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Analytic Hierarchy of Motivating and Demotivating Factors Affecting Labor Productivity in the Construction Industry: The Case of Azerbaijan

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Abstract: This research is aimed to identify and comparatively assess the motivation factors influencing labor productivity from the construction employees' perception. Based on results of a filled-in and returned questionnaire distributed among 350 workers and managers from 25 construction companies throughout the Republic of Azerbaijan, motivation and demotivation factors were identified. The statistical analysis of motivation drivers showed that most important ones for all construction employees are remuneration (including its timely payment), job security, bonuses, and fringe benefits. Among top demotivators for all types of employees are unsafe work conditions, underpayment, and colleagues' aggressive management style. Workers are also affected by bad treatment by managers and changing on workmates. While workers are more concerned with quality of site management and good relations with colleagues, managers are more motivated by responsible job and challenging tasks and demotivated by chaos and incompetent colleagues. Thus, according to the study, both economic and non-economic motivation and demotivation drivers occurred to be important for construction employees, and must be accounted by human resource (HR) officers. The results of the research would assist construction companies' management in developing more precise and employee-oriented human resources strategies and policies.

Keywords: motivation; motivators; demotivators; labor productivity; human resource management; construction sector

1. Introduction

Employees' skills and background, socio-psychological climate in the team, and labor efficiency affect labor quality, the effectiveness of management decisions, and as a consequence, the final business performance of a company [1,2]. To create an effective human resource (HR) system, management of the company needs to have a clear understanding of factors affecting labor productivity, and personal motivators and demotivators are most important among them.

The World Bank predicts that the global economy will grow 3% or more per year, thereby pointing to the stress that will be laid on the infrastructure [3,4]. To ensure sustainable economic development and global trade growth, timely modernization of infrastructure is required. According to the Organisation for Economic Co-operation and Development (OECD), the global construction industry growth is projected to be 3.9% per year, with the market segment growing 85% by 2030, up to 17.5 trillion dollars, which is almost 1% higher compared to the global economy. The construction

industry growth rate varies between regions and individual countries. The growth forecast for the US, for example, is 5% per year. In India, the construction market is projected to grow almost twofold faster than in China, which will lead to the fall of Japan in the world ranking. Mexico is projected to overstep Brazil, the largest construction market in Latin America. A twofold growth is expected in Colombia by 2030. The European construction market will grow at a restrained pace, although the UK may slide into the sixth place position in the world ranking, overstepping Germany, the largest player in Europe [3].

Azerbaijan's construction market possesses characteristics typical for the Commonwealth of Independent States (CIS) markets. The construction industry occupies the most important place in the economic system of countries that are close to Azerbaijan geopolitically and in terms of economic development. It is the largest industry in the economy of the Republic of Belarus (comprising 11% of the total gross output and 11.6% of GDP in 2017). In the Republic of Armenia, the construction industry is the second largest industry after agriculture (representing 13% of the total gross output and 15.2% of GDP). In the Republic of Kazakhstan, the Kyrgyz Republic, and in Russia, this industry is in the top five largest industries, with a 7.7% to 10.3% share of the gross output and with 7% of GDP. The construction industry generates about 12% of Azerbaijan's GDP [5].

The value of intermediate-use construction-related product consumption by product suppliers and service providers is also very high, amounting from 16.2% in Azerbaijan to 8.4% in Russia, which suggests a considerable contribution of the sector to other industries. Small- and medium-sized organizations involved in construction occupy about a quarter of the construction market in Azerbaijan and other CIS-member countries. However, construction workers employed in these organizations make up only 13% of all employees [5]. The construction sector is one of the largest employers in Azerbaijan and this once again emphasizes the economic and social significance of the industry. The amount of people working in the construction industry in Azerbaijan is 8% of the population. Thus, effective personnel management in construction becomes highly relevant, since in addition to the obvious functional roles, workers are considered as stakeholders. Taking into account the interests of stakeholders is considered to be a core element of any sustainable development plan [6]. High employee satisfaction is essential for change management programs or sustainability initiatives to work [7].

Despite the fact that the construction industry in Azerbaijan is one of the most rapidly growing industries [8], there have been few studies related to human resources management in the construction sphere of the country. One such study investigated the impact of cultural diversity on innovation performance in the industry [8] while another one analyzed the human resource management practices of Azerbaijan construction companies with the purpose of improving such practices [9]. However, there is a methodological gap in comparative studies assessing the difference in the needs and expectations of employees at different levels. When creating a universal corporate motivation system, companies do not take into account the difference between employees that exist at different organizational levels. This results in a failure to achieve maximum productivity. Filling this gap will contribute to corporate efficiency and to the strength of the domestic construction market in Azerbaijan.

Thus, the purpose of this study is to compare (de)motivation factors influencing workers and managers involved in construction through an analysis of the corresponding hierarchies (relative importance rating).

2. Literature Review

Until recently, there have predominantly (in many enterprises, in particular CIS, these are still used) been approaches based on a technocracy that ignores the identity of the employee. Modern conceptual approaches in science that contrast with technocracy are based on human relations and consider a person as a valuable resource of the enterprise, and the functions that are associated with human resource management as the main management challenges [10]. This conceptual interpretation

of the role and place of human resource management is important for modern science and human resource management practices' development [11].

Employee motivation is among some ways to boost labor productivity, which, in turn, is a key direction of any enterprise's personnel policy. The most common system for employee motivation is a system that encourages employees to pursue individual goals, to grow as a professional, and to reach new highs. The effectiveness of this system can be examined through the key performance indicators (KPI) [12].

Most theorists who have explored motivation systems have come to the conclusion that only the said motivation system is ideal, as it justifies remuneration and provides employees with the opportunity to receive and increase their income by putting in greater efforts. The system proves a flexible and one-size-fits-all solution; each employee has his/her own reason to become motivated in the workplace, a result that he/she craves.

However, though differentiated, motivation in the company should be based on uniform principles and rules that allow determination of the factors that act as motivational and demotivational when applied to a particular team. The identification process can be based on the existing theorems of motivation (i.e., Maslow's theory, Alderfer's Existence, Relatedness and Growth (ERG) theory, Herzberg's theory, Vroom's expectancy theory).

Supporters of Maslow's theory believe that psychology studies not human consciousness but human behavior [13], which is based on human needs:

1. Physiological needs or requirements for human survival: Food, water, rest;
2. Safety needs and confidence in the future: Protection against physical and other hazards of the outside world;
3. Social needs: Belongingness, relationships, the feeling of fellowship;
4. Esteem needs: Recognition by others, the pursuit of personal achievement; and
5. Self-actualization need: Personal growth, achieving one's full potential.

According to this theory, the leader's duty is to carefully monitor his/her subordinates, timely identify which needs drive their behavior, and make decisions regarding them to boost the efficiency of employees. In its later interpretation by Clayton Alderfer, the theory of human needs embraces only three separate groups [14]:

1. Existence: Relates to physiological and safety needs;
2. Relatedness: Relates to communication needs that reflect the social nature of a person. This group of needs may include a desire to occupy any place in the world, the need for recognition as well as relationships with subordinates or bosses, colleagues, enemies, friends, a sense of belongingness; and
3. Growth: Relates to a person's needs for development and personal growth.

One may argue that existence needs constitute two groups from the Maslow's pyramid: Safety needs, which, however, do not include group security, and physiological needs. The relatedness needs are linked with the sense of belongingness (i.e., social needs). According to Alderfer, relatedness needs reflect the social nature of people, as briefly mentioned earlier. For this reason, the said group can be safely related to Maslow's groups of self-esteem needs and safety needs, specifically group safety. When it comes to the needs of growth, an analogy can be drawn with Maslow's self-actualization needs [15]. Other requirements that can be attributed to the considered group are the needs for recognition and self-esteem, which are based on a person's desire to improve, become confident, etc.

Herzberg's two-factor theory of motivation classifies two categories of requirements, hygiene factors and motivational factors [16]. Hygiene factors are associated with the environment in which the person carries out his/her duties while motivational factors are related with the nature of one's work. Herzberg called the first category "hygiene factors", since, in his opinion, these factors describe the

employee's environment and serve primary functions that prevent dissatisfaction at work. The second group is motivational because factors within it encourage employees to perform better.

The expectancy theory by Victor Vroom is one of the most famous theories of motivation. According to him, the motivational effect is exerted not by the person's needs but by his/her perceptions of future work and outcomes [17]. The expectancy theory assumes that efforts put by an individual depend upon his confidence in achieving a certain goal and receiving a reward.

Adams' theory of justice postulates that people subjectively determine the effort-to-reward ratio and then correlate it with the reward received by other people who have done similar work [18]. If the comparison shows imbalance and injustice, i.e., the person believes that his colleague received a greater reward for the same work, then he/she experiences stress. As a result, the manager will have to motivate this employee, relieve his/her stress, and correct the imbalance to restore justice.

People can restore balance or a sense of justice by changing either the level of effort or the amount of remuneration. Thus, those employees who believe that they are not paid enough compared to others can either start working less intensively or seek ways to increase remuneration. Those employees who believe that they are overpaid will tend to maintain labor intensity at the same level or even increase it [19].

Comprehensive identification of (de)motivational factors through the prism of the above theories allows the broadest and most comprehensive analysis of motives behind the employees' behavior, preventing gaps that could appear if utilizing each theory separately.

3. Methodology

Quantitative data was processed by the analytic hierarchy process (AHP) method, introduced by Thomas Saaty, in MPRIORITY 1.0. The AHP method allows analysis of the hierarchical structures by statistical assessment methods, grouping, and Aij matrix construction, where i and j are motivational and demotivational factors, respectively, that are compared with one another within the group, with the aim of evaluating their effect or relative weight and subsequently ranking them as higher to lower. Other methods used here are the relative importance index calculation and comparative analysis. Using MPRIORITY 1.0 for data processing reduces the risk of subjectivity when creating rating tables and improves the calculation accuracy.

The survey was conducted in 2017 to 2018. At the preparation stage, the focus was laid on gathering at least 250 questionnaires from at least 20 companies (which means 20 different corporate cultures) that were filled out correctly. The latter was calculated using the Box–Behnken methodology, which determines the minimum number of samples for representativeness. Since the goal was to address the best—that is, to study the experience of individuals working in the most progressive employers in Azerbaijan—the list of companies was made using publicly available ratings of the best employers, according to the local media, national rating agencies, and international non-governmental organizations. Note that different companies have different numbers of employees, of whom a variable proportion is able to participate in the study. In this regard, the research was preliminary agreed with the top management of the selected companies via a written request that indicated the objectives of the study, background, and ethical standards for personal data storage and processing. When completing questionnaires, there was a risk of having some respondents refuse to participate or incorrectly fill out the forms. In such an event, the research quality will fall, so a decision was made to heighten the minimum required number of respondents.

In response to the research brief, 25 companies, which agreed to participate in the study, received 350 questionnaire forms for employees to fill out. Thus, questionnaires were distributed unevenly among the companies, in accordance with the number of employees that the company could offer for the study without inflicting harm to the one's own business (Table 1). Of 350 questionnaire forms, 182 were conveyed in 2017 (small enterprises, 171; middle-sized enterprises, 9; large enterprises, 2) and 168 in 2018, of which 156 were sent to small enterprises, 10 to middle-sized enterprises, and 2 to large enterprises.

Table 1. Analyzed questionnaires according to the types of participating construction company.

Size	2017	2018
Large, %	1	1
Medium, %	5	6
Small, %	94	93

The share of questionnaires from small enterprises was 93.5% on average; the share of medium-sized enterprises was 5.5%, and the share of large enterprises was 1%. We assume that this imbalance was due to the mobility and openness of smaller enterprises, and that large enterprises are neither capable of achieving the high mobility level or receptive to research initiatives from the outside.

For the purposes of the survey, a questionnaire was developed, which contained the lists of 25 motivating and 25 demotivating factors. The list of motivating factors was based on Maslow's theory [13], Herzberg's motivation-hygiene theory [16], and on previous research [10,20–28]. The list of demotivating factors was formed according to previous research that investigated this aspect [1,10,19,20].

Thus, the selected factors embraced the aspects of labor activity in the construction sector as broadly as possible. These aspects include satisfaction, basic safety provisions, justice in the workplace, relations and organizational climate, efficiency, micromanagement, and culture-specific characteristics. The latter was given particular attention since all factors that were borrowed from other studies were adapted to the Azerbaijani socio-cultural setting to correspond with Hofstede's theory. After these manipulations, factors that were previously explored in other contexts reflected the corporate behavior of workers and conditions surrounding them in such a manner that the results were relevant to the selected environment. Thus, the representativeness of the results and, consequently, the possibility of applying them directly in Azerbaijani corporate management was ensured at the stage of research preparation. Aside from that, the results were consistent with the foundations (i.e., Herzberg's and Maslow's theories) underlying employee motivation and with their improved derivatives (via the correlation with Vroom's and Alderfer's theories, and with Adams model).

Respondents were asked to rate the list of factors on a four-point scale: Not important, somewhat important, important, and very important. The results were used to build comparison matrices for each group of factors. Then, the relative importance index (RII) was calculated for both groups, motivation and demotivation factors. After that, all factors were ranked according to the relevant RII of each. The resulting table of ratings acted as an importance-based hierarchy of (de)motivation factors.

Out of 350 questionnaires distributed among employees, only 308 were answered. The employees of the companies who refused to take part in the questionnaire (42 employees) were not taken into account. Eight more questionnaires were disregarded due to improper filling-in. Thus, the sample of the survey comprised 300 employees, 78.26% of whom were men and 21.74% were women. The average age of the employees was 39 years. The job positions were systematized by two criteria: Workers (both skilled and non-skilled) and managers (including foremen and project managers). Thus, the sample of the survey contained 256 workers and 44 managers, who established voluntary consent to participate in the study, which indicates a high level of engagement among working respondents.

In the construction sector, the tasks, duties, and responsibilities of employees are strictly regulated, including by law (in Azerbaijan, by the Construction Code). Hence, the tasks and working hours assigned to the same category of respondents would not differ between genders and age. Thus, identifying additional factors of motivation for different genders was not feasible. The difference in motivational factors was possible within groups, in workers with different qualifications and educational backgrounds, but we were only able to check the availability of certificates and diplomas. Qualitative and quantitative assessment of knowledge was not accomplished, in this study at least. Therefore, the said intragroup factor was not taken into account.

Through the example of Azerbaijan, this study bridges the gap in applied research, one that is relative to the construction sector, while emphasizing the importance of psychological factors and

managerial aspects in the sustainable development of a socially significant industry. Thus, this study creates value for managers and specialists in sustainable development, as well as setting a precedent for similar studies in the relevant literature.

4. Results

4.1. Factors Motivating Workers and Managers

The results of the survey showing the ranking of workers' motivators are given in Table 2.

Table 2. List of factors motivating construction workers.

Motivator	RII	Rank
Amount of remuneration	0.94	1
Job security	0.92	2
Quality of site management	0.90	3
Timeliness of remuneration	0.88	4
Bonuses and fringe benefits	0.86	5
Good relationship with colleagues	0.85	6
Work satisfaction	0.83	7
Work appreciation by managers	0.80	8
Good safety program	0.74	9
Overtime	0.72	10
Penalty clause	0.67	11
Shift/Schedule compression	0.65	12
Relaxation allowances	0.64	13
Participation in decision making	0.63	14
Challenging task	0.59	15
Decent and respectful job	0.57	16
Contract of employment	0.56	17
Promotion opportunities	0.56	18
High responsibility job	0.54	19
Crew size and efficiency	0.53	20
Occupational education and training	0.52	21
Good supervision	0.50	22
Distance from home	0.49	23
Official salary	0.46	24
Cultural differences	0.40	25

Table 2 shows that workers are more concerned about the amount and timeliness of salary, bonuses and fringe benefits, security issues, quality of site management, and good relations with colleagues. Among things motivating workers, least of all are cultural difference, official salary, distance from home, good supervision, and further training. Thus, according to the survey, construction workers seem to be more reward-oriented than result-oriented.

Table 3 shows that construction managers also seriously consider questions of remuneration, benefits, and job security when evaluating factors affecting their motivation. At the same time, job responsibility is ranked in third place for them. Challenging tasks, safety program, and crew efficiency are also of significant importance for them.

The differences of rankings of motivators for construction workers and managers are shown in Table 4.

Table 3. List of factors motivating construction managers.

Motivator	RII	Rank
Amount of remuneration	0.92	1
High responsibility job	0.89	2
Job security	0.87	3
Bonuses and fringe benefits	0.85	4
Challenging task	0.83	5
Good safety program	0.83	6
Crew size and efficiency	0.80	7
Promotion opportunities	0.78	8
Occupational education and training	0.77	9
Work satisfaction	0.76	10
Timeliness of remuneration	0.74	11
Good supervision	0.72	12
Quality of site management	0.72	13
Participation in decision making	0.70	14
Contract of employment	0.66	15
Decent and respectful job	0.64	16
Official salary	0.63	17
Work appreciation by managers	0.63	18
Good relationship with colleagues	0.61	19
Overtime	0.60	20
Penalty clause	0.57	21
Shift/Schedule compression	0.56	22
Relaxation allowances	0.53	23
Distance from home	0.45	24
Cultural differences	0.33	25

Table 4. Motivators of workers vs. motivators of managers.

Motivator	Workers		Managers		Rank Difference
	RII	Rank	RII	Rank	
Amount of remuneration	0.94	1	0.92	1	-
Bonuses and fringe benefits	0.86	5	0.85	4	1
Challenging task	0.59	15	0.83	5	10
Contract of employment	0.56	17	0.66	15	2
Crew size and efficiency	0.53	20	0.80	7	13
Cultural differences	0.40	25	0.33	25	-
Decent and respectful job	0.57	16	0.64	16	-
Distance from home	0.49	23	0.45	24	1
Good relationship with colleagues	0.85	6	0.61	19	13
Good safety program	0.74	9	0.83	6	3
Good supervision	0.50	22	0.72	12	10
High responsibility job	0.54	19	0.89	2	17
Job security	0.92	2	0.87	3	1
Occupational education and training	0.52	21	0.77	9	12
Official salary	0.46	24	0.63	17	7
Overtime	0.72	10	0.60	20	10
Participation in decision making	0.63	14	0.70	14	-
Penalty clause	0.67	11	0.57	21	10
Promotion opportunities	0.56	18	0.78	8	10
Quality of site management	0.90	3	0.72	13	10
Relaxation allowances	0.64	13	0.53	23	10
Shift/Schedule compression	0.65	12	0.56	22	10
Timeliness of remuneration	0.88	4	0.74	11	7
Work appreciation by managers	0.80	8	0.63	18	10
Work satisfaction	0.83	7	0.76	10	3

According to Table 4, construction managers are more motivated by the responsibility of the job (17 points of rank difference), crew size and efficiency (13 points), occupational education and training (12 point), challenging tasks, and good supervision (10 points). Managers' motivation is less influenced by timely remuneration (7 points) and shift/schedule compression (10 points). This can be explained by the fact that managers have more responsible work, better educated, and result oriented.

The research indicates that workers are more motivated by the quality of site management, good relationship with colleagues, work appreciation by managers, penalties, overtime, and relaxation allowances (each motivator has 10 points of difference in rankings) and less influenced by promotion opportunities (10 points) and official salaries (7 points).

Such motivating factors as the amount remuneration, participation in decision making, decent and respectful job, and cultural differences were equally ranked by workers and managers.

4.2. Factors Demotivating Workers and Managers

According to Table 5, the first five demotivators for workers are underpayment for the work done, bad treatment by supervisors, unsafe work conditions, and interpersonal relations with colleagues, including changing on workmates, colleagues' aggressive management style, quarrels, and hassles.

Table 5. Factors demotivating workers.

Demotivator	RII	Rank
Underpayment for the work done	0.93	1
Bad treatment by the supervisors	0.92	2
Unsafe work conditions	0.90	3
Changing on workmates	0.89	4
Colleagues' aggressive management style	0.87	5
Quarrels and hassles	0.85	6
Colleagues mistakes	0.84	7
Long hours	0.82	8
Desire to do other things apart from work	0.77	9
Incompetent colleagues	0.76	10
Rework	0.73	11
Lack of recognition of efforts	0.72	12
Underutilization of skill	0.72	13
Overcrowded work areas	0.70	14
Lack of communication	0.67	15
Poor organization ethics	0.59	16
Lack of cooperation	0.58	17
Chaos/adhocracy	0.58	18
Lack of participation in decision making	0.56	19
Poor inspection and supervision	0.55	20
Not enough responsibility	0.54	21
Not enough challenge	0.53	22
Travel to work and back	0.50	23
Tool unavailability	0.49	24
Unavailability of material	0.44	25

Among demotivators influencing workers, least of all are issues of tools/materials unavailability, travel to work, lack of challenge, and responsibility.

Managers, as shown in Table 6, are mostly demotivated by chaos/adhocracy, unsafe work conditions, colleagues' aggressive management style, incompetent colleagues, and underpayment for their work.

Table 6. Factors demotivating managers.

Demotivator	RII	Rank
Chaos/adhocracy	0.93	1
Unsafe work conditions	0.90	2
Colleagues' aggressive management style	0.89	3
Incompetent colleagues	0.88	4
Underpayment for the work done	0.85	5
Unavailability of material	0.84	6
Tool unavailability	0.81	7
Lack of cooperation	0.79	8
Bad treatment by the supervisors	0.75	9
Lack of communication	0.74	10
Colleagues mistakes	0.71	11
Poor organization ethics	0.70	12
Poor inspection and supervision	0.69	13
Underutilization of skill	0.66	14
Rework	0.61	15
Overcrowded work areas	0.58	16
Lack of recognition of efforts	0.57	17
Lack of participation in decision making	0.56	18
Changing on workmates	0.54	19
Quarrels and hassles	0.53	20
Not enough challenge	0.51	21
Long hours	0.49	22
Desire to do other things apart from work	0.47	23
Not enough responsibility	0.45	24
Travel to work and back	0.41	25

Among factors affecting managers, least of all are travel to work, lack of responsibility and challenge, desire to do other things, long hours, and quarrels/hassles.

It was found by the research that the main differences between the perceptions of workers and managers in terms of demotivators relate to the issue of an unavailability of materials and tools (19 and 17 points, respectively), as shown in Table 7. This can be explained by the fact that in the conditions of tools/materials unavailability, workers do not need to work and can have some rest (although paid for the day) while managers, who are result oriented, are mostly demotivated because of stopping or production and delays in schedules. The same goes to chaos/adhocracy (17 point of difference in ranking), which significantly affects managers' motivation.

On the other hand, managers are less affected by changing on workmates (15 points), desire to do other things, and long hours of work (each having 14 points). Workers are more affected by quarrels and hassles then managers (14 points) and bad treatment by supervisors (7 points) and are less demotivated by the lack of cooperation (9 points) and poor inspection and supervision (7 points).

After receiving factor matrices, the Kendall concordance coefficient was calculated, which, based on a set of criteria, characterizes the consistency of expert opinions. The calculations were performed using the rankings obtained for the influence of (de)motivational factors on managers and employees, according to the formula, $W = 12S/m^2(n^3–n)$, where m is the number of experts in the group, n is the number of factors, and S is the sum of standard deviations. According to the calculation methodology, if $W < 0.2–0.4$, then the opinion consistency is poor, and if $W > 0.6–0.8$, then it is high.

The calculation results are as follows:

1. The consistency of responses among employees is 0.54 for motivational factors and 0.49 for demotivational factors.
2. The consistency of responses among managers is 0.77 for motivational factors and 0.78 for demotivational factors.

Table 7. Demotivators of workers vs. motivators of managers.

Demotivator	Workers		Managers		Rank Difference
	RII	Rank	RII	Rank	
Bad treatment by the supervisors	0.92	2	0.75	9	7
Changing on workmates	0.89	4	0.54	19	15
Chaos/adhocracy	0.58	18	0.93	1	17
Colleagues mistakes	0.84	7	0.71	11	4
Colleagues' aggressive management style	0.87	5	0.89	3	2
Desire to do other things apart from work	0.77	9	0.47	23	14
Incompetent colleagues	0.76	10	0.88	4	6
Lack of communication	0.67	15	0.74	10	5
Lack of cooperation	0.58	17	0.79	8	9
Lack of participation in decision making	0.56	19	0.56	18	1
Lack of recognition of efforts	0.72	12	0.57	17	5
Long hours	0.82	8	0.49	22	14
Not enough challenge	0.53	22	0.51	21	1
Not enough responsibility	0.54	21	0.45	24	3
Overcrowded work areas	0.70	14	0.58	16	2
Poor inspection and supervision	0.55	20	0.69	13	7
Poor organization ethics	0.59	16	0.70	12	4
Quarrels and hassles	0.85	6	0.53	20	14
Rework	0.73	11	0.61	15	4
Tool unavailability	0.49	24	0.81	7	17
Travel to work and back	0.50	23	0.41	25	2
Unavailability of material	0.44	25	0.84	6	19
Underpayment for the work done	0.93	1	0.85	5	4
Underutilization of skill	0.72	13	0.66	14	1
Unsafe work conditions	0.90	3	0.90	2	1

The above consistency averages can be caused by the following reasons: Opinions within the group divide in general; there are subgroups with a high consistency of opinions that do not agree with each other (perhaps, respondents belong to different corporate cultures).

In contrast to the employee group, high values of consistency among managers can indicate either a common opinion among respondents or that different representatives of top management within the sample share the same problems and tasks as well as work under similar conditions. However, the consistency value stays within the certain range, below 0.8. Therefore, the domination of a particular opinion in the industry, within the specific segments of the market, is a misleading statement.

The findings indicate that managers and employees view motivation in a significantly different way. In this regard, compensation packages should vary significantly, depending on the levels of employee engagement. By distinguishing different compensation pathways, managers can improve employee satisfaction and therefore, accelerate their movement across the satisfaction–loyalty–engagement matrix.

In parallel, managers and employees have similar opinions regarding the factors of demotivation. Hence, as their presence in the workplace is perceived on both sides, companies should pay attention to minimizing such factors and preventing their occurrence. In doing so, companies will significantly reduce the employee turnover rate, increase work productivity, and facilitate the transformation of employees into brand advocates. Note that steps towards minimizing the influence of demotivational factors may require the company to improve its corporate culture, business policy, and management strategy. This necessitates the allocation of resources, including working hours (i.e., the workforce reassigned to a specific task spends time accomplishing it, rather than continuing the primary duty), money, and the deployment time frame. In many cases, such transformations can be irrational and ineffective. Thereby, before starting any actions, specific changes should be specified in a plan with deadlines, employees responsible for the process, and necessary resources. With an outline, top

management will be able to evaluate the possible directions of the company, what needs significant improvement, or what should be addressed now to prevent further problems.

5. Discussions

Until recently, there were predominantly (in many enterprises, in particular CIS, these are still used) approaches based on technocracy that ignores the identity of employee. Modern conceptual approaches in science in contrast to technocracy are based on human relations and consider a person as a valuable resource of the enterprise, and the functions that are associated with human resource management as the main management challenges [28]. This conceptual interpretation of the role and place of human resource management is important for modern science and human resource management practices' development [11].

Research findings confirm the need for a shift from technocratic approaches to personnel management. People are ready for changes and expect the top managers, who form the motivation system, to introduce a set of new management tools. The workforce is a driver of corporate changes; therefore, the present study accurately demonstrates solutions to the construction companies in Azerbaijan regarding the transformation of business operations. Despite the use of a narrow range of methods and individual data, the results are fully in line with the main theories of motivation, integrating them in a quantitatively visual form [28]. The list of factors, which were made based on the experience of other researchers and on the Maslow and Herzberg theories, provides an indirect confirmation of Vroom's and Alderfer's theories of motivation, and the Adams model.

The fact that respondents of both groups consider remuneration and bonuses to be the most important factors of motivation corresponds to Vroom's expectancy theory. The construction sector imposes strict work regulations and requires workers to apply their utmost efforts in work. Thus, employees expect compensation for their diligence, and they are serious about it. This falls within the category of "existence" in Alderfer's ERG theory. In addition, from the rating tables, it can be seen that employees re-focus on relatedness while managers bring the growth needs of employees to the fore. A shift in managers' priorities occurred before the shift in the priorities of employees because managers have been fulfilling their relatedness needs initially, in the line of duty. A construction company manager must be in constant contact with his/her subordinates while the employees are not obligated to. At that, an employee is limited in communication by a narrower set of people and by reasons to interact [15]. The fact that security issues have occupied high positions among demotivation factors once again confirms the above aspects. A high rating of factors related to injustice confirms Adams' message. People are inspired to work hard only when the treatment is fair [29]. Otherwise, productivity will be at a level close to the average among the same category workers operating at the same organizational level. Thus, the study confirms that construction companies should pay attention to issues, such as fair rewarding and equal workloads.

It is important to compare motivators and demotivators for different levels of employees, since due to specific differences (e.g., areas of responsibility, management levels, the number of people employed, hard and soft skills), the basic needs of a manager will differ from those of a subordinate. This means different motivation methods applied to them, with the same set of methods used within organizational groups of the same level. Regional features can be considered another factor influencing the motivation policy of a construction company. For example, in CIS that has a growing economy, it is important for employees to plan their future work, in particular the company and in the state as a whole [5]. It is important for employees from developing countries to have a source of income in addition to social protection and welfare. They have a fear of not getting a job according to their specialty or not finding a job with decent pay. In developed countries, such as the UK, Germany, Italy, and France, it is important for employees to have an empowerment perspective, a more interesting and responsible job, a sense of power and independence, and the ability for self-improvement and development of their own capabilities [15]. Therefore, the application of the present findings in other regions is limited.

Nevertheless, some of the results confirmed the experience of other researchers, which suggests the existence of a global trend in the field of personnel motivation. The study found that among the main motivational factors for construction workers today are the level of wages (including timely payment thereof), bonuses, and fringe benefits. These results are consistent with the findings of previous research in this field. Salary- and bonus-related factors were among the first five most important factors [10,19,20,22–26,29]. At the same time, the research by Ghoddousi et al. [30] showed that solely non-material factors were important for construction employees most of all: More responsibility/control on the job, praise from the manager, feeling good about myself, feelings of accomplishment, and learning of new things.

Financial remuneration is the highest motivating factor for many workers in socially significant sectors (including construction), according to previous studies [25]. The current study demonstrates that this statement is not universal and can be true only for workers of certain organizational levels. While the aspect of safety in the current research, as well as in other research [10,20,23,26,29], is quite important for both managers and line employees. Since the definitions in the works of various researchers vary, safety can be understood as the general safety of life [10,20,29], and safety as the quality of construction site management (construction project) [21,26].

Thus, almost all motivational and demotivational factors can be discussed from the perspective of corporate culture and corporate governance. From the position of corporate culture, when recruiting employees, it is very important to take into account the basic values and priorities of the person and their correlation with the values and priorities of the company. If this correlation is antagonistic, then it is most likely that staff will be demotivated by the work conditions, even if these conditions are set by the most conscientious employer. On the contrary, if a worker's personal values coincide with work values, then such a worker will be motivated for high-quality work. That is, personnel management should be based on corporate values and differentiated permanent testing of employees during their "life cycle" in the company, in order to identify antagonists and work separately with them. A manager will be able to obtain greater labor productivity if he/she uses feedback, individual conversations, and meets the employee's special needs through correction of the compensation package. In this case, such a manager can potentially transform an antagonist into a brand advocate. Thereby, the level of staff loyalty and involvement can be increased from the perspective of the entire corporate management. If the productivity of the antagonist's labor does not grow with all the tools implemented, managers should develop a set of measures to minimize his/her negative impact on the team.

Hence, the results of the study have evidential uniqueness and methodological novelty, and supplement the knowledge of construction employees' motivating and demotivating factors, thus making a visible contribution to the science of human resources management.

6. Conclusions

Motivation of an employee is a significant factor influencing labor productivity, which is one of the most driving factors for the overall productivity of a construction company.

The research showed that both workers and managers are motivated and demotivated by the level and timely payment of remuneration, job security, bonuses, and fringe benefits. While workers are more concerned with the quality of site management and good relations with colleagues, managers are more motivated by a responsible job and challenging tasks and demotivated by chaos and incompetent colleagues. Among the top demotivators for all types of employees are unsafe work conditions, underpayment for the work done, and colleagues' aggressive management style. Workers are also mostly demotivated by bad treatment by managers and changing on workmates.

By applying the results, construction companies of Azerbaijan will boost their performance in the market, significantly increase their levels of satisfaction and employee engagement, adapt their corporate strategy to the principles of sustainable development, and contribute to the construction sector's competitiveness within the country and in the Caspian region.

The findings may be used as a framework for further research in the field of employee motivation and encouragement to create an econometric model displaying a demographic effect on the productivity of construction employees.

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