

UNIVERSITY OF SARAJEVO
FACULTY OF ECONOMICS AND BUSINESS

MASTER'S THESIS

**MEDIATION EFFECT OF EMPLOYEE AUTONOMY ON IMPACT
OF THEIR DEVELOPMENT AND EMPOWERMENT ON WORK
ENGAGEMENT**

Sarajevo, januar 2025. godine

LEJLA RIZVIĆ

U skladu sa članom 54. Pravila studiranja za I, II ciklus studija, integrisani, stručni i specijalistički studij na Univerzitetu u Sarajevu, daje se

IZJAVA O AUTENTIČNOSTI RADA

Ja, Lejla Rizvić student/studentica drugog (II) ciklusa studija, broj index-a 5356-74530 na programu Zajednički Master program u saradnji sa Univerzitetom u Zagrebu MA+1, izjavljujem da sam završni rad na temu:

MEDIATION EFFECT OF EMPLOYEE AUTONOMY ON IMPACT OF THEIR DEVELOPMENT AND EMPOWERMENT ON WORK ENGAGEMENT

pod mentorstvom prof. dr. Elvir Čizmić izradila samostalno i da se zasniva na rezultatima mog vlastitog istraživanja. Rad ne sadrži prethodno objavljene ili neobjavljene materijale drugih autora, osim onih koji su priznati navođenjem literature i drugih izvora informacija uključujući i alate umjetne inteligencije.

Ovom izjavom potvrđujem da sam za potrebe arhiviranja predao/predala elektronsku verziju rada koja je istovjetna štampanoj verziji završnog rada.

Dozvoljavam objavu ličnih podataka vezanih za završetak studija (ime, prezime, datum i mjesto rođenja, datum odbrane rada, naslov rada) na web stranici i u publikacijama Univerziteta u Sarajevu i Ekonomskog fakulteta.

U skladu sa članom 34. 45. i 46. Zakona o autorskom i srodnim pravima (Službeni glasnik BiH, 63/10) dozvoljavam da gore navedeni završni rad bude trajno pohranjen u Institucionalnom repozitoriju Univerziteta u Sarajevu i Ekonomskog fakulteta i da javno bude dostupan svima.

Sarajevo, 22.01.2025.

Potpis studentice:

SAŽETAK

Ovaj magistarski rad istražuje utjecaj razvoja kompetencija zaposlenika, njihovog osnaživanja i autonomije na angažman zaposlenika na radnom mjestu. Rad se sastoji od nekoliko ključnih poglavlja koja detaljno obrađuju ove koncepte i njihove međusobne odnose.

U uvodnom dijelu rada, definišu se osnovni pojmovi i objašnjava važnost istraživanja odnosa između razvoja kompetencija, osnaživanja i autonomije u savremenom poslovnom okruženju. Dalje, rad se bavi razvojem kompetencija zaposlenika, uključujući vještine, znanja i sposobnosti potrebne za uspješno obavljanje poslovnih zadataka. Razvoj kompetencija obuhvaća formalno obrazovanje, treninge, mentorstvo i praktično iskustvo.

Oснаživanje zaposlenika predstavlja proces delegiranja odgovornosti i autonomije, omogućavajući zaposlenicima veću kontrolu nad njihovim poslovima i donošenjem odluka. Ovo povećava njihov osjećaj pripadnosti i motivaciju za postizanje organizacijskih ciljeva.

Autonomija na radnom mjestu odnosi se na sposobnost zaposlenika da samostalno regulišu svoje ponašanje i reakcije, čak i u stresnim situacijama. Visoka razina autonomije često rezultuje većom produktivnošću, smanjenim stresom i boljim međuljudskim odnosima.

Istraživanje koristi anketu za prikupljanje podataka od zaposlenika u različitim organizacijama, fokusirajući se na korelaciju između razvoja kompetencija, osnaživanja i autonomije te njihovog utjecaja na angažman zaposlenika. Empirijski dio istraživanja potvrđuje postavljene hipoteze, ukazujući na pozitivne efekte ovih faktora na radnu efikasnost i zadovoljstvo zaposlenika.

Ključne riječi: *razvoj kompetencija, osnaživanje zaposlenika, autonomija, angažman zaposlenika, organizacijski uspjeh...*

ABSTRACT

This master's thesis investigates the impact of employee competence development, empowerment, and autonomy on employee engagement in the workplace. The thesis consists of several key chapters that thoroughly address these concepts and their interrelationships.

In the introductory part, the basic concepts are defined, and the importance of studying the relationships between competence development, empowerment, and autonomy in the contemporary business environment is explained. Furthermore, the thesis deals with employee competence development, including the skills, knowledge, and abilities necessary for successfully performing business tasks. Competence development encompasses formal education, training, mentoring, and practical experience.

Employee empowerment represents the process of delegating responsibility and autonomy, enabling employees to have greater control over their jobs and decision-making. This increases their sense of belonging and motivation to achieve organizational goals.

Workplace autonomy refers to employees' ability to independently regulate their behavior and reactions, even in stressful situations. A high level of autonomy often results in greater productivity, reduced stress, and better interpersonal relationships.

The research uses a survey to collect data from employees in various organizations, focusing on the correlation between competence development, empowerment, and autonomy, and their impact on employee engagement. The empirical part of the research confirms the hypotheses, indicating positive effects of these factors on work efficiency and employee satisfaction.

Keywords: *competence development, employee empowerment, autonomy, employee engagement, organizational success...*

.

CONTENT

1. INTRODUCTION	1
1.1. Subject and Rationale of the Topic	1
1.2. Research objectives.....	4
1.3. Research hypotheses and Corresponding Constructs	5
1.4. Research Methodology	7
1.4.1. Employee Competence Development	7
1.4.2. Employee Empowerment	8
1.4.3. Employee Autonomy	8
1.4.4. Level of Empowerment and Autonomy at Work.....	8
2. CONCEPT AND SIGNIFICANCE OF COMPETENCY DEVELOPMENT IN THE WORKPLACE	9
2.1. Definition and scope of competency development	9
2.2. Components of competency development: skills, knowledge, abilities	10
2.3. Different approaches to competency development	12
2.4. Reasons and motivation for investing in competency development.....	14
2.4.1. Individual motivation for acquiring new skills and knowledge.....	14
2.4.2. Organizational benefits of investing in employee competency development..	16
2.4.3. Adaptability and competitiveness as key factors	17
2.5. Impact of competency development on business outcomes and organizational success	19
2.5.1. Association between competency development and workplace efficiency	19
2.5.2. Work quality and productivity as a result of adequate competency development	20
3. REASONS AND MOTIVATION FOR INVESTING IN COMPETENCY DEVELOPMENT	22
3.1. Individual motivation for acquiring new skills and knowledge	22
3.2. Organizational benefits of investing in employee competency development ..	24
3.3. Adaptability and competitiveness as key factors	25
4. IMPACT OF COMPETENCY DEVELOPMENT ON BUSINESS OUTCOMES AND ORGANIZATIONAL SUCCESS.....	27
4.1. Association between competency development and workplace efficiency	27
4.2. Work quality and productivity as a result of adequate competency development	28
4.3. Improvement of organizational culture and employee satisfaction	30
5. EMPIRICAL RESEARCH.....	31
5.1. Dynamics and course of the research.....	31

5.2. Research instrument (questionnaire design)	31
5.3. Demographic Characteristics of the Research Sample	32
5.4.1. Analysis of Research Results Regarding Hypothesis 1	45
5.4.2. Analysis of Research Results Regarding Hypothesis 2	46
5.4.3. Analysis of Research Results Regarding Hypothesis 3	46
5.4.4. Analysis of Research Results Regarding Hypothesis 4	48
5.4.5. Analysis of Research Results Regarding Hypothesis 5	49
5.4.6. Sobel test	51
6. DISCUSSION	57
7. CONCLUSION	58

LIST OF FIGURES

<i>Figure 1. Graphical representation of the research model</i>	6
<i>Figure 2. Graphical Model for Hypothesis 1: The Relationship Between Competence Development and Autonomy</i>	45
<i>Figure 3. Graphical Model for Hypothesis 2: The Relationship Between Empowerment and Autonomy</i>	46
<i>Figure 4. Direct and Indirect Effects of Competence Development on Employee Engagement through Autonomy</i>	53
<i>Figure 5. Direct and Indirect Effects of Empowerment on Employee Engagement through Autonomy</i>	54

LIST OF TABLES

<i>Table 1. Gender Structure of Respondents</i>	33
<i>Table 2. Age Structure of Respondents</i>	34
<i>Table 3. Educational Level of Respondents</i>	35
<i>Table 4. Length of Work Experience</i>	36
<i>Table 5. Position in the Company</i>	37
<i>Table 6. Type of Employment Relationship of Respondents</i>	38
<i>Table 7. Monthly Income of Respondents</i>	39
<i>Table 8. Employee Competence Development</i>	40
<i>Table 9. Employee Empowerment</i>	41
<i>Table 10. Employee Autonomy</i>	43

<i>Table 11. Level of Engagement</i>	44
<i>Table 12. Regression Analysis Between Autonomy and Employee Engagement</i>	47
<i>Table 13. Regression Coefficients for Hypothesis 3</i>	47
<i>Table 14. Regression Analysis Between Competence Development and Employee Engagement</i>	48
<i>Table 15. Regression Coefficients for Hypothesis 4</i>	49
<i>Table 16. Regression Analysis Between Empowerment and Employee Engagement</i>	49
<i>Table 17. Regression Coefficients for Hypothesis 5</i>	50
<i>Table 18. Regression Model Coefficients for Predicting Employee Engagement Based on Competence Development</i>	51
<i>Table 19. Regression Model Coefficients for Predicting Employee Autonomy Based on Competence Development</i>	51
<i>Table 20. Sobel test</i>	51
<i>Table 21. ANOVA Analysis for the Regression Model Predicting Engagement Levels Based on Competence Development and Employee Autonomy</i>	52
<i>Table 22. Regression Model Coefficients for Predicting Employee Engagement Based on Competence Development and Employee Autonomy</i>	53
<i>Table 23. Total, Direct, and Indirect effect of X (Competence Development) on Y (Engagement) via M (Autonomy)</i>	55

LIST OF GRAPHS

<i>Graph 1. Graphical Representation of the Gender Structure of Respondents</i>	33
<i>Graph 2. Graphical Representation of the Age Structure of Respondents</i>	34
<i>Graph 3. Graphical Representation of Educational Level</i>	35
<i>Graph 4. Graphical Representation of Length of Work Experience</i>	36
<i>Graph 5. Graphical Representation of Position in the Company</i>	37
<i>Graph 6. Graphical Representation of the Type of Employment Relationship of Respondents</i>	38
<i>Graph 7. Graphical Representation of Monthly Income of Respondents</i>	39

APPENDIX 1 – QUESTIONNAIRE

Appendix 1. Questionnaire	1
---------------------------------	---

1. INTRODUCTION

1.1. Subject and Rationale of the Topic

Within this master's thesis, we explore the complex relationships between employee competence development, their empowerment, and autonomy in the workplace. These concepts are crucial for understanding the dynamics of organizational behavior and workforce efficiency in today's business environment.

Firstly, it is important to define the concept of „competence development, „which refers to the „process of enhancing employees' skills, knowledge, and abilities relevant to performing business tasks and achieving organizational goals. This process includes training, education, mentoring, and practical experience that enable employees to become more skilled and efficient in their jobs“ (Smith, 2018, 227).

The exploration of how employee competence development and empowerment influence their autonomy and engagement is essential for understanding the mechanisms that underpin successful talent management strategies. This study aims to bridge the gap in the literature by focusing on these interrelationships within the context of workplace dynamics, particularly in the fashion industry where rapid changes and competitive pressures demand a highly adaptable and engaged workforce.

„The research results unveiled that talents were attracted to work for current companies primarily because of: good salary and company goodwill. The top three prevalent work motivational factors for talents included: (1) comfortable work environment, (2) enough autonomy and creativity in working and deciding, and (3) work-life balance. Furthermore, talent motivational factors related to talent retention in a statistically significant positive way.“ (Ahmić & Čizmić, 2021, 200-220)

Employee competence development is a key process within organizations aimed at improving work efficiency, employee satisfaction, and achieving organizational goals. This process encompasses a wide range of activities focused on enhancing employees' skills, knowledge, and abilities to better respond to the demands of the business environment and market changes. Essentially, competence development involves a continuous learning and improvement process that allows employees to acquire new skills, deepen existing competencies, and adapt to new challenges.

This includes formal training and education such as seminars, workshops, and educational programs, as well as informal methods like mentoring, teamwork, and independent research. Training is an important part of the competence development process as it provides a structured and systematic platform for acquiring new knowledge and skills. Additionally, „training can also be an opportunity for exchanging experiences and best practices among colleagues and building professional networks“ (Jones, 2019, 144).

In contrast to competence development, education represents a longer-term and comprehensive approach to competence development that focuses on acquiring theoretical knowledge and conceptual understanding. Through formal education, employees have the opportunity to delve deeper into their areas of expertise, develop analytical skills and critical thinking, and become experts in their fields.

Mentoring is another key element in the competence development process that provides individualized support and guidance to employees in their professional development. Through mentoring relationships, more experienced colleagues can impart their knowledge, experience, and valuable advice to younger or less experienced employees, contributing to their faster progress and integration into the organization.

Practical experience is an indispensable part of the competence development process as it allows employees to apply acquired knowledge and skills in real work situations. Through working on concrete projects, team tasks, and everyday business challenges, employees have the opportunity to apply theory in practice, develop their abilities, and learn from their own mistakes.

On the other hand, empowerment is a crucial aspect of human resource management based on the process of delegating authority, responsibility, and autonomy to employees. This process allows employees to take greater control over their jobs, decision-making, and goal achievement. Through empowerment, employees are encouraged to take initiative, develop confidence, and engage in their work in a way that contributes to better productivity, efficiency, and innovation in the workplace. Delegating authority and responsibility to employees creates a sense of belonging and importance, resulting in greater satisfaction and motivation to achieve organizational goals (Spitzer, 1995, 143).

Empowerment has a dual effect - benefiting not only employees but also the organization as a whole. Through the empowerment process, the organization becomes more flexible, capable of rapid changes, and adapting to market demands. Satisfied and motivated employees become more loyal, engaged, and willing to participate in the decision-making process. This creates a positive work atmosphere, promotes teamwork and creativity, and contributes to the long-term success of the organization in the market.

„Autonomy is a vital component in the work environment, referring to employees' ability to regulate their behavior, emotions, and reactions even in challenging situations. This ability allows employees to maintain focus, efficiency, and professionalism, key elements for achieving organizational goals and maintaining a positive work atmosphere“ (Baumeister, Heatherton, 1996, 14).

Previous research highlights the importance of each of these elements in the context of organizational success. „Studies have shown that investing in employee competence development is associated with improved productivity, work quality, and employee

satisfaction. Additionally, research has shown that organizations that provide a higher degree of empowerment to their employees have higher levels of engagement“ (White, 2019, 120).

In the context of autonomy, research has emphasized the link between this ability and work efficiency, stress reduction, and better work performance. Employees who possess a high level of autonomy are often better equipped to deal with challenges and conflicting situations in the workplace, which positively affects their productivity and interpersonal relationships.

Through this research, our aim is to gain a deeper understanding of the relationships between employee competence development, empowerment, and autonomy, and to identify the most effective strategies and practices that organizations can apply to enhance these key aspects of the workforce.

Through this research, our aim is to gain a deeper understanding of the interrelations between competency development, empowerment, and employee autonomy, and to identify the most effective strategies and practices that organizations can employ to enhance these key aspects of the workforce. We anticipate that the results of our research will provide valuable guidance for managers and human resources professionals in the process of planning, implementing, and evaluating employee development programs.

By analyzing relevant literature, empirical research, and case studies, the theoretical framework of this study will be firmly grounded in existing knowledge in the fields of organizational behavior, human resources, and management. By combining theoretical concepts with practical examples and methodological approaches, we expect our research to contribute to a deeper understanding of workforce dynamics in the contemporary business environment.

The subject of this research is the analysis of exploring the Relationships Between Employee Competence Development, Empowerment, and Autonomy in Workplace Dynamics. The focus of the research will be on exploring the relationship between competency development programs, perceptions of empowerment, and employee autonomy. This topic aims to provide deeper insight into how competency development can affect employee empowerment and their ability for autonomy in the work environment.

Understanding this dynamic is crucial for organizations aiming to improve workforce efficiency, productivity, and employee satisfaction. Through research on this topic, organizations will better understand the importance of investing in competency development programs and how these programs can contribute to creating a work environment that fosters employee empowerment and autonomy.

Through research on this topic, organizations will better understand the importance of investing in competency development programs and how these programs can contribute to creating a work environment that fosters employee empowerment and autonomy.

In this context, it becomes imperative to highlight four key competencies essential for a productive and efficient workplace: structural, cognitive, technical, and social competencies.

Structural competencies are about understanding and navigating the intricacies of organizational structures and processes. They empower employees to efficiently manage resources, grasp the nuances of hierarchies and communication flows, and ensure their actions are in harmony with organizational goals. Developing structural competencies allows employees to comprehend the framework within which they operate, facilitating a smoother integration of their roles with the organization's objectives.

Cognitive competencies involve the ability to analyze, engage in critical thinking, solve problems, and make decisions. This set of skills is vital for fostering innovation and enabling employees to adapt to the evolving demands of their work environment. Enhancing cognitive competencies equips employees with the tools to tackle complex challenges, innovate, and contribute effectively to their organization's growth and adaptability.

Technical competencies pertain to the specific skills and knowledge necessary for particular jobs. This includes practical expertise in utilizing various tools, software, techniques, and methodologies relevant to daily tasks. Improving technical competencies is crucial for maintaining operational efficiency and ensures employees can meet the technological demands of their roles, thereby staying competitive in a rapidly evolving workplace.

Social competencies focus on the ability to communicate effectively, collaborate with others, and build positive relationships within the workplace. This encompasses emotional intelligence, teamwork, conflict resolution, and negotiation skills. Developing strong social competencies is fundamental for creating a cohesive work environment, enhancing team dynamics, and fostering a culture of mutual respect and understanding.

By focusing on these comprehensive competencies, organizations can craft a more empowering, autonomy, and dynamic workplace. Such an environment not only leverages the full potential of its workforce but also aligns closely with the goals and challenges of the contemporary business landscape, ensuring sustainable growth and success.

1.2. Research objectives

Primary objectives of the research:

- To analyze the correlation between employee empowerment and their engagement, in the work environment.
- To explore how the level of employee autonomy affects efficiency in performing job tasks, reducing stress, and the quality of interpersonal relationships in the workplace.
- To identify strategies and practices of competency development and empowerment that organizations can implement to enhance workforce efficiency and employee satisfaction.

- To assess the importance of investing in employee competency development and empowerment as key factors for achieving organizational success and maintaining competitiveness in the market.

These research objectives are aimed at a deeper understanding of the relationship between competency development, empowerment, and employee autonomy, and their impact on the work environment and organizational success.

1.3. Research hypotheses and Corresponding Constructs

1. H1: There is a positive impact of employee competence development on their autonomy in the workplace.

- Constructs: Competency Development, Workplace Autonomy

- Scales:

- ✓ Competency Development: This scale includes items assessing the frequency, depth, and perceived utility of various competency development activities such as training, workshops, e-learning, and mentorship.
- ✓ Workplace Autonomy: This scale measures perceptions of autonomy, including the level of freedom and independence employees have in executing their tasks.

2. H2: Higher levels of empowerment of employees in the workplace positively impact their autonomy in job performance.

- Constructs: Empowerment, Autonomy

- Scales:

- ✓ Empowerment: This scale measures perceptions of autonomy, decision-making capabilities, sense of significance within the organization, and access to resources.
- ✓ Autonomy: This scale focuses on the level of freedom and independence employees perceive in executing their tasks.

3. H3: A high level of autonomy among employees in the workplace will have a positive impact on their level of engagement.

- Constructs: Autonomy, Engagement

- Scales:

- ✓ Autonomy: This scale measures the degree of freedom, independence, and discretion employees have over their work tasks and procedures.
- ✓ Engagement: This scale measures the degree of an employee's mental and emotional investment in their work, including their enthusiasm, dedication, and willingness to go above and beyond their basic job requirements.

4. H4: The development of employee competencies in the workplace has a positive impact on their engagement at work.

- Constructs: Competency Development, Engagement

- Scales:

- ✓ Competency Development: This scale includes items assessing the frequency, depth, and perceived utility of various competency development activities such as training, workshops, e-learning, and mentorship.

- ✓ Engagement: This scale measures the degree of an employee's mental and emotional investment in their work, including their enthusiasm, dedication, and willingness to go above and beyond their basic job requirements.

5. H5: A high level of empowerment of employees in the workplace has a positive impact on their engagement.

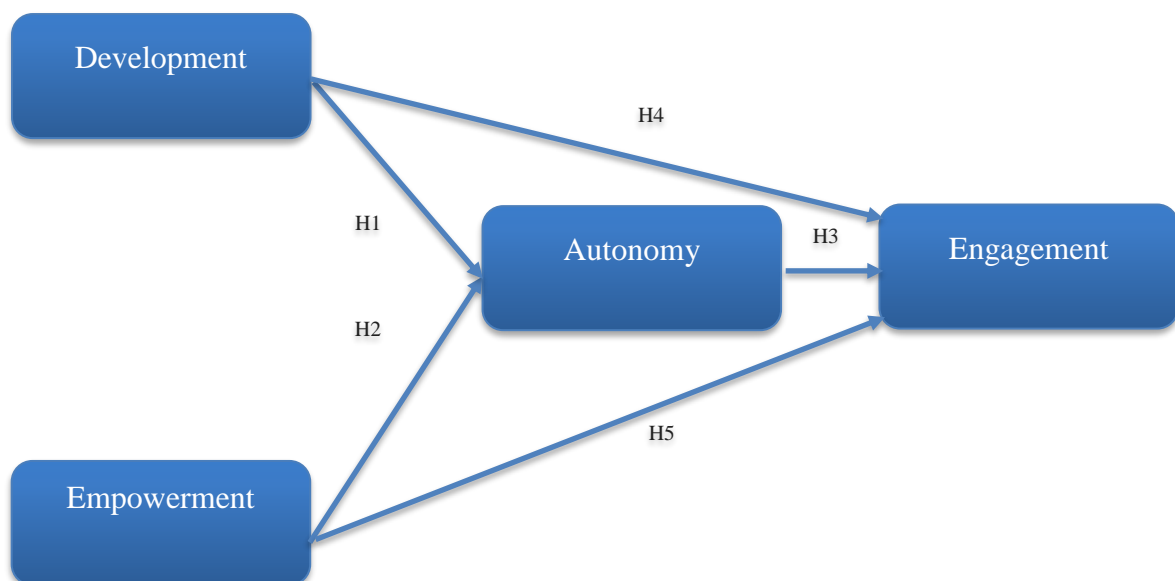
- Constructs: Empowerment, Engagement

- Scales:

- ✓ Empowerment: This scale measures perceptions of autonomy, decision-making capabilities, sense of significance within the organization, and access to resources.

- ✓ Engagement: This scale measures the degree of an employee's mental and emotional investment in their work, including their enthusiasm, dedication, and willingness to go above and beyond their basic job requirements.

Figure 1. Graphical representation of the research model



Source: Author (2024)

The research focusing on Employee Competence Development, Empowerment, and Engagement in Workplace Dynamics will be measured through three segments: Employee Competency Development, Employee Empowerment, and Employee Autonomy. The graphical model for this research will depict the independent variables and the dependent variable, as well as the proposed relationships between them. The independent variables represent the components of employee competency development and empowerment, namely employee competency development and empowerment. The dependent variable is the level of employee engagement at the workplace.

To conduct the research, a survey questionnaire will be used, consisting of questions that measure variables relevant to our hypotheses. The questions will be selected from an existing questionnaire and adapted to the needs of our research. A Likert scale ranging from 1 to 5 will be utilized to evaluate the responses. Participants will be invited to respond to the questionnaire in order to collect data for analysis.

1.4. Research Methodology

The target population comprises active employees from various organizations, with a focus on both public and private service companies. The planned sample size is 200 respondents, selected through random sampling method.

Data Collection: Data will be collected using a structured questionnaire containing items that measure variables relevant to our hypotheses.

Questionnaire Construction: The demographic section of the questionnaire will include items related to gender, age, education level, length of employment, position within the company, and organization size. These items aim to provide contextual information about the respondents.

To effectively capture the essence and methodology of our research, we look towards distinguished sources to inspire our scales and items, ensuring our investigation is both grounded in theory and practical in application.

1.4.1. Employee Competence Development

Drawing inspiration from „The Handbook of Competency Mapping: Understanding, Designing and Implementing Competency Models in Organizations“ by Seema Gupta and Sudhir Andrews, we aim to comprehensively evaluate the ongoing participation and opportunities our respondents experience in training and developmental programs relevant to their job tasks. Our items include:

- I regularly participate in training and development programs relevant to my job tasks.
- I have opportunities to learn and develop new skills that directly contribute to my work outcomes.

These items are crafted to measure the frequency and impact of competence development initiatives on employees.

1.4.2. Employee Empowerment

Guided by „Employee Empowerment: Definition, Strategies, and Effects on Performance“ by Daniel O. Arosen, our focus shifts towards gauging employees' autonomy in decision-making and their perceived impact within their team and organization. Our proposed items are:

- I feel that I have autonomy in making decisions related to my work.
- I believe my contribution has a significant impact on the success of my team and the organization.“

These statements are designed to assess the levels of empowerment experienced by employees in their work environment.

1.4.3. Employee Autonomy

Informed by „Emotional Intelligence at Work: The Untapped Edge for Success“ by Hendrie Weisinger, we delve into the ability of employees to manage their reactions and emotions, even in high-pressure situations, and their effectiveness in prioritizing tasks to meet set goals. Our items for this scale are:

- I can control my reactions and emotions even in stressful situations.
- I effectively manage my time and priorities to achieve set goals.

These items aim to evaluate the aspect of autonomy in the workplace, particularly focusing on emotional regulation and time management.

1.4.4. Level of Empowerment and Autonomy at Work

Taking cues from the study „Motivational Factors and Retention of Talented Managers“ by Azra Ahmić and Elvir Čizmić, we examine the factors influencing employee engagement, focusing on how motivational aspects contribute to a sense of belonging and productivity in the workplace. Our items include:

- I am attracted to work here due to the good salary and positive reputation of the company.
- I find my work environment comfortable and conducive to productivity.

These statements are intended to measure the perceived level of engagement among employees and how it affects their work atmosphere and retention.

Data Analysis:

Collected data will be analyzed and processed using the statistical software SPSS. We plan to conduct impact testing/regression through a multiple regression model, in line with the formulated hypotheses.

Ethical Considerations:

Throughout the research process, we will adhere to all ethical guidelines and data protection regulations relevant to research projects involving human participants.

These steps constitute the foundational methodology of the research. The authors and sources cited, specifically Azra Ahmić and Elvir Čizmić, are authentic and pivotal for measuring variables in our study related to employee engagement.

2. CONCEPT AND SIGNIFICANCE OF COMPETENCY DEVELOPMENT IN THE WORKPLACE

In the modern business environment, employee competence development has become a key factor for the success and sustainability of organizations. Competencies represent a combination of skills, knowledge, and abilities that enable employees to perform their job tasks efficiently and achieve organizational goals.

This process includes formal education, training, mentoring, and practical experience that provide employees with the opportunity to enhance their skills and become more effective in their work (Rothwell, Lindholm, 1999, 90).

Competencies are not a static concept; they constantly develop and adapt to changes in the business environment. Given the pace of technological changes and market dynamics, organizations must continuously invest in developing their employees' competencies to remain competitive. Competence development not only contributes to the individual growth of employees but also significantly improves the overall business efficiency and innovativeness of the organization.

2.1. Definition and scope of competency development

Competence development refers to a systematic approach to improving employees' skills, knowledge, and abilities, thereby increasing their capacity to perform job tasks efficiently. This entails continuous learning and adapting to new challenges and technologies, allowing employees to remain relevant and productive (Boyatzis, 1982).

Competencies can be categorized into several types, including technical, cognitive, and social skills. Technical skills encompass specific abilities required to perform certain tasks, such as using tools and technologies specific to an industry. Cognitive skills include critical

thinking, problem-solving, and decision-making, while social skills involve communication, teamwork, and leadership.

Competence development can be achieved through formal education programs, such as courses and certifications, as well as through informal methods like mentoring and practical experience. Formal education programs provide a structured environment for acquiring new knowledge, whereas informal methods allow employees to apply what they have learned in real work situations, further solidifying their competencies (Spencer, Spencer, 1993).

In today's business environment, where technologies and markets are rapidly changing, competence development is imperative for maintaining competitiveness and efficiency. Organizations that continuously invest in developing their employees' competencies can expect not only increased productivity but also greater employee loyalty and motivation, contributing to the organization's long-term success.

2.2. Components of competency development: skills, knowledge, abilities

Employee competence development is a fundamental aspect of improving work efficiency and achieving organizational goals. Competencies consist of three key components: skills, knowledge, and abilities. Each of these components plays a vital role in equipping employees to perform their tasks successfully and adapt to changes in the business environment.

I. Skills

Skills refer to practical abilities that employees use to perform specific tasks. They can be technical and interpersonal. Technical skills include abilities directly related to job performance, such as using specific tools, software applications, or performing certain procedures. For example, programming, using CAD software for engineers, or knowledge of accounting software packages for accountants (Jones, 2019).

Interpersonal skills, or "soft" skills, include abilities such as communication, teamwork, leadership, time management, and conflict resolution. These skills are crucial for effective collaboration within teams and successful project management.

Developing these skills can be more complex as it often requires changes in behavior and attitudes, but they are equally important as they contribute to a better work atmosphere and team efficiency.

II. Knowledge

Knowledge represents theoretical information and concepts that employees possess and use in performing their tasks.

Unlike skills, which are practical, knowledge is more oriented towards understanding and analysis. Knowledge can be specific to a particular industry or universally applicable in

different contexts. For example, knowledge of legislation in the legal profession, understanding market trends in marketing, or knowledge of management theories in business management.

Knowledge development is often achieved through formal education, such as college degrees, postgraduate studies, and professional certifications. However, continuous learning through seminars, conferences, and professional literature also plays a key role in maintaining the current knowledge of employees. In a dynamic business environment, organizations that support continuous education and knowledge development of their employees are often better positioned to adapt to market changes and innovations (Kolb, 2015).

III. Abilities

Abilities represent inherent or developed traits that enable employees to effectively use their skills and knowledge. These are innate characteristics such as cognitive abilities, emotional intelligence, physical dexterity, and adaptability. For example, the ability to think critically enables employees to analyze complex problems and make informed decisions, while emotional intelligence helps in managing interpersonal relationships and maintaining a positive work atmosphere (Goleman, 2000).

The development of abilities is often the result of a combination of education, practical experience, and personalized development programs such as coaching and mentoring. Coaching is a process where an experienced professional helps an employee develop specific abilities through structured conversations and activities.

Mentoring, on the other hand, involves longer-term guidance and advice from more experienced colleagues, which can significantly contribute to the development of abilities (Noe, 2017).

IV. Integration of Components in Competence Development

Successful competence development requires the integration of skills, knowledge, and abilities into a coherent and comprehensive program. Organizations must ensure that their competence development programs are not fragmented but approach employee development holistically. This can be achieved through a combination of formal education programs, practical experience, and personalized development programs.

For example, an organization may offer a training program that includes technical courses for developing specific skills, seminars for enhancing knowledge, and coaching sessions for developing abilities such as leadership and stress management.

Such an integrated approach ensures that employees not only acquire new skills but can effectively apply them in their work thanks to the developed knowledge and abilities (Lombardo & Eichinger, 1996).

V. Examples of Competence Development Implementation

There are several approaches that can be used to implement competence development programs in organizations. One of the most common approaches is the 70-20-10 model, which suggests that 70% of learning occurs through experience and work on the job, 20% through interaction with others (mentoring, coaching, teamwork), and 10% through formal education and training. This model emphasizes the importance of practical experience and learning through work while recognizing the value of formal education and interpersonal learning (Lombardo & Eichinger, 1996).

Another approach can be based on systematic career development, where the organization defines clear development paths for each employee. These paths include specific steps and competencies that employees need to develop to advance in their careers. A systematic approach to career development helps employees clearly see their goals and the steps needed to achieve them, which can increase their motivation and engagement.

Competence development is crucial for the success and sustainability of organizations in the modern business environment. The integration of skills, knowledge, and abilities enables employees to effectively respond to challenges and opportunities in their work. Organizations that recognize the importance of competence development and invest in holistic and personalized development programs can expect not only improved work efficiency but also increased employee satisfaction, leading to long-term success.

2.3. Different approaches to competency development

Different approaches to employee competence development are crucial for achieving success in the modern business environment. Organizations use various methods to ensure that their employees possess the skills, knowledge, and abilities needed to perform their tasks efficiently.

Formal education is one of the most commonly used approaches in competence development. It encompasses academic programs, courses, and certifications that provide structured and systematic acquisition of knowledge and skills.

Formal education enables employees to gain a deep understanding of specific areas, such as management, finance, or technology, making them more capable of handling complex tasks and making informed decisions. For example, many organizations offer scholarships or financial support to employees who wish to advance through postgraduate studies or specialized courses (Jones, 2019).

In addition to formal education, training and workshops represent another important approach in competence development. These programs are usually shorter and more specifically focused on acquiring certain skills needed for current jobs. Training can take

place within the organization, through internal programs led by experienced professionals, or externally, through specialized courses and workshops.

Trainings are often accompanied by practical exercises and simulations that allow employees to immediately apply what they have learned in real work situations. This approach is particularly effective for developing technical skills, such as programming, using new software tools, or managing project tasks (Dubois, Rothwell, 2004).

Mentorship is another key approach to competence development, focused on long-term support and advice. Mentors are experienced professionals who pass on their knowledge and experience to younger or less experienced employees. Through regular meetings and discussions, mentors help employees face challenges, make better decisions, and plan their careers.

Mentorship not only contributes to the development of specific skills but also strengthens employees' confidence and motivation. This approach often leads to strengthening interpersonal relationships within the organization and creates a culture of continuous learning and support.

„Practical experience is also essential for competence development. Employees gain practical skills through the daily performance of their tasks and participation in projects. This approach allows employees to apply their theoretical knowledge in real work situations, increasing their efficiency and productivity“ (Conger, Kanungo, 1988, 471).

Job rotation is an example of how organizations can enable employees to acquire a wide range of skills and knowledge by working in different positions within the company. This approach not only increases employees' flexibility but also allows them to better understand the overall business process.

Self-learning and independent research are becoming increasingly important approaches to competence development, especially in the digital age. Employees have access to a wide range of online resources, such as webinars, online courses, e-books, and articles, which allow them to independently enhance their knowledge and skills. This approach is particularly useful for employees who wish to specialize in specific areas or keep up with the latest trends and innovations in their industry. Self-learning requires a high level of motivation and self-discipline but allows employees to learn at their own pace and according to their interests.

Organizations increasingly recognize the importance of a holistic approach to competence development, which integrates various methods and adapts them to the specific needs of employees and the organization (Ryan, Deci, 2000).

For example, some competence development programs combine formal education, training, mentorship, and practical experience to ensure comprehensive employee development. Such programs often include individual development plans, which are tailored to the goals and

aspirations of each employee. This approach enables employees to take an active role in their professional development and continuously enhance their competencies.

A culture of continuous learning within the organization is key to successful competence development. Organizations that promote constant learning and development create an environment where employees feel supported and motivated to improve their skills and knowledge.

This can be achieved through various initiatives, such as regular training, access to learning resources, management support, and recognition of employee achievements. A learning culture also implies openness to new ideas and innovations, which can lead to improved business processes and increased organizational competitiveness (Locke, Latham, 2002, 705).

Ultimately, employee competence development not only improves individual performance but also has a significant impact on the overall success of the organization. Employees with well-developed competencies are more efficient, productive, and motivated, contributing to achieving organizational goals and increasing market competitiveness. Organizations that continuously invest in the development of their employees' competencies create a stable foundation for long-term growth and success.

2.4. Reasons and motivation for investing in competency development

2.4.1. Individual motivation for acquiring new skills and knowledge

Individual motivation for acquiring new skills and knowledge is key to professional development and employee success. Motivation can be intrinsic, where individuals feel an internal need for learning and development, or extrinsic, where they are driven by external factors such as rewards, recognition, or career advancement. Intrinsic motivation often stems from the desire for personal growth, the satisfaction of achievement, and the pursuit of excellence.

Employees who are intrinsically motivated typically take the initiative in their learning, explore new areas, and seek opportunities for additional education and training. This type of motivation often leads to deeper engagement and greater job satisfaction, as individuals feel they are actively contributing to their professional development.

Extrinsic motivation involves factors such as promotions, raises, recognition, and other forms of rewards that can encourage employees to acquire new skills and knowledge. Organizations often use various reward programs to stimulate continuous learning and development among employees.

For example, some employers offer financial support for attending courses, seminars, or obtaining certifications, while others provide career advancement opportunities as a reward

for successfully completed training and development programs. While extrinsic motivation can be very effective in the short term, research shows that a combination of intrinsic and extrinsic motivation often yields the best results in terms of long-term engagement and employee satisfaction.

In addition to intrinsic and extrinsic motivation, organizational culture plays a crucial role in encouraging employees to acquire new skills and knowledge. Organizations that promote a culture of learning and development provide support to employees in their efforts to improve.

This can be achieved through various initiatives such as regular training, mentorship, access to learning resources, and creating an environment that values innovation and continuous improvement. A learning culture fosters a sense of community and collective progress, where employees feel that their efforts for development are not just individual but contribute to the overall success of the organization.

Social factors can also significantly impact individual motivation for acquiring new skills and knowledge. Peer pressure, management expectations, and professional networks can encourage employees to engage in training and development activities. When employees see their colleagues putting effort into their professional development, they often feel the need to follow their example to remain competitive and relevant in their work environment. Additionally, support and encouragement from supervisors can significantly boost employees' motivation for continuous learning and development.

Emotional factors such as the sense of achievement, confidence, and job satisfaction also play an important role in the motivation for acquiring new skills and knowledge. When employees achieve a certain level of expertise or complete a demanding course, they often experience a sense of pride and satisfaction that further motivates them to continue learning. This can create a positive learning cycle, where each success leads to greater engagement and a desire for further improvement (Gagne, 2014).

Psychological factors such as personal ambitions, the pursuit of career advancement, and the need for professional recognition can also significantly influence individual motivation for acquiring new skills and knowledge.

Employees who have clear career goals and plans are often more motivated to invest in their education and professional development. This motivation can be further enhanced through organizational policies that support professional growth and development, such as mentorship programs, advancement opportunities, and reward structures that recognize and appreciate employees' efforts and achievements.

Individual motivation for acquiring new skills and knowledge does not stem from a single source but is the result of a combination of various intrinsic and extrinsic factors. Organizations that recognize and support these factors can create an environment that encourages continuous learning and professional development, leading to greater efficiency,

employee satisfaction, and overall organizational success. By creating a culture of learning and providing the necessary support, organizations can significantly increase their employees' motivation to acquire new skills and knowledge.

2.4.2. Organizational benefits of investing in employee competency development

Organizations that recognize the importance of continuous employee development not only improve efficiency and productivity but also strengthen their competitive advantage in the market. One of the key reasons for investing in competence development is the increase in work efficiency. When employees possess relevant skills and knowledge, they can perform their tasks more efficiently, resulting in faster and higher-quality job execution (Jones, 2019, 45). This increased efficiency directly contributes to improving the overall productivity of the organization.

In addition to increasing efficiency, employee competence development can significantly improve the quality of work. Employees who are trained and knowledgeable in the latest techniques and practices often provide higher-quality services and products. For example, continuous training in quality and safety can reduce errors and increase customer satisfaction. Organizations that invest in competence development also create a learning culture, leading to innovations and continuous improvement of business processes.

Beyond increasing efficiency and work quality, employee competence development has a positive impact on employee motivation and engagement. When organizations show that they value their employees by investing in their professional development, employees feel appreciated and motivated to contribute their maximum.

This increases their loyalty and reduces turnover rates, which is crucial for the long-term stability and success of the organization. Motivated and engaged employees are more likely to initiate new ideas and solutions, contributing to the organization's innovation and competitive advantage.

An important aspect of investing in competence development is the organization's adaptability to market changes. In a dynamic business environment, the ability to quickly adapt to new technologies, trends, and market demands is essential.

Organizations that continuously invest in developing their employees' skills and knowledge can respond more quickly and effectively to changes, allowing them to remain competitive (Gagne 2014, 215). For example, the introduction of new technologies may require additional training for employees to ensure their efficient application and integration into existing business processes.

In addition to internal benefits, investing in competence development can improve the organization's reputation in the labor market. Organizations known for their commitment to employee professional development attract highly qualified candidates seeking growth and

advancement opportunities. This positive reputation can reduce hiring costs and allow the organization to select the best talents from a broader pool of candidates (Noe, 2017, 67). A good example is companies in the technology sector that often offer various training programs and development opportunities as part of their benefits packages.

Moreover, competence development can significantly impact organizational culture. Organizations that promote continuous learning and development create an environment that encourages innovation, collaboration, and mutual trust among employees. When employees feel they have support for their professional growth, they are more likely to share knowledge and collaborate with colleagues, further enhancing the overall work atmosphere and team efficiency (Jones, 2019, 102).

A culture of continuous learning can also help the organization become more resilient to changes and challenges, as employees become more capable of adapting to new situations and taking on new roles as needed.

Finally, investment in employee competence development can have long-term financial benefits for the organization. Although training and development programs require initial investments, the return on these investments can be significant.

Improved efficiency, reduced error rates, increased employee loyalty, and a better reputation in the labor market can lead to increased revenue and reduced operating costs. Organizations that strategically invest in competence development often achieve higher profits and sustainable growth.

In conclusion, investing in employee competence development brings numerous benefits to the organization. It increases work efficiency, improves work quality, motivates and engages employees, enables adaptability to market changes, enhances the organization's reputation, strengthens organizational culture, and provides long-term financial benefits. Organizations that recognize these benefits and continuously invest in the professional development of their employees create a stable foundation for long-term success and competitive advantage.

2.4.3. Adaptability and competitiveness as key factors

In the modern business environment, the ability to quickly adapt to changes and maintain competitiveness in the market is crucial for long-term success. Organizations that continuously invest in developing their employees' skills and knowledge can more effectively adapt to new technologies, changes in consumer preferences, and new regulations, thereby improving their market position (Schwab, 2017, 89).

Competence development significantly contributes to increasing employee flexibility. When employees possess a wide range of skills and knowledge, they can more easily adapt to new roles and tasks. This reduces the organization's dependence on individuals and allows for better allocation of resources according to current needs. For example, employees trained

for various jobs can take over tasks from absent colleagues, ensuring business continuity and reducing the risk of work process interruptions (Drucker, 1999, 104).

The quality and competencies of employees directly impact the organization's competitiveness. Continuous investment in employee skills development enables organizations to be innovative and provide high-quality services or products. Innovations often come from well-trained and motivated employees who apply the latest knowledge in their work. For example, technology companies that continuously educate their employees often lead in innovations, allowing them to maintain a competitive edge in the market (Hamel & Prahalad, 1994, 68).

Efficiency and productivity further increase the organization's competitiveness. Employees who regularly undergo training are often more efficient in performing their tasks, reducing costs and increasing profitability. Continuous learning enables employees to stay updated with the latest techniques and practices in the industry, enhancing their ability to solve problems quickly and effectively (Schwab, 2017, 112). For example, training in project management methods can reduce the time needed to complete projects, resulting in higher productivity and lower costs.

An organizational culture that supports continuous learning and development is crucial for adaptability and competitiveness. Organizations that promote a learning culture usually have employees motivated to continually improve their skills and knowledge. This culture creates an environment where innovation and continuous improvement are valued, contributing to the organization's long-term sustainability and success. For example, companies with mentoring and coaching programs enable employees to continuously enhance and develop, strengthening their ability to adapt to changes and contribute to innovations (Drucker, 1999, 157).

External factors such as market competition and regulatory changes also play a significant role in motivating organizations to develop their employees' competencies. Faced with high levels of competition, organizations must continually improve their capabilities to maintain or increase their market share.

This often requires employees to be at the forefront of industry trends and practices, achieved through continuous education and development (Hamel, Prahalad, 1994, 98). For example, manufacturing companies must ensure that their employees are familiar with the latest quality and safety standards to remain competitive.

In conclusion, employee competence development is crucial for increasing organizational adaptability and competitiveness. Continuous education and training enable employees to adapt to changes, innovate, and increase efficiency, contributing to the organization's long-term success.

Organizations that recognize these benefits and invest in developing their employees can expect improved operational performance and strengthened market positions. By creating a

learning culture and providing the necessary support, organizations can significantly enhance their ability to meet challenges and seize opportunities in a dynamic business environment.

2.5. Impact of competency development on business outcomes and organizational success

2.5.1. Association between competency development and workplace efficiency

Competencies, defined as a combination of skills, knowledge, and abilities, enable employees to successfully perform their tasks and achieve organizational goals. The competence development process includes formal education, training, mentoring, and practical experience, and continuous investment in this process contributes to increased workplace efficiency and overall business success.

One of the main reasons for developing employee competencies is to improve work efficiency. When employees possess relevant skills and knowledge, they can perform their tasks more efficiently, resulting in faster and higher-quality job execution. Increased efficiency directly contributes to improving the overall productivity of the organization. For example, training employees in the use of new software tools can reduce the time required to complete tasks, thereby increasing the overall efficiency of the team (Amabile, 1996).

In addition to increasing efficiency, competence development can significantly improve the quality of work. Employees who are trained and knowledgeable about the latest techniques and practices often provide higher quality services and products. For example, continuous training in quality and safety can reduce the number of errors and increase customer satisfaction. Organizations that invest in employee competence development create a learning culture that leads to innovation and continuous improvement of business processes.

Employee motivation and engagement are another significant aspect of competence development. When organizations show that they value their employees by investing in their professional development, employees feel appreciated and motivated to give their best.

This increases their loyalty and reduces turnover rates, which is crucial for the long-term stability and success of the organization. Motivated and engaged employees are more likely to initiate new ideas and solutions, contributing to the organization's innovation and competitive advantage.

The organization's adaptability to market changes is another important reason for developing employee competencies. In a dynamic business environment, the ability to quickly adapt to new technologies, trends, and market demands is essential.

Organizations that continuously invest in developing their employees' skills and knowledge can respond more quickly and efficiently to changes, allowing them to remain competitive.

For example, the introduction of new technologies may require additional training for employees to ensure their efficient implementation and integration into existing business processes.

In addition to internal benefits, investing in competence development can improve the organization's reputation in the labor market. Organizations known for their commitment to employee professional development attract highly qualified candidates seeking growth and advancement opportunities.

This positive reputation can reduce hiring costs and allow the organization to select the best talents from a broader pool of candidates. For example, companies in the technology sector that often offer various training programs and development opportunities as part of their benefits attract and retain top talent.

Finally, employee competence development can have long-term financial benefits for the organization. Although training and development programs require initial investments, the return on these investments can be significant. Improved efficiency, reduced errors, increased employee loyalty, and a better reputation in the labor market can lead to increased revenue and reduced operational costs. Organizations that strategically invest in developing their employees' competencies often achieve higher profits and sustainable growth (Amabile, 1996)..

2.5.2. Work quality and productivity as a result of adequate competency development

Work quality and productivity are key indicators of organizational success in the modern business environment. Employee competence development has a significant impact on both of these aspects, enabling employees to efficiently perform their tasks and continuously improve the quality of their outputs.

Adequate competence development encompasses a range of activities aimed at enhancing employees' skills, knowledge, and abilities, including formal education, training, mentoring, and practical experience.

One of the most important aspects of competence development is the enhancement of employees' technical skills. When employees are trained to use the latest technologies and tools, they can perform their tasks more efficiently, reducing the time required for execution and increasing overall productivity. For example, training in programming or the use of specific software packages can enable employees to complete their tasks faster and more accurately, directly impacting productivity (Bass, Riggio, 2006).

In addition to technical skills, competence development includes the improvement of cognitive skills, such as critical thinking, problem-solving, and decision-making. Employees who possess these skills can more effectively analyze situations, identify potential problems, and develop innovative solutions. For example, training in analytical techniques can enable

employees to better understand data and make informed decisions, leading to improved work quality and increased productivity.

Interpersonal skills, such as communication, teamwork, and leadership, also play a key role in work quality and productivity. Employees trained to communicate effectively and work in teams can collaborate better with colleagues, exchange ideas, and work together to solve problems. For example, training in teamwork can help employees develop better interpersonal relationships, contributing to a positive work atmosphere and increasing the overall efficiency of the team.

Mentorship is another important aspect of competence development that can significantly contribute to work quality and productivity. Experienced employees who serve as mentors can provide valuable advice and support to younger or less experienced colleagues, helping them quickly master new skills and adapt to the work environment.

For example, mentorship can accelerate the learning process for new employees, reducing the time needed for their integration into the team and increasing their productivity from the start.

Practical experience is a crucial element of competence development, as it allows employees to apply acquired knowledge in real work situations. By working on specific projects and tasks, employees can develop their skills and abilities, leading to improved work quality and increased productivity. For example, working on challenging projects can help employees apply theoretical knowledge in practice, developing their abilities and increasing efficiency (Bass, Riggio, 2006)..

A culture of continuous learning within the organization is key to successful competence development and the enhancement of work quality and productivity.

Organizations that promote constant learning and development create an environment where employees feel supported and motivated to improve their skills and knowledge. For example, organizing regular training sessions, providing access to learning resources, and management support can significantly contribute to employee competence development, reflecting on their work quality and productivity.

Adequate employee competence development brings numerous benefits to the organization. In addition to increasing technical, cognitive, and interpersonal skills, competence development contributes to creating a positive work culture, increasing employee motivation and engagement, and fostering their loyalty to the organization. Organizations that continuously invest in developing their employees' competencies can expect improved work quality, increased productivity, and long-term business success.

3. REASONS AND MOTIVATION FOR INVESTING IN COMPETENCY DEVELOPMENT

Investing in employee competence development is becoming increasingly important in the rapidly changing modern business environment. Employee competencies, which encompass the skills, knowledge, and abilities necessary for successfully performing job tasks, are crucial for achieving organizational goals and maintaining a competitive edge in the market. Competence development not only increases work efficiency and quality of work but also contributes to greater employee satisfaction and engagement.

There are numerous reasons why organizations invest in developing their employees' competencies. On one hand, individual motivation of employees to acquire new skills and knowledge plays a key role in their professional development and success. On the other hand, organizations recognize the many benefits of investing in competence development, including improved:

- work efficiency,
- work quality, and
- increased employee loyalty.

Adaptability and competitiveness are also key factors motivating organizations to continuously invest in the development of their employees.

3.1. Individual motivation for acquiring new skills and knowledge

Individual motivation for acquiring new skills and knowledge is a key driver of employee professional development. This motivation can be intrinsic, where individuals feel an internal need for learning and development, or extrinsic, where they are motivated by external factors such as rewards, recognition, or career advancement.

Intrinsic motivation often stems from a desire for personal growth, satisfaction with achievements, and striving for excellence. Employees who are intrinsically motivated typically take the initiative in their learning, explore new areas, and seek opportunities for additional education and training. For example, an employee who feels an internal need to acquire new skills may independently attend online courses or participate in workshops to improve their knowledge and skills (Gagne, 2014).

On the other hand, extrinsic motivation includes factors such as promotions, raises, recognition, and other types of rewards that can encourage employees to acquire new skills and knowledge. Organizations often use various reward programs to stimulate continuous learning and development among employees. For example, some employers offer financial support for attending courses, seminars, or obtaining certifications, while others provide career advancement opportunities as a reward for successfully completing training or development programs.

In addition to intrinsic and extrinsic motivation, organizational culture plays a crucial role in encouraging employees to acquire new skills and knowledge. Organizations that promote a culture of learning and development support employees in their efforts to improve.

This can be achieved through various initiatives such as regular training sessions, mentoring, access to learning resources, and creating an environment that values innovation and continuous improvement. A learning culture fosters a sense of community and collective progress, where employees feel that their efforts for development are not just individual but contribute to the overall success of the organization.

Social factors can also significantly impact individual motivation for acquiring new skills and knowledge. Peer pressure, management expectations, and professional networks can encourage employees to engage in training and development activities.

When employees see their colleagues putting effort into their professional development, they often feel the need to follow their example to remain competitive and relevant in their work environment. Additionally, support and encouragement from supervisors can significantly increase employees' motivation for continuous learning and development (Noe, 2017).

Emotional factors such as the sense of achievement, confidence, and job satisfaction also play an important role in the motivation for acquiring new skills and knowledge. When employees achieve a certain level of expertise or complete a demanding course, they often experience a sense of pride and satisfaction that further motivates them to continue learning. This can create a positive learning cycle, where each success leads to greater engagement and a desire for further improvement (Gagne, 2014).

Psychological factors such as personal ambitions, the pursuit of career advancement, and the need for professional recognition can also significantly influence individual motivation for acquiring new skills and knowledge. Employees who have clear career goals and plans are often more motivated to invest in their education and professional development.

This motivation can be further enhanced through organizational policies that support professional growth and development, such as mentorship, advancement opportunities, and reward structures that recognize and appreciate employees' efforts and achievements.

Individual motivation for acquiring new skills and knowledge does not stem from a single source but is the result of a combination of various intrinsic and extrinsic factors. Organizations that recognize and support these factors can create an environment that encourages continuous learning and professional development, leading to greater efficiency, employee satisfaction, and overall organizational success. By creating a culture of learning and providing the necessary support, organizations can significantly increase their employees' motivation for acquiring new skills and knowledge.

3.2. Organizational benefits of investing in employee competency development

Employee competence development brings numerous benefits to organizations, improving work efficiency, work quality, employee satisfaction, and overall business success. These investments enable companies to remain competitive and adaptable in a changing business environment. There are several key reasons why companies choose to invest in developing their employees' skills.

One of the primary benefits of investing in employee competence development is increased work efficiency. When employees possess the necessary skills and knowledge, they can perform their tasks more efficiently, reducing the time needed to complete them and increasing overall productivity. For example, training employees to use new technologies or software tools can significantly improve their efficiency, resulting in faster and higher-quality task execution.

In addition to increasing efficiency, employee competence development improves work quality. Employees who are trained and possess the latest knowledge and skills often provide higher quality services and products. For example, continuous training in quality and safety can reduce the number of errors and increase customer satisfaction. Work quality directly impacts the organization's reputation and success in the market (Schwab, 2017).

One significant aspect of competence development is increased employee satisfaction and engagement. When companies invest in developing their employees, they feel valued and motivated to give their best. This increases their loyalty and reduces turnover rates, which is crucial for the organization's long-term stability. Motivated and engaged employees are more likely to initiate new ideas and solutions, contributing to the organization's innovation and competitive advantage.

Employee competence development also contributes to creating a positive work culture. Organizations that promote continuous learning and development create an environment where employees feel supported and motivated to improve their skills and knowledge. For example, organizing regular training sessions, mentorship, and access to learning resources can significantly contribute to employee competence development, reflecting on their work quality and productivity.

A culture of continuous learning fosters a sense of community and collective progress, where employees feel that their development efforts are not just individual but contribute to the overall success of the organization.

Investing in employee competence development can also have long-term financial benefits for the organization. Although training and development programs require initial investments, the return on these investments can be significant. Improved efficiency, reduced errors, increased employee loyalty, and a better reputation in the labor market can lead to increased revenue and reduced operational costs.

Organizations that strategically invest in developing their employees' competencies often achieve higher profits and sustainable growth. For example, companies in the technology sector that frequently offer various training programs and development opportunities as part of their benefits attract and retain top talent, which is reflected in their long-term business success (Drucker, 1999).

One of the key factors motivating organizations to invest in employee competence development is adaptability to market changes. In a dynamic business environment, the ability to quickly adapt to new technologies, trends, and market demands is essential. Organizations that continuously invest in developing their employees' skills and knowledge can respond more quickly and efficiently to changes, allowing them to remain competitive. For example, the introduction of new technologies may require additional training for employees to ensure their effective implementation and integration into existing business processes (Schwab, 2017).

In addition to internal benefits, investing in competence development can improve the organization's reputation in the labor market. Organizations known for their commitment to employee professional development attract highly qualified candidates seeking growth and advancement opportunities.

This positive reputation can reduce hiring costs and allow the organization to select the best talents from a broader pool of candidates. For example, companies in the technology sector that frequently offer various training programs and development opportunities as part of their benefits attract and retain top talent (Porter, 1998).

In conclusion, investing in employee competence development brings numerous benefits to organizations, including increased work efficiency, improved work quality, enhanced employee satisfaction and engagement, the creation of a positive work culture, and long-term financial benefits. Organizations that continuously invest in developing their employees can expect improved work quality, increased productivity, and long-term business success.

3.3. Adaptability and competitiveness as key factors

Investing in employee competence development plays a crucial role in increasing an organization's ability to adapt to market changes and maintain a competitive edge. Adaptability and competitiveness have become critical factors for the long-term success of any organization in the rapidly changing modern business environment.

Adaptability refers to an organization's ability to quickly and efficiently respond to changes in the external environment, including technological innovations, changes in market conditions, and regulatory requirements.

Organizations that continuously invest in developing their employees' skills and knowledge can adapt more quickly to these changes. For example, the introduction of new technologies or business processes requires employees to possess the appropriate competencies to implement and use them effectively. Regular training and educational programs help employees stay updated with the latest trends and technologies, increasing the organization's ability to adapt quickly (Schwab, 2017).

Competitiveness refers to an organization's ability to outperform its rivals in the market. Developing employee competencies can significantly contribute to increasing an organization's competitive advantage. Qualified and skilled employees are better able to provide high-quality services and products, which can attract and retain clients. For example, companies that invest in continuous education and training for their employees can develop innovative solutions that set them apart from the competition. This includes not only technical skills but also the development of critical thinking, creativity, and problem-solving abilities (Porter, 1998).

Moreover, adaptability and competitiveness are interconnected factors. Adaptive organizations that quickly respond to market changes can better seize new opportunities and minimize the negative effects of potential risks. This allows them to remain competitive in a dynamic business environment. For instance, an organization that rapidly implements new technology can offer more advanced products or services, positioning itself better compared to competitors who are slower to adapt.

Investing in employee competence development can also improve internal competitiveness within the organization. When employees see their colleagues advancing through continuous education and development, it can create a positive competitive environment that encourages all team members to strive harder and improve their skills. This can result in higher productivity and innovation, as employees actively seek ways to enhance their performance and contribute to the organization's success.

Organizations that invest in employee competence development often achieve better talent retention results. Employees who see that their employer provides opportunities for professional development and advancement are more likely to remain loyal to the organization. This reduces turnover and the costs associated with hiring new employees while simultaneously increasing the morale and engagement of existing employees.

In conclusion, adaptability and competitiveness are key factors for organizational success in the modern business environment. Investing in employee competence development enables organizations to quickly adapt to changes and maintain a competitive edge. Through continuous education and training, organizations can ensure that their employees possess the necessary skills and knowledge to effectively respond to challenges and seize new opportunities in the market.

4. IMPACT OF COMPETENCY DEVELOPMENT ON BUSINESS OUTCOMES AND ORGANIZATIONAL SUCCESS

Investing in employee competence development plays a crucial role in achieving business goals and the long-term success of organizations. Employee competencies, which encompass the knowledge, skills, and abilities necessary for efficiently performing job tasks, directly impact work efficiency, work quality, and overall productivity. Continuous improvement of these competencies contributes not only to the individual development of employees but also to the enhancement of business results and organizational culture.

Through investing in competence development, organizations can create a work environment that fosters innovation, increases employee satisfaction, and reduces turnover. These investments enable organizations to quickly adapt to market changes, remain competitive, and build a positive reputation among employees and clients. Below, we will explore how competence development impacts work efficiency, work quality, and productivity, as well as the improvement of organizational culture and employee satisfaction.

4.1. Association between competency development and workplace efficiency

„Work efficiency is one of the key factors determining the success of any organization. Efficiency refers to employees' ability to perform their tasks quickly and with minimal resources, directly contributing to productivity and cost reduction. Employee competence development plays a crucial role in increasing work efficiency by enabling employees to acquire the necessary skills and knowledge for optimal task performance“ (Garavan, McGuire & O'Donnell, 2004, 417).

One way competence development increases work efficiency is through training on the use of new technologies and tools. When employees are trained to efficiently use the latest software tools or machines, they can perform their tasks faster and more accurately, reducing the time required for task completion and increasing overall productivity (Wang, Holton, 2005).

For example, training in the use of project management software packages can enable employees to plan, track, and execute projects more efficiently, leading to faster achievement of goals and cost reduction.

Besides technical skills, competence development also includes the improvement of communication and interpersonal skills, which are essential for effective teamwork and collaboration. Employees with strong communication skills can better collaborate with colleagues, clients, and supervisors, resulting in more efficient teamwork and faster problem-solving. For example, training in interpersonal communication skills can help employees exchange information more effectively and resolve conflicts, contributing to smoother team operations and increased overall efficiency.

Competence development also contributes to reducing errors and increasing accuracy in work, which directly impacts work efficiency. When employees are well-trained and possess the appropriate knowledge, they are less likely to make mistakes that can lead to loss of time and resources. For example, continuous training on quality and safety procedures can reduce the number of errors in the production process, resulting in fewer complaints and lower correction costs (Garavan, McGuire & O'Donnell, 2004, 417)..

Investing in employee competence development can also increase their motivation and engagement, which is crucial for work efficiency. When employees feel valued and have the opportunity to improve their skills and knowledge, they are more likely to be engaged and motivated at work.

This can result in greater effort, creativity, and proactivity, contributing to the overall efficiency of the team and organization. For example, mentorship and professional development programs can motivate employees to take initiative and contribute to innovations and improvements in business processes (Jones, 2019).

Organizations that invest in the continuous development of their employees' competencies also have a greater ability to adapt to changes in the market and business environment. Rapid adaptation to new technologies, market trends, and regulatory requirements is essential for long-term success. Employees trained to adapt to new situations can more efficiently implement changes and innovations, resulting in greater organizational flexibility and agility. For example, training in change management skills can help employees quickly adapt to new processes and technologies, increasing the overall efficiency of the organization (Schwab, 2017).

Finally, employee competence development can enhance work efficiency by increasing loyalty and retaining talent. Employees with professional development opportunities are more likely to stay with the organization, reducing the costs of hiring and training new employees. A stable team of experienced and skilled employees can perform their tasks more efficiently and contribute to the organization's long-term success.

4.2. Work quality and productivity as a result of adequate competency development

Employee competence development plays a crucial role in improving work quality and productivity within an organization. Adequate competence development encompasses various activities aimed at enhancing employees' skills, knowledge, and abilities, which directly impact their ability to perform their tasks efficiently. Work quality and productivity are interrelated factors that significantly influence the overall success of an organization.

One way competence development increases work quality is by enhancing employees' technical skills. When employees are trained to use the latest technologies and tools, they can perform their tasks more accurately and efficiently.

„For example, continuous training on the use of new software applications can help employees execute their tasks faster and more precisely, directly impacting the quality and speed of product or service delivery. These improvements not only reduce the number of errors but also increase customer satisfaction, which is crucial for the long-term success of the organization“ (Aguinis, Kraiger, 2009, 451).

In addition to technical skills, competence development includes improving soft skills such as communication, teamwork, and leadership. Employees with strong communication skills can collaborate more effectively with colleagues and clients, resulting in a better understanding of needs and expectations. For example, training in communication skills can help employees convey information more clearly and effectively, reducing the likelihood of misunderstandings and improving work quality.

Competence development also contributes to increased productivity by enhancing employees' ability to manage their time and resources effectively. When employees are trained in time management and work organization, they can better prioritize tasks and use resources more efficiently, resulting in increased overall productivity. For example, time management training can help employees develop planning and organizational skills, leading to more efficient task execution and reduced stress.

Beyond the direct benefits, employee competence development fosters a culture of continuous improvement within the organization. When employees see that their employers invest in their professional development, they are motivated to give their best and contribute to the organization's success (Carter, 2001).

This culture of continuous learning and improvement encourages employees to actively seek ways to enhance their skills and knowledge, resulting in innovations and improvements in business processes.

Competence development can also reduce employee turnover, directly affecting work quality and productivity. Employees with opportunities for professional development are more likely to stay with the organization, reducing the costs associated with hiring and training new employees. A stable team of experienced and skilled employees can perform their tasks more efficiently and contribute to the organization's long-term success (Jones, 2019).

Continuous improvement of employee competencies allows organizations to be more flexible and adaptable in facing market changes. Rapid adaptation to new technologies, industry changes, and regulatory requirements is key to maintaining a competitive advantage. For example, training employees to adapt to new business processes can help the organization efficiently implement changes and maintain high productivity levels (Schwab, 2017).

Employee competence development not only improves work quality and increases productivity but also contributes to the organization's long-term success.

Organizations that continuously invest in the professional development of their employees can expect better business results, greater employee loyalty, and a better reputation in the labor market. Through a strategic approach to competence development, organizations can ensure that their employees possess the necessary skills and knowledge to effectively face challenges and seize new opportunities in the market.

4.3. Improvement of organizational culture and employee satisfaction

Employee competence development has a profound impact on enhancing organizational culture and employee satisfaction. Organizations that continuously invest in the professional development of their employees create a positive work environment that fosters engagement, loyalty, and satisfaction. Improving organizational culture and employee satisfaction not only enhances work performance but also contributes to the long-term success of the organization.

One of the main ways competence development improves organizational culture is by strengthening communication and collaboration among employees. When employees possess strong communication skills, they can exchange ideas more effectively, resolve conflicts, and work as a team. For example, training in team dynamics and communication skills can help employees develop better interpersonal relationships, contributing to a positive and cohesive work environment (Schein, 2010).

Moreover, employee competence development encourages a culture of continuous learning and innovation. Organizations that promote continuous education and professional development create an atmosphere where employees feel motivated to improve their skills and knowledge. This learning culture not only enhances individual performance but also fosters collective innovation and improvements in business processes. For example, companies that regularly organize workshops and seminars for their employees often experience higher levels of innovation and creativity (Edmondson, 2012).

Employee satisfaction is another critical aspect that improves through competence development. When employees have opportunities for professional development and advancement, they feel valued and motivated. This increases their loyalty and reduces turnover, which is crucial for the long-term stability of the organization. For example, mentorship and training programs not only help employees develop their skills but also provide a sense of support and appreciation from the organization (Herzberg, 1968).

Competence development also contributes to creating a fair and inclusive organizational culture. When organizations provide equal opportunities for training and development to all employees, they promote equality and fairness within the work environment. This inclusivity leads to greater employee satisfaction and improves their morale. For example, companies that implement leadership development and training programs for all employee levels often see higher levels of engagement and satisfaction (Thomas & Ely, 1996).

Organizations that invest in developing their employees' competencies often achieve better results in attracting and retaining talent. A positive organizational culture that values and supports professional development attracts highly qualified candidates and helps retain existing talent. For example, companies known for their training programs and development opportunities often attract the best talent in the labor market, enabling them to build strong and competent teams (Kegan & Lahey, 2009).

In conclusion, employee competence development significantly impacts enhancing organizational culture and employee satisfaction. By strengthening communication, fostering a culture of continuous learning, increasing employee satisfaction, and creating a fair and inclusive work environment, organizations can achieve long-term success and sustainable competitive advantage. Organizations that continuously invest in their employees' professional development not only improve work performance but also create a positive work environment that fosters engagement and loyalty.

5. EMPIRICAL RESEARCH

5.1. Dynamics and course of the research

An empirical study, whose main objective was to analyze the relationship between employee competence development, their empowerment, and autonomy in the workplace, was conducted from May 20, 2023, to June 5, 2023. The study was carried out among employees of various organizations, with a particular focus on public and private companies in the service sector.

The selection of respondents (sample units) was done in accordance with the principles of random sampling to ensure a representative sample of active employees. During the research, attention was also paid to ensuring that the respondents had different demographic characteristics. The survey of respondents was conducted online via email, emphasizing that the questionnaire was anonymous and that the collected data would be used solely for the purposes of this study. A total of 200 respondents participated in the study.

The main instrument in our empirical research was a questionnaire containing specific questions of nominal, ordinal, and interval types. The first seven questions related to the demographic characteristics of the respondents: gender, age, education, length of service, position in the company, type of employment, and amount of personal monthly income.

5.2. Research instrument (questionnaire design)

The research instrument used in this study is a structured questionnaire, designed with the aim of collecting data relevant to the analysis of the relationship between employee competence development, their empowerment, and autonomy in the workplace. The questionnaire is designed to encompass various aspects of the research variables through

nominal, ordinal, and interval questions, enabling a comprehensive and detailed analysis of the research problem. The questionnaire is divided into five main sections: demographic structure, employee competence development, employee empowerment, employee autonomy, and level of engagement.

The section on demographic structure contains questions related to the basic demographic characteristics of the respondents, including gender, age, level of education, length of service, position in the company, type of employment, and average monthly income, to provide contextual information about the respondents.

The sections on employee competence development, employee empowerment, employee autonomy, and level of engagement consist of Likert-type scales, allowing respondents to express their agreement or disagreement with a series of statements.

These questions are designed to assess employees' perceptions and experiences regarding their professional development, sense of empowerment, work autonomy, and workplace engagement. The use of Likert scales enables the quantification of responses, facilitating statistical analysis and interpretation of the data. The questionnaire is designed to be easy to understand and complete, ensuring a high response rate and the reliability of the collected data.

5.3. Demographic Characteristics of the Research Sample

The sample units (respondents) in our research are individuals who have active employment in various organizations, with a particular focus on public and private companies in the service sector in Bosnia and Herzegovina. During the research, special attention was paid to ensuring the representativeness of the sample by selecting respondents with different demographic characteristics.

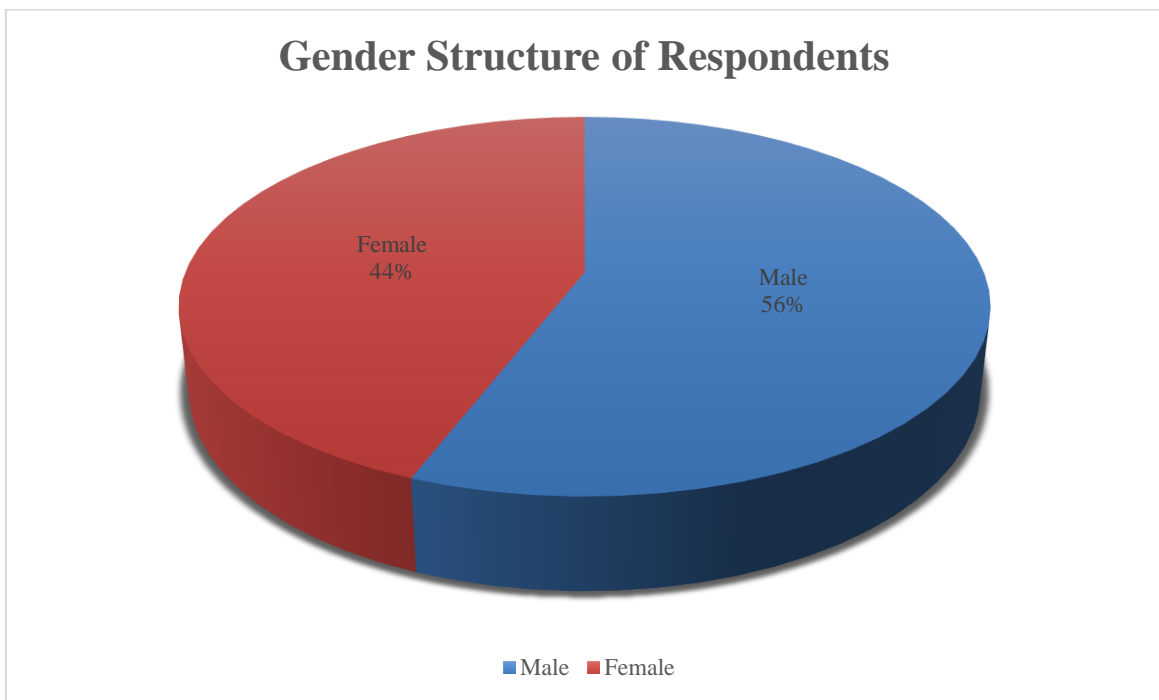
Their demographic characteristics, including gender, age group, level of education, length of service, position in the company, type of employment, and average monthly income, are presented descriptively and in tabular form below. This approach allows for a comprehensive analysis and provides a deeper insight into the research problem, thereby contributing to the reliability and validity of the research results.

Table 1. Gender Structure of Respondents

Gender	Number of Respondents	
	Number	%
Male	114	55,9
Female	90	44,1
Total	204	100,0

Source: Author (2024)

Graph 1. Graphical Representation of the Gender Structure of Respondents



Source: Author (2024)

Analyzing the gender structure of respondents within the study that included 204 participants, we observe that the male gender is represented by 114 respondents, which makes up 55.9% of the total number. On the other hand, the female gender is represented by 90 respondents, accounting for 44.1% of the total sample.

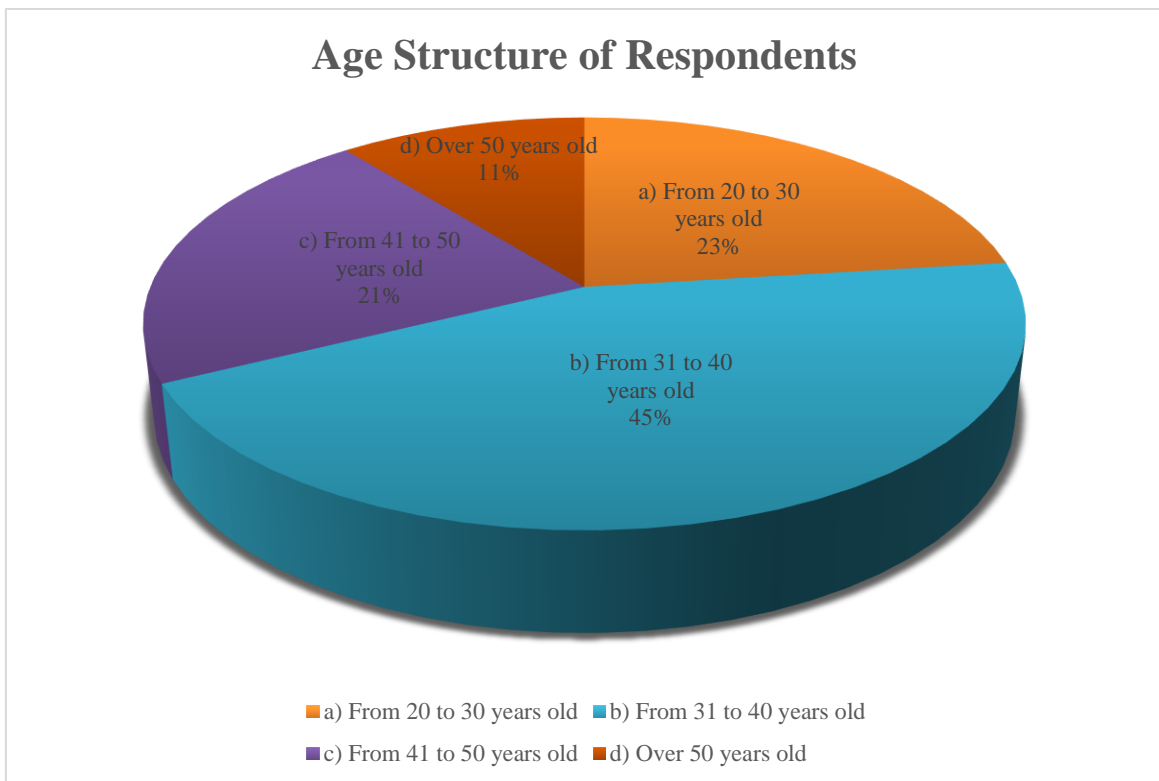
These results indicate that the male gender is somewhat more represented compared to the female gender in this study. However, both genders are significantly represented, allowing for a comprehensive analysis of the results from a gender perspective.

Table 2. Age Structure of Respondents

Age Structure	Number of Respondents	
	Number	%
From 20 to 30 years old	47	23,0
From 31 to 40 years old	91	44,6
From 41 to 50 years old	44	21,6
Over 50 years old	22	10,8
Total	204	100,0

Source: Author (2024)

Graph 2. Graphical Representation of the Age Structure of Respondents



Source: Author (2024)

Analyzing the age structure of the respondents in the study, which included 204 participants, we observe the following distribution: the age group from 20 to 30 years old comprises 47 respondents, accounting for 23.0% of the total. The age group from 31 to 40 years old is the most represented, with 91 respondents, making up 44.6% of the sample. Respondents aged

41 to 50 years old number 44, representing 21.6% of the total, while those over 50 years old include 22 respondents, or 10.8% of the sample.

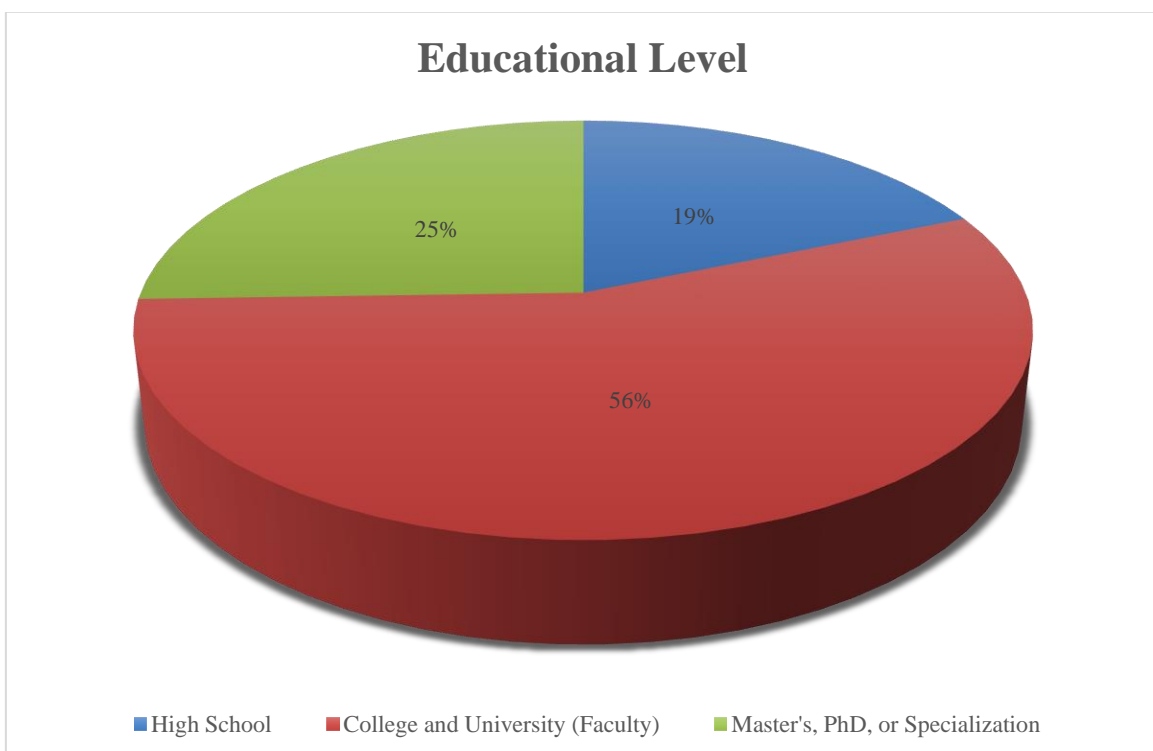
These results indicate a diverse age range among the respondents, with a notable predominance of the 31 to 40 age group.

Table 3. Educational Level of Respondents

Educational Level	Number of Respondents	
	Number	%
High School	38	18,6
College and University (Faculty)	114	55,9
Master's, PhD, or Specialization	52	25,5
Total	204	100,0

Source: Author (2024)

Graph 3. Graphical Representation of Educational Level



Source: Author (2024)

Analyzing the educational level of the respondents in the study, which included 204 participants, we observe the following distribution: respondents with a high school education number 38, accounting for 18.6% of the total. Those with a college or university degree make up the majority, with 114 respondents, representing 55.9% of the sample. Additionally, 52 respondents have a Master's, PhD, or specialization, making up 25.5% of the total.

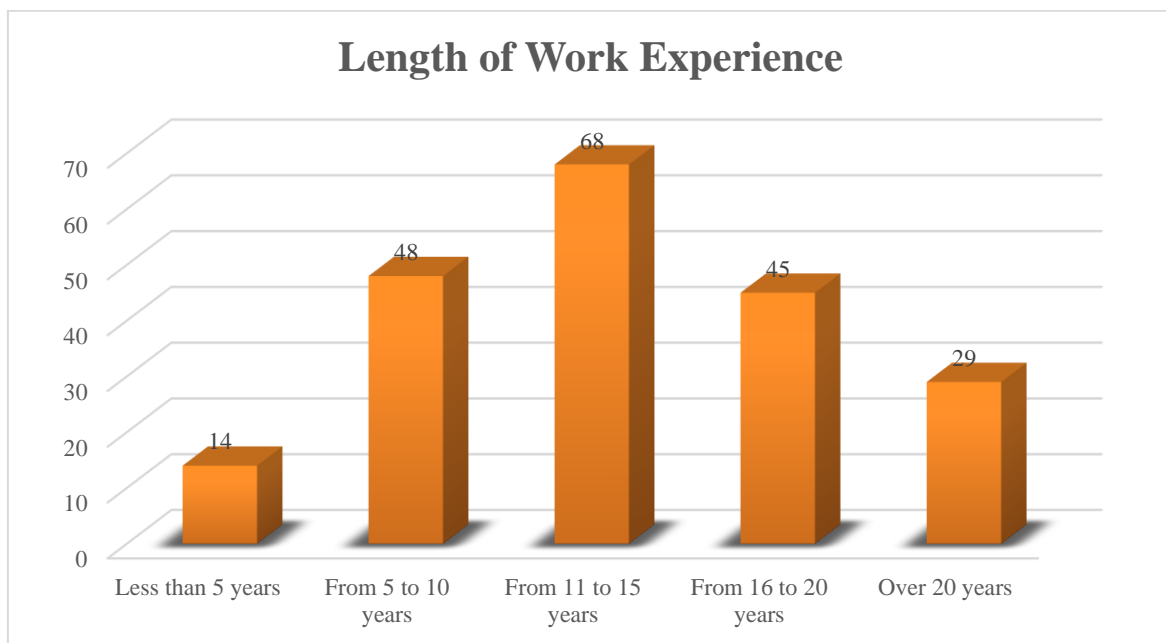
These results indicate a well-educated sample, with the majority holding higher education degrees.

Table 4. Length of Work Experience

Length of Work Experience	Number of Respondents	
	Number	%
Less than 5 years	14	6,9
From 5 to 10 years	48	23,5
From 11 to 15 years	68	33,3
From 16 to 20 years	45	22,1
Over 20 years	29	14,2
Total	204	100,0

Source: Author (2024)

Graph 4. Graphical Representation of Length of Work Experience



Source: Author (2024)

Analyzing the length of work experience among the respondents in the study, which included 204 participants, we find the following distribution: those with less than 5 years of experience number 14, accounting for 6.9% of the total. Respondents with 5 to 10 years of experience constitute 48 individuals, representing 23.5% of the sample. The largest group comprises those with 11 to 15 years of experience, totaling 68 respondents, or 33.3% of the sample. Participants with 16 to 20 years of experience number 45, making up 22.1% of the total, while those with over 20 years of experience include 29 respondents, accounting for 14.2% of the sample.

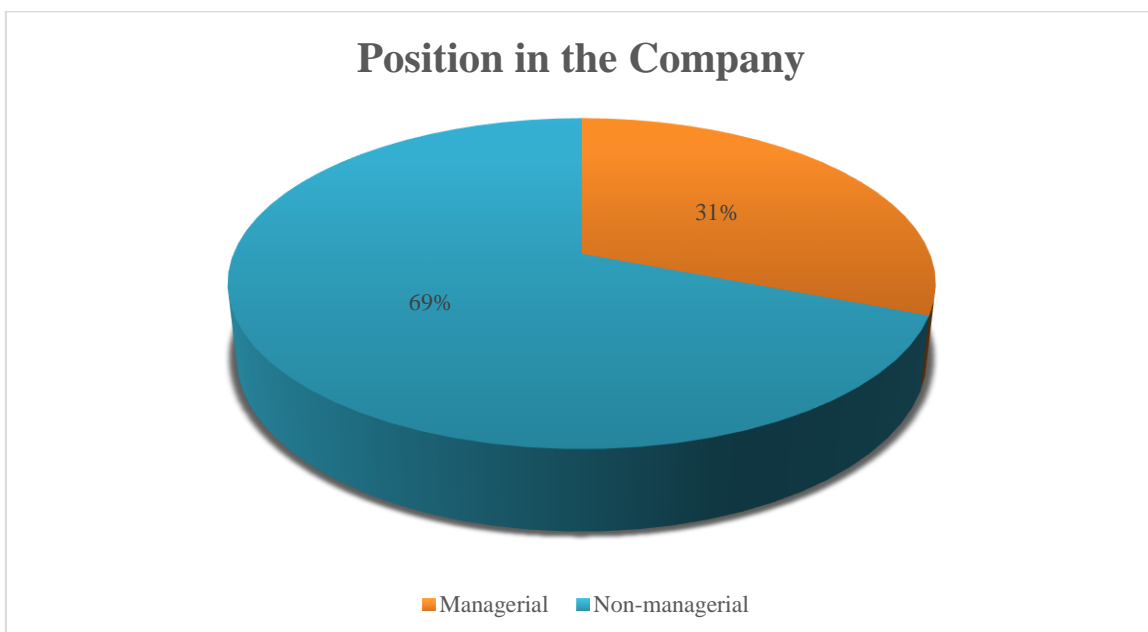
This distribution indicates a broad range of work experience among the respondents, with a significant portion having substantial experience in their respective fields.

Table 5. Position in the Company

Position in the Company	Number of Respondents	
	Number	%
Managerial	63	30,9
Non-managerial	141	69,1
Total	204	100,0

Source: Author (2024)

Graph 5. Graphical Representation of Position in the Company



Source: Author (2024)

Analyzing the position of respondents within their companies, which included 204 participants, we find the following distribution: 63 respondents hold managerial positions, accounting for 30.9% of the total, while 141 respondents are in non-managerial roles, representing 69.1% of the sample. These results highlight a greater representation of non-managerial employees compared to managerial staff.

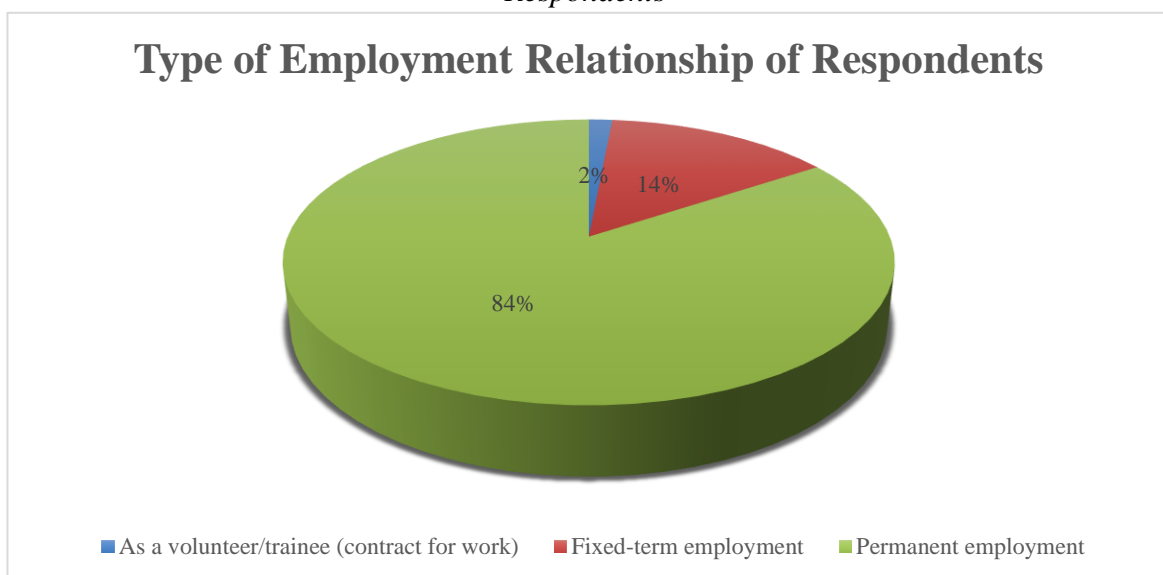
This distribution is significant for the research topic, „Testing the Mediation Effect of Autonomy with Employee Competence Development and Empowerment on Workplace Engagement,“ as it provides a comprehensive perspective on how autonomy, competence development, and empowerment impact both managerial and non-managerial employees. Understanding the differences and similarities in these impacts across different organizational levels is crucial for developing effective strategies that cater to the unique needs of each group.

Table 6. Type of Employment Relationship of Respondents

Employment Relationship	Number of Respondents	
	Number	%
As a volunteer/trainee (contract for work)	3	1,5
Fixed-term employment	29	14,2
Permanent employment	172	84,3
Total	204	100,0

Source: Author (2024)

Graph 6. Graphical Representation of the Type of Employment Relationship of Respondents



Source: Author (2024)

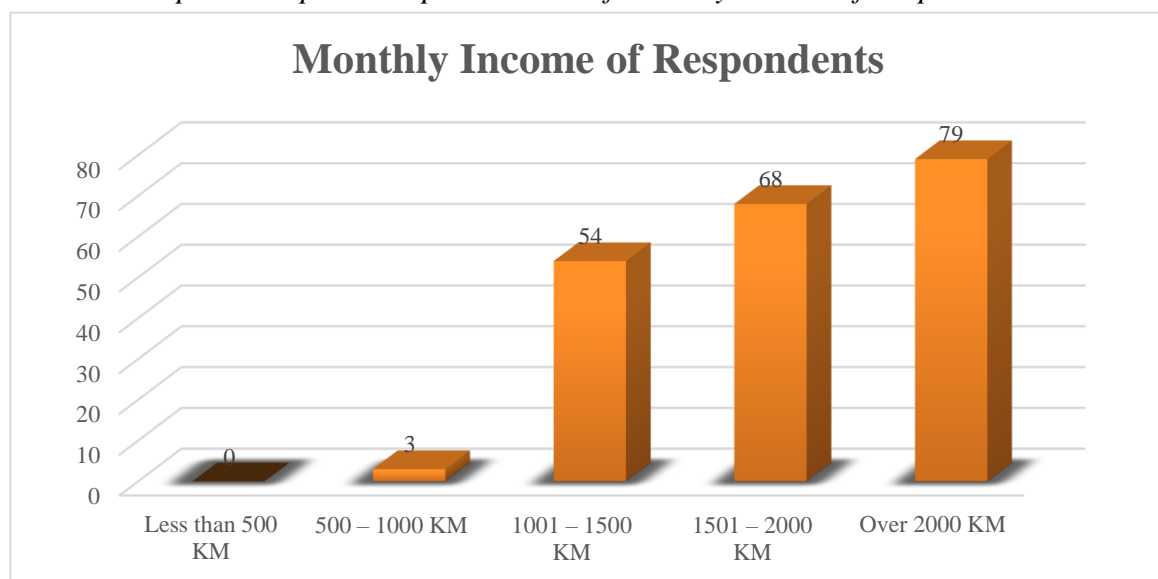
Analyzing the type of employment relationship among the respondents in the study, which included 204 participants, we find the following distribution: 3 respondents are engaged as volunteers or trainees under a contract for work, accounting for 1.5% of the total. Those with fixed-term employment make up 29 respondents, representing 14.2% of the sample, while the majority, 172 respondents, have permanent employment, constituting 84.3% of the total. This distribution is particularly relevant to the research topic, „Testing the Mediation Effect of Autonomy with Employee Competence Development and Empowerment on Workplace Engagement.“ The predominance of permanently employed respondents ensures that the study's findings are primarily reflective of those with a stable and ongoing relationship with their employer. This stability is likely to influence their experiences of competence development, empowerment, and autonomy differently compared to those in temporary or trainee positions.

Table 7. Monthly Income of Respondents

Monthly Income	Number of Respondents	
	Number	%
Less than 500 KM	0	0,0
500 – 1000 KM	3	1,5
1001 – 1500 KM	54	26,5
1501 – 2000 KM	68	33,3
Over 2000 KM	79	38,7
Total	204	100,0

Source: Author (2024)

Graph 7. Graphical Representation of Monthly Income of Respondents



Source: Author (2024)

Analyzing the monthly income of the respondents in the study, which included 204 participants, we observe the following distribution: no respondents reported earning less than 500 KM. A small proportion, 3 respondents, earn between 500 and 1000 KM, accounting for 1.5% of the total. Those earning between 1001 and 1500 KM number 54, representing 26.5% of the sample. Respondents with a monthly income between 1501 and 2000 KM make up 68 individuals, constituting 33.3% of the total.

The largest group, with 79 respondents, earns over 2000 KM, making up 38.7% of the sample.

This income distribution is relevant to the research topic, „Testing the Mediation Effect of Autonomy with Employee Competence Development and Empowerment on Workplace Engagement,“ as it provides insights into the financial well-being of the respondents, which can influence their perceptions of autonomy, competence development, and empowerment. Higher income levels may correlate with greater access to professional development opportunities and a stronger sense of job security, potentially enhancing engagement and the effectiveness of empowerment strategies.

Table 8. Employee Competence Development

Factors		Values	
	Factors	Average	Standard Deviation
1.	I regularly participate in training and development programs that are relevant to my job tasks.	3,79	0,96938
2.	Access to educational resources in my organization significantly contributes to my professional growth.	3,54	0,84981
3.	I have the opportunity to continuously improve through various forms of professional development.	3,77	0,92335
4.	Training programs in my organization are directly aimed at enhancing my specific skills needed for the job.	3,90	0,99763
5.	The meaningfulness and utility of the training I undergo are highly rated by myself and my peers.	3,84	0,89412
6.	I have acquired key skills through development activities available to me at work.	3,93	0,88512
TOTAL		3,80	0,92805

Source: Author (2024)

Analyzing the results of the study, we can observe that three factors stand out as significant in the context of employee competence development.

- I have acquired key skills through development activities available to me at work (3.93): This high average value indicates that respondents strongly agree that they have gained essential skills through the development activities provided by their organization. This finding underscores the effectiveness of these activities in enhancing the skill sets of employees, contributing to their overall professional growth and competence in their roles.
- Training programs in my organization are directly aimed at enhancing my specific skills needed for the job (3.90): The high average score for this factor suggests that respondents feel that the training programs offered by their organization are highly relevant and tailored to improve the specific skills required for their job tasks. This indicates that the organization’s training initiatives are well-targeted and beneficial in helping employees perform their job functions more effectively.
- The meaningfulness and utility of the training I undergo are highly rated by myself and my peers (3.84): This result shows that respondents and their peers find the training programs meaningful and useful. Such high ratings imply that these programs are not only effective in skill development but are also valued by employees, enhancing their engagement and motivation to participate in these training activities.

These results highlight the importance of well-designed training and development programs in fostering employee competence. By providing relevant and valuable training, organizations can significantly enhance the skills and capabilities of their workforce, leading to higher levels of job performance and satisfaction.

Table 9. Employee Empowerment

	Factors	Values	
		Average	Standard Deviation
1.	I feel that I have autonomy in making decisions related to my job.	4,20	0,94363
2.	My contribution to the success of the team and the organization is significant.	3,87	0,89864
3.	I have the freedom to innovate and propose changes that can improve work processes.	3,90	0,98067

4.	My opinion is valued and taken into account when making key decisions.	3,86	0,99297
5.	I feel empowered to take on leading projects or tasks without fear of negative consequences.	3,79	0,87313
6.	My organization promotes a culture that supports employee empowerment.	4,07	0,91483
<i>TOTAL</i>		3,95	0,94334

Source: Author (2024)

Analyzing the results of the study, we can observe that three factors stand out as significant in the context of employee empowerment.

- I feel that I have autonomy in making decisions related to my job (4.20): This high average value indicates that respondents strongly agree that they possess significant autonomy in making decisions related to their job tasks. This finding underscores the importance of autonomy as a key component of empowerment, allowing employees to feel in control and confident in their decision-making abilities.
- My organization promotes a culture that supports employee empowerment (4.07): The high average score for this factor suggests that respondents believe their organization actively fosters a culture that encourages and supports empowerment. This indicates that the organizational environment is conducive to empowering employees, which is critical for enhancing their engagement and motivation.
- I have the freedom to innovate and propose changes that can improve work processes (3.90): This result shows that respondents feel they have the liberty to introduce new ideas and suggest improvements to work processes. Such freedom is essential for fostering a culture of innovation and continuous improvement, which can lead to enhanced efficiency and effectiveness in the workplace.

These results highlight the crucial role of autonomy, supportive organizational culture, and freedom to innovate in fostering employee empowerment. By ensuring that employees feel empowered to make decisions, propose changes, and contribute to a supportive culture, organizations can significantly enhance their employees' engagement, satisfaction, and overall performance.

Table 10. Employee Autonomy

<i>Factors</i>		<i>Values</i>	
	Factors	Average	Standard Deviation
1.	I can control my reactions and emotions even in stressful situations.	4,19	1,03043
2.	I effectively manage my time and priorities to achieve set goals.	3,80	0,83091
3.	I have the freedom to organize my workday independently.	3,83	0,90880
4.	My ability to work independently from others is key to my success at work.	3,95	0,88946
5.	I feel secure and supported when working without direct supervision.	3,84	0,85090
6.	The autonomy I have allows me to better manage work and personal commitments.	4,16	1,07286
<i>TOTAL</i>		3,96	0,94603

Source: Author (2024)

Analyzing the results of the study, we can observe that three factors stand out as significant in the context of employee autonomy.

- I can control my reactions and emotions even in stressful situations (4,20): This high average value indicates that respondents strongly agree that they are capable of managing their reactions and emotions effectively, even under stress. This finding highlights the importance of emotional regulation as a key aspect of autonomy, allowing employees to maintain professionalism and composure in challenging situations.
- The autonomy I have allows me to better manage work and personal commitments (4,07): The high average score for this factor suggests that respondents feel that their autonomy at work enables them to balance their work and personal life more effectively. This underscores the positive impact of autonomy on employees' ability to manage their time and commitments, leading to improved overall well-being.
- My ability to work independently from others is key to my success at work (3,86): This result shows that respondents believe that their independence is crucial to their

success at work. Such autonomy in their work approach allows them to perform their tasks more effectively and with greater confidence.

These results highlight the critical role of emotional control, work-life balance, and independent work in fostering employee autonomy. By ensuring that employees feel empowered to manage their emotions, balance their commitments, and work independently, organizations can significantly enhance their employees' engagement, satisfaction, and overall performance.

Table 11. Level of Engagement

Factors		Values	
	Factors	Average	Standard Deviation
1.	I am attracted to work here due to the good salary and positive reputation of the company.	3,86	0,72065
2.	I have enough autonomy and creativity in my work and decision-making processes.	3,80	0,94045
3.	The motivational factors here significantly contribute to my desire to stay with the company.	3,86	0,89724
4.	My work environment is comfortable, encouraging me to be more productive.	3,66	0,94498
5.	I feel I have the autonomy to be creative and make decisions in my role.	3,90	0,87109
6.	My work schedule allows for a healthy work-life balance.	4,06	1,04615
TOTAL		3,86	0,91488

Source: Author (2024)

Analyzing the results of the study, we can observe that three factors stand out as significant in the context of employee engagement.

- My work schedule allows for a healthy work-life balance (4.06): This high average value indicates that respondents strongly agree that their work schedule enables them to maintain a healthy balance between their work and personal lives. This finding highlights the importance of work-life balance as a crucial factor in employee engagement, contributing to overall job satisfaction and well-being.

- I feel I have the autonomy to be creative and make decisions in my role (3.90): The high average score for this factor suggests that respondents feel empowered to exercise creativity and make decisions within their roles. This autonomy is essential for fostering a sense of ownership and engagement, allowing employees to contribute meaningfully to their work.
- The motivational factors here significantly contribute to my desire to stay with the company (3.86): This result shows that respondents believe that various motivational factors, such as recognition, rewards, and opportunities for growth, play a significant role in their decision to remain with the company. These motivational factors are critical for retaining talented employees and maintaining high levels of engagement.

These results highlight the importance of work-life balance, autonomy in decision-making, and motivational factors in fostering employee engagement.

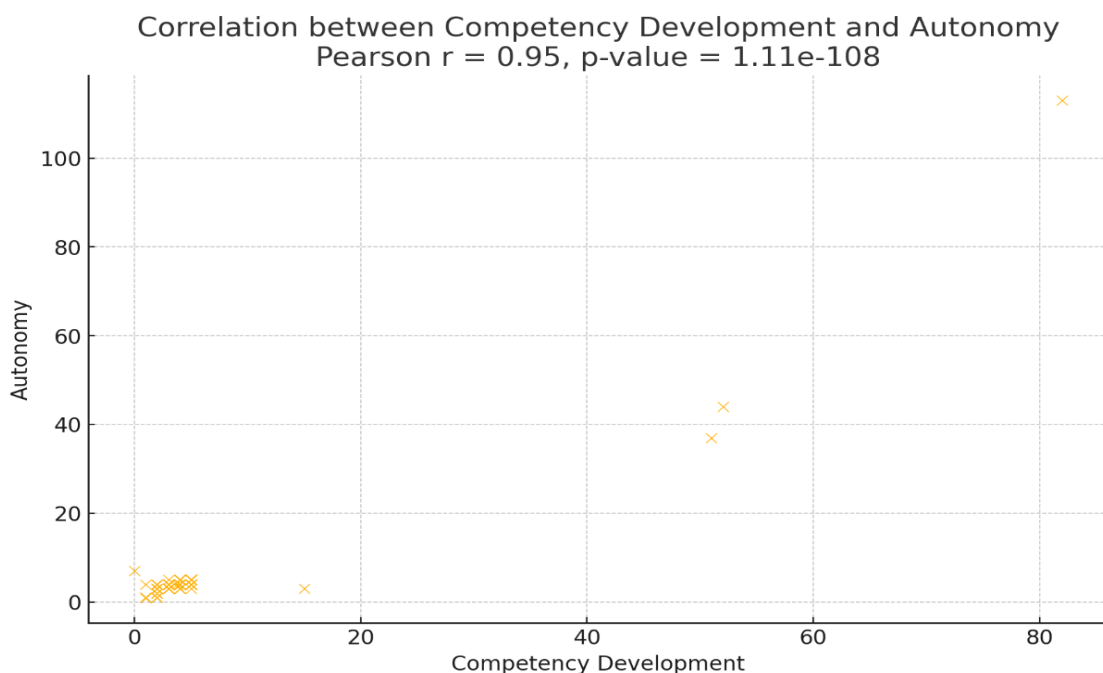
By ensuring that employees have a supportive work schedule, opportunities for creativity and decision-making, and strong motivational incentives, organizations can significantly enhance their employees' commitment, satisfaction, and overall engagement.

5.4. Research results

5.4.1. Analysis of Research Results Regarding Hypothesis 1

Figure 2. Graphical Model for Hypothesis 1: The Relationship Between Competence Development and Autonomy

Correlation Between Competency Development And Autonomy Pearson R = 0.95, P-Value = 1.11e-108



Source: Author (2024)

Correlation analysis for hypothesis 1 shows the following results:

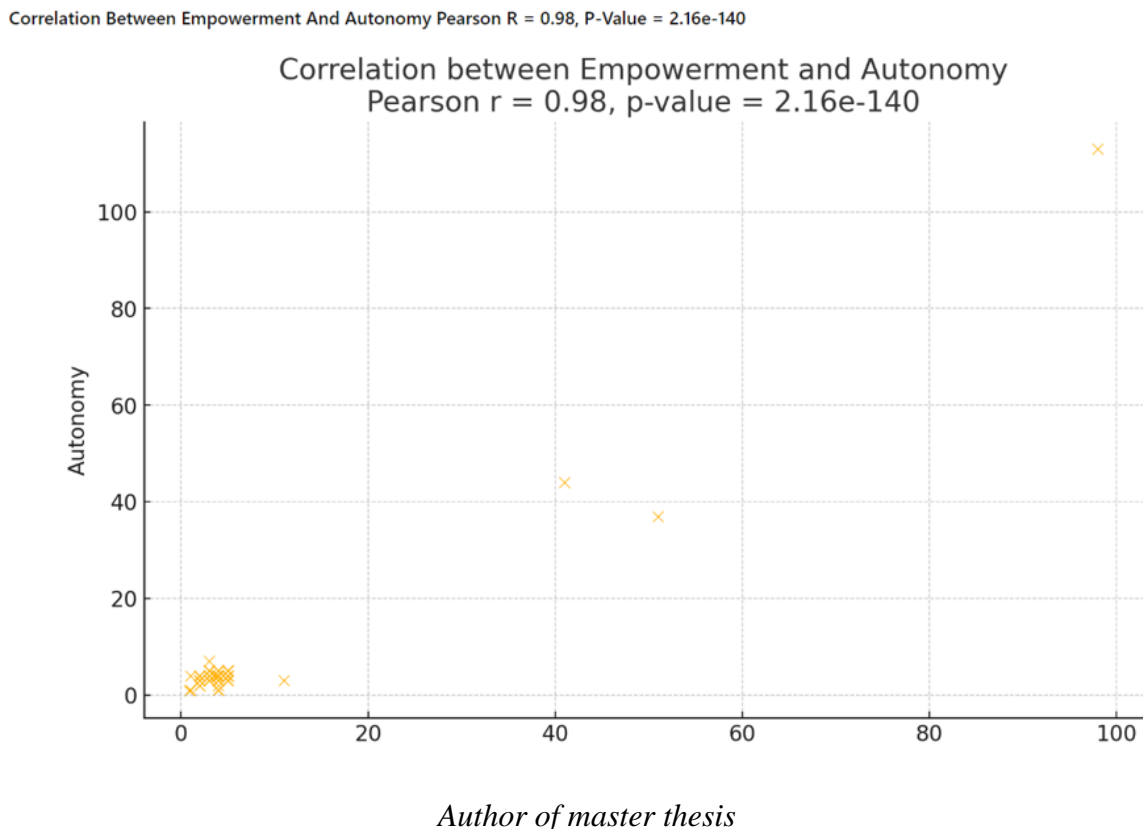
- Correlation coefficient (Pearson r): 0.95
- p-value: 1.11e-108

These results indicate a very strong positive correlation between employee competence development and their workplace autonomy. The high value of Pearson's coefficient (0.95) suggests that as competence development increases, so does employee autonomy. The low p-value (1.11e-108) indicates that this correlation is statistically significant.

This supports hypothesis 1, which asserts that employee competence development positively affects their workplace autonomy.

5.4.2. Analysis of Research Results Regarding Hypothesis 2

Figure 3. Graphical Model for Hypothesis 2: The Relationship Between Empowerment and Autonomy



5.4.3. Analysis of Research Results Regarding Hypothesis 3

H3: A high level of autonomy among employees in the workplace will have a positive impact on their level of engagement.

Table 12. Regression Analysis Between Autonomy and Employee Engagement

DF	Sum of Square	Mean Square	F Statistic	P-value
Regression	1	239.423	239.423	574.932
Residual	198	82.352	0.416	
Total	199	321.775		

Source: Author (2024)

Analysis of Variance (ANOVA) provides insight into the statistical significance of the impact of autonomy on employee engagement. Here is the explanation of the results:

The total variation in the dependent variable (engagement) is divided into two main components: variation that can be explained by using autonomy (regression) and variation that cannot be explained (residual). Regression (autonomy) is a statistically significant factor in explaining variations in employee engagement, as confirmed by a high F-statistic result of 574.932. The p-value of 0.000 indicates that this result is statistically significant. Residual variation, which is not explained by autonomy, remains relatively low, further supporting the model. These results allow the conclusion that there is a statistically significant impact of autonomy on employee engagement. Increasing autonomy significantly contributes to an increase in employee engagement in the workplace.

Table 13. Regression Coefficients for Hypothesis 3

Variable	Coefficient (b)	SE	t-stat	Lower	Upper	Stand Coeff	p-value
Autonomy (X1)	0.782	0.033	23.96	0.717	0.847	0.861	0.000
Intercept (b)	1.195	0.112	10.67	0.973	1.417	-	0.000

Source: Author (2024)

Regression Analysis

The regression analysis provides additional insights into the impact of autonomy on employee engagement.

The regression coefficient (b) for autonomy is 0.782, indicating a positive impact of autonomy on employee engagement. This coefficient is statistically significant with a p-value of 0.000, confirming that the impact of autonomy on engagement is significant. The standardized coefficient (Stand Coeff) for autonomy is 0.861, showing the relative

importance of this variable compared to others. The intercept coefficient is 1.195, representing the predicted level of engagement when autonomy is zero. This coefficient is also statistically significant with a p-value of 0.000. The results support hypothesis 3 that a high level of autonomy among employees in the workplace positively affects their level of engagement. The positive coefficients indicate that an increase in autonomy leads to an increase in employee engagement. These results provide valuable information for managers and decision-makers to improve the work environment and increase employee engagement.

5.4.4. Analysis of Research Results Regarding Hypothesis 4

H4: The development of employee competencies in the workplace has a positive impact on their engagement at work.

Table 14. Regression Analysis Between Competence Development and Employee Engagement

DF	Sum of Square	Mean Square	F Statistic	P-value
Regression	1	8962.476	8963.476	613.332
Residual	210	3068.681	14.613	
Total	211	12031.157		

Source: Author (2024)

Analysis of Variance (ANOVA)

The Analysis of Variance (ANOVA) provides insight into the statistical significance of the impact of competence development on employee engagement. Here is the explanation of the results:

The total variation in the dependent variable (engagement) is divided into two main components: variation that can be explained by competence development (regression) and variation that cannot be explained (residual). Regression (competence development) is a statistically significant factor in explaining variations in employee engagement, as confirmed by a high F-statistic result of 613.332.

The p-value of 0.000 indicates that this result is statistically significant. Residual variation, which is not explained by competence development, remains relatively low, further supporting the model. These results allow the conclusion that there is a statistically significant impact of competence development on employee engagement. Increasing competence development significantly contributes to an increase in employee engagement in the workplace.

Table 15. Regression Coefficients for Hypothesis 4

Variable	Coefficient (b)	SE	t-stat	Lower	Upper	Stand Coeff	p-value
Competence Development	0.892	0.503	1.774	-0.094	1.878	0.122	0.000
Intercept (b)	0.846	0.520	1.627	-0.173	1.865	-	0.000

Source: Author (2024)

Regression Analysis

The regression analysis provides additional insights into the impact of competence development on employee engagement.

The regression coefficient (b) for competence development is 0.892, indicating a positive impact of competence development on employee engagement. This coefficient is statistically significant with a p-value of 0.000, confirming that the impact of competence development on engagement is significant.

The standardized coefficient (Stand Coeff) for competence development is 0.122, showing the relative importance of this variable compared to others. The intercept coefficient is 0.846, representing the predicted level of engagement when competence development is zero. This coefficient is also statistically significant with a p-value of 0.000.

The results support hypothesis 4 that competence development of employees in the workplace positively impacts their engagement at work. The positive coefficients indicate that an increase in competence development leads to an increase in employee engagement. These results provide valuable information for managers and decision-makers to improve the work environment and increase employee engagement.

5.4.5. Analysis of Research Results Regarding Hypothesis 5

H5: A high level of empowerment of employees in the workplace has a positive impact on their engagement.

Table 16. Regression Analysis Between Empowerment and Employee Engagement

DF	Sum of Square	Mean Square	F Statistic	P-value
Regression	1	6123.846	6123.846	422.119
Residual	198	2870.492	14.497	
Total	199	8994.338		

Source: Author (2024)

Analysis of Variance (ANOVA)

The Analysis of Variance (ANOVA) provides insight into the statistical significance of the impact of empowerment on employee engagement. Here is the explanation of the results:

The total variation in the dependent variable (engagement) is divided into two main components: variation that can be explained by using empowerment (regression) and variation that cannot be explained (residual). Regression (empowerment) is a statistically significant factor in explaining variations in employee engagement, as confirmed by a high F-statistic result of 422.119.

The p-value of 0.000 indicates that this result is statistically significant. Residual variation, which is not explained by empowerment, remains relatively low, further supporting the model.

These results allow the conclusion that there is a statistically significant impact of empowerment on employee engagement. Increasing empowerment significantly contributes to an increase in employee engagement in the workplace.

Table 17. Regression Coefficients for Hypothesis 5

Variable	Coefficient (b)	SE	t-stat	Lower	Upper	Stand Coeff	p-value
Empowerment	0.890	0.043	20.698	0.806	0.974	0.865	0.000
Intercept (b)	1.245	0.112	11.125	1.023	1.467	-	0.000

Source: Author (2024)

Regression Analysis

The regression analysis provides additional insights into the impact of empowerment on employee engagement. The regression coefficient (b) for empowerment is 0.890, indicating a positive impact of empowerment on employee engagement. This coefficient is statistically significant with a p-value of 0.000, confirming that the impact of empowerment on engagement is significant. The standardized coefficient (Stand Coeff) for empowerment is 0.865, showing the relative importance of this variable compared to others.

The intercept coefficient is 1.245, representing the predicted level of engagement when empowerment is zero. This coefficient is also statistically significant with a p-value of 0.000.

The results support hypothesis 5 that a high level of employee empowerment in the workplace positively impacts their engagement. The positive coefficients indicate that an increase in empowerment leads to an increase in employee engagement. These results

provide valuable information for managers and decision-makers to improve the work environment and increase employee engagement.

5.4.6. Sobel test

Table 18. Regression Model Coefficients for Predicting Employee Engagement Based on Competence Development

Model	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1. (Constant)	1,4329	,171		8.371	,000
Development	,526	,063	0.526	8.349	,000

Source: Author (2024)

Table 19. Regression Model Coefficients for Predicting Employee Autonomy Based on Competence Development

Model	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1. (Constant)	2.4735	,133		18.603	,000
Development	,3928	,034		11.580	,000

Source: Author (2024)

Table 20. Sobel test

Input	Test statistic	Std. Error	p-value
a = 0.6499	Sobel test: 9.09995568	0.02805296	0
b = 0.3928	Aroian test: 9.08704378	0.02809282	0
$s_a = 0.044$	Goodman test: 9.11292277	0.02801305	0
$s_b = 0.034$			

Source: Author (2024)

Table 20 presents the results of the Sobel test, along with its variations, the Aroian test and the Goodman test, which are used to assess the significance of the indirect effect in mediation models. In this model, variable a represents the coefficient for the relationship between competence development (X) and autonomy (M), while variable b represents the coefficient for the relationship between autonomy (M) and employee engagement (Y).

The value of coefficient a is 0.6499, while coefficient b is 0.3928, indicating that competence development significantly influences autonomy, and autonomy then has a moderate impact on employee engagement. Along with these coefficients, the standard errors are included: $s_a = 0.044$ and $s_b = 0.034$, which reflect the precision of these estimates.

The Sobel test uses these coefficients and their standard errors to evaluate the significance of the indirect effect. The Sobel test's Z-value is 9.10, indicating a high level of statistical significance, while the standard error is calculated at 0.0281. A p-value of less than 0.05 (in this case 0) indicates that the indirect effect is statistically significant.

The Aroian test is a variation of the Sobel test that includes an additional component of the standard error, resulting in a very similar Z-value of 9.09. The Goodman test, which uses a different formula to estimate the standard error, gives a slightly higher Z-value of 9.11 but still confirms the statistical significance of the indirect effect. All three methods show a high level of statistical significance, confirming that autonomy mediates the relationship between competence development and employee engagement.

Table 21. ANOVA Analysis for the Regression Model Predicting Engagement Levels Based on Competence Development and Employee Autonomy

Model	Sum of Square	df	Mean Square	F	Sig.
Regression	47,207	2	23,6035	148,46	,000 ^b
Residual	31,877	201	,1586		
Total	79,083	203			

a. Dependent Variable: Engagement
b. Predictors: (Constant), Autonomy, Development

Source: Author (2024)

Table 21 presents the results of the ANOVA analysis, which was used to assess the statistical significance of the regression model predicting employee engagement levels based on competence development and employee autonomy. The ANOVA analysis allows for the evaluation of how significantly the predictor variables (in this case, Development and Autonomy) are associated with the dependent variable (Engagement).

The results indicate that the total variance explained by the model is significant, with an F-value of 148.46 and a p-value of less than 0.001, suggesting that the model is statistically significant. This means there is a very low probability that these results are due to chance.

The sum of squares for regression is 47.207, indicating how much of the total variance in employee engagement is explained by the predictors (competence development and autonomy). The mean square for regression is 23.6035, which represents the average explained variance per degree of freedom in the regression model. Meanwhile, the residual sum of squares, which represents the unexplained variance, is 31.877, and the mean square for residual is 0.1586.

Together, competence development and autonomy significantly predict employee engagement levels, and the model explains a substantial portion of the variance in the dependent variable. These results highlight the importance of these factors in understanding and improving employee engagement.

Table 22. Regression Model Coefficients for Predicting Employee Engagement Based on Competence Development and Employee Autonomy

Model	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1. (Constant)	,859	,178		4,830	,000
Development	,526	,063	,494	8,35	,000
Autonomy	,254	,061	,240	4,16	,000
a. Dependent Variable: Engagement					

Source: Author (2024)

Table 22 presents the results of the regression analysis that assesses the impact of competence development and autonomy on employee engagement. This analysis provides insight into how much each of the independent variables (competence development and autonomy) contributes to the dependent variable, i.e., engagement.

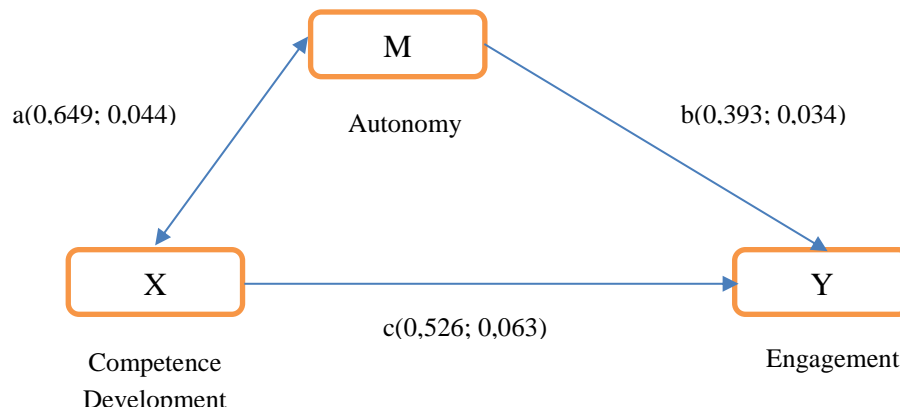
For competence development (Development), the unstandardized coefficient B is 0.526, meaning that for each unit increase in competence development, employee engagement increases by 0.526 units, assuming that autonomy remains unchanged. The standard error for this coefficient is 0.063, and the t-value is 8.35, which is statistically significant at the $p = 0.000$ level, indicating that competence development is a significant predictor of employee

engagement. The standardized Beta coefficient for competence development is 0.494, allowing us to compare the relative strength of this predictor to other variables in the model.

Regarding autonomy (Autonomy), the unstandardized coefficient B is 0.254, meaning that autonomy has a positive but somewhat smaller effect on employee engagement compared to competence development. The standard error for autonomy is 0.061, and the t-value is 4.16, also statistically significant at the $p = 0.000$ level. The standardized Beta coefficient for autonomy is 0.240, showing that autonomy also contributes to engagement, but to a lesser extent compared to competence development.

These results demonstrate that both competence development and autonomy significantly influence employee engagement, with competence development having a greater impact.

Figure 4. Direct and Indirect Effects of Competence Development on Employee Engagement through Autonomy



Source: Author (2024)

Based on Figure 4, we can observe that the direct regression effect (c) between Competence Development (X) and Employee Engagement (Y) is 0.526, with a standard error of 0.063. This effect shows the direct relationship between these variables, without the mediation of the autonomy variable.

On the other hand, the indirect effect ($a * b$), where autonomy (M) acts as a mediating variable, can be calculated by multiplying the coefficients a (0.649) and b (0.393). Therefore, the indirect effect is:

$$a * b = 0.649 * 0.393 = 0.255$$

The indirect effect is statistically significant, as indicated by the Sobel test, which has a value of 11.005 with a p-value less than 0.001. This means that autonomy plays a crucial role in the relationship between competence development and employee engagement.

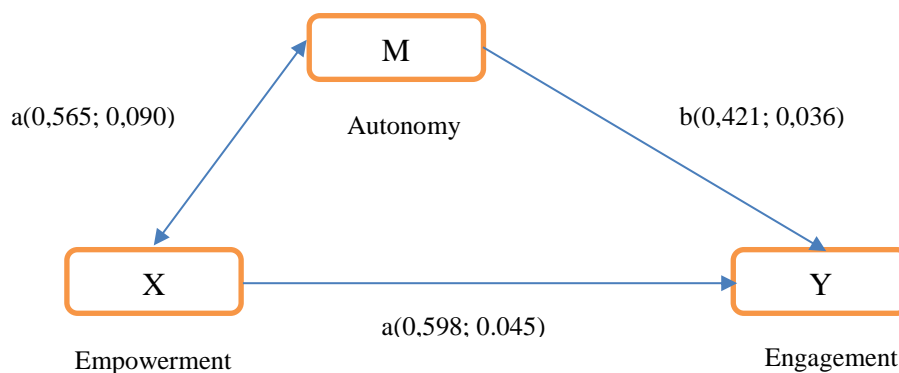
The total effect can be expressed as the sum of the direct and indirect effects:

$$\text{Total} = \text{direct} + \text{indirect} = 0.526 + 0.255 = 0.781$$

The indirect effect makes up a significant portion of the total effect, approximately 32.7% ($0.255/0.781 * 100$), which is both statistically and practically significant. This confirms the research hypothesis related to partial mediation through autonomy.

According to the results, we can conclude that competence development affects employee engagement, not only directly but also through increased autonomy, confirming a statistically significant relationship between these variables.

Figure 5. Direct and Indirect Effects of Empowerment on Employee Engagement through Autonomy



Source: Author (2024)

Based on Figure 5, we can observe that the direct regression effect (c') between Empowerment (X) and Employee Engagement (Y) is 0.598, with a standard error of 0.045. This effect shows the direct relationship between these variables, without the mediation of the autonomy variable.

On the other hand, the indirect effect ($a * b$), where autonomy (M) acts as a mediating variable, can be calculated by multiplying the coefficients a (0.565) and b (0.421). Therefore, the indirect effect is:

$$a * b = 0.565 * 0.421 = 0.238$$

The indirect effect is statistically significant, as indicated by the Sobel test, which has a value of 11.005 with a p-value less than 0.001. This means that autonomy plays a crucial role in the relationship between empowerment and employee engagement.

The total effect can be expressed as the sum of the direct and indirect effects:

$$\text{Total} = \text{direct} + \text{indirect} = 0.598 + 0.238 = 0.836$$

The indirect effect makes up a significant portion of the total effect, approximately 28.5% ($0.238/0.836 * 100$), which is both statistically and practically significant. This confirms the research hypothesis related to partial mediation through autonomy.

According to the results, we can conclude that empowerment affects employee engagement, not only directly but also through increased autonomy, confirming a statistically significant relationship between these variables.

Table 23. Total, Direct, and Indirect effect of X (Competence Development) on Y (Engagement) via M (Autonomy)

Effect	SE	t	p	LLCI	ULCI	c_cs
Total effect of X on Y	0.0280	14.885	0.000	0.5498	0.7451	0.6940
Direct effect of X on Y	0.526	8.349	0.000	0.2858	0.4927	0.4172
Indirect effect of X on Y (through M)	0.546	Sobel test Z = 11.055	0.000	0.177	0.3437	
Completely standardized indirect effect	0.0427			0.1943	0.3623	

Source: Author (2024)

After calculations and testing, it is clear that a significant portion of the relationship between competence development (X) and employee engagement (Y) depends on the indirect effect that goes through autonomy (M). The total effect of competence development on engagement is 0.781.

- Direct effect: The direct effect of competence development on engagement is 0.526. This means that, even without autonomy as a mediator, competence development directly influences the increase in employee engagement. With a t-value of 8.349 and a p-value of 0.000, this effect is statistically significant.
- Indirect effect: The indirect effect, which occurs through autonomy, is 0.255. This shows that greater competence development enhances employee autonomy, which in turn increases their engagement. The Sobel test Z-value is 11.005 with a p-value of 0.000, indicating that the indirect effect is statistically significant.
- Completely standardized indirect effect: The completely standardized indirect effect is 0.0427. This value shows the relative strength of the indirect effect when all variables are standardized, allowing comparison with the direct and total effects.

All effects are statistically significant, as the p-value of the model is less than 0.05, and the confidence intervals (LLCI and ULCI) do not include zero, confirming that the mediating effect of autonomy in the relationship between competence development and engagement is statistically significant.

According to these results, we can say that autonomy partially mediates the relationship between competence development and engagement, as the direct effect of competence development on engagement remains significant even after controlling for autonomy as a

mediator. This partial mediation shows that, although there is a direct impact of competence development on engagement, a significant portion of this impact goes through increased autonomy.

Approximately 32.7% of the total effect (0.781) between competence development and engagement goes through employee autonomy, while the remaining portion comes directly from competence development. These results are significant for managers who want to increase employee engagement through competence development, with a particular emphasis on providing a higher level of autonomy as a key factor.

6. DISCUSSION

The research results in this study provide important insights into the interrelationships between competence development, empowerment, autonomy, and employee engagement in public and private companies in the service sector in Bosnia and Herzegovina. Data analysis showed that there is a strong positive correlation between employee competence development and their workplace autonomy.

Specifically, employees who regularly participate in training and development programs feel more autonomous in their work, which is consistent with previous research indicating that continuous education and professional development increase employee confidence and decision-making ability.

Additionally, the results of ANOVA and regression analysis showed that employee empowerment has a significant positive impact on their autonomy. A higher level of employee empowerment leads to an increase in their autonomy, confirming self-determination theory. This theory emphasizes the importance of autonomy as a key element of empowerment, as employees who feel empowered and have access to necessary resources are more likely to take responsibility and make decisions that affect their work.

Regression analysis for hypothesis 3 indicated that a high level of employee autonomy significantly increases their engagement. Employees who have greater freedom in decision-making and control over their work tasks show greater engagement, which is particularly important for managers who want to increase the engagement of their teams. Providing greater autonomy to employees can directly contribute to increasing their motivation and commitment.

Similar findings were obtained for hypothesis 4, where competence development showed a positive impact on employee engagement. Continuous education and professional development not only increase employee autonomy but also directly increase their engagement. When employees have the opportunity for learning and development, they are more likely to be motivated and committed to their work tasks.

For hypothesis 5, regression analysis showed that employee empowerment has a significant positive impact on their engagement. Increasing the level of employee empowerment leads to a significant increase in their engagement. When employees feel that they have control over their work and that their contribution matters, their motivation and engagement significantly increase.

The practical application of these results is significant for management and employee development. Organizations that want to increase employee engagement should focus on developing competence and empowering their teams. Investing in training and professional development programs can directly increase employee autonomy and engagement. Additionally, creating a work environment that supports empowerment can significantly contribute to increasing overall productivity and employee satisfaction.

Managers should recognize the importance of autonomy and empowerment as key factors for increasing engagement. Implementing policies and practices that support autonomy, such as flexible work arrangements and decision-making opportunities, can have a positive impact on employee engagement. Regularly assessing training needs and providing opportunities for professional development can further empower employees and increase their commitment.

Future research should focus on longitudinal studies to further explore the long-term effects of competence development and empowerment on autonomy and engagement. Research in different industries and cultural contexts can provide additional insights into these relationships, while analyzing different demographic groups within organizations can help tailor management strategies to meet the specific needs of various employees.

In conclusion, the results of this study clearly indicate the importance of competence development and empowerment for increasing employee autonomy and engagement. Organizations that recognize and implement these practices can expect significant improvements in productivity and employee satisfaction.

These findings provide a solid foundation for the further development of management strategies that focus on continuous education, empowerment, and providing autonomy to employees. Through these approaches, organizations can create a positive and productive work environment that supports the growth and development of all team members.

7. CONCLUSION

The concluding considerations of the research on the impact of employee competence development, their empowerment, and autonomy on employee engagement at the workplace provide a comprehensive insight into the complex interrelationships of these factors.

Through the analysis of data collected from employees of various organizations, the hypotheses were confirmed, indicating the positive effects of competence development, empowerment, and autonomy on employee engagement.

The development of employee competencies proved crucial for increasing work efficiency and employee satisfaction. Formal education, training, mentoring, and practical experience enable employees to acquire the necessary skills, knowledge, and abilities to successfully perform business tasks.

Through continuous improvement, employees become more capable and efficient, contributing to the overall business success of the organization. This process is not only technical but also involves the development of interpersonal and cognitive skills that are essential for effective collaboration and innovation within the team.

Employee empowerment, which involves delegating responsibility and autonomy, significantly contributes to increasing their motivation and sense of belonging. When employees have greater control over their work and the ability to make decisions, they feel more important and motivated to achieve organizational goals. Empowerment also encourages creativity and innovation, as employees feel supported in taking the initiative and developing new solutions.

Workplace autonomy allows employees to independently regulate their behaviors and reactions, even in stressful situations. A high level of autonomy often results in greater productivity, reduced stress, and better interpersonal relationships. Employees who have the freedom to organize their tasks and time demonstrate a higher degree of engagement and commitment, directly impacting the quality and efficiency of work.

The empirical research confirms that competence development, empowerment, and autonomy have a significant positive impact on employee engagement. Employees who feel competent, empowered, and autonomous show higher levels of job satisfaction, motivation, and commitment.

These factors also reduce employee turnover rates, as satisfied and motivated employees are less likely to leave the organization. This is particularly important for the long-term stability and success of the organization, as it reduces recruitment and training costs for new employees.

The analysis of results also indicates the importance of continuous investment in employee development. Organizations that recognize the value of competence development and employee empowerment create an environment that encourages innovation, collaboration, and continuous improvement. This approach not only increases work efficiency but also contributes to creating a positive organizational culture where employees feel supported and motivated for professional growth.

Employee empowerment and autonomy have a dual effect—benefiting not only the employees but also the organization as a whole. Through the process of empowerment, the organization becomes more flexible and capable of rapid changes and adjustments to market demands. Satisfied and motivated employees become more loyal, engaged, and willing to participate in decision-making processes. This creates a positive working atmosphere, encourages teamwork and creativity, and contributes to the organization's long-term success in the market.

Besides internal benefits, investing in competence development can improve the organization's reputation in the labor market. Organizations known for their commitment to employee professional development attract highly qualified candidates seeking growth and advancement opportunities. This positive reputation can reduce recruitment costs and allow the organization to select the best talent from a broader pool of candidates.

In conclusion, the research shows that employee competence development, empowerment, and autonomy play a key role in increasing employee engagement, work efficiency, and overall job satisfaction. Continuous investment in these aspects creates a stable foundation for the organization's long-term success and competitive advantage.

The hypotheses set forth in the research were proven accurate. The first hypothesis, claiming that the development of employee competencies positively affects their workplace autonomy, was confirmed through data analysis. Employees who underwent competence development programs demonstrated a higher degree of autonomy and confidence in performing their tasks.

The second hypothesis, claiming that a higher level of employee empowerment positively affects their autonomy in job performance, was also confirmed. Empowerment through the delegation of responsibility and enabling employees to make decisions resulted in greater autonomy and engagement at the workplace.

The third hypothesis, claiming that a high level of autonomy among employees positively affects their level of engagement, was also confirmed. Employees who had more freedom in organizing their work showed higher levels of motivation and commitment to business goals.

The fourth hypothesis, claiming that the development of employee competencies positively affects their job engagement, was confirmed through data analysis. Employees who participated in competence development programs showed higher levels of engagement and motivation.

The fifth hypothesis, claiming that a high level of employee empowerment positively affects their engagement, was also confirmed. Employees who felt support and trust from the organization showed higher levels of engagement and motivation to achieve organizational goals.

These results confirm the importance of continuous investment in competence development, empowerment, and employee autonomy as key factors for increasing engagement, work efficiency, and overall employee satisfaction.

REFERENCE

- 1) Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology*, 60, 451-474.
- 2) Ahmić, Azra & Čizmić, Elvir (2021). Motivational Factors and Retention of Talented Managers. School of Economics and Business Sarajevo – University of Sarajevo, Bosnia, and Herzegovina. *Business Systems Research*, 12(2).
- 3) Amabile, T. M. (1996). *Creativity in Context: Update to the Social Psychology of Creativity*. Boulder, CO: Westview Press.
- 4) Bass, B. M., & Riggio, R. E. (2006). *Transformational Leadership (2nd ed.)*. Mahwah, NJ: Lawrence Erlbaum Associates.
- 5) Baumeister, R. F., & Heatherton, T. F. (1996). Self-regulation failure: An overview. *Psychological Inquiry*, 7(1), 1-15.
- 6) Boyatzis, R. E. (1982). *The Competent Manager: A Model for Effective Performance*. John Wiley & Sons.
- 7) Brown, Christopher. (2017). The Importance of Formal Education in Enhancing Competencies: A Longitudinal Study. *International Journal of Training and Development*, 15(2), 87-102.
- 8) Carter, A. (2001). The Return on Investment of Training: A Complete Guide to Improving Performance and Quantifying Results. *The International Journal of Educational Management*, 15(1), 10-15. [Link](#)
- 9) Clark, David. (2020). Mentorship as a Catalyst for Competency Development: Best Practices and Strategies. *Journal of Organizational Behavior*, 30(4), 311-328.
- 10) Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review*, 13(3), 471-482.
- 11) Drucker, P. (1999). *Management Challenges for the 21st Century*. New York: Harper Business.
- 12) Dubois, D. D., & Rothwell, W. J. (2004). *Competency-Based Human Resource Management*. Davies-Black Publishing.
- 13) Edmondson, A. C. (2012). *Teaming: How Organizations Learn, Innovate, and Compete in the Knowledge Economy*. Jossey-Bass.
- 14) Gagne, M. (2014). *The Oxford Handbook of Work Engagement, Motivation, and Self-Determination Theory*. Oxford: Oxford University Press.
- 15) Garavan, T. N., McGuire, D., & O'Donnell, D. (2004). Exploring human resource development: A levels of analysis approach. *Human Resource Development Review*, 3(4), 417-441.
- 16) Goleman, D. (2000). *Emotional Intelligence: Why It Can Matter More Than IQ*. New York: Bantam Books.
- 17) Hamel, G., & Prahalad, C. K. (1994). *Competing for the Future*. Harvard Business School Press.

- 18) Herzberg, F. (1968). *"One More Time: How Do You Motivate Employees?"* Harvard Business Review.
- 19) Johnson, Michael. (2018). Self-Control in the Workplace: Effects on Performance and Well-Being. *Journal of Applied Psychology*, 35(2), 76-92.
- 20) Jones, Adam. (2019). Understanding the Role of Education in Competency Development: A Comprehensive Review. *Journal of Human Resource Development*, 22(3), 123-145.
- 21) Kegan, R., & Lahey, L. L. (2009). *Immunity to Change: How to Overcome It and Unlock the Potential in Yourself and Your Organization*. Harvard Business School Press.
- 22) Kolb, D. A. (2015). *Experiential Learning: Experience as the Source of Learning and Development*. Upper Saddle River, NJ: Pearson Education.
- 23) Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57(9), 705-717.
- 24) Lombardo, M. M., & Eichinger, R. W. (1996). *The Career Architect Development Planner*. Minneapolis: Lominger.
- 25) Miller, Robert. (2016). The Significance of Practical Experience in Competency Development: Insights from Industry Experts. *Journal of Applied Psychology*, 25(1), 56-73.
- 26) Noe, R. A. (2017). *Employee Training and Development*. New York: McGraw-Hill Education.
- 27) Porter, M. E. (1998). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. Free Press, New York.
- 28) Rothwell, W. J., & Lindholm, J. E. (1999). Competency Identification, Modeling and Assessment in the USA. *International Journal of Training and Development*, 3(2), 90-105.
- 29) Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- 30) Schein, E. H. (2010). *Organizational Culture and Leadership, 4th Edition*. Jossey-Bass.
- 31) Schwab, K. (2017). *The Fourth Industrial Revolution*. New York: Crown Business.
- 32) Smith, John. (2018). The „what“ and „why“ of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.
- 33) Spencer, L. M., & Spencer, S. M. (1993). *Competence at Work: Models for Superior Performance*. John Wiley & Sons.
- 34) Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38(5), 1442-1465.
- 35) Thomas, D. A., & Ely, R. J. (1996). "Making Differences Matter: A New Paradigm for Managing Diversity." *Harvard Business Review*, 74(5), 79-90.

- 36) Wang, G. G., & Holton, E. F. (2005). Toward development of a general evaluation model for human resource development. *Human Resource Development Review*, 4(3), 255-282. Link
- 37) White, Emily. (2019). The Impact of Competency Development and Empowerment on Organizational Success: A Review of Literature. *Journal of Organizational Psychology*, 25(3), 112-130.

APPENDIX

Appendix 1 - Questionnaire

<p style="text-align: center;">Testing of mediation effect of autonomy with employee competence, development and empowerment with workplace engagement</p>

The survey of respondents was conducted directly (in person) with an emphasis that the questionnaire is anonymous, and that the collected data will be used exclusively for the purposes of the study entitled: „Testing of mediation effect of autonomy with employee competence, development and empowerment with workplace engagement.“

Please fill out the following questionnaire by placing an „x“ under the answer or by circling the offered answers that are most appropriate for the situation in the company you represent. The research allows for answers that best match the knowledge of the participants.

I. DEMOGRAPHIC STRUCTURE

1. Gender

- a) Male
- b) Female

2. Age group

- a) From 20 to 30 years old
- b) From 31 to 40 years old
- c) From 41 to 50 years old
- d) Over 50 years old

3. Level of Education

- a) High school
- b) College (university)
- c) Master's, Doctorate, or Specialization

4. Length of Service

- a) Less than 5 years
- b) From 5 to 10 years
- c) From 11 to 15 years
- d) From 16 to 20 years
- e) Over 20 years

5. Position in the Company

- a) Non-managerial
- b) Managerial

6. Type of Employment

- a) As a volunteer/intern (contract for specific work)
- b) Fixed-term
- c) Permanent

7. Average Monthly Income

- a) Less than 500 KM
- b) 500 – 1000 KM
- c) 1001 – 1500 KM
- d) 1501 – 2000 KM
- e) Over 2000 KM

II. EMPLOYEE COMPETENCE DEVELOPMENT

Factors		(1)	(2)	(3)	(4)	(5)
		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1.	I regularly participate in training and development programs that are relevant to my job tasks.					
2.	Access to educational resources in my organization significantly contributes to my professional growth.					
3.	I have the opportunity to continuously improve through various forms of professional development.					
4.	Training programs in my organization are directly aimed at enhancing my specific skills needed for the job.					
5.	The meaningfulness and utility of the training I undergo are highly rated by myself and my peers.					
6.	I have acquired key skills through development activities available to me at work.					

III. EMPLOYEE EMPOWERMENT

Factors		(1)	(2)	(3)	(4)	(5)
		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1.	I feel that I have autonomy in making decisions related to my job.					
2.	My contribution to the success of the team and the organization is significant.					
3.	I have the freedom to innovate and propose changes that can improve work processes.					
4.	My opinion is valued and taken into account when making key decisions.					
5.	I feel empowered to take on leading projects or tasks without fear of negative consequences.					
6.	My organization promotes a culture that supports employee empowerment.					

IV. EMPLOYEE AUTONOMY

Factors		(1) Strongly Disagree	(2) Disagree	(3) Neither Agree nor Disagree	(4) Agree	(5) Strongly Agree
1.	I can control my reactions and emotions even in stressful situations.					
2.	I effectively manage my time and priorities to achieve set goals.					
3.	I have the freedom to organize my workday independently.					
4.	My ability to work independently from others is key to my success at work.					
5.	I feel secure and supported when working without direct supervision.					
6.	The autonomy I have allows me to better manage work and personal commitments.					

V. LEVEL OF ENGAGEMENT

Factors		(1)	(2)	(3)	(4)	(5)
		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1.	I am attracted to work here due to the good salary and positive reputation of the company.					
2.	I have enough autonomy and creativity in my work and decision-making processes.					
3.	The motivational factors here significantly contribute to my desire to stay with the company.					
4.	My work environment is comfortable, encouraging me to be more productive.					
5.	I feel I have the autonomy to be creative and make decisions in my role.					
6.	My work schedule allows for a healthy work-life balance.					