatest influence on research performance as compared to attracting talent, recruiting talent, and cultivating talent. The study presented that the majority of the respondents agreed that, the university ensures my University image remains well all the time to retain talented researchers, the university has competitive compensation system than other Universities in the country to motivate tough researchers, the university flexible working hour is a motivating factor to maintain right researchers, the university offers training opportunities to enhance career growth hence retain potential researchers, in the university there is effective performance assessment which enhances the researchers' confidence, and the university ensures the researchers are satisfied and motivated all the time. The null hypothesis was rejected by regression results and this implied that retaining talent has a significant effect on research performance.

5.2. Conclusion

The conclusions drawn from the study are discussed below:Based on the study findings, the researcher concluded that talent management practices such as attracting talent researchers, recruiting talent researchers, cultivating talent researchers, and retaining talent researchers.

The study led to the conclusion that components of talent attraction which included; active involvement of the university in communication and implementation of researcher branding, good working conditions, and fair wages, university valuation of talent search matrix during selection, university facilitation of work-life balance as well as social networking and the assurance of researchers job security has a positive influence on the research performance in Jimma University. Talent attraction has a positive and significant influence on the research performance at Jimma University.

The study concludes that the university has effective recruitment practices. This is the result of the university's internal recruitment policy to uplift researchers' morale, fully informed researchers about the qualifications required to perform the job before being hired, formal induction process designed to help recruits understand the university, the university provides an orientation to researchers to make understand the university, the university clearly defines the objectives of recruitment and specification in the recruitment process, the university always recruits best fit researchers to conduct research has a positive influence on the research performance in Jimma University. The study concluded that recruitment had a positive and significant effect on research performance.

Study findings led to the conclusion that university has not have put in place effective cultivation activities. The particular activities include; appropriate learning, the university had acquired new knowledge and skills, and mastered new ways of doing things, identification of the researchers who needed learning and development, determine the level of learning and development researchers need before conducting training, the existence of in-house (within the university) development programs had a positive influence on the research performance in Jimma University. The study concluded that cultivation had a positive and insignificant effect on research performance.

The finding concluded that the university has put in place effective talent retention practices. This came after the realization that the university needs to invest in researchers' retention to be successful. This has been achieved by the university ensures image remains well all the time to retain talented researchers, competitive compensation, flexible working, offers training opportunities to enhance career growth, effective performance assessment, and ensures the researcher's satisfaction and motivate all the time. Overall, retaining talented researchers has the most significant positive relationship with research performance. However, retaining talented researchers alone is not enough to attract and maintain highly skilled, motivated, and experienced researchers that the university needs to own. The other talent management practices must also come to play, to ensure efficient attainment of university goals leading to its research performance.

5.3. Recommendation

The study recommends that it is more important for university to maintain favorable conditions to attract researchers as the best talent researchers who contribute to good research performance like actively involved in communication and implementation of researchers branding, good working conditions and fair wages, values talent search matrix during selection, assures researchers job security, work-life balance in the university, and social networking facilities will be attracted to work for the university.

The study suggests that it is better for the Jimma University widely adopt recruitment methods like university's internal recruitment policy, fully informed researchers about the qualifications required performing the job before being hired, designed formal induction process to recruits, providing orientation to researchers when they applying for the university, clearly defined the objectives of recruitment and specification in the recruitment process and university always recruits best fit researchers are should be widely adopted by Jimma University as doing so would lead to improved research performance.

It is also strongly recommended that the management of the university utilizes talent cultivating practices to identify researchers with successor potential who are play critical roles. Management of the university should take a strong measurement on talent cultivating such as: setting appropriate learning strategies, the university should identify the researchers who need training and development, the university has to determine the level of learning and development researchers need before conducting training, the university should improve in house development program provided to researchers, and both researchers and university should focus more on teamwork skills development in the university. Unquestionably, when these measurements are properly addressed, the university will be able to have a smooth transition of researchers from lower roles to higher roles and effective research performance.

The study recommended that it is better for the Jimma University to keep valuing and ensuring that talent retention strategies like ensures university image remains well all the time, competitive compensation system than other universities, university flexible working hour, offering training opportunities to enhance career growth, effective performance assessment which enhances the researchers' confidence, and ensures the researchers are satisfied and motivated all the time because the study found a high influence of talent researchers retention on research performance. Overall, it is recommended that talent management practices should be emphasized as doing so brings about superior research performance. The particular practices should include talent researchers' attraction, talent researchers' recruitment, talent researchers cultivating, and talent researchers' retention.

5.4. Suggestions for Further Research

Some extensions to this study may provide further insights into the effects of talent management practices on research performance. Some suggestions for future studies have been provided below:

The current study employed four elements as independent variables under talent management practices and investigated their effects on research performance. This implies that other variables relating to talent management practices were not considered. Hence, it is suggested that in the future, other researchers should consider factors in other elements of talent management practices and assess their impact on research performance. Additionally, the content analysis results indicated that there could be other components of attracting talent researchers', recruitment of talent researchers, cultivation of talent researchers, and retention of talent researchers that may contribute positively to the research performance in Jimma University. Future studies may use additional components of the variables of attraction talent researchers', recruitment of talent researchers, especially the cultivation of talent researchers, and retention of talent researchers on research performance.

Moreover, research works on talent management practices and their effect on research performance are vital for universities in today's global knowledge-based competition. However, most of the existing studies are carried out in the Western world which necessitated this study. It is, therefore, necessary for more researchers, especially, in East Africa to continue to explore the area empirically. In addition, due to certain limitations, this study was restricted to Jimma University, which is one of the giants among state universities. It is, therefore, not known to what extent one can generalize the findings from this study to other state universities or even for private universities across the country. It is, therefore, suggested that future studies should focus on those universities/institutions not captured in the current study.

The study employed multiple linear regressions to analyze the effect of talent management practice and used only quantitative analysis. This study did not use logic regression and qualitative analysis and therefore, future researchers have an opportunity to considering/employing the logic regressions and qualitative analysis.

Finally, this study did not make use of moderating variables in the conceptual framework, and therefore, there is an opportunity for other researchers to introduce these variables like gender, age, or educational level and establish whether the findings can be generalized.

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APPENDIX: QUESTIONNAIRE
JIMMA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF MANAGEMENT

Dear esteemed Respondents,

This questionnaire is part of a master's degree thesis being undertaken at Jimma University. The purpose of this questionnaire is to gather information on the *effects of talent management practices on research performance*: as part of a study for the award of MBA at Jimma University. Since the information you provide is critical for the success of this study, your genuine and prompt response to the questions that follow is highly valued. I assure you that all the information you provide will remain completely confidential and will be used for research purposes only. So, please be confident and frank to give your responses to the best of your knowledge.

If you have questions, suggestions, or concerns at any time about the study, you may contact me via +251 (0) 20368534/+251(0)980610271 or email: gedah52@gmail.com.

Thank you in advance for participating in this study!

Kindly, tick [] the appropriate response in the box or supply a response appropriate to the question in your opinion.

Part A: Demographic Characteristics

1. Gender: Male Female
2. Age
- 25– 35years
- 36 – 45 years
- 46 – 55 years
- 56 – 65 years
- Above 65 years
3. Educational level
- Assistance professor
- Associate professor
- Full professor
4. How long have you been employed in this University?
- 1-5 years
- 6-10 years
- 11-15 years
- Above 15 years

Part B: Variables of Talent Management Practices

1. Based on your experience and perception show your agreement with the following statements relating to the effects of talent management on research performance. Kindly, tick [√] the appropriate response in the box or supply a response appropriate to the question in your opinion.

1=strongly Disagree, 2= Disagree, 3=Neutral, 4= Agree, 5=strongly Agree

	The Statements	scales				
		1	2	3	4	5
TA1	My University has been actively involving in the communication and implementation of researcher's branding.					
TA2	This University's good working conditions and fair wages have enabled it to attract the right talents.					
TA3	This University values a talent search matrix during selection to get the right researchers.					
TA4	This University assures employees job security, to attract the right talent researchers.					
TA5	Work-life balance in this University is a motivating factor to attract the right researchers.					
TA6	Social networking facilities enhanced in this University motivating experienced researchers.					
TR1	This University's internal recruitment policy helps uplift researchers' morale.					
TR2	Researcher applicants are fully informed about the qualifications required to perform the job before being hired.					
TR3	There is a formal induction process designed to help recruits understand the University.					
TR4	My university provides an orientation to me when I was applying to the university to make understand the university.					
TR5	The University clearly defines the objectives of recruitment and specification in the recruitment process.					
TR6	My University always recruits the best fit researchers to conduct research.					
TC1	In my University appropriate learning strategies have been put in place.					
TC2	My University identifies the research employees who need training and development.					
TC3	My University determines the level of learning and development research employees need before conducting training.					
TC4	In my University research employees are continuously acquiring new knowledge, skills, and mastering new ways of doing things.					

TC5	In my University in the house development program is commonly provided to researchers.					
TC6	The researchers focus more on Teamwork skills Development in this University.					
TM1	The University ensures my University image remains well all the time to retain talented researchers.					
TM2	My University has competitive compensation system than other Universities in the country to motivate tough researchers.					
TM3	My University flexible working hour is a motivating factor to maintain the right researchers.					
TM4	My University offers training opportunities to enhance career growth hence retain potential researchers.					
TM5	In my University, there is an effective performance assessment that enhances the researchers' confidence.					
TM6	My University ensures the researchers are satisfied and motivated all the time.					
TRP1	I believe my creativity performance increases over years.					
TRP2	I believe the researcher's productivity is increasing.					
TRP3	I believe Jimma university is increasing community service through researches.					
TRP4	I believe there is an increasing number of research centers.					
TRP5	I believe more attention is given to core research laboratories.					
TRP6	I believe research publication on internationally reputable journals is increasing.					

This is the end of my questionnaire. Thank You!