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INVESTIGATING THE RELATIONSHIP BETWEEN WORK ENVIRONMENT, PROFESSIONAL DEVELOPMENT SUPPORT, AND FINANCIAL INCENTIVES IN THE CONTEXT OF IT PROFESSIONALS' MOBILITY: A SEM ANALYSIS

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Abstract: This study examines the relationship between work environment, salaries and incentives, and support for professional development in the context of IT professionals' mobility. Using Structural Equation Modelling (SEM), the research analyses data from 171 employees in the IT sector, considering various demographic factors. The findings indicate that salaries and incentives significantly impact both the work environment and support for professional development. Additionally, professional development support and financial incentives strongly influence the decision to relocate for career advancement. The results confirm five proposed hypotheses, demonstrating positive and statistically significant relationships between the analysed constructs. The highest variance explanation is observed for change of residence (84.36%), followed by support for professional development (75.54%), while work environment exhibits the lowest explained variance (43.23%). The variable salaries and incentives is exogenous, meaning it is not influenced by other factors in the model. These findings suggest that improving financial compensation and fostering a supportive work environment can enhance professional development opportunities and reduce workforce turnover. Furthermore, IT companies can benefit from targeted talent retention strategies by understanding the key drivers of employee mobility. This paper offers deeper insight into workforce mobility and employee retention, highlighting the significance of professional development and financial incentives. The results offer practical implications for IT organizations aiming to create a more attractive work environment and encourage long-term employee commitment. Future research should explore additional factors influencing mobility decisions, such as remote work policies and organizational culture.

Keywords: work environment, support for professional development, salaries and incentives, change of residence, IT company.
Field: Social Sciences.

1. INTRODUCTION

Given the rapid changes in the IT industry, gaining a deep understanding of the factors driving workforce mobility is essential, particularly the interaction between financial incentives, professional development support, and the work environment. This paper explores the relationships between the work environment, salaries and incentives, support for professional development and change of residence in the IT sector by analysing the opinions of 171 employees from IT sector, varying in demographic and professional characteristics. Expanding on prior findings (Kukolj, Deretić, & Adžić, 2024), this paper examines work-life quality and employee motivation within IT organizations. Gorji et al. (2025) demonstrate that financial incentives play a significant role in influencing the workplace atmosphere and enhancing employee satisfaction. Similarly, within the IT sector, competitive salaries and benefits contribute to a more positive workplace atmosphere and reduce employee turnover. Vilhelmsson et al. (2025) highlight that financial stability and a supportive work environment foster professional development within the healthcare sector. This model can be extended to the IT sector, where higher salaries and bonuses provide employees with greater opportunities for further education and career advancement. Shakil et al. (2024) identify high salaries and flexible working conditions as key factors influencing workforce mobility. In the IT sector, competitive earnings and additional incentives may encourage professionals to relocate to more technologically advanced regions. Hughes, Niu, and Greer (2025) emphasise that a well-structured work environment promotes professional growth in virtual settings. IT companies that cultivate a positive workplace atmosphere can facilitate employees' access to training and mentorship, thereby enhancing their career progression. Satterthwaite et al. (2025) examine the impact of professional development on mobility and relocation decisions among specialists. Similarly, IT professionals frequently relocate in search of improved career prospects and further educational opportunities.

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2. MATERIALS AND METHODS

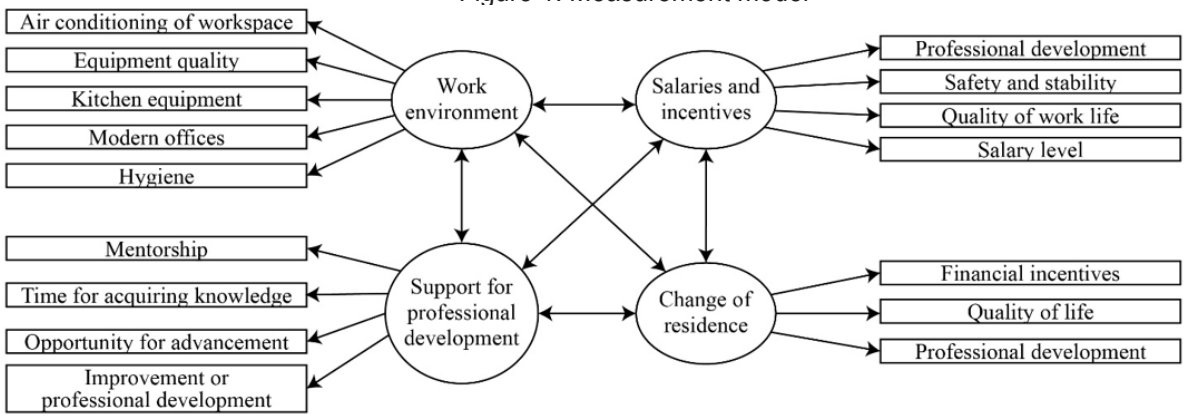
By formulating the hypotheses outlined below, this paper endeavors to present a holistic perspective of the interconnections between the work environment, salaries and incentives, support for professional development, and relocation decisions within the IT sector. Gaining deeper insights into these relationships can help organisations develop more effective strategies for talent retention and workforce mobility. Therefore, the following hypotheses are proposed:

- H(1): Salaries and incentives positively impacts on the Work environment in the context of IT sector.
- H(2): Salaries and incentives positively impacts on the Support for professional development in the context of IT sector.
- H(3): Salaries and incentives positively impacts on the Change of residence in the context of IT sector.
- H(4): Work environment positively impacts on the Support for professional development in the context of IT sector.
- H(5): Support for professional development positively impacts on the Change of residence in the context of IT sector.

For this research, data were collected through direct surveys, with all participants giving voluntary consent. Employees from IT companies were purposefully selected as part of the research sample, ensuring relevant representation through purposive sampling. A pilot study involving 30 respondents was conducted beforehand to test the questionnaire's clarity and reliability. This research was carried out in the Republic of Serbia over three months, from October to December 2024, with a final dataset comprising 171 participants (n = 171).

The survey was structured into two main sections. The first section collected demographic and professional background information, including key personal and occupational details. The second section aimed to assess significant factors impacting IT professionals, requiring participants to rate various elements on a five-point Likert scale, from 1 ('very dissatisfied') to 5 ('very satisfied'). Specifically, work environment was assessed based on factors such as air conditioning, equipment quality, kitchen facilities, modern office design, and overall hygiene. Salaries and incentives were evaluated in terms of professional development opportunities, job security and stability, quality of work life, and salary levels. Support for professional development included mentorship, time allocated for skill acquisition, career advancement opportunities, and overall access to training and development resources. Lastly, change of residence was analysed through factors such as financial incentives, perceived quality of life, and professional development prospects associated with relocation. The collected data were interpreted with software (SPSS and AMOS) to explore associations among the identified variables and test the proposed hypotheses (Figure 1), with Structural Equation Modeling (SEM) applied in AMOS to evaluate the hypothesized relationships.

Figure 1. Measurement model



Source: Authors research

3. RESULTS

The outcomes of the study are drawn from the "Survey on the Relationship Between Work Environment, Professional Development Support, and Financial Incentives in the Context of IT Professionals' Mobility". The table 1 presents the socio-demographic structure of the employee sample, which consists of a total of 171 respondents. The majority of respondents are male (62.6%), while females make up 37.4%. The largest portion of the sample belongs to the 18-30 age group (48%), whereas the smallest proportion consists of respondents aged 41 and older (16.9%). Regarding the level of education, most respondents hold a college or university degree (39.2%), while 36.8% have a high school diploma. The highest number of respondents work as project designers (47.4%), while the lowest percentage are direct managers (10.5%).

Table 1. Demographic and professional characteristics of the sample (n=171)

		Frequency	Percent (%)
Gender group	Men	107	62.6
	Women	64	37.4
Age group	18-30	82	48.0
	31-40	60	35.1
	41 and older	29	16.9
Level of Education	High School degree	63	36.8
	College or university degree	67	39.2
	Master of Science degree	41	24.0
Experience of working in a company	< 6 months	44	25.7
	6 months – 1 year	64	37.4
	1 year – 2 years	39	22.8
	> 2 years	24	14.1
Position in the company	Manager	21	12.3
	Document specialist	51	29.8
	Project designer	81	47.4
	Direct manager	18	10.5

Source: Authors research

To assess construct reliability, Cronbach's Alpha and Composite Reliability were utilized. In this study, Cronbach's Alpha values for all constructs exceeded the recommended threshold of 0.70. Composite Reliability values ranged from 0.819 to 0.898, consistently surpassing the 0.70 criterion (Hair et al., 2010). Consequently, the reliability of each construct in the analysis was confirmed (Table 2).

Table 2. Loadings, Reliability and Convergent Validity - CFA Results

Variables	Standardized factor loading	Critical ratio	AVE	Cronbach Alfa (α)	Composite Reliability	p-value
Work environment (WE)						
Q1 - Air conditioning	0.779					
Q2 - Equipment quality	0.807	11.061	0.583	0.874	0.875	<0.001
Q3 - Kitchen equipment	0.761	10.324				<0.001
Q4 - Modern offices	0.688	9.186				<0.001
Q5 - Hygiene	0.778	10.599				<0.001
Support for professional development (SPD)						
Q1 - Mentorship	0.846					
Q2 - Time for acquiring knowledge	0.842	13.189	0.607	0.851	0.860	<0.001
Q3 - Opportunity for advancement	0.743	11.002				<0.001
Q4 - Improvement or professional development	0.673	9.623				<0.001
Salaries and incentives (S&I)						
Q1 - Professional development	0.906					
Q2 - Safety and stability	0.821	14.251	0.688	0.897	0.898	<0.001
Q3 - Quality of work life	0.815	14.078				<0.001
Q4 - Salary level	0.771	12.757				<0.001
Change of residence (CR)						
Q1 - Financial incentives	0.810		0.602	0.805	0.819	
Q2 - Quality of life	0.756	10.584				<0.001
Q3 - Professional development	0.760	10.656				<0.001

Source: Authors research

Convergent validity of the scale items was evaluated using the Average Variance Extracted (AVE) method (Fornell & Larcker, 1981). The AVE values exceeded the recommended threshold of 0.50 (Fornell & Larcker, 1981), confirming that the scales employed in this research exhibit the necessary level of convergent validity (Table 2). Discriminant validity was assessed using both the Fornell and Larcker (F&L) criterion and the Heterotrait-Monotrait (HTMT) ratio. According to the F&L approach, discriminant validity is established when the square root of AVE for a given construct is greater than its correlations with other constructs in the model. However, due to recognized limitations of this method (Ab Hamid, Sami, & Sidek, 2017), the HTMT ratio has gained prominence as an alternative measure. In this study, all HTMT values remained below the accepted threshold of 0.85 (Henseler, Ringle, & Sarstedt, 2015), thereby confirming discriminant validity. A summary of the results is provided in Table 3.

To assess the validity of the measurement model, Confirmatory Factor Analysis (CFA) was performed in IBM SPSS AMOS. During the analysis, the factor loadings of individual items were evaluated. The model fit was evaluated using key statistical indices such as the chi-square ratio (χ^2/df), significance level (p-value), and widely recognized goodness-of-fit measures, including GFI, CFI, TLI, SRMR, and RMSEA. All indices met commonly accepted thresholds (Bentler, 1990; Hu & Bentler, 1998; Kline, 1998; Hair et al., 2010). The four-element model (Work Environment, Salaries and Incentives, Support for Professional Development, and Change of Residence) demonstrated good fit (Table 4) to the data: $\chi^2/df = 1.53$, $p < 0.001$, GFI = 0.90, CFI = 0.97, TLI = 0.96, SRMR = 0.039 and RMSEA = 0.056.

The correlations among latent variables are all positive and highly significant ($p < 0.001$), reflecting a strong association between the constructs. The highest correlation is between "Support for professional development" and "Change of residence" (standardized estimate $\beta = 0.848$), while the lowest is between "Work environment" and "Salaries and incentives" ($\beta = 0.654$). The standard errors (S.E.) are relatively low, and all critical ratios (C.R.) exceed 1.96, confirming that the estimates are reliable and statistically significant (Table 5).

Table 3. HTMT Matrix for Discriminant Validity Assessment

	Change of residence (CR)	Salaries and incentives (S&I)	Support for professional development (SPD)	Work environment (WE)
Change of residence (CR)	-			
Salaries and incentives (S&I)	0.7312	-		
Support for professional development (SPD)	0.7285	0.6212	-	
Work environment (WE)	0.6751	0.5740	0.7191	-

Source: Authors research

Table 4. Fit indices for the measurement model

Model adequacy indices	χ^2/df	GFI	CFI	TLI	SRMR	RMSEA
Suggested threshold	<3	>0.90	>0.90	>0.90	<0.08	<0.08
Observed value	1.5283	0.9042	0.9701	0.9633	0.0392	0.0557

Source: Authors research

Table 5. Latent Variable Correlation Matrix

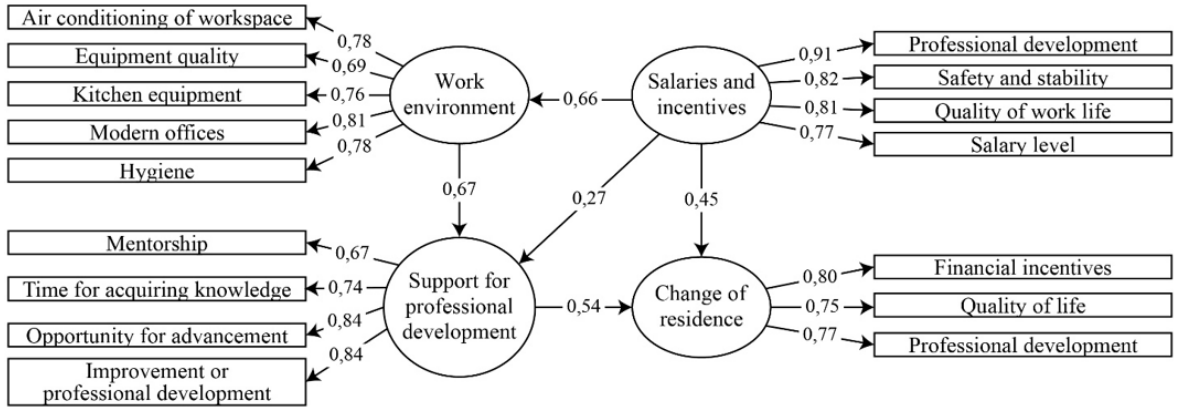
			β	S.E.	C.R.	P
Support for professional development	<-->	Change of residence	0.848	0.047	6.864	<0.001
Work environment	<-->	Support for professional development	0.837	0.051	6.729	<0.001
Salaries and incentives	<-->	Change of residence	0.833	0.037	7.026	<0.001
Support for professional development	<-->	Salaries and incentives	0.707	0.047	6.548	<0.001
Work environment	<-->	Change of residence	0.787	0.036	6.362	<0.001
Work environment	<-->	Salaries and incentives	0.654	0.036	6.036	<0.001

Source: Authors research

As part of the SEM analysis, standardized path coefficients and their significance levels were examined. A range of fit indices was considered to assess the structural model's overall alignment with the data (Figure 2) (χ^2/df, p, GFI, CFI, TLI, SRMR and RMSEA), with all values fulfilling commonly accepted thresholds (Bentler, 1990; Hu & Bentler, 1998; Kline, 1998; Hair et al., 2010). The proposed model demonstrated a satisfactory fit to the data (Table 6): χ^2/df = 151.39/99 = 1.53, p < 0.001, GFI = 0.90, CFI = 0.97, TLI = 0.96, SRMR = 0.040 and RMSEA = 0.056.

The findings indicate that the model accounts for the variance in Change of Residence (R^2 = 84.36%) most effectively, followed by Support for Professional Development (R^2 = 75.54%), whereas it provides the least explanation for Work Environment (R^2 = 43.23%). The Salaries and Incentives variable is exogenous, meaning it is not influenced by other variables within the model. This implies that the included factors significantly impact Change of Residence and Support for Professional Development, while Work Environment is shaped by additional, unconsidered factors.

Figure 2. Structural model



Source: Authors research

Table 6. Fit indices for the structural model

Model adequacy indices	χ^2/df	GFI	CFI	TLI	SRMR	RMSEA
Suggested threshold	<3	>0.90	>0.90	>0.90	<0.08	<0.08
Observed value	1.5292	0.9029	0.9697	0.9633	0.0399	0.0558

Source: Authors research

4. DISCUSSIONS

By applying the SEM methodology, five hypotheses were proposed and subsequently examined in this research. The analysis confirms that all hypotheses within the model possess positive path coefficient values and are supported. The findings of this study highlight the significant impact of salaries and incentives on both the work environment and professional development support, reinforcing the idea that financial compensation plays a crucial role in employee satisfaction and retention. Additionally, the strong relationship between professional development support and change of residence suggests that IT professionals are willing to relocate when career advancement opportunities are available. This aligns with previous research indicating that competitive salaries and career growth opportunities influence mobility decisions. Despite the robustness of the results, certain limitations should be considered. The study focuses on IT professionals, which may narrow the relevance of the findings for industries beyond the one studied. Additionally, external factors such as job market conditions, personal circumstances, and cultural differences could also influence mobility decisions but were not explicitly analysed in this model. Future research should incorporate qualitative insights, such as interviews with IT professionals, to better understand individual motivations for relocation. From a practical perspective, IT companies can enhance employee retention by fostering a supportive work environment and providing competitive financial incentives. Organizations should also consider dynamic work arrangements and skill enhancement strategies to secure and retain the best employees. Understanding these factors can help businesses design more effective workforce strategies in a competitive global market.

5. CONCLUSIONS

The model demonstrates that Salaries and incentives are a key factor influencing both Work environment and Support for professional development, while Support for professional development and Salaries and incentives are significant predictors of Change of residence. These findings support theoretical assumptions and suggest that organizations can enhance the work environment and professional development opportunities through appropriate financial incentives, which may, in turn, impact employee mobility.

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