Psychosocial risk and work decisions of transport workers: A study

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Abstract: Purpose: The main objective of the research was to identify the structure and level of psychosocial risk experienced by transport workers and the relation between occupational stress and the decision to leave the job. Methodology: The research on psychosocial risks at work and their impact on job-related decisions was conducted with the Psychosocial Risk Scale (SRP), a scientifically verified diagnostic tool characterized by high reliability and accuracy of coefficients. The scale consists of four parts, A, B, C, and D. Part A concerns demographic data (such as age, gender, seniority, position, etc.). Part B contains questions related to health and professional functioning. Part C consists of 50 statements related to characteristics of work that pose potential psychosocial risks. Annex D-SRP for the transport sector contains 12 questions (α-Cronbach factor = 0.80). Psychometric properties of parts B and C of the Psychosocial Risk Scale were determined on the basis of the survey results. Results: The psychosocial risk categories considered were workload, job content, work schedule, control, environment and equipment, organizational culture and function, interpersonal relationships, career development, and...
work-life interface. The mediating effect of job satisfaction was also considered to provide a holistic perception of the analyzed problem. Job satisfaction was analyzed in job content, work conditions and organization, financial conditions, career development, and interpersonal relations with superiors and co-workers. Based on research results, authors identified and characterized the impact of psychosocial risk on transport workers’ job-related decisions. Theoretical contribution: The research links social sciences, psychology, and management studies exploring the links between occupational stress and HR management implications, filling in a research gap between occupational stress and logistics management and creating new gaps and research questions as conclusions from research open following research fields and opportunities in the context of research on sustainable development of enterprises. It adds a new perspective to transport management, proving that risk resulting from job characteristics and organization can compromise the availability of workers and the quality of processes performed. Practical implications: The research results can be used by HR managers and workload planners to minimize the occupational stress experienced and improve the well-being and performance of transport workers.

Keywords: transport workers, psychosocial risk, job satisfaction, sustainable work

1. Introduction

Today, many industries suffer from a turbulent market environment, growing customer expectations about service levels, and changes in legal requirements. One of the industries most susceptible to this happening is transport, the sector that influences the economy, but on the other hand, it is significantly affected by its condition.

Transport is one of the sectors that is dependent on humans. Transport processes are not prone to automation or the use of autonomous technologies. However, some efforts toward implementing autonomous vehicles have already been made. Still, their wide and everyday use is not possible in the foreseeable future due to ethical, legal, organizational, and technical reasons.

Considering the human factor, the nature of work in transport has changed considerably over the past decades. Significant changes concern the need to make work more flexible, the entry of the 24-hour economy, mechanization, automation, and the appliance of information and communication technology (Saltzman & Belzer, 2007). A paradigm shift in management and increased demand for just-in-time deliveries have led to an intensification of human work in logistics, especially in transport. Furthermore, implementing communication technology has resulted in a decreased feeling of independence and tighter time schedules for transport workers. The era of lifetime employment ended, and the pay system became performance-based. Excess workload resulting from these changes is regarded as one of the essential psychosocial factors for mental health in the workplace (Saltzman & Belzer, 2007; Dahler-Larsen et al., 2020; Breaugh et al., 2023). Moreover, it is one of the most significant challenges for the sustainable development of enterprises.

The concept of sustainable development implemented in the activities of enterprises should involve simultaneous consideration of economic, ecological, and social circumstances, treating them not as components but as a long-term process in which the best solutions are sought to ensure equal and fair human development (Maningandan et al., 2023). It is not without reason that the concept of sustainable work has appeared in the specialist literature, which is defined as work "that enables employees to perform it without damage to their physical or mental health and will last for an extended period of their professional activity" (EU-OSHA, 2012; EUROFOUND, 2021).
Since, on the one hand, the transport sector suffers from high job fluctuations, on the other, it is crucial for the Polish economy, we designed two research questions:

Is the work in the transport sector sustainable?
Is the work in the transport sector satisfactory?

To recognize whether the work in the transport sector is sustainable, we researched psychosocial risks emerging from this type of work. The psychosocial risk categories considered were workload, job content, work schedule, control, environment and equipment, organizational culture and function, interpersonal relationships, career development, and work-life interface.

After recognizing the level of psychosocial risk, which is an objective category, we focused on job satisfaction level. Job satisfaction was analyzed in terms of job content, work conditions and organization, financial conditions, career development, and interpersonal relations with superiors and co-workers.

Finally, we identified and characterized the impact of psychosocial risk on job satisfaction level (occupational stress level perceived) and the decisions related to transport workers. The goal of the paper was to understand whether the level of occupational stress leads to the decision to leave to job. The results of the research are interesting in the sustainable development context (empirical perspective) and for employers to provide a safe and sustainable work environment (utilitarian perspective).

The paper's structure is the following: The paper's first part covers literature analysis and introduces psychosocial risk elements. The second part summarises a brief description of transport workers' job profiles concerning market environment-driven and corporate-driven factors. The third and fourth parts describe the research methodology and research results with discussion. The paper ends with the conclusion section, including a further research plan.

2. Literature review

The issue of psychosocial risks and their impact on the safety and functioning of a person at work is one of the most current areas of interest for institutions and organizations dealing with employees' health and safety. The working conditions of transport workers have been well known in terms of anthropotechnical requirements. However, few publications still deal with the issue of psychosocial risks for this group of employees. The European Agency for Safety and Health at Work (EU-OSHA, 2007) identifies in its analyses the already existing and "new and emerging psychosocial risks" as the most current risks for workers. According to these findings, occupational psychosocial risks are aspects of work organization and management, along with their social and environmental context, that can potentially cause psychological, social or physical harm. They can affect humans (a) directly, through physicochemical mechanisms - then we are talking about the so-called physical stressors, i.e. those acting in the human external environment (e.g. noise, unfavourable temperature), and (b) indirectly, through psychophysiological mechanisms of stress - these are psychosocial risks, defined as sources of occupational stress (Cox et al., 2000). Over the decades of research into occupational stress, many concepts of stress and the typology of stressors present in the work environment have emerged. The European framework approach is worth mentioning: the European Framework for Psychosocial Risk Management (WHO PRIMA-EF, 2008), which comprehensively covers the issue, integrating existing knowledge on occupational stress, its causes, and effects. An international team of specialists has presented the classification of occupational stressors divided into two categories: (1) features concerning the work context - culture and functions of the organization, role in the organization, control (scope of decision making), interpersonal relations at work, work-home relationship; (2) job content features - environment and equipment, work item, workload, work pace, and time frame of work (WHO PRIMA-EF, 2008).

Job stress has been labelled a modern health epidemic by Rosch, president of the American Institute of Stress, based on various indicators such as workers' compensation claims, job losses, and absence days from work because of illness (Spielberger et al., 2003). In the literature on the subject, we find data on the effects and costs of the occurrence of characteristics classified as psychosocial risks, which are observable both at the individual and enterprise levels. A number of studies show that in a work environment that generates a higher level of occupational stress, there is greater absenteeism, higher turnover of staff, worse indicators of health condition and the level of workability of employees,
as well as a lower level of professional satisfaction and lower commitment to work (Cox et al., 2000; Cox et al., 2005; ESENER, 2012; Sadlowska-Wrzesińska, 2016; Mościcka-Teske et al., 2019) In the long run, increased levels of stress at work may result in problems with concentration, addiction, anxiety disorders or burnout. In the case of extreme or sudden stress, there is a severe risk of developing posttraumatic stress disorder, reactive depression, and even suicidal thoughts or attempts (Bamber, 2006; Rugulies, 2006). Stress also affects the social and professional life of employees - it affects relationships with colleagues, causes interpersonal conflicts, increases the intention to turn or the intention to quit, reduces productivity and causes routine in everyday work (Mościcka-Teske et al., 2019). Employees' stress also negatively impacts the functioning of the entire organization, which usually manifests itself in higher absenteeism, lower productivity, higher employee turnover and more accidents (Niedhammer et al., 2008; Sadłowska-Wrzesińska, 2016). Employees who experience excessive stress are less successful in team work, have problems in communication processes in the company, and are also characterized by low morale. Employees affected by work-related stress are less loyal to the employer, generate more conflicts, and are less productive (Chen & Cunradi, 2008; Tucker et al., 2009). Under specific conditions, excessive stress may lead to extreme manifestations of employee dissatisfaction, leading to risky behaviours and even strikes and riots (Hoel et al., 2001).

From an individual employee's perspective, too high mental stress poses a serious risk of lowering the motivation to work and the satisfaction with its performance. Interpersonal relations are important, with particular emphasis on the relationship with the superior. We know the results of studies show that poor interpersonal relationships at work contribute to more significant pressure and distort a positive organizational climate (Viswesvaran, 1999). Friendly interpersonal relationships are an important element of social support. This support can work in two ways: It can reduce perceived stress and the consequences of the stress experienced. The supervisor's support factor is very important here. It significantly reduces the pressure from the tasks performed and on maintaining/increasing work efficiency (Babin & Boles, 1996). The research conducted by Glazer and Beehr (2005) that the level of organizational commitment can be treated as a consequence of an individual’s experience in a given organization seems to confirm the critical role of the organizational climate and supporting interpersonal relations for a positive emotional attitude to the workplace.

Spielberger's research (Spielberger et al., 2003) indicates job pressures and lack of organizational support as two fundamental causes of stress and health risks at work. The authors review the effects of occupational stress on productivity, employee burnout, and health-related problems. They examine conceptual models of stress in the workplace and focus on job pressures and lack of support as two overarching sources of stress and health risks for people at work.

From the perspective of organizational development, excessive stress will have consequences on decisions made (Janis & Mann, 1977). Understanding the interactions between stressors and decision-making processes can benefit an organization, as previous research has shown that stress causes deficits in decision-making. Despite the extensive literature on stress, organizational management scientists still have much to discover regarding the links between stress and organizational decision-making (Jones, 2020). Making executives aware of the relationship between prolonged work stress and decision-making can be of fundamental importance for organizations to understand how excessive stress affects their workforce, primarily when it is related to the decision to leave their jobs.

The literature covers the topics connected with psychosocial risk, job (occupational) stress and its causes; however, it lacks research on organizational consequences of stress, especially from an individual employee perspective. This research gap was the motivation to explore the problem of the impact of occupational stress on work-related decisions and conduct research on psychosocial risk and job satisfaction in one of the sectors of the Polish economy. The research is multidisciplinary, covering aspects of logistics (transport), management and sociology, and original.

3. Research methods

3.1. Research problem description

Workers in the transport sector, including dependent self-employed workers, are vulnerable, as they often must absorb the costs of ownership, maintenance, and other vehicle operating costs while they may not be able to participate in social dialogue and may not benefit from the protection, including
social protection, provided to other workers (ILO, 2019). Further on, the presence of well-designed and regulated nonstandard forms of employment in the road transport sector does not necessarily translate into poor working conditions or entail illegal operations, provided that the employers do not misuse them to circumvent their legal and contractual obligations and other employment-related responsibilities (Saltzman & Belzer, 2007).

Furthermore, transport is a demand-driven activity that takes place constantly and everywhere. The most often used classification, based on distance and means of transport, distinguishes transport within facilities and external transport. However, external transport workers are under a higher workload than internal transport workers, especially drivers. Internal transport workers are involved in shift and standardized work with reduced client social contact. Truck drivers often deal with problems that most factory shift workers do not. Due to the unpredictability of events on transport routes and in front of loading ramps, their schedules change constantly. Constant readiness is nothing special, but it is rarely paid. Drivers often suffer from disruption of sleep, which can substantially affect their recovery from fatigue and eventually harm their health. Transport workers perform transport activities and are constantly under time pressure and have to perform multistage negotiations with demanding customers or carriers. In addition to the intensity of the work, overtime is also common in terms of unexpectedly extended working hours, which the employer may also require. The European Economic Community (EEC) regulation limits truck drivers to an average of 45 and a maximum of 56 hours of driving per week. However, they can have substantially longer total work hours because about 30% of long-distance driver time is spent loading, unloading, waiting, vehicle maintenance, and running to find forwarding agents (Hamelin, 2001).

Safe vehicle operation requires sustained vigilance, excellent judgment, and quick reactions, particularly during heavy traffic or poor driving conditions. Fatigue affects all of these abilities, endangering truck drivers and other motorists who share the road with them. Drivers and truck drivers have traditionally the highest fatalities of any broad occupation group (BLS, 2019).

All transport workers are under tremendous pressure from errors, especially those that involve financial consequences. Drivers often face obstacles to staying on schedule: traffic jams, bad weather conditions, customs delays at borders, and queues for loading bays or forklifts. Just-in-time deliveries are often associated with paying penalties for delays, and damaged goods are not always insured against damage. Pressure from supply chain entities can be an underlying cause of transport workers adopting riskier and unsafe driving practices (ILO, 2019).

Over time, the pressure increases due to increased control of work; for example, improved communications have allowed employers to track the locations of their vehicles together with staff, resulting in decreased worker autonomy.

The tightening of competition between transport companies encourages the expansion of poor management practices. Companies accept jobs below cost and raise workers’ fatigue because they do not refuse loads that impose extremely demanding work schedules planned at the last second.

Many transport workers suffer from occupational safety and health problems. Up to 15% of all fatal accidents are between truck drivers. For example, truck driving was among the occupations with the highest rates of fatal occupational injuries in 2004 (U.S. Department of Labour, 2006).

The psychosocial condition of commercial drivers remains a significant public safety issue due to the increased risk of motor vehicle accidents caused by fatigued commercial drivers involving other motorists and pedestrians (Apostolopoulos et al., 2011).

Transport workers can be victims of physical violence or verbal abuse (Saltzman & Belzer, 2003). Among 300 Australian truck drivers surveyed, 30% had been victims of verbal abuse, 21% had been victims of “road rage,” 10% had been threatened, and 1% had been assaulted. In almost all incidents, verbal abuse and threats were closely linked with economic pressure at freight forwarding yards. The delays in loading, the cuts by drivers in line and the mistakes of the forklift drivers fuelled tensions and caused violent behaviours. U.S. beer delivery drivers are robbery targets since they may carry $1,000 to $3,000 in cash by the end of the day. The threat of such abuse and violence can increase psychological stress and the use of maladaptive coping mechanisms.

The job profile for a transport-related job proves problematic physically and psychologically. The stress factors briefly characterized result from market characteristics and individual corporate conditions.
3.2. Research method

The purpose of the research was to identify and characterize the impact of psychosocial risk on the decisions related to the work of transport workers. Two hypotheses were developed, namely:

H1: Occupational stress and the tendency to leave the job have a strong positive relationship.

H2: Satisfaction with relations with superiors works as a mediator in the relationship between occupational stress and the tendency to leave the job.

The research on psychosocial risks at work and their impact on job-related decisions was conducted with the Psychosocial Risk Scale (SRP), a scientifically verified diagnostic tool characterized by high reliability and accuracy coefficients (Mościcka-Teske, Potocka, 2013). The SRP enables an assessment of work characteristics that may be a potential hazard and their stress level. It also takes into account such aspects of the functioning of employees as absenteeism at work, frequency of accidents at work, health condition and ability to work, satisfaction with seven aspects of work (type of work performed, way of work organization, working conditions, remuneration and social benefits, professional development opportunities, relations with superiors, relations with colleagues), commitment to work and intention to change it. The Psychosocial Risk Scale considers the specificity of work in a given sector of the economy (e.g. in the section “Transport and warehouse management”) and the so-called general stressors, which may occur regardless of the industry in which the examined person is employed. The scale consists of four parts: A, B, C, and D. Part A concerns demographic data (such as age, gender, seniority, position, etc.). Part B contains questions related to health and professional functioning. Part C consists of 50 statements related to characteristics of work that pose potential psychosocial risks. These characteristics are grouped into three main factors: work content, work context, and interpersonal pathologies, which in turn are composed of a set of questions belonging to the 9 psychosocial dimensions of the work environment listed in Cox’s theory (work content, time frame, workload, control, culture and functions of the organization, interpersonal relationships, role in the organization/responsibility, career development, work-home relationship). (Cox, 1998). Part D (SRP industry appendix) is a set of statements concerning job characteristics specific to a given economic sector. Annex D-SRP for the transport sector contains 12 questions (α-Cronbach factor = 0.80). Psychometric properties of parts B and C of the Psychosocial Risk Scale were determined based on the results of 7623 respondents. The internal α-Cronbach coefficient for the whole scale is 0.94.

The response scale is constructed in such a way that the respondents respond to each of the above-mentioned characteristics of work on two dimensions: (1) whether or not a feature is present/not present in their workplace, and (2) if a feature is present, how stressful/not stressful they find it (not at all, a little or very).

The SRP is a well-recognized and validated tool, so we decided to use it to recognize the level of the psychosocial risk, and the originality of the methodology underlies using the SRP results to recognize the impact of the risk on job satisfaction and the decision to leave the job and analyze the mediation between the factors.

3.3. Characteristics of the research sample

The research sample included 491 respondents. Most respondents were male (n=419; 85.3%), and there were n=72 female transport workers (14.7%). The structure corresponds to the general structure of workers in the transport sector. The average age in the study group was 45.9 years (with a standard deviation of 9.5). The youngest respondents in this group were 21 years old, and the oldest was 70 years old. Most people (46.6%) were in the 45-54 age group. The next largest group was people aged 35-44 (20.6% of the sample), the third was 55+ (17.1%), the next 25-34 (12.6%), and the least numerous were the youngest and constituted less than 3.1% of the respondents.

Most of the respondents in the analyzed sector were truck and bus drivers, railroad drivers, traffic attendants, and representatives of related professions; moreover, transport dispatchers and warehouse staff were significantly represented.

The average experience at the current position was 17 years (minimum was one year and maximum 43 years). Over one-third of the respondents (36.3%) worked in their current position for 1 to 10 years. 25.5% of the respondents declared 11-20 years of experience in their current position, while
26.3% declared that they have been working there for 21-30 years. 12% of the respondents declared more than 31 years of experience.

4. Research results

According to respondents, the most stressful work feature is the risk of losing the job. The response was indicated by almost 75%. This threat occurs in nearly three-quarters of the employees in the surveyed group and is a source of stress for 95.8% of them. A similar percentage of respondents is stressed by the fact that work carries a risk for their health and/or life (92.8%), there are fines for damage/losses at work (92%), their work requires the completion of many documents (91.2%), and the rules of granting bonuses and salaries are ambiguous (89.4%). Regarding industry-specific stressors within the TSL sector, 80.5% of the respondents considered that their work is related to the responsibility for the health and life of others. 92.4% of them assessed this feature as stressful. The overwhelming majority of respondents (80%) also indicated a risk of natural and technical disasters at work, which was stressful for 92.4%. The third most frequent potential occupational stressor indicated by 72.7% of the respondents was the fact that there are high transport time requirements. According to the collected data, this feature is stressful for 89.4% of those who indicated it. Slightly less frequent (for about 2/3 of the respondents) but no less stressful characteristic of the work turned out to be the possibility of meeting unpredictable reactions of other people - 87.7% of the respondents indicated this feature as stressful, and dependence of the quality of work performance on the recipients or customers - 83.3% of the respondents were stressed by such situations.

Regarding the level of job satisfaction, the results indicate that the majority of the respondents were more than averagely satisfied with their relationship with colleagues (91.7%), the kind of work they did (81.5%), relationships with superiors (68.8%), and organizational work (60.5%). The primary sources of dissatisfaction were salaries and social benefits (68.4% of the respondents were dissatisfied), opportunities for professional development (58.9%), and working conditions such as noise, temperature, and equipment (52.7%).

The results also indicated that most respondents would not change their current job (63.1%) and that even if they could, they would not change to another job (66.2%).

These results indicate a relatively good level of job satisfaction in the surveyed group, but it is worth noting that more than 30% of employees are poorly satisfied with relationships with superiors and how their work is organized.

Moreover, almost 40% of employees consider leaving the job a possibility.

A correlation analysis was performed to establish direct relationships between the variables studied and verify the hypotheses of H1 and H2 (Table 1). The results showed that occupational stress and job satisfaction correlate to leave. A higher correlation was found between intention to leave the job and satisfaction with relationships with supervisors.

The following statistical analysis step investigated the relationship between variables using mediation analysis in a regression model. In the model, the predictor was occupational stress, the dependent variable was the tendency to leave the job, and the mediator was satisfaction with the supervisor relationship. According to the classical approach of Baron and Kenny (1986), mediation dependency testing requires the following 3 steps: 1. The relationship of the independent variable with the dependent variable (pathway c), 2. The relationship of the independent variable with the mediator (pathway a) and the mediator with the dependent variable (pathway b), 3. The relationship of the independent variable with the dependent variable when both the independent variable and the mediator are included in the model (pathway c’). The classic model assumes a comparison of the direct relationship (path c) with the situation when a mediator is introduced into the model (path c’). It is now recognized that statistically significant paths a and b are essential for mediation (Hayes, 2013). Statistically, significant mediation effects were inferred if the 95% confidence interval of the mean estimates did not include zero (Preacher & Hayes, 2008). This study performed statistical analyses with the SPSS statistical package 25.
Table 1: Correlation coefficients between intention to leave the job, job satisfaction, and occupational stress, n = 491

<table>
<thead>
<tr>
<th>Job satisfaction, occupational stress</th>
<th>Leave the job r-Pearson</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job satisfaction - general</strong></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with relationships with supervisors</td>
<td>0.26**</td>
</tr>
<tr>
<td>Satisfaction with work type</td>
<td>0.26**</td>
</tr>
<tr>
<td>Satisfaction with career development</td>
<td>0.22**</td>
</tr>
<tr>
<td>Satisfaction with salary</td>
<td>0.21**</td>
</tr>
<tr>
<td>Satisfaction with relationships with colleagues</td>
<td>0.13**</td>
</tr>
<tr>
<td>Satisfaction with work organization</td>
<td>0.12**</td>
</tr>
<tr>
<td>Satisfaction with working conditions</td>
<td>0.09**</td>
</tr>
<tr>
<td><strong>Occupational stress - general</strong></td>
<td>0.22**</td>
</tr>
<tr>
<td>Stress level related to career development</td>
<td>0.18**</td>
</tr>
<tr>
<td>Stress level connected with organizational culture</td>
<td>0.17**</td>
</tr>
<tr>
<td>Stress level related to professional role</td>
<td>0.13**</td>
</tr>
<tr>
<td>Stress level connected with control at work</td>
<td>0.12**</td>
</tr>
<tr>
<td>Stress level related to work-home relationships</td>
<td>0.09*</td>
</tr>
<tr>
<td>Stress level connected with work content</td>
<td>n.s.</td>
</tr>
<tr>
<td>Stress level related to workload</td>
<td>n.s.</td>
</tr>
<tr>
<td>Stress level connected with work time</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

**significant at level p<0.01, *significant at level p<0.05, n.s. non-significant

Figure 1: Expected model of the relationship between occupational stress and intention to leave the job mediated by satisfaction with relationship with supervisors

To answer the question about the mediating role of the variable determining satisfaction from the relationship with superiors to the relationship between professional stress and the intention to leave the job, a mediation analysis was conducted, supplemented by the Goodman test result. The first step confirmed the direct relationship between professional stress and the intention to leave the job. The regression model was well-suited to the data and indicated that with increasing levels of occupational stress, the tendency to quit the job increases, too (β=0.22, p<0.001). In the second step of the analysis, the relationship between the independent variable, occupational stress, and the mediator, satisfaction, was tested with the relationship with superiors. This relationship also turned out to be essential, and the whole model was well suited to the data (β=0.43, p<0.001). In the model taking into account both the mediator and the independent variable, the role of the independent variable in predicting the intention to leave the job decreased but remained statistically significant (β=0.14, p<0.001). In contrast, the mediator was associated with the dependent variable (β=0.21, p<0.001). A list of obtained β coefficients is presented in Figure 2.
Figure 2: Model of relationship between occupational stress and intention to leave the job mediated by satisfaction with relationship with supervisors

The result indicating partial mediation of satisfaction with supervisor relationships was confirmed by the Goodman test, which was statistically significant $Z=4.007, p<0.001$.

In the next step, several mediation analyses between the dimensions of occupational stress (OS) and the intention to leave the job (JJ) were performed, taking into account the mediation effect of satisfaction with relations with superiors (SSS). The results are presented in Table 2.

<table>
<thead>
<tr>
<th>Dimensions of occupational stress</th>
<th>Mediation paths (β)</th>
<th>Z</th>
<th>95% CI LL</th>
<th>95% CI UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress level related to career development</td>
<td>a X→M OS→SS</td>
<td>-0.31***</td>
<td>-0.23***</td>
<td>0.18***</td>
</tr>
<tr>
<td>Stress level connected with organizational culture</td>
<td>b M→Y S→SS</td>
<td>-0.26**</td>
<td>-0.23***</td>
<td>0.17***</td>
</tr>
<tr>
<td>Stress level connected with role</td>
<td>c X→Y OS→S</td>
<td>-0.22***</td>
<td>-0.26***</td>
<td>0.14***</td>
</tr>
<tr>
<td>Stress level connected with control at work</td>
<td>c' X→Y OS→LJ</td>
<td>-0.38***</td>
<td>-0.25***</td>
<td>0.13***</td>
</tr>
<tr>
<td>Stress level connected with work-home</td>
<td>-0.18***</td>
<td>-0.26***</td>
<td>0.09*</td>
<td>0.05</td>
</tr>
</tbody>
</table>

X – predictor (occupational stress OS), M – mediator (satisfaction with relations with superiors S.S.), Y - dependence variable (leave the job L.J.)
a–c’ – path
Z - Goodman test
CI - confidence interval; L.L. - lower level; U.U. - upper level
***p<0.001, **p<0.01, *p<0.05

In the models presented in Table 2, there was a total mediation effect for satisfaction with relations with superiors with intention to leave the job, when there was a higher level of occupational stress due to difficulties with the professional role, a lower level of control and negative interference from work and home. Satisfaction with relationships with superiors acts as a partial mediator of intention to leave the job when the level of career development and the quality of organizational culture provide a higher level of occupational stress.
5. Discussion

The correlation analysis indicated that there is a statistically significant positive relationship between occupational stress and the tendency to leave the job (r=0.22, p<0.01), and the tendency to leave the job and the satisfaction of the job in general (r=0.26, p<0.01). The highest correlation was observed with satisfaction with relationships with supervisors (r=0.26, p<0.01).

Further analysis of mediation indicated that satisfaction with relationships with superiors mediated the relationship between occupational stress and the tendency to leave the job (indirect effect β=0.08, p<0.001). There was a partial mediating effect with the stressful characteristics of work: organizational culture (β=0.06, p<0.001) and career development (β=0.07, p<0.001), and a total mediating effect with the characteristic of stressful work: professional role (β=0.26, p<0.001), control (β=0.25, p<0.001), and home-work interaction (β=0.26, p<0.001).

6. Conclusions

The research conducted and presented in the paper enabled answering the defined research questions:

Is the work in transport sector sustainable?
Is the work in transport sector satisfactory?

The research on psychosocial risk emerging from work in transport sector proved that it does not “enable employees to perform it without damage to their physical or mental health and will last for an extended period of their professional activity” (EU-OSHA, 2012; EUROFOUND, 2021), hence it is not sustainable which means employers in the sector should take some additional efforts to change the situation.

However, research prove that the work is satisfactory for most of the respondents. Job satisfaction was analyzed in job content, work conditions and organization, financial conditions, career development, and interpersonal relations with superiors and co-workers.

Based on the research results we positively verified two hypotheses:

| 1 | Tendency to leave the job (LJ) | 2 | Job satisfaction general (JS) | 3 | JS with relationships with supervisors | 4 | JS with work type | 5 | JS with career development | 6 | JS with salary | 7 | JS with relationships with co-workers | 8 | JS with work organization | 9 | JS with working conditions | 10 | Occupational stress general OS | 11 | OS related to career development | 12 | OS related to organizational culture | 13 | OS connected with professional role | 14 | OS connected to control at work | 15 | OS connected with work-home relations | 16 | OS connected to workload content | 17 | OS connected to workload | 18 | OS connected with work time |
| 1 | 0.26** | 2 | 0.26** 0.74** | 3 | 0.25** 0.63** 0.36*** | 4 | 0.22** 0.77** 0.57** 0.38** | 5 | 0.21** 0.71** 0.44** 0.27** 0.58** | 6 | 0.13** 0.53** 0.60** 0.33** 0.22** 0.20** | 7 | 0.12** 0.81** 0.46** 0.50** 0.54** 0.51** 0.36** | 8 | 0.09** 0.69** 0.36** 0.32** 0.44** 0.44** 0.24** 0.53** | 9 | 0.22** 0.44** 0.46** 0.28** 0.29** 0.28** 0.18** 0.35** 0.34** | 10 | 0.18** 0.30** 0.30** 0.18** 0.22** 0.20** 0.20** 0.20** 0.20** 0.58** | 11 | 0.17** 0.31** 0.26** 0.17** 0.19** 0.27** 0.27** 0.27** 0.26** 0.26** 0.42** 0.56** | 12 | 0.13** 0.22** 0.22** 0.17** 0.12** 0.15** 0.23** 0.52** 0.57** 0.40** | 13 | 0.12** 0.40** 0.38** 0.19** 0.28** 0.23** 0.16** 0.32** 0.32** 0.68** 0.68** 0.50** 0.58** | 14 | 0.09** 0.17** 0.18** 0.10** 0.11** 0.25** 0.54** 0.52** 0.39** 0.60** 0.53** | 15 | ns 0.33** 0.27** 0.18** 0.23** 0.21** 0.10** 0.29** 0.32** 0.49** 0.49** 0.45** 0.54** 0.55** 0.52** | 16 | ns 0.27** 0.25** 0.12** 0.19** 0.19** 0.10** 0.21** 0.22** 0.56** 0.63** 0.50** 0.63** 0.65** 0.60** 0.62** | 17 | ns 0.16** 0.16** 0.16** 0.16** 0.16** 0.16** 0.16** 0.16** 0.16** 0.16** 0.16** 0.16** 0.16** 0.16** 0.16** |

**p<0.01, *p<0.05, ns - not significant
H1: Occupational stress and the tendency to leave the job have a strong positive relationship.
H2: Satisfaction with relations with superiors works as a mediator in the relationship between occupational stress and the tendency to leave the job.

The research carried out has led to some interesting conclusions. Although transport workers fear losing their jobs, their stress causes them to leave. Therefore, from an individual perspective, occupational stress prevails with the fear of losing the job and the consequences. Since the situation in the transport sector is complicated and employers have to deal with high employment dynamics, they should analyze the determinants of job-related decisions. Analysis of the most critical stressors and identifying the manageable ones could significantly decrease employment fluctuation and reduce training costs, risk of damages, and wrong decisions. Improving the characteristics of the work environment and job satisfaction could influence job-related decisions and minimize those that result in job loss.

Hence, the results of the research are interesting in the context of sustainable development (empirical perspective) and for employers to provide a safe and sustainable work environment (utilitarian perspective).

The costs generated by increased absenteeism and staff fluctuation directly impact the company’s operations. It is worth adding, however, that for the company and employers, the low level of job satisfaction translates into the problem of compliance by employees with regulations, rules and principles of professional ethics and their submission to routine while performing tasks (Sadłowska-Wrzesińska & Mościcka-Teske, 2016). Although indirectly, these aspects negatively impact the company’s financial situation and image while significantly limiting the realization of the sustainable development concept. The research results could be used by employers in the transport sector to recognize and understand the problem of increased job retention and mitigate the risk, minimizing the negative impacts of high occupational stress and low satisfaction from work.

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Conflicts of interest

The authors declare no conflict of interest.

Data availability

Some or all data and models that support the findings of this study are available from the corresponding author upon reasonable request.

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