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THE QUICK IDENTIFICATION OF THE DISSATISFIED GROUPS OF EMPLOYEES

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Introduction

There are different generations of employees on the labor market in the first quarter of the 21st century. Due to different value systems among them, there is often misunderstanding, which results in insufficient cooperation among employees. In such cases, business results are lower than they could be. This phenomenon was researched by Ismagilova, Mirolyubova and Angelina. In 2024, the problem of generational differences is even more pronounced because millennial employees are also on the labor market. So, it is harder than ever to adequately coordinate employees, motivate them to work effectively and efficiently. The conclusions of

many scientific studies are that Leadership empowerment improves work performance. For example, this relationship was analyzed by Ali et al, Kim et al, Burhan and Khan, Qasim et al, Xu et al and many others. To empower leadership, it is essential to continuously enhance leaders' effectiveness. This was the subject of research by Moore and Hanson. Their findings are that it is necessary to constantly collect data on the level of leadership effectiveness based on the previously defined model of critical organizational values and behaviors essential for leadership effectiveness. Jang et al.'s research findings are that when the employees know that their leader effectiveness is measuring it increases their satisfaction. Several models for measuring employee satisfaction are described in the scientific and professional literature. Some of them include a question about satisfaction with the effectiveness of leaders.

The importance of empowerment of leadership has several authors explored in the context of the relationship between leadership styles and employee outcomes. Recent research by Garzón-Lasso et al. confirmed that transformational leadership had the most positive effect, while passive-avoidant leadership was detrimental. Similarly, Li et al. examined how digital leadership among middle managers influences work engagement, mediated by emotional intelligence and employee empowerment. This research highlights the importance of leadership adapting to digital transformations in today's work environments. Additionally, Alghofeli et al. explored inclusive leadership, showing that it enhances job satisfaction, especially when combined with high-performance practices and a workplace climate of inclusion.

Carins et al. argued that despite its proven effectiveness, segmentation is not adequately applied in campaigns aimed at societal good. This fact hinders the effectiveness of campaigns aimed at societal good. Carvalho's focus on well-being and propose a conceptual agenda that positions social marketing more prominently in addressing societal needs and improving quality of life. Cheng bridges these perspectives by applying segmentation within an internal marketing framework, concluding that identifying dissatisfied employee groups through segmentation allows organizations to target and resolve specific dissatisfaction triggers, leading to improved job satisfaction.

It is to be expected that the satisfaction of employees with managers is measured in Croatian companies. However, the results of such measurements almost certainly apply to the overall sample. It is highly likely that an analysis of the results would reveal statistically significant differences in employee satisfaction across different groups. Probably, the biggest differences in the assessment of satisfaction with leadership competencies would be noticed between employees from different generations, due to their different value systems.

Since the performance of the most dissatisfied employees deviates the most from defined goals, managers should focus on improving the competencies that contribute to dissatisfaction with leadership effectiveness exactly among these employees. Therefore they first need to understand which employee groups distributed by gender, age, professional training, hierarchical position, length of service, etc. are the most dissatisfied. After identifying the most dissatisfied groups, managers should investigate the specific reasons behind their dissatisfaction. Only by understanding these causes can they take effective measures to address them. One possible reason employees perceive their managers as ineffective leaders are that they do not sufficiently recognize good work performance.

Upon reviewing previous research papers in the field of employee satisfaction measurement, the authors identified a lack of scientific research on how well managers in the Croatian financial industry recognize good work performance according to theoretical models and the impact of this recognition on overall employee satisfaction.

The first research goal is to describe a method that enables managers to identify dissatisfied groups of employees quickly and accurately, particularly those whose dissatisfaction arises from unrecognized work performance. This method is applicable across

various criteria of managerial effectiveness, irrespective of the specific model used, and represents the originality and value of this paper. The described method for collecting and processing employee satisfaction data is straightforward, time-efficient, and cost-effective, making it feasible even for the smallest organizations.

The second research goal is to demonstrate the use of this method through a case study of employees in Croatia's financial industry. This paper, therefore, offers a universally applicable approach that allows leaders to adapt their communication and behavior toward dissatisfied employee groups, ultimately enhancing satisfaction with leadership effectiveness over time.

1. Literature review

Having outlined the challenges posed by generational differences in the workforce and the importance of leadership effectiveness in addressing these challenges, which were mentioned in introduction, a more extensive analysis of the theoretical frameworks and models that underpin the relationship between leadership empowerment, employee satisfaction, and work performance follows.

Ismagilova and Mirolyubova study investigates the challenges Russian managers face when interacting with older subordinates (aged 55 and above) and how both groups can benefit from life-long learning programs. A written questionnaire was administered to 120 Russian managers, followed by content analysis of their responses. The study examines how managers perceive aged employees' focus on job process vs. job standards and proposes training interventions for both groups. The results show that managers reported that older employees rely heavily on work experience rather than adhering to modern job standards. They recommend training aged employees to focus more on standards and results. Managers should also learn to use more measurable criteria in task planning and performance evaluation. While the study highlights important generational differences in the workplace, it is limited by its reliance on managers' subjective opinions. Incorporating perspectives from the aged employees themselves could provide a more balanced understanding of the interaction challenges. Furthermore, the study's focus on one country and a specific age group might restrict its applicability to other contexts or younger generations. Future research could expand by including a broader sample across industries or countries and testing the effectiveness of the proposed training programs in real-world settings (Ismagilova & Mirolyubova, 2015). This research is relevant to the author's study because Ismagilova and Mirolyubova problematized the differences in the way of working between employees from different generations. From this fact implies that there are dissatisfactions of the older generation's employee if their manager is from the younger generation. Author's recommendations for training tailored to older employees and their managers support this paper's approach, suggesting that addressing specific generational needs can enhance alignment with organizational standards and improve satisfaction.

Angeline paper examines generational diversity in the workplace, specifically focusing on the expectations and perceptions of Baby Boomers, Generation X, and Generation Y employees in Malaysia. The study aims to identify the unique characteristics and work-related attitudes of different generational groups, understand the sources of workplace tension, and suggest strategies for managing a multigenerational workforce. The paper employs a qualitative approach, drawing insights from previous research and theories on generational differences. It uses literature to build a theoretical framework and proposes strategies for bridging generational gaps. The study identifies distinct work values and expectations across generations. Baby Boomers value loyalty and seniority, Generation X prefers a balance between work and personal life, and Generation Y seeks flexibility, technological integration, and prompt

feedback. Conflicts often arise due to misunderstandings, with older generations viewing younger employees as entitled or unreliable and younger generations perceiving older colleagues as rigid. The author suggests awareness programs, mentorship, and cross-generational teamwork to foster understanding and mitigate conflicts. However, the paper is limited by its reliance on secondary data and lacks empirical research to validate the proposed generational characteristics within the Malaysian context. A more robust, empirical approach could enhance the understanding of intergenerational dynamics specific to Malaysia's unique demographic and cultural landscape (Angeline, 2011). This research is relevant to Authors' study as it also problematized generational differences in employee expectations and workplace tensions. Furthermore, Angeline's conclusion supports Authors' approach with the focus on using the marketing principle of the segmentation to identify dissatisfied employee groups based on leadership competencies. Angelina's insights into the distinct values and expectations of different generations, indicating that tailored strategies addressing generational needs can enhance satisfaction and reduce workplace conflicts.

Ali et al. study investigates the mediating role of thriving at work between empowering leadership behaviors and employee performance, with a focus on employees from the banking sector in Shanghai. The research employed a survey-based questionnaire targeting full-time employees. Data was analyzed using structural equation modeling (SEM) via AMOS 21 to test the proposed hypotheses. The study found that empowering leadership has a significant positive impact on both employee performance and thriving at work. Moreover, thriving at work partially mediates the relationship between empowering leadership and employee performance. This highlights the importance of creating a thriving work environment to maximize employee outcomes. While the study provides valuable insights into the banking sector, it is limited by its focus on one geographic area (Shanghai) and one industry, which may affect the generalizability of the results. Additionally, it relies on self-reported data, which could introduce bias. Future research could expand to other industries and geographic areas, and use longitudinal methods to strengthen the findings. (Ali, Lei, Jie, & Rahman, 2018). Because the relationship between leaders and employees is research subject, this paper is relevant to the Author's study. Ali et al.'s findings align with Authors' focus on leader's competencies measuring fostering specific workplace conditions to address unique employee needs, thereby boosting satisfaction and performance in targeted groups.

Kim et al. article conducts a meta-analysis to explore how empowering leadership affects various employee outcomes, including performance, motivation, attitudes, and leader evaluations. A meta-analysis of 55 independent samples was performed using statistical techniques to measure the strength of relationships between empowering leadership and employee responses. Results show that empowering leadership positively influences employee attitudes, motivation, and performance, with the strongest correlation seen in leader evaluations. However, its effect on emotions was insignificant. The analysis also explored potential moderators like rating sources and nationality. The study offers valuable insights but is limited by relying heavily on correlational data, making causal interpretations challenging. Moreover, some employee responses, such as emotional effects, require further exploration, and future studies could benefit from investigating more nuanced contexts like cultural differences and team dynamics. (Kim, Beehr, & Prewett, 2018). This research is relevant to Authors' study because relationship between leaders and employees is research subject, same as in the Ali et al. paper. Kim et al.'s meta-analysis supports this paper's leader's competencies measuring approach by demonstrating that leadership effectiveness can vary across different employee groups, emphasizing the need to understand specific triggers of satisfaction and dissatisfaction within diverse segments.

Burhan and Khan study explore how empowering leadership impacts employee engagement, knowledge sharing, and task performance, focusing on the mediating role of relational energy and the moderating effect of autonomy. Time-lagged surveys were conducted in small and medium-sized enterprises (SMEs), and the data was analyzed using AMOS to test the hypotheses. Results show that empowering leadership positively influences engagement, knowledge sharing, and performance, mediated by relational energy. The study provides valuable insights but could benefit from exploring other moderating factors beyond autonomy such as team dynamics or organizational culture. The study's focus on small and medium-sized enterprises (SMEs) is insightful but may limit its generalizability to larger organizations with different leadership structures and employee motivations. Also, the narrow focus on relational energy as the mediator limits exploration of other potential mediators, such as psychological empowerment or trust. (Burhan & Khan, 2023). Burhan and Khan's findings, same as Ali et al. findings supports this paper's leader's competencies measuring approach by emphasizing the importance of leadership approaches that resonate with specific employee needs, fostering positive outcomes in targeted groups.

Qasim et al. study examines the impact of differentiated empowering leadership on employee depression, focusing on how envy and gender simultaneously moderate this relationship. Data was gathered from 420 employees across 87 departments in Pakistan's service sector through two surveys conducted over a week. Structural equation modeling in Molus was used to test the hypotheses. The study found that differentiated empowering leadership contributes to employee depression. This effect is most pronounced in highly envious females, while the impact is weakest among males with low envy. While this study sheds light on an unexplored leadership dynamic, its findings are context-specific and may not apply universally. Additionally, the focus on envy and gender is insightful but could benefit from further exploration into other personal or cultural factors influencing depression (Qasim, Arshad, Farooq, & Raoof, 2023). Qasim et al.'s focus on how specific employee traits moderate leadership impact aligns with Authors' leader's competencies measuring approach, same as Burhan and Khan's and Ali et al. findings, suggesting that understanding and addressing unique employee responses to leadership styles is crucial for improving well-being and satisfaction.

Xu et al. investigates the impact of empowering leadership on millennial employees' voice behavior, using social exchange theory as a framework. The study explores how intrinsic motivation and job autonomy influence this relationship in the Chinese context. Data from 141 millennial employees in China were analyzed to test a moderated mediation model. The research focused on how leadership, motivation, and job design affect employees' willingness to speak up. The findings show that empowering leadership encourages millennial voice behavior, with intrinsic motivation acting as a partial mediator. Additionally, job autonomy strengthens both the direct and indirect relationships between leadership, motivation, and voice behavior. While the study effectively highlights how leadership can encourage millennial voice, the sample size is relatively small, and focusing solely on one region (China) might limit the generalizability of the results. Future studies could consider cross-cultural comparisons or larger sample sizes for broader application (Xu, Zhang, Yan, Zhang, & Fan, 2023). This research is relevant to Authors' study as it highlights how empowering leadership, combined with intrinsic motivation and job autonomy, enhances millennial employees' voice behavior, resonating with Authors' focus on leader's competencies measuring and addressing employee dissatisfaction. Xu et al.'s findings support the segmentation approach from this research by suggesting that tailored leadership and job design strategies can effectively meet specific needs, thereby improving engagement and satisfaction among distinct employee groups.

Moore and Hanson case study explore how complexity leadership concepts can be applied to improve leadership effectiveness by addressing organizational value gaps,

particularly in a manufacturing plant. The study uses multiple surveys and small group interviews to gather data. A rigorous coding method was employed to identify gaps in organizational values and behaviors. Scenario-based training was then applied to address these gaps. The training intervention led to positive outcomes, including a transformed work environment where leaders foster trust, share decision-making, and encourage employee interdependence. Improvements in job satisfaction, production, and reduced turnover were observed. While the study presents a useful approach for leadership development, its reliance on a single case study may limit generalizability. The complexity leadership theory, though effective in this context, may require adaptation for different industries or organizational structures. Additionally, the study could benefit from a more diverse set of data sources, such as employee feedback, to verify the intervention's effectiveness from multiple perspectives. The long-term sustainability of these leadership changes also remains unexamined. Future research should explore broader applications and longitudinal outcomes of such interventions. (Moore & Hanson, 2022). This research is relevant to Authors' study as it demonstrates how targeted leadership interventions, grounded in complexity leadership, can address organizational value gaps to improve job satisfaction and performance. Moore and Hanson's use of scenario-based training to foster trust and collaboration which aligns with Authors' focus on leader's competencies measuring, same as in the findings from previously analysed papers, suggesting that identifying and addressing specific dissatisfaction factors can transform the workplace and enhance employee outcomes.

Jang et al. study investigates the mediating role of employee participation in the performance measurement system on the relationship between authentic leadership and job satisfaction. A survey of 322 employees in South Korea was conducted, with structural equation modeling and bootstrapping methods used to test the hypotheses. The study confirms that authentic leadership positively influences job satisfaction. Employee participation in developing performance measures partially mediates this relationship, enhancing job satisfaction. While the study offers valuable insights, its focus on South Korea might limit generalization to other cultural or organizational contexts. Additionally, while employee participation in performance measurement is an interesting mediator, exploring additional factors such as leadership styles or team dynamics might offer a more comprehensive view. Longitudinal studies could also provide better insights into the lasting effects of authentic leadership and participation on job satisfaction over time (Jang, Chung, & Son, 2022). This research is relevant to Authors' study as it highlights the influence of authentic leadership on job satisfaction, with employee participation in performance measurement playing a key mediating role. Jang et al.'s findings align with the focus of Authors' on leader's competencies measuring, same as in the findings from previously analysed papers, suggesting that empowering employees in decision-making processes can improve satisfaction, particularly when authentic leadership is practiced.

Garzón-Lasso et al. study examines how different leadership styles, particularly transformational, transactional, and passive-avoidant, affect employee performance in terms of satisfaction, extra effort, and effectiveness. Using data collected from Colombian executives, the study aims to validate Bass and Avolio's full-range leadership model in a Latin American context. The study used partial least squares structural equation modeling (PLS-SEM) to analyze data from a survey of 577 executives. The findings reveal that transformational leadership has the most significant positive impact on all three factors (extra effort, satisfaction, and effectiveness). Conversely, passive-avoidant leadership has negative effects on these outcomes. The study confirms the model's validity in a Latin American context. While the conclusion supports the positive impact of transformational leadership, it may oversimplify the complexities of leadership in different cultural contexts. The study focuses solely on one

geographical region, limiting generalizability. Moreover, the model assumes a linear relationship between leadership style and employee outcomes, which may not account for dynamic organizational changes or other external factors like economic shifts. (Garzón-Lasso, Jorge, Arenas-Arango, & Molina, 2024). This research is relevant to Authors' study as it demonstrates how different leadership styles directly impact employee satisfaction, effort, and effectiveness, aligning with the focus on identifying dissatisfied employee groups based on leadership competencies. Garzón-Lasso et al.'s findings on the effectiveness of transformational leadership support Authors' emphasis on leader's competencies measuring, same as in the findings from previously analysed papers, by suggesting that certain leadership approaches can better meet the distinct needs of various employee groups, improving overall performance and satisfaction.

Li et al. research investigates how digital leadership among middle managers influences employee work engagement, especially in the context of digital transformation. The study emphasizes the importance of emotional intelligence, employee empowerment, and affective commitment as mediators of this relationship. The study employed a survey distributed to 559 employees across various listed companies in Southwest China. The data was analyzed using structural equation modeling (SEM) to understand the mediating roles of emotional intelligence and employee commitment in the context of digital leadership. The results show a strong positive relationship between middle managers' digital leadership and employee work engagement. Additionally, emotional intelligence, empowerment, and affective commitment were found to be key mediators in this process. While the study concludes that digital leadership positively impacts employee engagement, it overlooks potential negative effects of digital transformation, such as employee burnout or work-life imbalance, especially in highly digitized environments. The conclusion could be more nuanced by discussing these limitations and the need for balanced leadership approaches in digital settings. (Li, Yang, Yang, & Zhao, 2024). Li et al.'s emphasis on mediators such as empowerment and commitment by suggesting that targeted leadership competencies can address distinct employee needs, improving overall engagement and satisfaction. This research is relevant to Authors' study as it illustrates how specific leadership qualities, like digital leadership and emotional intelligence, positively impact employee engagement, resonating with the focus of this paper on leader's competencies measuring and on identifying factors that influence employee satisfaction and dissatisfaction.

Alghofeli et. al. explores how inclusive leadership enhances job satisfaction through high-performance practices, such as promoting innovation and collaboration. The study also investigates how a workplace climate of inclusion moderates the relationship between leadership practices and employee satisfaction. A longitudinal survey was used to gather data from employees in nonprofit organizations. Regression analysis was employed to assess how high-performance practices mediated the link between inclusive leadership and job satisfaction, with climate for inclusion serving as a moderating factor. The study finds that inclusive leadership significantly improves job satisfaction, especially when combined with high-performance practices and a strong climate for inclusion. The moderating role of inclusion climate further strengthens this relationship. While the findings are valuable, the conclusion might overemphasize the positive effects of inclusive leadership without sufficiently addressing the challenges of implementing such practices, especially in diverse workplaces. The study does not account for potential resistance to inclusive leadership or variations in employee receptiveness, which could affect the overall outcome (Alghofeli et al., 2024). This research is relevant to Authors' study as it highlights the role of leadership in enhancing job satisfaction, with a focus on tailored leadership practices that meet employee needs, like Authors' focus on leader's competencies measuring. Alghofeli et al.'s findings on the importance of inclusive leadership combined with high-performance practices underscore the value of targeted

leadership strategies in fostering satisfaction, aligning with the aim of this paper to improve employee outcomes by addressing specific dissatisfaction triggers. Above mentioned researches related to empowering leadership lead to conclusion and validate point that it is necessary to measure employee satisfaction with the leadership competencies of superiors, because leaders will certainly improve their leadership competencies and thus improve their leadership effectiveness if they know that it is "measured" by the level of employee satisfaction, which will lead to leadership empowerment and thus to better work results.

The following study highlights that segmentation, a common marketing method, is underutilized in social research, suggesting that it has greater potential for application. This supports our use of segmentation to measure employee satisfaction with leadership competence in recognizing work performance. Carins et al. research paper addresses the use of segmentation in social marketing, specifically exploring the development of a simplified segmentation tool to increase its application in social research and social marketing processes. The primary goal of the study is to create and validate a straightforward diagnostic segmentation tool that is both easy to administer and accessible to a broad range of users, facilitating the use of segmentation in social marketing. Author used multiple linear regression to predict segment membership, using different tools. The final tool was able to predict segment membership accurately using only five questions, derived from 16 survey items, significantly simplifying the segmentation process. The second study confirmed that the tool could effectively predict segment membership, while the third study further refined and validated it using an expanded analysis. The resulting tool demonstrates strong predictive accuracy and provides a simplified approach to segmentation that could make it more widely adopted in social marketing. A notable limitation of the study is its reliance on self-reported behavioral measures, which can introduce bias and may not fully capture objective behavior. Incorporating more objective measures would enhance the reliability and generalizability of the segmentation analysis and the diagnostic tool (Carins et al., 2022). This research is relevant to Authors' study as it showcases how a simplified segmentation tool can efficiently identify specific groups, aligning with the aim to quickly pinpoint dissatisfied employee groups based on segmentation. Carins et al. 's approach of using a streamlined, accurate diagnostic tool supports Authors' objective of efficiently applying segmentation in organizational settings, highlighting that simplified tool can enhance practical usability and broaden the adoption of segmentation for targeted interventions.

Carvalho explores the alignment between the broader societal trend towards realizing human potential and the field of social marketing, re-evaluating social marketing's aim of advancing social good and its role in promoting well-being. The main objective is to redefine "social good" with a focus on well-being and propose a conceptual agenda that positions social marketing more prominently in addressing societal needs and improving quality of life. This study reviews literature from both social marketing and human well-being research, examining theories and evidence on what drives well-being. It also investigates societal-level issues like the relationship between income, happiness, and well-being to bridge these findings with social marketing. The study argues that simply reducing ill-being is insufficient for societies aiming to elevate citizen well-being. It suggests that social marketing should become part of this well-being movement to remain relevant. The paper proposes a six-point agenda for social marketers to help achieve these broader goals, such as integrating well-being drivers into social marketing programs, expanding the discipline to new regions, and leveraging social marketing to address poverty and promote mindful consumption (demarketing). While the paper offers valuable insights into the connection between social marketing and well-being, it remains largely theoretical without empirical validation of its propositions. This conceptual focus, though valuable for expanding perspectives, lacks specific case studies or data that could demonstrate

the practical implementation of its ideas. Future research could benefit from empirical studies to test the proposed framework and assess its effectiveness in real-world social marketing initiatives (Carvalho & Mazzon, 2016). This paper is relevant to Authors' research as it highlights the importance of understanding and addressing diverse needs to improve well-being, aligning with the focus on segmentation to identify and address dissatisfaction among specific employee groups. By advocating for a tailored approach to foster social good, the paper supports the use of segmentation to enhance organizational outcomes by targeting and addressing the unique challenges faced by dissatisfied employees, particularly in generational contexts.

Cheng's study investigates the role of internal marketing in influencing employee job satisfaction and dissatisfaction, using an asymmetric approach. The research explores how segmentation can be applied to identify dissatisfied employee groups based on specific internal marketing factors. The study employs fuzzy-set qualitative comparative analysis (fsQCA), which allows for examining causal relationships that lead to either job satisfaction or dissatisfaction. The method identifies conditions under which certain employee segments are likely to be dissatisfied based on internal marketing strategies. The findings suggest that job satisfaction is highly influenced by factors such as innovation, coworker relations, and task-related characteristics, while dissatisfaction is often caused by a lack of supervisor-related characteristics. This asymmetric approach effectively segments employees by their specific satisfaction and dissatisfaction triggers. While the study provides a novel approach using fsQCA, it tends to oversimplify the relationship between internal marketing and job satisfaction. The conclusions do not address how dynamic workplace environments and external factors (like organizational changes) might affect employee perceptions in the long term. In the context of employee satisfaction, these marketing principles, particularly segmentation, can be useful in identifying groups of employees with specific needs. Employees, much like customers, can be viewed as buyers of satisfaction from their employers. By segmenting the workforce based on factors such as work experience, department, or demographics, companies can better understand the specific concerns of dissatisfied groups and address their needs more effectively. However, the idea of using marketing tools such as segmentation in internal organizational contexts might face some challenges. While segmentation works well in external consumer markets, internal application might require careful handling to avoid reinforcing divisions within the workforce or creating a perception of unequal treatment among different employee groups (Cheng, 2020). This paper is relevant to Authors' research as it demonstrates how segmentation can effectively identify groups of employees based on satisfaction and dissatisfaction triggers, aligning with the focus on using segmentation to pinpoint the most dissatisfied employee groups. Cheng's use of internal marketing factors to segment employees by satisfaction levels supports Authors' approach, emphasizing that targeted strategies based on specific dissatisfaction causes, such as supervisor-related issues, can enhance managerial effectiveness and employee engagement.

Based on the findings of all analyzed papers, measuring employee satisfaction with leaders' competencies is essential, as it directly influences work performance. However, such measurements are sensitive and time-consuming, as they need to be conducted across all employees. Leadership is one of the fundamental functions of management. When employees evaluate their satisfaction with the leadership competencies of their managers, they take on the role of consumers. Therefore, to identify dissatisfied groups of employees, it is appropriate to use the marketing principle of segmentation. The authors propose that by using the Weight of Evidence statistical method to process anonymously collected satisfaction responses, segmentation could be quickly achieved, thereby identifying the most dissatisfied groups of employees. This approach would result in significant time savings, as an in-depth analysis of

the reasons for dissatisfaction would be focused on a much smaller subset of employees—specifically, those who are most dissatisfied and whose work performance deviates the most from business goals.

In the following empirical chapter, the application of this quick segmentation procedure for identifying the most dissatisfied employee groups will be demonstrated with an example. Responses from employees in the Croatian financial industry regarding their managers' recognition of good work performance were processed using the Weight of Evidence statistical method, as described by Sugumaran et al. (2017).

2. Empirical research methodology

There are four subchapters in this chapter. In the first subchapter, the Empirical Research Subject, Hypothesis and Goals are presented. The data source is described in the second subchapter. The third sub-chapter includes a brief description of the research model and the methods used. The numerical values of all the performed analyzes and their interpretation are presented in fourth subchapter.

2.1. Empirical research subject, hypothesis and goals

The empirical research subject is attitudes of employees in the financial industry in Croatia about how much managers recognize good work performance of their employees. Based on the research subject, the research hypothesis has been formulated: "H: Managers in Croatian financial institutions recognize good work performance of employees".

There are three empirical research goals. The first goal is to explain whether managers in Croatian financial institutions recognize good performance of their employees. The second goal of the research is to explain whether employee's attitudes about do managers in Croatian financial institutions recognize good work performance of employees differ from the distributions according to age, level of education, work experience of the employees and the business sector in which they are employed. The third goal of the research is to describe the level of satisfactions of each group of respondents if there are differences in attitudes for the analysed distribution.

2.2. Data source

The research was conducted based on data collected by Sara Soldo, one of the authors of this paper for the purposes of research of her doctoral thesis. The data was collected through an online survey in second half of 2022. The respondents were employees from financial institutions in the Republic of Croatia. There were 3141 responses collected (out of 25519 totals). This number ensures the relevance of the conclusions of this research, because its rate of return is higher than 10%. The research analyzed answers of the close survey question: "When I perform my job properly, it is recognized and praised by my supervisor". The answers offered were on a Likert scale.

2.3. Research model and methods

The hypothesis was tested assuming expectations of a normal, i.e. Gaussian distribution of the answers because this distribution is most often assumed as expected in social research when examining respondents' attitudes using a Likert scale due to Central Limit Theorem.

Normal distributions assume values are grouped around the *Mean* value even if the population isn't normally distributed (Scribbr, 2025). In the research around neutral attitudes of respondents regarding whether managers in Croatian financial institutions recognize good work performance of employees.

The hypothesis was tested in two steps. In the first step, it was analyzed whether the distribution of responses to the survey question differed from the normal distribution values. This step was necessary because the hypothesis testing method used requires an auxiliary hypothesis based on the assumption of a normal distribution of responses. The null auxiliary hypothesis AH_0 states: "Respondents' answers to the survey question about whether managers in Croatian financial institutions recognize good work performance of employees are distributed according to a normal distribution". The alternative auxiliary hypothesis AH_1 states: "Respondents' answers to the survey question about whether managers in Croatian financial institutions recognize good work performance of employees are not distributed according to a normal distribution". Based on the results of the normality test for the distribution of answers, a conclusion is drawn about whether to reject or accept the null auxiliary hypothesis. If the normality test results indicate that the distribution of answers is statistically significantly different from the expected values (i.e., the values of the normal distribution), then the null auxiliary hypothesis should be rejected. In the opposite case, the null auxiliary hypothesis should be accepted, indicating that the distribution of answers is not statistically significantly different from the expected values.

If the result of the normality test is the conclusion that the null alternative hypothesis should be accepted, this fact directly leads to the rejection of the main hypothesis, as formulated in the paper. However, if the result of the normality test is the conclusion that the null auxiliary hypothesis should be rejected, and the alternative auxiliary hypothesis should be accepted, it is not possible to directly conclude whether the alternative main hypothesis should be accepted or rejected. This is because the alternative form of the main hypothesis encompasses two possibilities: either most respondents consider that managers in Croatian financial institutions do not recognize good work performance of employees, or most respondents consider that managers in Croatian financial institutions do recognize good work performance of employees. Therefore, it is necessary to perform the second step of hypothesis testing, which involves analyzing the value of the statistical parameter *Mean* to determine whether the hypothesis should be accepted or rejected. If the value of this parameter is greater than the neutral value of 3, the alternative main hypothesis should be accepted. This indicates that the distribution of responses to the survey question shows a higher proportion of respondents who agree or completely agree that managers in Croatian financial institutions recognize good work performance of employees, compared to those who completely disagree or disagree.

The normality test for the distribution of answers to the survey question was performed using the *Chi squared* test, non-parametric statistical method, although the expected distribution in the research is normal. This is because the commonly used parametric statistical methods for testing normality, such as the *Kolmogorov-Smirnov* test or the *Shapiro-Wilk* test, are not appropriate when there are small sample sizes (Gokhaner & Dhar, 2013), (Lee, 2025) as in this study with only five values, due to the five levels of agreement in the Likert scale used to conduct research of respondents' attitudes. According Papić, using *Chi Squared* test is appropriate statistical method for testing normality when there is small size sample (Papić, 2014, p. 236).

Whether there are differences in the respondents' attitudes was analyzed using the *ANOVA* method. If there is a difference, using the *Weight of Evidence* method, the numerical values of the levels of satisfaction of each represented group of employees within all the analyzed distributions is described. According to Sugumaran, Sangaiah, and Thangavelu the

Weight of evidence method is a method used to calculate the level of the impact of the influence of each value in a distribution from the observed samples on the defined target variable. It is mostly used to construct prognostic models when the target variable may have two or more values (Sugumaran, Sangaiah, & Thangavelu, 2017). In this study, the target variable has two values. These are desirable and undesirable modalities of the attitude about whether managers in the financial industry in the Republic of Croatia recognize good work performance of employees. Undesirable modalities are represented by *Strongly Disagree*, *Disagree* and *Neutral* responses. Desirable modalities are represented by *Agree* and *Strongly Agree* responses. Therefore, it is first necessary to change the numerical values of respondents 1, 2, and 3 responses to the undesirable modality, *NO* and the numerical values of respondents 4 and 5 responses to the desirable modality, *YES*.

The value of the Weight of Evidence statistical parameter is calculated using the formula $WoE = \ln\left(\frac{D_d}{D_u}\right)$. It means that the variable values represent the natural logarithm of the percentage ratio between the desired modality, the D_d value and the undesirable modality, the D_u value. (Sugumaran, Sangaiah, and Thangavelu 2017). The values for the desired and undesirable modality should be calculated so that their sums in columns equal 100%. These values can be easily calculated by creating a pivot table. In the pivot table, the independent variable should be specified in the row label, and the *YES/NO* variable in the column label. The option *Show Value As* should be specified to *% of Column Total*. Table 1 presents these values according a distribution by age. A column was added to this table, where the values for the statistical parameter *Weight of Evidence* were calculated using the specified formula. A positive value of a *Weight of Evidence* variable represents respondent segments that consider that managers in the financial industry in the Republic of Croatia recognize good work performance of employees. A negative value of a *Weight of Evidence* statistical parameter represents respondent segments that consider that managers in the financial industry in the Republic of Croatia do not recognize good work performance of employees.

Table 1. Weight of Evidence values calculating example

Count of Your age is:				
Row Labels	YES	NO	Total	LN(YES/NO)
18-24 years (generation Z)	8.51%	10.66%	10.28%	-0.2248
25-40 years (generation Y)	25.54%	43.84%	40.62%	-0.5401
41-56 years (generation X)	45.47%	27.58%	30.72%	0.5000
57-75 years (baby boomers)	20.47%	17.92%	18.37%	0.1330
Grand Total	100.00%	100.00%	100.00%	

Source: Researched and processed by the authors

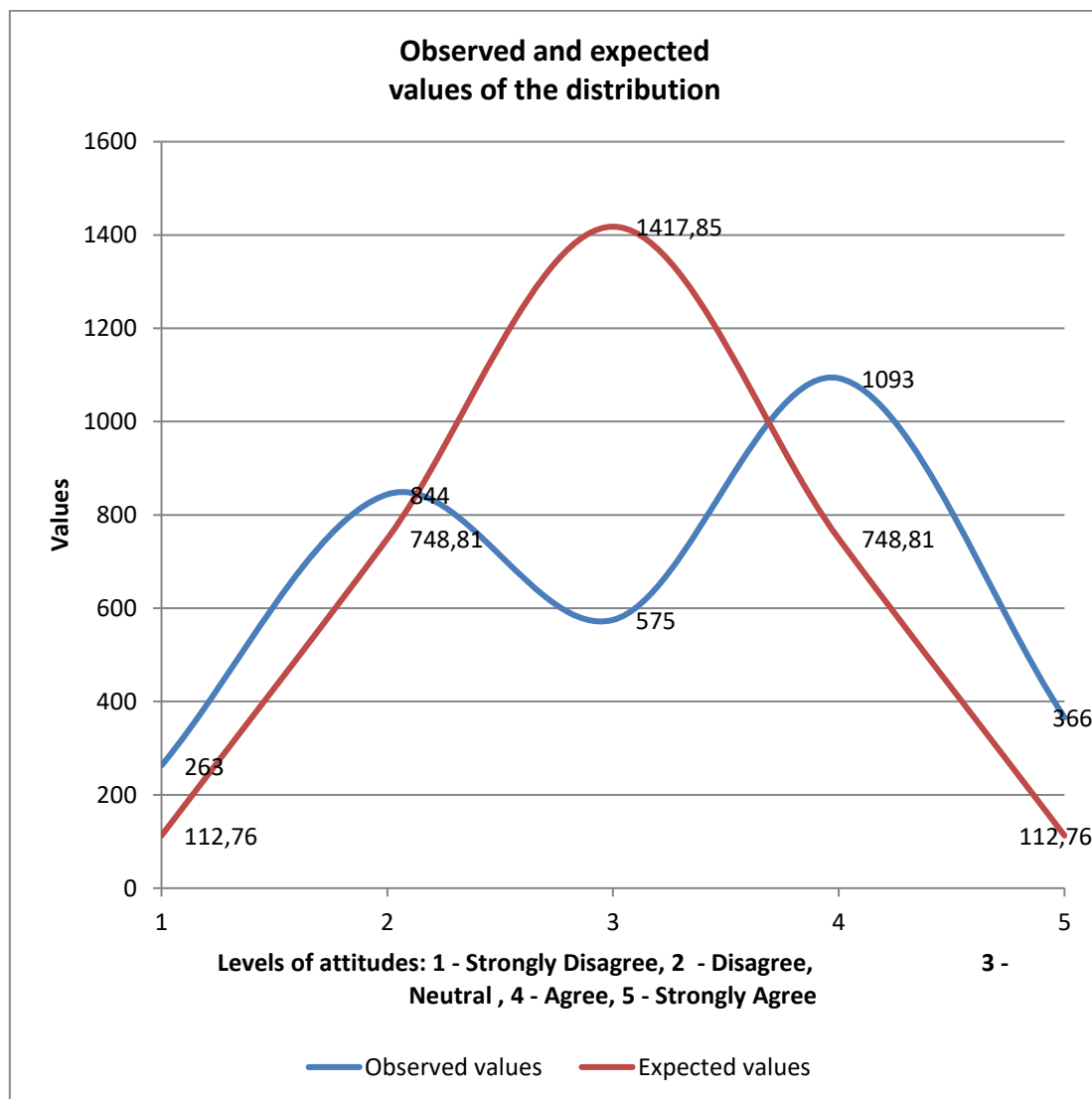
Table 1 shows an example of calculating the Value of Evidence statistical parameter. The same values for the Weight of Evidence statistical parameter are shown in the table 2, sorted in ascending order, as with the other analyzed respondent distributions. The extreme values were interpreted by providing an explanation as to why that group has such an attitude.

2.4. Description and analysis of respondents' attitudes

The distribution of respondents' answers to the question "When I perform my job properly, it is recognized and praised by my supervisor" is shown in graph 1. In Graph 1, except for the curve showing the observed distribution values, there is also the curve of the expected

distribution values shown because in the first step of the hypothesis testing, the observed and expected values of the distribution are compared. The expected distribution values for the normal, i.e. Gaussian, distribution were calculated using Papić's formula (Papić, 2014, p. 237)

The first goal of the research is to explain do employees consider that managers in Croatian financial institutions recognize good work performance of employees. That analyse was performed by testing hypothesis: "Managers in Croatian financial institutions recognize good work performance of employees". The first step in the hypothesis testing is to determine whether the observed and expected values differ. Due to $\Sigma Chi-square$ value = 1868.924 which is greater than *Critical value*, which is 13.277 for certain significance level determined in the research $\alpha = 0.01$ for four degrees of freedom, that means that observed and expected distribution values vary significantly (statistically) from the normal, i.e., Gaussian values. The same conclusion was drawn based on the *p value* = 0.0000 which is less then significance level $\alpha = 0.01$. Due to this fact, it is necessary to perform the second step in the hypothesis testing to determine whether the alternative hypothesis is to be rejected or accepted by observing the *Mean* value.



Graph 1. Observed and expected values of the distribution

Source: Data collected and processed by the authors

Due to *Mean* value = 2.508, that it is smaller than neutral *Mean* value = 3, in observed distribution there are more answers *Strongly Disagree* and *Disagree* than *Agree* and *Strongly Agree*. This fact means the hypothesis: "Managers in Croatian financial institutions recognize good work performance of employees" is to be rejected. Furthermore, it means that employees consider that managers in Croatian financial institutions don't recognize good work performance of employees.

The second goal of the empirical research is to determine whether there are differences in the attitudes of respondents regarding whether managers recognize good work performance, based on factors such as age, level of education, work experience, and the business sector in which they are employed. If such differences in attitudes are found, the third goal of the research is to assess the level of satisfaction for each group within the analyzed distributions in relation to the recognition of good work performance. Table 2 shows the values of the variance analysis of employees' responses from the distribution according to age, whether managers recognize good work performance. Values important for drawing conclusions in the table are marked with blue cell backgrounds. Because the value of the statistical parameter $F = 48.8163$ is higher than the value of the statistical parameter $F_{crit} = 2.6077$, there was drawn conclusion that differences of respondents' answers whether managers recognize good work performance exist. The same conclusion was also drawn based on the $P\text{-value} = 7.89 \text{ E-}31$, which is less than certain level of significance in the research $\alpha = 0.01$.

Table 2. Analysis of the differences in the attitudes of respondents whether managers recognize good work performance from the distribution according to age

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	135.7263	3	45.2421	48.8163	7.89 E-31	2.6077
Within Groups	2907.3167	3137	0.9268			
Total	3043.0430	3140				

Source: Researched and processed by the authors

Because there are differences in respondents' attitudes whether managers recognize good work performance from the distribution according to age, it makes sense to analyze the level of how well managers recognize good work performance, from the distribution of employees according to age. Table 3 shows values of how well managers recognize good work performance, from the distribution of employees according to age sorted from the most unsatisfied to the most satisfied.

Table 3. How well managers recognize good work performance from the distribution according to age

Weight of evidence value	Age (generation)
-0.5401	25 - 40 (generation Y)
-0.2248	18 - 24 (generation Z)
0.1330	57 - 75 (baby boomers)
0.5000	41 - 56 (generation X)

Source: Researched and processed by the authors

According to the presented data, Generation Y is the most dissatisfied with the level of recognition they receive from managers for their good work performance. Generation Z also shows dissatisfaction, while Baby Boomers are more satisfied, and Generation X is the most satisfied. This trend could be attributed to differing expectations and work values across generations. Generation Y, often referred to as Millennials, grew up in a time of rapid technological advancement and economic instability, which may have led them to value feedback and recognition as crucial for career development. They tend to seek frequent validation and clear career progression, so a perceived lack of recognition can lead to greater dissatisfaction. On the other hand, Generation Z, being relatively new to the workforce, might be facing similar struggles but with the added challenge of finding their footing in professional environments. However, their dissatisfaction might not be as pronounced as that of Generation Y, as they are still adjusting to work norms and expectations. Baby Boomers and Generation X, having spent more time in the workforce, may have different priorities and expectations from their jobs. Baby Boomers often value job security and stability over immediate recognition, while Generation X employees are typically more independent and accustomed to balancing work and personal life. As a result, they might not place as much emphasis on managerial recognition, leading to higher satisfaction levels.

Table 4 shows the values of the variance analysis of employees' responses from the distribution according to level of education, whether managers recognize good work performance. Values important for drawing conclusions in the table are marked with blue cell backgrounds. Because the value of the statistical parameter $F = 34.2023$ is higher than the value of the statistical parameter $F_{crit} = 2.2170$, there was drawn conclusion that differences of respondents' answers whether managers recognize good work performance exist. The same conclusion was also drawn based on the $P\text{-value} = 3.90 \text{ E-}34$, which is less than certain level of significance in the research $\alpha = 0.01$.

Table 4. Analysis of the differences in the attitudes of respondents whether managers recognize good work performance from distribution according to level of education

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	157.4089	5	31.4818	34.2023	3.90 E-34	2.2170
Within Groups	2885.6341	3135	0.9205			
Total	3043.0430	3140				

Source: Researched and processed by the authors

Because there are differences in respondents' attitudes whether managers recognize good work performance from the distribution according to level of education, it makes sense to analyze the level of how well managers recognize good work performance, from the distribution of employees according to level of education.

Table 5 shows values of how well managers recognize good work performance, from the distribution of employees according to level of education sorted from the most unsatisfied to the most satisfied. The population that has the highest level of education has responded with the lowest satisfaction level to the question whether good work performance is recognized by their managers. The authors believe that these figures are due to higher expectations from employees with a higher level of education. Highly educated employees are more aware of

importance of good communication and adequate performance recognition in the workplace and that is the reason why they expect to be praised by their supervisors when performing a good job.

Table 5. How well managers recognize good work performance from the distribution according to level of education

Weight of evidence value	Level of education
-0.3180	7. level of education – completed Bachelor Degree and Graduate vocational program
-0.2145	6. level of education – completed undergraduate degree & vocational study
-0.1015	8. level of education – completed postgraduate study: Master’s Degree, Doctoral Degree
-0.1000	1. level of education – completed primary school
0.6281	5. level of education – completed vocational study
1.9729	4. level of education – completed 3-year high school program, completed 4-year high school program

Source: Researched and processed by the authors

Table 6 shows the values of the variance analysis of employees' responses from the distribution according to work experience in financial industry, whether managers recognize good work performance. Values important for drawing conclusions in the table are marked with blue cell backgrounds. Because the value of the statistical parameter $F = 37.3150$ is higher than the value of the statistical parameter $F_{crit} = 2.3748$, there was drawn conclusion that differences of respondents' answers whether managers recognize good work performance exist. The same conclusion was also drawn based on the $P\text{-value} = 1.57 \text{ E-}30$, which is less then certain level of significance in the research $\alpha = 0.01$.

Table 6. Analysis of the differences in the attitudes of respondents whether managers recognize good work performance from distribution according to work experience in financial industry

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	138.2553	4	34.5638	37.3150	1.57 E-30	2.3748
Within Groups	2904.7877	3136	0.9263			
Total	3043.0430	3140				

Source: Researched and processed by the authors

Because there are differences in respondents' attitudes whether managers recognize good work performance from the distribution according to work experience in financial industry, it makes sense to analyze the level of how well managers recognize good work performance, from the distribution of employees according to work experience in financial industry. Table 7 shows values of how well managers recognize good work performance, from the distribution of employees according to work experience in financial industry sorted from the most unsatisfied to the most satisfied. When it comes to years of work experience,

employees with 11–15 years of experience are the most dissatisfied with the recognition they receive from managers for their good work performance, followed by those with 2–5 years of experience. The most content employees are those with up to 1 year of experience, followed by those with 6–10 years, and finally, those with 16–40 years of experience. The dissatisfaction among employees with 11–15 years of experience could be linked to career stagnation or unmet expectations for advancement and recognition. At this stage in their careers, many professionals expect to have achieved a certain level of recognition or career growth. If those expectations aren't met, frustration and dissatisfaction can arise, especially if they perceive their contributions as being undervalued.

Table 7. How well managers recognize good work performance from the distribution according to work experience in financial industry

Weight of evidence value	Work experience in years
-0.5088	11 - 15
-0.0127	2 - 5
0.3991	16 - 40
0.5551	6 - 10
1.6886	0 - 1

Source: Researched and processed by the authors

Employees with 2–5 years of experience may also feel dissatisfied as they are still establishing themselves in their roles and might not receive as much recognition or opportunity for advancement as they expect after a few years in the workforce. On the other hand, employees with less than 1 year of experience are likely still in the early, optimistic phase of their careers, focused on learning and adapting, and may not yet expect substantial recognition. Similarly, employees with 6–10 years of experience may have gained a certain level of stability and confidence in their roles, allowing them to feel more satisfied. Employees with 16–40 years of experience may prioritize job security and have developed a more pragmatic approach to recognition, as they are likely more focused on long-term stability or nearing the latter stages of their careers. Therefore, they might not place as much emphasis on managerial recognition, leading to higher overall satisfaction.

Table 8. Analysis of the differences in the attitudes of respondents whether managers recognize good work performance from distribution according to business sector

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	267.8876	12	22.3240	25.1623	1.10 E-54	1.7553
Within Groups	2775.1554	3128	0.8872			
Total	3043.0430	3140				

Source: Researched and processed by the authors

Table 8 shows the values of the variance analysis of employees' responses from the distribution according to business sector, whether managers recognize good work performance. Values important for drawing conclusions in the table are marked with blue cell backgrounds. Because the value of the statistical parameter $F = 25.1623$ is higher than the value of the statistical parameter $F_{crit} = 1.7553$, there was drawn conclusion that differences of respondents' answers whether managers recognize good work performance exist. The same conclusion was

also drawn based on the P-value = 1.10 E-54, which is less than certain level of significance in the research $\alpha = 0.01$.

Because there are differences in respondents' attitudes whether managers recognize good work performance from the distribution according to business sector, it makes sense to analyze the level of how well managers recognize good work performance, from the distribution of employees according to business sector. Table 9 shows values of how well managers recognize good work performance, from the distribution of employees according to business sector sorted from the most unsatisfied to the most satisfied.

Table 9. How well managers recognize good work performance from the distribution according to business sector

Weight of evidence value	Business sector
-1.0143	Finance
-0.6554	Information technology
-0.1000	Claims department
-0.0250	Administration/Back office
0.0969	Sales
0.1000	Vault department
0.1552	Marketing
0.4469	Procurement
1.0293	Accounting
1.5455	Human Resources
1.7968	Management
1.8332	Risk management
3.4914	Board of directors

Source: Researched and processed by the authors

The finance and information technology sectors are the least satisfied with internal communication between managers and employees within the financial industry in Croatia, as shown in Table 9. This dissatisfaction is likely since these sectors are the most demanding in the market, primarily because of rapid technological changes. Since constant technological advancements require significant investment, it can sometimes be costly for employers to keep pace. These challenges are often prioritized over communication between managers and employees, leading to inadequate leadership.

Interestingly, departments that require the most frequent communication daily, such as finance and IT, report being the least satisfied with communication from their supervisors and with the recognition of good performance. On the other hand, board members and senior management, who have less frequent communication with supervisors, report the highest levels of satisfaction. Considering the cross-section of the results of the previous four analyses, the most dissatisfied group of employees in Croatian financial institutions due to managers do not recognize their good work performance enough are employees from generation Y, that have 7th level of education – completed Bachelor Degree and Graduate vocational program, that have working experience between 11 - 15 years and work in finance sector. Exactly this group of employees is most likely to consider that their managers are not (enough) good leaders. Therefore, managers should first find out the exact reasons what causes dissatisfaction to know how to eliminate them exactly in this group of the employees.

Conclusion

When employees evaluate their satisfaction with the leadership competencies of their managers, they take on the role of consumers. Since employers have a vested interest in promoting employee satisfaction, they could apply the marketing principle of segmentation to identify the most dissatisfied groups of employees and understand the reasons behind their dissatisfaction, allowing for targeted measures to address these issues. The Weight of Evidence statistical method is an effective way to quickly identify segments of dissatisfied employees, significantly reducing the sample of employees in which it is necessary to investigate the reasons for dissatisfaction.

Based on the results of testing the hypothesis, “Managers in Croatian financial institutions recognize the good work performance of employees,” the hypothesis should be rejected. It is therefore concluded that employees in Croatian financial institutions generally feel that managers do not sufficiently acknowledge their good work performance. Using the statistical method ANOVA, it was determined that this general conclusion of employee dissatisfaction due to insufficient recognition does not hold true for all employee groups. This finding necessitated identifying which specific groups of employees’ experience dissatisfaction across the four analyzed distributions.

It was concluded that the most dissatisfied group of employees in Croatian financial institutions - due to a lack of managerial recognition for good work performance—consists of Generation Y employees, those who have completed a 7th level of education (a Bachelor’s Degree and Graduate Vocational Program), employees with 11–15 years of work experience, and those working in the finance department. This group is also the most likely to perceive their managers as ineffective leaders. Therefore, managers should prioritize investigating the specific causes of dissatisfaction within this group to address and resolve these issues effectively.

There are two limitations of the empirical findings of the research. First is the timing of data collection. It were collected during the end of the COVID-19 pandemic and the beginning of the post-COVID-19 period, during which many employees were still working from home. As a result, employees were not in daily direct contact with managers, which may have influenced their perceptions. For this reason, the research on employee satisfaction and managerial recognition of good work performance in the finance industry in Croatia should be repeated once the post-pandemic period fully stabilizes to ensure the reliability of the conclusions. Second, the data refers to employees in the financial industry in Croatia. Therefore, the same research should be performed for employees in other business sectors.

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References

- Alghofeli, M., Alghofeli, M., Alsabban, A., & Basahal, A. (2024). Inclusive Leadership and Job Satisfaction: The Mediating Role of High-Performance Practices and the Moderating Role of Climate for Inclusion. *Employee Responsibilities and Rights Journal*, 1-26.

- Ali, M., Lei, S., Jie, Z. S., & Rahman, M. A. (2018, 6). *Empowering Leadership and Employee Performance: A Mediating Role of Thriving at Work*. Retrieved 9 24, 2024, from Web of Science: <https://www-webofscience-com.ezproxy.nsk.hr/wos/woscc/full-record/WOS:000455434100001>
- Angeline, T. (2011, 1 18). *Managing generational diversity at the workplace: expectations and perceptions of different generations of employees*. Retrieved 9 24, 2024, from Web of Science: <https://www-webofscience-com.ezproxy.nsk.hr/wos/woscc/full-record/WOS:000290631900002>
- Burhan, Q.-u.-A., & Khan, M. A. (2023, 10). *Empowering leadership ripple effect: improving employee engagement, performance and knowledge sharing through relational energy and autonomy*. Retrieved 9 24, 2024, from Web of Science: <https://www-webofscience-com.ezproxy.nsk.hr/wos/woscc/full-record/WOS:001085412500001>
- Carins, J., Kitunen, A., & Rundle-Thiele, S. (2022, 2 25). *When Less is More: A Short-form Tool to Increase Segmentation Implementation*. Retrieved 10 6, 2024, from Web of Science: <https://www-webofscience-com.ezproxy.nsk.hr/wos/woscc/full-record/WOS:000827202700001>
- Carvalho, H. C., & Mazzon, J. A. (2016, 3 23). *A better life is possible: the ultimate purpose of social marketing*. Retrieved 10 6, 2024, from Web of Science: <https://www-webofscience-com.ezproxy.nsk.hr/wos/woscc/full-record/WOS:000371338900005>
- Cheng, C.-F. (2020). Revisiting internal marketing for the determinants of job (dis)satisfaction by using asymmetric approach. *Sustainability*, 1-15.
- Garzón-Lasso, F., J. S.-M., Arenas-Arango, S., & Molina, C. (2024). Full range leadership style and its effect on effectiveness, employee satisfaction, and extra effort: an empirical study. *Frontiers in Psychology*, 01-09.
- Gokhaner, G., & Dhar, M. (2013, 7 15). *Which-normality-test-is-preferable-for-small-data-sets-10-observations*. Retrieved 3 19, 2025, from Researchgate: <https://www.researchgate.net/post/Which-normality-test-is-preferable-for-small-data-sets-10-observations>
- Ismagilova, F., & Mirolyubova, G. (2015, 11 16 - 20). *What do Russian managers want to add to life-long learning of their aged subordinates?* Retrieved 9 24, 2024, from Web of Science: <https://www-webofscience-com.ezproxy.nsk.hr/wos/woscc/full-record/WOS:000377304008076>
- Jang, S., Chung, Y., & Son, H. (2022, 3 17). *Web of Science*. Retrieved 9 28, 2024, from Employee participation in performance measurement system: focusing on job satisfaction and leadership: <https://www-webofscience-com.ezproxy.nsk.hr/wos/woscc/full-record/WOS:000766099700001>
- Kim, M., Beehr, T. A., & Prewett, M. S. (2018, 8). *Employee Responses to Empowering Leadership: A Meta-Analysis*. Retrieved 9 24, 2024, from Web of Science: <https://www-webofscience-com.ezproxy.nsk.hr/wos/woscc/full-record/WOS:000436045400001>
- Lee, S. (2025, 3 18). *10 Essential Facts About the Shapiro-Wilk Test You Must Know*. Retrieved 3 19, 2025, from <https://www.numberanalytics.com/blog/essential-facts-shapiro-wilk-test>: <https://www.numberanalytics.com/blog/essential-facts-shapiro-wilk-test>
- Li, Z., Yang, C., Yang, Z., & Zhao, Y. (2024). *The impact of middle managers' digital leadership on employee work engagement*. Retrieved 10 17, 2024, from Scopus: <https://www-scopus-com.ezproxy.nsk.hr/record/display.uri?eid=2-s2.0-85189975098&origin=resultslist&sort=plf-f&src=s&sid=dbfb147f9ce56c277f8cf12d58569c65&sot=b&sdt=b&s=TITLE-ABS-KEY%28The+impact+of+middle+managers%E2%80%99+digital+leadership+on+em+employee+wo>

- Moore, J. R., & Hanson, W. (2022, 11 22). *Web of Science*. Retrieved 9 28, 2024, from Improving leader effectiveness: impact on employee engagement and retention: <https://www-webofscience-com.ezproxy.nsk.hr/wos/woscc/full-record/WOS:000847398600001>
- Papić, M. (2014). *Primijenjena statistika u MS Excelu*. Zagreb, Hrvatska: Zoro d.o.o.
- Qasim, N., Arshad, M., Farooq, O., & Raoof, R. (2023, 4 20). *The impact of differentiated empowering leadership on employees' depression: moderation of employees' envy and gender*. Retrieved 9 24, 2024, from Web of Science: <https://www-webofscience-com.ezproxy.nsk.hr/wos/woscc/full-record/WOS:000960493400001>
- Scribbr. (2025). *Central Limit Theorem | Formula, Definition & Examples*. Retrieved 3 19, 2025, from Scribbr: <https://www.scribbr.com/statistics/central-limit-theorem/>
- Sugumaran, V., Sangaiah, A. K., & Thangavelu, A. (2017). *Computational Intelligence Applications in Business Intelligence and Big Data Analytics*. Cleveland: CRC Press.
- Xu, W., Zhang, Y., Yan, M., Zhang, J., & Fan, X. (2023, 11). *How empowering leadership promotes millennial employees' voice behavior*. Retrieved 9 24, 2024, from Web of Science™: <https://www-webofscience-com.ezproxy.nsk.hr/wos/woscc/full-record/WOS:001099530900010>