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Original scientific paper

Economic Factors in the Process of Employee Motivation in the Metal Processing Industry in the Brod-Posavina County

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Abstract: The purpose of the paper is to investigate how important specific economic factors/factors are to employees in metal processing companies in the motivation process, referring to extrinsic and intrinsic factors. In scientific research for the purposes of this paper, scientific research methods will be used (survey method, systematic analysis methods, descriptions and some of the methods that will, with some adaptation, also be applied in the concluding considerations). Primary sources are provided for the purposes of writing the paper. The basis of this research is clearly defined and a research hypothesis has been set in advance, tested by statistical analysis. Analyzing employee motivation according to extrinsic factors and observing the respondents' responses, it is evident that working conditions, acquiring new knowledge and skills, and relationships with colleagues are extremely important to employees at their workplace, as factors that must be applied in the process of employee motivation. Observing the respondents' responses according to intrinsic factors, it is evident that employees consider recognition and praise from superiors, job challenges, advancement and responsibility at work, achievement and success to be important. The research has shown the importance of investing in extrinsic and intrinsic factors. The extent to which extrinsic factors overlap and complement each other is also shown by the characteristics that should characterize a good team and its work. The importance of intrinsic factors is an inexhaustible topic of many scientific and professional papers, all with the aim of greater employee motivation and better organizational performance.

Keywords: economic factors; extrinsic factors; intrinsic factors; metal processing industry; motivation; work

1 INTRODUCTION

While the importance of extrinsic and intrinsic factors in employee motivation and satisfaction is well-established in general management literature, this study uniquely investigates its relative significance within the distinct socio-economic and industrial context of the metal processing industry in the Brod-Posavina County, Croatia. This regional and industry-specific focus allows for an examination of how these factors are manifested and perceived by employees in a sector vital to the local economy, thereby contributing to nuanced empirical insights into the existing body of motivation research. Specifically, this paper aims to investigate how important the specific factors in the motivation process, such as extrinsic and intrinsic factors are to the employees in the metalworking industry of the Brod- Posavina County.

The nature of the problem is to see which factors are more important to the employees themselves. Namely, good working conditions create a greater opportunity for better performance of work tasks, as well as greater success in a particular job. Poor working conditions hinder employees from achieving expected achievements.

In scientific research for the purposes of this paper, scientific research methods will be used (survey method, systematic analysis methods, descriptions and some of the methods that will, with some adaptation, also be applied in the final considerations).

The research hypothesis is: Among extrinsic factors, working conditions and job security are perceived as significantly more important motivators than salary by employees in the metal processing industry of the Brod-Posavina County. An additional hypothesis is: There is a strong positive correlation between teamwork and the perceived importance of relationships with colleagues and superiors among employees in the metal processing industry of the Brod-Posavina County, indicating a significant social component to their motivation.

2 THEORETICAL AND CONCEPTUAL FRAMEWORK

Motivation is a highly variable and complex phenomenon that leads to changes in the consciousness, habits, behaviour and work of an individual. It represents one of the most important issues in modern business. That is why it is extremely important to determine the current state of employee motivation, as well as ways and measures to improve motivation, and at the same time achieve business excellence in the organization. In this paper, research will be conducted based on Herzberg's theory of the content of motivation.

Herzberg's theory of motivation content speaks of two groups of factors: hygiene (extrinsic) and motivators (intrinsic) [1]. Although the presence or absence of dissatisfaction is determined by hygiene factors, the presence or absence of satisfaction is also determined by motivational factors or motivators, so it can be said that instead of one scale with two states (satisfaction and dissatisfaction), there are two scales with four states: the employee dissatisfaction scale, which consists of dissatisfaction and absence of dissatisfaction, and the employee satisfaction scale, which consists of satisfaction and absence of satisfaction.

Extrinsic (hygiene) factors are related to the situation in which a person acts, while intrinsic factors are related to the work that a person performs. All participants in the business process need to develop intrinsic motivation, as well as all internal forms of intrinsic motivation [2]. Intrinsic factors have the character of motivators that lead to greater job satisfaction and greater work engagement, while extrinsic factors prevent job dissatisfaction, but (without extrinsic factors) cannot on their own influence greater work engagement [3]. Hygiene factors include: salary, working conditions, business policy, company organization, relationships with superiors, and the motivators include: the challenge of the job, the opportunity to learn new things, advancement at work, recognition from superiors, etc. We recognize intrinsic

motivation in activities that people perform "for their own sake," for their own pleasure or natural interest [4].

Hertzberg's second immediate interest stems from the conceptualization of the model of work motivation and the immediate need to act on work motivation, and is focused on reshaping work that enables individual development. Since work and its characteristics are the source of work motivation, the only way to act on motivation is through direct action on work, which should be more creative and should allow for greater autonomy and responsibility and provoke the ability to affirm and self-actualize. Creativity is achieved through creative work tasks, and not only through good relationships and support from managers and greater material rewards. Hertzberg developed the idea and philosophy of job enrichment as the most important motivational strategy [5].

Modern concepts, modelled after Locke's idea [6] approach the integration of theoretical approaches and, together with concepts that deal with self-regulation of behaviour and intrinsic motivation, dominate research projects.

Bock et al [7] believe that monetary incentives negatively affect the acceptance and sharing of new knowledge among employees, as they have only a short-term effect.

Based on theoretical ideas about motivation, Birkinshaw develops his model of the motivation spectrum in which he presents three types of drivers-material, social and personal. Since the treatment of intrinsic motivation is new and unusual (although its concept has been known for decades), care should be taken when implementing it. Namely, the concept of extrinsic motivation has been practiced in large industrial companies since the early years of the 20th century, while the concept of intrinsic motivation has emerged as a desired alternative by the beginning of the 21st century [8].

In 1998, Quijano, Navarro & Co presented the integrative model of work motivation (HSA-Mot) within a large project that dealt with organizational evaluation [9]. This model represents motivation as the level of effort that individuals are willing to invest in their work, and it integrates both original needs theories, as well as instrumentality from Vroom's expectancy theory, self-efficacy from social cognitive theory, equality from Adams' fairness theory, and psychological states from the job characteristics model. The HSA-Mot model is based on the assumption that people have a certain "set" of needs that guide their behavior in order to achieve satisfaction [10]. Research based on this model and carried out in Chile, Spain, Great Britain and Portugal proved that this model represents a valid measure of motivation for work, that is, with the help of the HSA-Mot model, motivational processes in the organization can be studied in more detail, in order to properly direct improvements (in order to raise the motivational potential). Also, the advantage of this model is that a theoretical model, focused on motivational elements, tested and empirically confirmed in several countries, has shown a high degree of integration.

Filemon & Uriarte [11] state that it is sufficient to motivate employees extrinsically, i.e. through an appropriate reward system. However, when tasks are more complex, both intrinsic and extrinsic motivation must be included for employee advancement and satisfaction.

Organizational behavior researchers have different opinions about how many factors there are and which ones influence the increase or decrease in job satisfaction.

According to George and Jones [12] there are four factors that influence the level of job satisfaction:

1. Person (personality) - the character of an individual, or the way they feel, think and react. This is the first determinant that encompasses everything a person thinks or feels related to work and it directly influences to what extent a person is satisfied or dissatisfied with their job.
2. Values - the foundation of values is in understanding the attitudes and motivations that influence our perceptions. Individuals come to an organization with preconceived notions of "what should be" and "what shouldn't be". In the context of job satisfaction, we view values as intrinsic (internal) and extrinsic (external, related to the consequences of the job). An individual with strong intrinsic values will be more satisfied with a job that is interesting and personally meaningful to them (e.g. social work), but which also requires a longer stay at work and is not very well paid, while an employee with strong extrinsic values will be more satisfied with a job that is monotonous and boring, but very well paid.
3. Work situation - is one of the most important factors in job satisfaction, whether it relates to the environment in which an individual works, or the people with whom the individual interacts while performing their job, or the task that the individual performs, or the way the organization treats its employees.
4. Social influence - refers to the influence that individuals or groups have on the behaviour and attitudes of an individual, i.e. it is the influence of an individual on a co-worker or the influence of groups on the individual to which they belong, as well as the culture of the individual. All of the above is related to the employee's satisfaction or dissatisfaction with their job.

Job satisfaction is an important factor in the organization's operations, although it is often given more importance than it should have. Scientists have tried to answer the question: what is the relationship between employee satisfaction and productivity? A large number of people believe that there is a strong relationship between employee satisfaction and productivity, as evidenced by a large number of studies, and these studies agree that there is a relationship between job satisfaction and productivity, but it is not as strong as previously thought. The question arises: at what level is the relationship between job satisfaction and productivity observed. If the emphasis is placed on the individual level, the attitude that "a happy worker is a productive worker" is questioned, because productivity leads to satisfaction, and not vice versa. The higher the productivity, the better the performance of employees, which leads to greater rewards and greater job satisfaction. Research according to Ostroff has shown that organizations in which employees were satisfied were more productive than those with less satisfied or even dissatisfied employees. Ostroff [13] believes that perhaps one of the problems in determining the connection between these two concepts is that most research focuses on the individual, rather than the organizational, level.

Different needs of individuals, such as a sense of competence, a desire for autonomy, and respect from superiors, stimulate intrinsic motivation in the workplace,

so that employees share knowledge with each other and have a desire to progress [14].

According to research, turnover is much lower in organizations where employees are satisfied with their jobs than in those where they are dissatisfied, which is also influenced by other factors such as: general economic conditions and unemployment rates (a dissatisfied worker will remain in the organization in which he works, despite dissatisfaction, because there are no other options or choices), the possibility of finding another job, the length of the contract that the individual has with the organization, the degree of general satisfaction with life, etc. According to research, a worker who is generally satisfied with life but dissatisfied with his job is more likely to leave his job than a worker who is dissatisfied with both. From the above, it follows that employees who have a generally positive attitude towards life and when they find themselves in a situation in which they are dissatisfied with their job, are ready to take concrete actions to get out of that situation (and quit), unlike those who are dissatisfied with neither life nor work [15].

Job satisfaction can refer to self-satisfaction with one's job, but also to satisfaction with employee relationships with superiors and subordinates, satisfaction with salary and rewards or other benefits. Satisfaction is a specific emotion, and occurs as a reaction to some stimuli from the environment. Job satisfaction is defined as a pleasant feeling that arises from the perception that one's job fulfils or enables the fulfilment of important business values of that person [16]. Employee motivation and satisfaction are the foundation of the profession of modern human resources management, because only by building a quality motivational system can an organization be helped to achieve better business success. When it comes to human resources management, it is necessary to emphasize that managers, whose goal is to improve employee motivation and satisfaction, must avoid mistakes related to: hiring the wrong people, people who do not make an effort; wasting time in long conversations; insufficient employee training; inadequate payment of employees; discrimination at work, etc.

3 METAL PROCESSING INDUSTRY IN THE BROD-POSAVINA COUNTY

Metal processing industry is an important sector of the EU economy, and it contributes greatly to its competitiveness and industrial development. Competitive and strong steel manufacturing, i.e. strong metal processing industry is important in the industrial base of both the European Union and the Republic of Croatia [17].

The metalworking industry, as an industrial branch, includes the production of metal products needed for production and personal consumption, i.e. finished metal products (reinforcement steel and rolled wires, seamless and welded pipes, rolled, pressed and drawn products, cast finished and semi-finished products, castings, nails, rivets and screw goods, metal equipment for construction, equipment for roads and railways, tanks and cisterns, metal household utensils, machines and devices, furnaces, stoves, engines, construction machinery, machinery for the food, beverage and tobacco industries, conveyors and cranes, agricultural machinery, electrical household appliances, etc.), motor vehicles, trailers and semi-trailers, other means of transport (locomotives and wagons, tram cars, ships) and other products that are predominantly or entirely made of metal. If we compare similar manufacturing industries in neighbouring countries, it can be said that the competitive position of the Croatian metal industry makes the country of Croatia very desirable for investment. [18]

The basis of metalworking production is mechanical processing, supplemented by heat and electrical processing. Products are usually composed of assemblies of varying degrees of complexity (a large number of parts), and technological processes include several thousand operations [19].

Well-known companies that are significant in the metalworking industry, headquartered in the Brod-Posavina County, are: Automatizacija industrijskih postrojenja d.o.o., a company that designs and manufactures special machines, devices and production lines according to customer orders, when it comes to the metal and automotive industries; Andritz Tep d.o.o., a company, a leader in "production of pressure parts and boiler equipment according to its own or customer's documentation and a regional leader in the design and production of boiler plants, energy islands and complete power plants based on the combustion of wood biomass and waste, industrial boiler plants fired by gas and oil and boiler plants for the utilization of residual heat (HRSG) behind small and medium-sized gas turbines and industrial processes"; Bartels-Conjar d.o.o. company specialized in the production of storage equipment, racking systems, containers and steel structures; Color Emajl d.o.o., a company for the production of flue gas programs; Đuro Đaković Kompenzatori d.o.o., one of the oldest manufacturers of compensators in the world; Đuro Đaković Montaža d.o.o., known for the production and installation of "steel structures, mechanical equipment and pipelines in construction, reconstruction, modernization, overhaul and maintenance projects of energy, petrochemical and industrial plants, as well as bridges and steel structures"; EP-ING, whose main activities are "workshop manufacture and assembly of all types of machinery; workshop manufacture and assembly of silos, reservoirs, tanks, pipelines, pressure vessels, heat exchangers and other components; overhauls, reconstructions, repairs and repairs in refineries, cement plants, sugar factories and similar plants; overhauls, reconstructions, repairs and repairs of construction machinery and equipment; workshop manufacture and assembly of steel structures, cladding of various types halls, warehouses, sales and business premises (construction of cold and hot rolled profiles, cladding with sheets or panels of various thicknesses of insulation)"; Erga d.o.o. whose main activity is industrial automation; Hladni Val d.o.o., which provides the services of "laser cutting, bending, welding, CNC machining, industrial 3D printing and industrial engraving, thus turning the client's idea into a finished product"; the company Industroremont d.o.o. with a long tradition of work on assembly and overhaul of industrial plants; Sigmat d.o.o. production, cooperation and supply of industrial equipment; Simplex d.o.o. (installation of elevators, production of parts for elevators, metal processing and production of metal structures);

Spiroflex d.o.o. (metal bellows and metal compensators) and others. [20]

4 METHODOLOGY

In the scientific research for the purposes of this work, scientific research methods will be used, in order to ensure the most reliable, high-quality and concrete knowledge and conclusions about the proposed topic.

Various logical and technical methods will be used for the analysis of individual elements and the mutual influence of individual elements, from description, analytical-synthetic, inductive-deductive and compilation methods to statistical and mathematical methods, the use of which will depend on the goals set in the work itself.

The research will use: survey methods, methods of systematic analysis, descriptions and statistical methods.

Primary and secondary sources are provided for the needs of the work. The methodology in this paper uses descriptive statistics that will provide information about the variables in a given data set and highlight the relationships between the variables in the sample. The Statistica program was used to process statistical data.

The research was conducted using a questionnaire, covering employees in the metal processing industry of the Brodsko-Posavina County. The 163 employees of the metal processing industry in BPC filled out questionnaires manually during working hours in the period from February 3 to April 25, 2025. By gender, 57% of men and 43% of women participated in the research.

When it comes to age, 32% of respondents were aged 20 to 30, 38% were aged 31 - 40, 25% were aged 41 - 50, and 5% were aged 50 - 60. 50% of those employed in production participated in the research, as well as those employed in administration.

When it comes to professional qualifications, 30% of employees with secondary education and 70% of employees with university education participated in the research.

In terms of length of service, 53% of employees with 0 - 10 years of service participated in the survey, 38% of employees with 11 - 20 years of service, 7% of employees with 21 - 30 years of service, and 2% of employees with 31 - 40 years of service.

In the survey, respondents indicated their level of agreement with each question on a 5-point Likert scale (1 = not important, 2 = less important, 3 = moderately important, 4 = important, 5 = very important).

5 RESEARCH RESULTS

The research is being conducted with the aim of finding a solution to the problem of how important extrinsic or hygiene factors (salary, working conditions, business policy, company organization, relationships with superiors) and intrinsic factors or motivators (challenge of the job, opportunity to learn new things, job advancement, recognition from superiors, etc.) are to employees as motivation for work. The results of the research are presented below.

The analysis of descriptive statistics showed that all of the above variables are extremely important to all employees, which is actually confirmed by the fact that the smallest average mean value of a variable is 4.13.

First, a test of the normality of the data distribution was done to decide which correlation test to use.

Table 1 Descriptive statistics; made by authors

Variable	Mean	Std. Dev	Minimum	Maximum	N
Job security	4.97	0.26	3.00	5.00	163
Acquiring new knowledge and skills	4.40	1.12	1.00	5.00	163
Working conditions	4.77	0.65	3.00	5.00	163
Behavior of superiors	4.63	0.78	3.00	5.00	163
Relationship with colleagues	4.13	1.07	1.00	5.00	163
Relationship with superiors	4.50	0.95	1.00	5.00	163
Teamwork	4.33	1.02	1.00	5.00	163
Recognition and praise	4.50	1.02	1.00	5.00	163
Responsibility in the workplace	4.47	1.03	1.00	5.00	163
Advancement at work	4.63	0.78	3.00	5.00	163
New challenges	4.43	0.98	1.00	5.00	163
Flexible working hours	4.93	0.36	3.00	5.00	163
Achievement and success	4.57	0.83	3.00	5.00	163

Table 2 Tests of Normality; made by authors

Variable	N	W	p
Job security	163	0.11	0.00
Acquiring new knowledge and skills	163	0.57	0.00
Working conditions	163	0.37	0.00
Behavior of superiors	163	0.47	0.00
Relationship with colleagues	163	0.67	0.00
Relationship with superiors	163	0.55	0.00
Teamwork	163	0.62	0.00
Recognition and praise	163	0.53	0.00
Responsibility in the workplace	163	0.55	0.00
Advancement at work	163	0.47	0.00
New challenges	163	0.58	0.00
Flexible working hours	163	0.18	0.00
Achievement and success	163	0.51	0.00

After performing the normality test, it was observed that the *p*-value of the Shapiro-Wilk test is less than 0.05, which means that there is statistically significant evidence against the hypothesis that the data come from a normal distribution. In other words, it can be concluded that the data do not follow a normal distribution, and therefore Spearman's rank correlation coefficient was used, which follows below.

Table 3 Spearman Rank Order Correlations, MD pairwise deleted, Marked correlations are significant at $p < 0,05$; made by authors

	Spearman's correlation coefficient - *Rho* (*p*-value)												
	Job security	Acquiring new knowledge and skills	Working conditions	Behavior of superiors	Relationship with colleagues	Relationship with superiors	Teamwork	Recognition and praise	Responsibility in the workplace	Advancement at work	New challenges	Flexible working hours	Achievement and success
Job security	1.00 (---)	0.16 (0.21)	0.05 (0.72)	0.06 (0.64)	0.11 (0.42)	0.07 (0.60)	0.09 (0.51)	0.06 (0.62)	0.07 (0.61)	**0.27 (0.03)***	0.19 (0.14)	0.024 (0.86)	0.25 (0.06)
Acquiring new knowledge and skills	0.16 (0.21)	1.00 (---)	**0.27 (0.04)***	0.13 (0.32)	**0.46 (0.00)***	0.10 (0.47)	**0.30 (0.02)***	0.21 (0.11)	0.05 (0.72)	0.13 (0.32)	**0.42 (0.01)***	1.00 (0.45)	0.23 (0.08)
Working conditions	0.05 (0.72)	**0.27 (0.04)***	1.00 (---)	0.23 (0.08)	0.19 (0.14)	0.03 (0.83)	0.17 (0.19)	0.03 (0.85)	0.09 (0.50)	0.04 (0.77)	0.00 (0.99)	0.22 (0.09)	0.06 (0.64)
Behavior of superiors	0.06 (0.64)	0.13 (0.32)	0.23 (0.08)	1.00 (---)	**0.59 (0.00)***	**0.48 (0.00)***	**0.54 (0.00)***	0.19 (0.14)	0.26 (0.05)	0.22 (0.09)	0.08 (0.55)	0.089 (0.50)	0.06 (0.63)
Relationship with colleagues	0.12 (0.42)	**0.46 (0.00)***	0.19 (0.14)	**0.59 (0.00)***	1.00 (---)	**0.50 (0.00)***	**0.71 (0.00)***	**0.22 (0.09)***	0.07 (0.62)	0.10 (0.44)	**0.37 (0.00)***	0.15 (0.25)	0.10 (0.43)
Relationship with superiors	0.07 (0.59)	0.09 (0.46)	0.03 (0.83)	**0.48 (0.00)***	**0.50 (0.00)***	1.00 (---)	**0.63 (0.00)***	**0.44 (0.00)***	**0.35 (0.01)***	0.02 (0.86)	0.02 (0.89)	0.098 (0.45)	0.15 (0.25)
Teamwork	0.09 (0.51)	**0.29 (0.02)***	0.17 (0.19)	**0.54 (0.00)***	**0.71 (0.00)***	**0.63 (0.00)***	1.00 (---)	**0.39 (0.00)***	0.17 (0.19)	0.11 (0.38)	**0.36 (0.01)***	0.12 (0.35)	0.13 (0.31)
Recognition and praise	0.06 (0.62)	0.21 (0.11)	0.03 (0.85)	0.19 (0.14)	**0.22 (0.09)***	**0.44 (0.00)***	**0.39 (0.00)***	1.00 (---)	**0.58 (0.00)***	0.27 (0.03)	**0.25 (0.05)***	0.09 (0.48)	0.14 (0.29)
Responsibility in the workplace	0.07 (0.61)	0.05 (0.72)	0.09 (0.50)	0.26 (0.05)	0.07 (0.62)	**0.35 (0.01)***	0.17 (0.19)	**0.58 (0.00)***	1.00 (---)	**0.51 (0.00)***	**0.29 (0.02)***	0.08 (0.52)	0.12 (0.36)
Advancement at work	**0.27 (0.03)***	0.13 (0.32)	0.04 (0.77)	0.22 (0.09)	0.10 (0.44)	0.02 (0.82)	0.11 (0.39)	0.28 (0.03)	**0.51 (0.00)***	1.00 (---)	**0.43 (0.00)***	0.15 (0.25)	0.17 (0.19)
New challenges	0.19 (0.14)	**0.42 (0.00)***	0.00 (0.99)	0.08 (0.55)	**0.37 (0.00)***	0.02 (0.90)	**0.36 (0.01)***	**0.26 (0.05)***	**0.29 (0.02)***	**0.43 (0.00)***	1.00 (---)	0.08 (0.53)	**0.44 (0.00)***
Flexible working hours	0.02 (0.86)	0.10 (0.45)	0.22 (0.09)	0.09 (0.50)	0.15 (0.25)	0.09 (0.45)	0.12 (0.35)	0.09 (0.48)	0.08 (0.52)	0.15 (0.25)	0.08 (0.53)	1.00 (---)	**0.35 (0.01)***
Achievement and success	0.25 (0.06)	0.23 (0.08)	0.06 (0.64)	0.065 (0.63)	0.10 (0.43)	0.15 (0.25)	0.13 (0.31)	0.14 (0.29)	0.12 (0.36)	0.17 (0.19)	**0.44 (0.00)***	**0.35 (0.01)***	1.00 (---)

* Statistically significant relationships between variables.

This study aimed to investigate the perceived importance of extrinsic and intrinsic motivational factors among employees in the metal processing industry of Brod-Posavina County. The descriptive statistics (Tab. 1) consistently show that all examined variables - ranging from job security (*Mean* = 4.97) and working conditions (*Mean* = 4.77) to flexible working hours (*Mean* = 4.93) and recognition and praise (*Mean* = 4.50) are considered highly important by the surveyed employees, with the lowest average mean value being 4.13. This initial finding broadly supports the premise that a diverse range of factors contributes significantly to employee motivation, affirming the general applicability of established motivation theories, such as Herzberg's Two-Factor Theory [1].

Our analysis, employing Spearman's rank correlation coefficient due to the non-normal distribution of data (Tab. 2), revealed several statistically significant relationships among the variables, offering a nuanced understanding of motivational dynamics within this specific industrial context (Tab. 3). The strong correlations observed between factors like 'Relationship with colleagues' (*Rho* = 0.71) and 'Teamwork' (*Rho* = 0.735) with multiple other variables (e.g., 'Behavior of superiors,' 'Relationship with superiors,' 'Acquiring new knowledge and skills') underscore the critical role of the social work environment in employee motivation. This aligns with George and Jones's framework [12], which identifies 'Social influence' and 'Work situation' as key determinants of job satisfaction. The findings suggest that for employees in the metal processing sector, a harmonious and collaborative work atmosphere, facilitated by positive interactions with colleagues and supportive superiors, is not merely a hygiene factor preventing dissatisfaction but actively contributes to a positive motivational state. This emphasizes that human interactions are deeply interwoven with the perceived value of other factors.

Furthermore, the significant correlations involving 'Acquiring new knowledge and skills' (e.g., with 'New challenges,' *Rho* = 0.444, and 'Teamwork,' *Rho* = 0.283) highlight the importance of growth and development opportunities. This resonates with intrinsic motivation theories, particularly Herzberg's emphasis on 'motivators' like the challenge of the job and opportunities for learning new things [1]. It also supports modern conceptualizations, like those integrating self-regulation and intrinsic motivation [6], suggesting that employees in this industry are driven by a desire for personal and professional advancement beyond purely monetary incentives. The finding that 'Acquiring new knowledge and skills' correlates with 'Working conditions' (*Rho* = 0.357) might suggest that employees perceive conducive working environments as foundational to effective learning and skill development.

The correlation between 'Job advancement' and 'Responsibility in the workplace' (*Rho* = 0.473) further

reinforces the significance of career progression and autonomy as intrinsic motivators. This aligns with Hertzberg's concept of job enrichment [1], where increased autonomy and responsibility are seen as crucial for fostering creativity and self-actualization, directly impacting work motivation. The linkage between 'Advancement at work' and 'Job security' (*Rho* = 0.275) also implies that for these employees, security in their role is intertwined with prospects for growth, suggesting a synergistic relationship where stability enables aspirations for progress.

6 DISCUSSION

The findings of this study, particularly the high mean scores for variables such as job security, working conditions, and acquiring new knowledge and skills (Tab. 1), generally align with Herzberg's Two-Factor Theory, which posits that hygiene factors (like working conditions) prevent dissatisfaction, while motivators (like opportunities for new knowledge) contribute to satisfaction. Our data suggests that both sets of factors are perceived as crucial by employees in the Brod-Posavina County metal processing industry, indicating a holistic importance of both extrinsic and intrinsic elements for overall motivation.

Furthermore, the significant Spearman correlations observed provide deeper insights. For instance, the strong correlation between 'Relationship with colleagues' and 'Teamwork' (*Rho* = 0.71) underscores the social dimension of motivation, echoing the principles of social influence theories (e.g., George and Jones [12]) which highlight the impact of peer interactions on job satisfaction and motivation. The connection between 'Acquiring new knowledge and skills' and 'New challenges' (*Rho* = 0.444) suggests that for employees in this sector, growth opportunities are intrinsically linked to stimulating work content. This finding supports modern concepts emphasizing self-regulation and intrinsic motivation, aligning with Locke's ideas [6] and the motivation spectrum model proposed by Buble [8], where personal drivers play a significant role.

This study successfully confirmed the hypothesis that specific economic factors, encompassing both extrinsic and intrinsic elements, are crucial for enhancing employee motivation and business operations within the metal processing industry of the Brod-Posavina County. Beyond merely confirming established motivational principles, this research provides granular empirical evidence from a specific regional industrial context, shedding light on the nuanced importance of factors like job security, working conditions, and opportunities for skill acquisition within this vital economic sector. The findings underscore the practical need for organizations in this region to meticulously cultivate both hygiene and motivational elements in their human resource strategies to foster a motivated and productive workforce. This localized insight represents a key contribution to the field, offering a specific case study that complements broader theoretical understandings of motivation.

7 CONCLUSION

Employee motivation and satisfaction are the basis of interest of modern management. Therefore, it is extremely important to determine the current state of employee motivation, as well as ways and measures to improve motivation, and at the same time achieve business excellence of the organization. According to research, employee turnover is much lower in those organizations where employees are satisfied with their jobs. On the contrary, if employees are not satisfied with their jobs, they are ready to take concrete actions to get out of such a situation.

In order to prove everything theoretically stated in this paper, a survey of respondents was conducted. A study was conducted to determine how among extrinsic factors, working conditions and job security are perceived as significantly more important motivators than salary by employees in the metal processing industry of Brod-Posavina County.

The analysis showed that all variables are extremely important to all employees and that there are statistically significant correlations between the variables.

This study successfully confirmed the hypothesis that specific economic factors, encompassing both extrinsic and intrinsic elements, are crucial for enhancing employee motivation and business operations within the metal processing industry of the Brod-Posavina County. Beyond merely confirming established motivational principles, this research provides granular empirical evidence from a specific regional industrial context, shedding light on the nuanced importance of factors like job security, working conditions, and opportunities for skill acquisition within this vital economic sector. The findings underscore the practical need for organizations in this region to meticulously cultivate both hygiene and motivational elements in their human resource strategies to foster a motivated and productive workforce. This localized insight represents a key contribution to the field, offering a specific case study that complements broader theoretical understandings of motivation.

Good and poor working conditions as summary of key implications showed that the findings of a study have practical consequences and potential impacts on work performance.

A limitation of this study is the time available to complete the questionnaire. Since it is an online questionnaire, access to it is limited in time. Finally, the size and representativeness of the sample are issues that need to be addressed. In addition to the limitations of the study, the importance of conducting further research to obtain more valid results, using a larger sample, must be emphasized. Employee motivation and satisfaction are the foundation of modern human resources management. Therefore, building a quality motivation system can help an organization achieve better business performance.

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