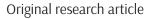
journal homepage: http://ijiemjournal.uns.ac.rs/



International Journal of Industrial Engineering and Management

2024 / ARTICLE-IN-PRESS / 369





# Job Satisfaction, Flexible Work Arrangements and Innovative Work Behavior in Serbian SMEs

D. Gašić<sup>a</sup> (D) 0000-0002-9068-0593, T. Jevtić<sup>b,\*</sup> (D) 0009-0005-4434-2138, N. Berber<sup>a</sup> (D) 0000-0002-1433-6416, M. Aleksić<sup>a</sup> (D) 0000-0002-4488-4472

<sup>a</sup> University of Novi Sad, Faculty of Economics in Subotica, Subotica, Republic of Serbia; <sup>b</sup> Academy of Professional Studies Šabac, Šabac, Republic of Serbia

#### ABSTRACT

The external and internal challenges have been compelling organizations to adapt their business strategies to enhance their market positioning. One effective approach for organizations to improve their market position and positively influence employees' attitudes and behaviors is by implementing various forms of flexible work arrangements. This research investigates the direct impact of flexible work arrangements on job satisfaction and innovative work behavior and examines the mediating role of job satisfaction in this relationship. The study has been conducted on a sample of 109 highly educated managers in private SMEs in the Republic of Serbia. The theoretical framework is built upon existing scientific research, while the empirical section employs the **PLS-SEM** method. The findings reveal positive direct effects of flexible work arrangements on job satisfaction and innovative work behavior, with job satisfaction serving as a mediator in the relationship between flexible work arrangements and innovative work behavior. This mediation is found to be partial. Future research recommendations include the analysis of a larger cohort of managers, exploring the effects within larger organizations, and investigating their impact on other employee attitudes and behaviors.

# ARTICLE INFO

Article history:

Received November 22, 2023 Revised September 19, 2024 Accepted October 11, 2024 Published online December 24, 2024

Keywords: Flexible work arrangements; Job satisfaction; Innovative work behavior; Managers; SMEs

\*Corresponding author: Tamara Jevtić tamarajevtic@vmpts.edu.rs

# 1. Introduction

For an organization to achieve success in today's modern, complex, uncertain, dynamic, and highly competitive business environment, it is essential that the workforce is satisfied and committed. In recent decades, flexible working arrangements (FWAs) have gained significant prominence in human resource management. These arrangements encompass various practices, such as operating on a shift basis, weekend shifts, telecommuting, compressed workweeks, job sharing, part-time employment, fixed-term contracts, temporary or occasional work, and annual hours contracts [1]-[5]. A highly competitive work environment requires innovation, and innovative work behavior is the deliberate generation, promotion, and realization of new ideas at the workplace [6].

The primary objective of this research is to examine the relationship between the implementation of flexible work arrangements and innovative work behavior. Additionally, it aims to explore the mediating role of job satisfaction in the relationship between flexible work arrangements and innovative work behavior among highly educated managers in private Small and Medium-sized Enterprises (SMEs) located in the Republic of Serbia. The research seeks to discern the direct effects of flexible work arrangements on job satisfaction and innovative work behavior. Furthermore, it endeavors to ascertain the indirect influence of job satisfaction on the connection between flexible work arrangements and innovative work behavior among highly educated managers in private SMEs in the Republic of Serbia. The research involved a sample of 109 highly educated managers employed in private SMEs in the Republic of Serbia. Data were collected via an online questionnaire from January to October 2022. The authors used PLS-SEM analysis with SmartPLS software to examine the established relationships.

The research comprises four main parts. The first part presents the theoretical foundation of the research, clarifying the significance and impact of flexible work arrangements as an independent variable on innovative work behavior as a dependent variable. The second part focuses on the research methodology, covering the questionnaire development process, data collection methods, and data analysis conducted using the **IBM SPSS** program. The third part is dedicated to testing hypotheses and presenting research results for the observed variables. The fourth part consist of discussions, implications, research limitations, and suggestions for future research.

# 2. Theoretical background and hypotheses development

#### 2.1 Flexible Work Arrangements, Job Satisfaction, and Innovative Work Behavior

The modern business environment is characterized by the diversification and flexibility of working hours, which came as a result of numerous technological, market, and social changes [7]. The rapid growth and progress of technology have led to the replacement of traditional methods with modern work approaches, posing new challenges and opportunities for organizations [2], [7]. As a response to socio-economic and demographic changes, the implementation of flexible work arrangements is becoming an increasingly popular practice in organizations. These arrangements are implemented as an HR strategy to attract, motivate, and retain talented individuals, commonly known as benefits and flexible work scheduling. This scheduling deviates from traditional working hours, encompassing changes in the time and hours of work during the week, work location, and work patterns [2], [4], [8]-[12].

Flexible work arrangements are policies, regulations, and practices that formally and informally allow employees to decide when and where to undertake work duties [5], [13]. As a strategic tool for more efficient management of space, time, and employees, these arrangements help organizations build a culture of trust in the workplace [2], [14]. For employees, flexible work arrangements represent a form of reward that can improve the balance between work and private life, create general well-being, and influence attitudes and behaviors [9], [12]. Therefore, flexible work arrangements provide favorable opportunities for both employers and employees [7], [12].

Job satisfaction is considered as a combination of psychological, physiological, and external circumstances that determine the emotional attitude employees show toward different aspects of work and working conditions. Therefore, job satisfaction is the emotional state of an employee according to the work roles they perform in regard to their work, that is, the feeling and attitude of employees towards the work and social environment [11], [13]. [15]. Employees' perception of the nature of their work significantly affects the level of job satisfaction [3]. Employees perceive flexible work arrangements as a form of valuing and caring for them by the organization [11]. Satisfied employees show greater loyalty to the organization and contribute to the achievement of organizational goals [16]. Therefore, job satisfaction significantly influences the motivation and productivity of employees, impacting the organization as a whole [3].

Many organizations are facing rapid and dynamic changes, especially within the Industrial Revolution 4.0, prompting a focus on innovative work behavior to gain a competitive advantage [17]. To achieve a competitive edge in the modern market, organizations encourage managers to innovate their techniques and behavioral approaches for optimal results [18]. Employees are expected to demonstrate appropriate behavior adapted to new circumstances, even proactive behavior by creating new and improving current conditions. Innovative work behavior is seen as a specific, dynamic, and multifaceted phenomenon, involving proactive behavior with a special emphasis on novelty. The intentional creation, introduction, and application of new ideas within a work role, group, or organization are considered innovative work behavior [19], [20]. Innovative work behavior is viewed as a multifaceted four-dimensional construct that includes problem recognition, idea generation, advocacy, and idea realization [19], [21], [22].

# 2.2 Relations between Flexible Work Arrangements, Job Satisfaction, and Innovative Work Behavior

Wheatly [23] investigated the impact of flexible work arrangements, revealing positive effects associated with different forms, including working from home, which positively influenced job satisfaction for both men and women. Kröll et al. [24] conducted a meta-analytic analysis, demonstrating that flexible work arrangements and stress management training positively affect job satisfaction and the psychological health of employees. Abdullah et al. [25] emphasized the necessity of flexible work engagement, highlighting its significant role in fostering a better working environment and contributing to increased employee satisfaction.

Analyzing previous research on the impact of flexible work arrangements on job satisfaction, it is evident that a positive connection exists, signifying those employees highly value flexible work arrangements [2]-[3], [7], [9]-[12]. When people are allowed to use certain forms of flexible work arrangements, they can feel more freedom to choose the way the job will be done, and when. Also, they can feel more autonomy and control over their job but also over their personal life, because working in some flexible mode, and therefore, they can be even more satisfied with their job. Based on the review of previous theoretical and empirical findings on the impact of flexible work arrangements on job satisfaction, a research hypothesis is proposed:

**H1:** Flexible working arrangements have positive effects on job satisfaction

Moll and Leede [26] investigated the impact of new ways of working on the innovative work behavior of employees. The authors identified remote work, flexible working hours, flexible workplaces, and information and communication technologies as examples of these new ways of working. Innovative work behavior, as defined in the research, comprises four components: opportunity/research, generation of ideas, champion work (the need for workers to involve all relevant colleagues to reduce resistance to new ideas), and implementation. The results indicated that information and communication technologies play a crucial role in supporting remote work, flexible working hours, and flexible workplaces, positively affecting innovative work behavior among employees. In addition to the individual effects mentioned, the research found a collectively positive impact of the four basic practices of new ways of working on the innovative work behavior of employees. In a related study, Rahman et al. [27] highlighted that flexible work arrangements have a positive and direct impact on innovative work behavior. This suggests that employees, when granted the freedom to regulate their work activities, can generate ideas and solutions when faced with certain problems in their work. They can work on more interesting parts of their work, without taking too much effort to satisfy formal issues like getting to the job, registration, and other administrative onsite procedures.

Based on the review of previous theoretical and empirical knowledge about the impact of flexible work arrangements on innovative behavior, research hypothesis is proposed:

**H2:** Flexible working arrangements have positive effects on innovative work behavior

Previous research on the mediating role of job satisfaction in the relationship between flexible work arrangements and innovative work behavior found that there is no specific study that examined it. By investigating the influence of job satisfaction on the innovative work behavior of employees, Mustafa et al. [28] found on a sample of 125 employees in small and medium-sized enterprises in Switzerland that job satisfaction has a positive effect on innovative work behavior (and with each of its sub-dimensions: generating, promoting and realization of ideas). Based on the mentioned deficiency, the results of the authors [28] and the fact that attitudes are significant predictors of the future behavior of employees, the authors propose the following:

**H3:** Job satisfaction has a positive mediation effect in the relationship between flexible work arrangements and innovative work behavior

We hypotheses that when employees are using FWAs, they would show higher levels of innovative work behavior when they are more satisfied at work.

# 3. Materials and methods

#### 3.1 Questionnaire

To conduct empirical research, we designed an electronic questionnaire comprising three parts. The first part includes control questions related to gender, age, education level, headquarters, and company type. The second part incorporates 11 questions sourced from the work of Albion [29] focusing on the independent variable "Flexible Work Arrangements" (coded as FWA). Questions FWA1, FWA5, FWA6, and FWA7 pertain to family, while questions FWA2R, FWA3R, FWA4R, FWA8R, FWA9R, FWA10R, and FWA11 relate to the job. The third part of the questionnaire refers to the dependent variables "Job Satisfaction" [30], and "Innovative Work Behavior" [31]. The questionnaire on job satisfaction comprises five questions, coded as "JS". The Innovative Work Behavior questionnaire consists of nine questions, coded as "IWB," categorized into three segments: "Idea Generation" (IWB1IG, IWB2IG, IW-B3IG), "Idea Promotion" (IWB4IP, IWB5IP, IW-B6IP), and "Realization" (IWB7REA, IWB8REA, IWB9REA). Respondents provided answers on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) [32]. Since the questionnaire is electronic, respondents could answer the questions at their convenience using their mobile devices.

#### 3.2 Sample and data collection

The sample comprises highly educated managers employed in the private sector within SMEs located in the Republic of Serbia. The rationale behind selecting highly educated managers is rooted in the fact that flexible work arrangements are more commonly extended to employees in elevated positions, often

Gašić et al.
--------------

referred to as "white collars" [12], and therefore we believe that the right answers could be possible to gathered from this group of employees. Data collection for the sample spanned from January to October 2022, and the sample's composition is detailed in Table 1.

We sent out 300 questionnaires and got back 116. After careful analysis, we deleted partially filled questionnaires and kept only 109 full responses. The response rate was 36.33%. With the outlined structure of the sample, we conclude that it comprises 109 managers from the private sector employed in SMEs in the Republic of Serbia. Among them, the majority are male (N=69, 63.3%), with the remaining being female (N=40, 36.7%). Examining the age distribution reveals a predominantly younger population, where (N=57, 52.3%) fall within the age range of 25 to 35 years, and (N=52, 47.7%) fall between 35 and 45 years. In terms of educational attainment, the sample is highly educated, with the largest portion holding a bachelor's degree (N=52, 47.7%), followed by those with a master's degree (N=48, 44%), and a smaller group holding a Ph.D. (N=9, 8.3%). Regarding the main market served, the majority of managers work in organizations catering to the international market (N=31, 28.4%), followed by the national (N=29, 26.6%), global (N=19, 17.4%), regional (N=17, 15.6%), and the smallest number serving the local market (N=13, 11.9%). Examining the type of organization, the largest number operates within

Measure	Items	Frequency	Percent
Gender	Male	69	63.3
	Female	40	36.7
Age	25 – 35	57	52.3
	35 – 45	52	47.7
Education	Bachelor	52	47.7
	Master's degree	48	44.0
	Ph.D.	9	8.3
Main market	Local	13	11.9
	Regional	17	15.6
	National	29	26.6
	International	31	28.4
	Global	19	17.4
Type of organization	National	76	69.7
	Branches of national	9	8.3
	International	12	11.0
	Branches of international	12	11.0

Table 1. Sample characteristics (n=109)

a national organization (N=76, 69.7%), with others working in international organizations and their branches (N=12, 11%), and (N=9, 8.3%) in branches of national organizations.

#### 4. Results

Following the presentation of the sample and coded data, an analysis was conducted using the PLS-SEM method to assess the established model. According to Hair et al [33], PLS-SEM is a method that involves analyzing complex interrelated relationships between constructs and indicators. The analysis specifically focuses on examining the indirect relationships between flexible work arrangements and innovative work behavior through job satisfaction. The second-order formative construct "Flexible Work Arrangements" consists of two first-order reflective constructs (FWAs related to work and FWAs related to family). Job satisfaction and innovative work behavior are reflective constructs. Innovative work behavior, in turn, is a second-order reflective construct observed through three first-order reflective constructs: idea generation, idea promotion, and realization. The relationships are visually represented in Figure 1.

The first part pertains to the reliability analysis of the measurement model, while the second part focuses on testing the structural model. The analysis of the reliability of the measurement model involves assessing both formative and reflective constructs—a process commonly known as the analysis of the external model. The examination of formative constructs includes an assessment of the external influence of indicators and their significance through standard error, T statistic, p-value, along with an evaluation of multicollinearity using the Variance Inflation Factor (VIF) in the formative model.

Based on the analysis of the formative construct in the external model and the provided VIF values for

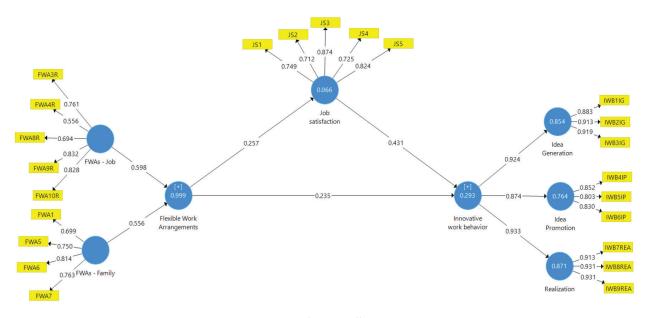


Figure 1. Results of path coefficient estimate

Table 2. Analysis of formative constructs of the external model - Flexible work arrangements

Relation	Outer weight	St. Dev.	T Statistics	p - values
FWAs - Family -> Flexible Work Arrangements	0.556	0.065	8.577	0.000
FWAs - Job -> Flexible Work Arrangements	0.598	0.059	10.091	0.000

Table 3. Results of the variance inflation factor (VIF) of the formative construct - Flexible work arrangements

First order of FWA-s	Variance inflation factor (VIF)	Criterion
FWAs – Family	1.335	< 3.3
FWAs – Job	1.335	Kock and Lynn [34]

the formative construct, we have concluded that both constructs, "FWAs – Family" and "FWAs – Job," exhibit statistically significant relationships with the formative construct of "Flexible work arrangements" (p < 0.05; VIF < 3.3). The subsequent section pertains to the analysis of reflective constructs. To assess the reflective constructs within the model, we examine reflective indicators, evaluate the reliability of internal consistency, analyze convergent validity, and establish discriminant validity.

Hair et al. [35] emphasized that outer loadings falling between 0.40 and 0.708 should be considered for deletion only if removing the indicator would enhance convergent validity or internal consistency beyond the suggested threshold. Indicators with loadings above 0.708 are recommended for retention, signifying that the construct explains more than 50% of the indicator's variance, thereby ensuring the indicator's reliability [33]. Following these criteria, items FWA2R and FWA11 were identified for removal. The subsequent analysis involves calculating Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE) for the measurement model. Detailed results of this analysis can be found in Table 5.

Based on the results presented in Table 5, it is evident that all observed values meet the predefined criteria. Cronbach's Alpha values surpass 0.6, ranging from 0.754 (FWAs - Family) to 0.916 (Realization).

Table 4. Results of outer l	loadings indicator	of reflective construct
-----------------------------	--------------------	-------------------------

Items	FWAs - Family	FWAs - Job	Job satisfaction	Idea Generation	Idea Promotion	Realization
FWA1	0.699					
FWA5	0.750					
FWA6	0.814					
FWA7	0.763					
FWA3R		0.761				
FWA4R		0.556				
FWA8R		0.694				
FWA9R		0.832				
FWA10R		0.828				
JS1			0.749			
JS2			0.712			
JS3			0.874			
JS4			0.725			
JS5			0.824			
IWB1IG				0.883		
IWB2IG				0.913		
IWB3IG				0.919		
IWB4IP					0.852	
IWB5IP					0.803	
IWB6IP					0.830	
IWB7REA						0.913
IWB8REA						0.931
IWB9REA						0.931

Table 5. Assessment of the reliability of the measurement model (internal consistency and convergent validity)

Namo	Cronbach's Alpha		Composite Reliability		Average Variance Extracted (AVE)	
Name	Value	Criterion	Value	Criterion	Value	Criterion
FWAs - Family	0.754		0.843		0.574	
FWAs - Job	0.787		0.857		0.550	
Idea Generation	0.890	> 0.6 Dakduk et al.	0.931	> 0.7	0.819	>0.5 Dash and
Idea Promotion	0.776	[36, p. 7]	0.868	Hair et al. [37]	0.687	Paul [38]
Job satisfaction	0.837	100, p. 11	0.885		0.607	1 441 [00]
Realization	0.916		0.947		0.856	

Composite Reliability values exceed 0.7, ranging from 0.843 (FWAs - Family) to 0.947 (Realization). AVE values are greater than 0.5, ranging from 0.55 (FWAs - Job) to 0.856 (Realization). Consequently, we deduce that the reliability of the measurement model is deemed satisfactory.

The subsequent analysis focuses on discriminant validity, which includes the calculation of cross loadings, examination of the Fornell-Larcker criteria, and Heterotrait-monotrait. As emphasized by Rasoolimanesh [39], cross loadings evaluate the extent to which a measurement model indicator loads on a construct other than the one it was primarily intended to measure. Chin [40] underlined that the external loading of each item on its associated construct should be higher than the item's loading on other constructs. According to the Fornell-Larcker criteria, discriminant validity is met if the root of the AVE on the diagonal is greater than the observed values below for each variable, as outlined by Helkenmeier et al [41]. Hair et al [33] specified that the acceptance threshold for this criterion is 0.9. The following three tables present the results of the discriminant validity analysis.

Based on the findings from the discriminant validity analysis in tables 6, 7, and 8, we can affirm that discriminant validity is indeed established. The following table pertains to the analysis of multicollinearity within the reflective construct.

Table 6. Discriminant validity (Cross loadings)

Item	FWAs - Family	FWAs - Job	Job satisfaction	Idea Generation	Idea Promotion	Realization
FWA1	0.699	0.606	0.142	0.248	0.227	0.213
FWA5	0.750	0.171	0.247	0.376	0.314	0.430
FWA6	0.814	0.230	0.199	0.257	0.200	0.314
FWA7	0.763	0.416	0.202	0.167	0.248	0.208
FWA3R	0.419	0.761	0.026	0.020	0.087	0.077
FWA4R	0.568	0.556	0.355	0.253	0.225	0.162
FWA8R	0.240	0.694	0.131	0.058	0.290	0.133
FWA9R	0.334	0.832	0.150	0.209	0.265	0.238
FWA10R	0.256	0.828	-0.014	0.013	0.088	0.066
JS1	0.188	0.300	0.749	0.479	0.374	0.305
JS2	0.115	0.014	0.712	0.392	0.412	0.270
JS3	0.284	0.182	0.874	0.415	0.336	0.282
JS4	0.185	0.028	0.725	0.398	0.256	0.238
JS5	0.210	0.098	0.824	0.405	0.360	0.281
IWB1IG	0.321	0.204	0.614	0.883	0.631	0.646
IWB2IG	0.262	0.130	0.444	0.913	0.618	0.683
IWB3IG	0.335	0.091	0.420	0.919	0.667	0.830
IWB4IP	0.110	0.067	0.400	0.613	0.852	0.489
IWB5IP	0.336	0.338	0.315	0.399	0.803	0.437
IWB6IP	0.354	0.246	0.389	0.692	0.830	0.818
IWB7REA	0.314	0.280	0.425	0.747	0.760	0.913
IWB8REA	0.362	0.133	0.244	0.690	0.611	0.931
IWB9REA	0.358	0.097	0.311	0.777	0.652	0.931

Table 7. Discriminant validity (Fornell-Larcker)

Name	FWAs - Family	FWAs - Job	Idea Generation	Idea Promotion	Job satisfaction	Realization
FWAs - Family	0.758					
FWAs - Job	0.501	0.741				
Idea Generation	0.339	0.154	0.905			
Idea Promotion	0.324	0.256	0.706	0.829		
Job satisfaction	0.256	0.177	0.540	0.449	0.779	
Realization	0.372	0.186	0.799	0.731	0.356	0.925

International Journal of Industrial Engineering and Management

Name	FWAs - Family	FWAs - Job	Idea Generation	Idea Promotion	Job satisfaction	Realization
FWAs - Family						
FWAs - Job	0.603					
Idea Generation	0.420	0.195				
Idea Promotion	0.420	0.385	0.822			
Job satisfaction	0.339	0.279	0.627	0.547		
Realization	0.463	0.225	0.880	0.828	0.401	

**Table 8.** Discriminant validity (Heterotrait-monotrait - HTMT)

Based on the presented VIF results in table 9, all observed values, with the exception of IWB8REA (3.667) and IWB9REA (3.556), fall below 3.3. Authors [42] stress that VIF values below 5 are considered acceptable. Therefore, we conclude that there is no multicollinearity problem. The subsequent analysis refers to measuring the structural model based on bootstrapping analysis.

Based on the results of the structural model, it has been established that there are positive and statistically significant relationships between flexible work arrangements and job satisfaction ( $\beta = 0.257$ ; T = 2.592; p = 0.010), as well as positive and statistically significant relationships between flexible work arrangements and innovative work behavior ( $\beta = 0.346$ ; T = 3.792; p = 0.000). Furthermore, it was identified that partial mediation is at play, as the indirect effect of flexible work arrangements on innovative work behavior through job satisfaction is statistically significant ( $\beta = 0.111$ ; T = 2.326; p = 0.020). These relationships are visually represented in Figure 2.

The R2 results presented in Table 11 indicate that changes in job satisfaction can be attributed to 6.6%, explained by flexible work arrangements, with

Table 9. Results of the multicollineari	ty of the reflective construct (VIF)
---	--------------------------------------

Itom	VIF	
Item	Value	Criterion
FWA1	1.216	
FWA10R	2.908	
FWA3R	1.573	
FWA4R	1.172	
FWA5	1.957	
FWA6	2.399	
FWA7	1.577	
FWA8R	1.483	
FWA9R	2.686	
IWB1IG	2.284	
IWB2IG	2.868	< 3.3 [34]
IWB3IG	2.834	< 5 Akinwande et al. [42]
IWB4IP	1.922	
IWB5IP	1.798	
IWB6IP	1.392	
IWB7REA	2.758	
IWB8REA	3.667	
IWB9REA	3.556	
JS1	1.580	
JS2	1.510	
JS3	2.548	
JS4	1.949	
JS5	2.203	

#### Table 10. Direct and indirect effects

Relationship		β	St. Dev.	T Statistics	p - values	Hypothesis testing
Direct effect	Flexible Work Arrangements -> Job satisfaction	0.257	0.099	2.592	0.010	✓ H <sub>1</sub>
	Flexible Work Arrangements -> Innovative work behavior	0.346	0.091	3.792	0.000	✓ H <sub>2</sub>
Indirect effect	Flexible Work Arrangements -> Job satisfaction -> Innovative work behavior	0.111	0.048	2.326	0.020	✓ H <sub>3</sub>

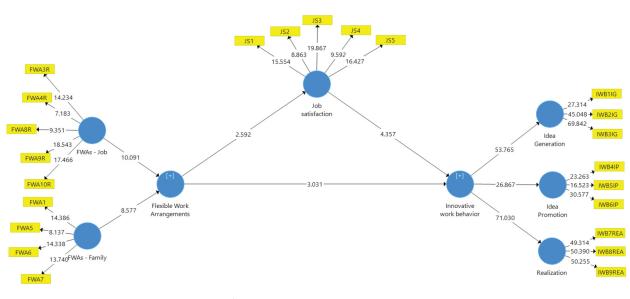


Figure 2. Results of structural model based on the bootstrapping analysis

the remaining 93.4% attributed to unexplored factors. Similarly, changes in innovative work behavior are influenced by 29.3% explained by flexible work arrangements, while the remaining 70.7% are influenced by unexplored factors.

Table 11. Coefficients of determination of the construct

Variable name	R <sup>2</sup>
Job satisfaction	0.066
Innovative work behavior	0.293

Based on the analysis performed using the partial least squares structural equation modeling (PLS-SEM) model, we have confirmed all our hypotheses.

#### 5. Discussion and Conclusions

The research reveals the relationships between the modern way of doing business (work design), flexible work arrangements, job satisfaction and innovative work behavior. The theoretical framework

is built on existing scientific research, while the PLS-SEM method is used in the empirical part. The theoretical implications lie in the increased understanding of the effects of employee job satisfaction on the relationship between flexible work arrangements and innovative work behavior of employees, given that the application of flexible work arrangements has significantly transformed the way of doing business and that job satisfaction plays one of the key roles in shaping work environments that encourage innovative work behavior among employees. This is important to bear in mind if we understand that "innovation has been identified as a consequence of introducing new products, processes, markets, organizational structures and new services" [43, p. 1]. For such a process one of the most important issues is to have satisfied and motivated employees. Organizations that strive to create this kind of environment will often have employees who are highly motivated, creative, and ready to innovate, while innovation, as pointed out, is a key aspect in achieving competitive advantage and social progress that encourages economic growth and quality of life.

Using the PLS-SEM analysis on a sample of 109 highly educated managers in private SMEs organizations in the Republic of Serbia, all three hypotheses were confirmed, which were determined based on a review of the author's previous theoretical and empirical research on the relationships between the mentioned variables. Findings reveal positive direct effects of flexible work arrangements on job satisfaction and innovative work behavior, with job satisfaction serving as a mediator (partial mediator) in the relationship between flexible work arrangements and innovative work behavior. The positive direct effect of flexible work arrangements on job satisfaction is confirmed by previous research [2]-[3], [7], [10], [11], [13], [14], [16], [23]-[25]. The positive effect of flexible work arrangements on innovative work behavior was also confirmed in the previous studies [26], [27]. After reviewing previous theoretical and empirical works on mediation on the role of job satisfaction in the relationship between flexible work arrangements and innovative work behavior, it was determined that there is a lack of research, more precisely, that no one has so far specifically investigated this mediating effect. According to the knowledge that attitudes represent significant predictors of future behavior and that in the research of the authors [28] showed that job satisfaction has a positive effect on innovative work behavior (on all three components: generation, promotion, and realization of ideas), the authors decided to examine the given relationships and determine the effects by testing the third research hypothesis. It was found that job satisfaction positively mediates the relationship between flexible work arrangements and innovative work behavior.

Practical implications refer to the potential of applying flexible work arrangements to increase job satisfaction and, accordingly, innovative work behavior of employees. These results can serve as a starting point when creating an organizational strategy for the implementation of flexible work arrangements that would positively affect work attitudes (job satisfaction) and behavior (innovative work behavior) of highly educated managers in the private sector working in SEMs organization in the Republic of Serbia.

The limitation relates to sample size, and accordingly, as one of the future recommendations, it refers to the inclusion of a larger number of employees in the research, as well as a comparative analysis with employees who have a different level of education, are in other positions such as professional or administrative workers or employed large organizations and those working in the public sector. In addition to the above, additional recommendations refer to the inclusion of additional variables such as work engagement, turnover intention, commitment, worklife balance, stress at work as well as demographic and organizational level in the model as a moderator or mediator that can reveal new results. At the end, inclusion of more diverse variables and sectors in future research is recommendation for new research that could be derived from this one. A larger international sample of SMEs managers and new variables related to innovation would be in focus of new investigations.

# Funding

This work was supported by the Provincial Secretariat for Higher Education and Scientific Research of the Autonomous Province of Vojvodina, Republic of Serbia under the project "Effects of flexible working arrangement on the performance and sustainability of organizations" [project number 000885375 2024 09418 003 000 000 001 04 002].

# References

- N. Berber and A. Slavić, "Flexible Working Arrangements and Employee Turnover in the Central and Eastern Europe," in 11th International Scientific Conference of the Faculty of management of the Cracow University of Economics" Knowledge-Economy-Society" - CFM 2019, Cracow, Poland, 2019, pp. 35-46.
- [2] L.L. Gao, J. Zha, Z.Y. Feng, S.F. Liu, S.S. Wu, Z.Y. Zhu, "Flexible job shop rescheduling scheme selection using improved topsis," Int. J. Sim. Model., vol. 23, no. 3, pp. 507 - 518, 2024, doi: 10.2507/IJSIMM23-3-CO12.
- [3] A. A. Davidescu, S. A. Apostu, A. Paul, and I. Casuneanu, "Work flexibility, job satisfaction, and job performance among Romanian employees – Implications for sustainable human resources management," Sustainability, vol. 12, no. 15, pp. 1-53, 2020, doi: 10.3390/su12156086.
- [4] D. Gašić and N. Berber, "The influence of flexible work arrangement of employee behavior during the COVID-19 pandemic in the Republic of Serbia," Manag. Sustain. Bus. Manag. Solut. Emerg. Econ., vol. 26, no. 3, pp. 73-88, 2021, doi: 10.7595/management.fon.2021.0026.
- [5] M. S. Msuya and A. B. Kumar, "Flexible work arrangements, leave provisions, and employee job performance in banking sector," J. Posit. Sch. Psychol., vol. 6, no. 5, pp. 5596-5612, 2022.
- [6] M. Weideman and K.B. Hofmeyer, "The influence of flexible work arrangements on employee engagement: An exploratory study," J. Hum. Resour., vol. 18, no. 1, pp. 1-18, 2020, doi: 10.4102/sajhrm.v18i0.1209.
- [7] E. Uglanova and J. Dettmers, "Sustained effects of flexible working time arrangements on subjective well-being," J. Happiness Stud., vol. 19, no. 6, pp. 1727-1748, 2017, doi: 10.1007/s10902-017-9894-6.
- [8] Y. Chen and I. S. Flumer, "Fine-tuning what we know about employees experience with flexible work arrangements and their job attitudes," Hum. Resour. Manage., vol. 57, no. 1, pp. 381-395, 2017, doi: 10.1002/hrm.21849.

- [9] M. Aziz-Ur-Rehman and D. A. Siddiqui, "Relationship between flexible working arrangements and job satisfaction mediated by work-life balance: Evidence from public sector universities employees of Pakistan," Int. J. Hum. Resour. Stud., vol. 10, no. 1, pp. 104-127, 2019, doi: 10.5296/ijhrs. v10i1.15875.
- [10] N. Berber, D. Gašić, I. Katić, and J. Borocki, "The Mediating Role od Job Satisfaction in the Relationship between FWAs and Turnover Intentions" Sustainability, vol. 14, no. 8, pp. 4502, 2022, doi: 10.3390/su14084502.
- [11] C. E. Winarti, B. H. J. T. Sitorus, Y. F. Cahaya, and A. P. Erasashanti, "Effect of Flexible Working Arrangement, Work-Life Balance, And Job Satisfaction on Employee Performance in Bureau of Organization and Governance," Int. J. Econ. Stud. Manag., vol. 3, no. 1, pp. 117-126, 2023, doi: 10.5281/zenodo.7590811.
- [12] D. Gašić and N. Berber, "The Mediating Role of Employee Engagement in the Relationship between Flexible Work Arrangements and Turnover Intentions among Highly Educated Employees in the Republic of Serbia," Behav. Sci, vol. 13, no. 2, pp. 131, 2023, doi: 10.3390/bs13020131.
- [13] D. Yulisetiarini, N. Y. Maulana, D. Wulandari, T. Endhiarto, S. Prasetiyaningtiyas, and N. Nurhayati, "The influence of perceived usefulness and perceived ease of use on loyalty in spot online trading applications from sucor sekuritas through customer satisfaction," J. Innov. Bus. Ind., vol. 2, no. 2, pp. 79-84, 2024, doi: 10.61552/JIBI.2024.02.003.
- [14] K. M. Shockley and T. D. Allen, "When flexibility helps: Another look at the availability of flexible work arrangements and work-family conflict," J. Vocat. Behav., vol. 71, no. 3, pp. 479-493, 2007, doi: 10.1016/j.jvb.2007.08.006.
- [15] T. Jevtić and D. Gašić, "The effects of the compensation system on job satisfaction and turnover intentions of employees in the Republic of Serbia," in 28th International Scientific Conference Strategic Management System in Strategic Management, Subotica, Republic Serbia, 2023, pp. 426-435, doi: 10.46541/978-86-7233-416-6\_55.
- [16] M. Margareth and A. Satrya, "Work-Family Conflict as a Mediator Between Organizational Interventions for Work-Life Balance and Job satisfaction," in 4th International Conference on Economics, Business and Economic Education Science, Semarang, Indonesia, 2022, doi: 10.4108/eai.27-7-2021.2316893.
- [17] A. Purwanto, I. Bernarto, M. Asbari, L. M. Wijayanti, and C. C. Hyun, "The impact of leadership and culture on work performance in service company and innovative work behavior as mediating effects," J. Res. Bus. Econ. Educ., vol. 2, no. 1, pp. 283-291, 2020.
- [18] M. A. Khan, F. B. Ismail, A. Hussain, and B. Alghayali, "The interplay of leadership styles, innovative work behavior, organizational culture, and organizational citizenship behavior," SAGE Open, vol. 10, no. 1, pp. 1-16, 2020, doi: 10.1177/2158244019898264.
- [19] A. C. Bos-Nehles and A. A. Veeneddaal, "Perceptions of HR practices an innovative work behavior: the moderating effects of innovative climate," Int. J. Hum. Resour. Manag., vol. 30, no. 18, pp. 2661-2683, 2019, doi: 10.1080/09585192.2017.1380680.
- [20] M. Yasir and A. Majid, "High-involvement HRM practices and innovative work behavior among production-line workers: mediating role of employees functional flexibility," Empl. Relat., vol. 42, no. 4, pp. 883-902, 2020, doi: 10.1108/ ER-02-2018-0061.
- [21] A. Abstein, S. Heidenreich, and P. Spieth, "Innovative work behavior: The impact of comprehensive HR system perceptions and the role of work-life conflict," Ind. Innov., vol. 21, no. 2, pp. 91-116, 2014, doi: 10.1080/13662716.2014.896159.

- [22] A. Alheet, A. Adwan, A. Areiqat, A. Zamil, and M. Saleh, "The effect of styles on employees innovative work behavior," Manag. Sci. Lett., vol. 11, no. 1, pp. 239-246, 2021, doi: 10.5267/j.msl.2020.8.010.
- [23] D. Wheatly, "Employee satisfaction and use of flexible working arrangements," Work Employ. Soc., vol. 31, no. 4, pp. 567-585, 2017, doi: 10.1177/0950017016631447.
- [24] C. Kröll, P. Doebler, and S. Nüesch, "Meta-analytic evidence of the effectiveness of stress management at work," Eur. J. Work. Organ. Psychol., vol. 26, no. 5, pp. 677-693, 2017, doi: 10.1080/1359432X.2017.1347157.
- [25] S. A. Abdullah, S. A. Suhaimi, U. S. Zakaria, A. A. Razudin, A. Adnan, and N. S. F. Ramli, "Flexible working Arrangements, Job Desing and Job Satisfaction Among Manufacturing Employees," in 9th International Economics and Business Management Conference, Melaka, Malaysia, 2020, doi: 10.15405/epsbs.2020.12.05.81.
- [26] F. Moll and J. Leede, "Foresting innovation: The influence of New Ways of Working on Innovative Work Behavior," New Ways of Working Practices, pp. 95-143, 2016 doi: 10.1108/S1877-636120160000016006.
- [27] M. F. W. Rahman, A. Kistyanto, and J. Surjanti, "Flexible work arrangements in COVID-19 pandemic era, influence employee performance: The mediating role of innovative work behavior," Int. J. Manag. Innov. Entrep. Res., vol. 6, no. 2, pp. 10-22, 2020, doi: 10.18510/ijmier.2020.622.
- [28] M. Mustafa, A. Coetzer, H. M. Ramos, and J. Fuhrer, "Exploring the effects of small-and medium-sized enterprise employees' job satisfaction on their innovative work behaviours: the moderating effects of personality", J. Organ. Eff., vol. 8, no. 2, pp. 228-250, 2021, doi: 10.1108/ JOEPP-07-2020-0133.
- [29] M. J. Albion, "A measure of attitudes towards flexible work options," Aust. J. Manag., vol. 29, no. 2, pp. 275-294, 2004, doi: 10.1177/031289620402900207.
- [30] F. P. Morgeson and S.E. Humphrey, "The Work Desing Questionnaire (WDQ): developing and validating a comprehensive measure for assessing job design and the nature of work," J. Appl. Psychol., vol. 91, no. 6, pp. 1321-1339, 2006, doi: 10.1037/0021-9010.91.6.1321.
- [31] O. Janssen, "Job demands, perception of effort-reward fairness and innovative work behaviour," Occup. Organ. Psychol., vol. 73, no. 3, pp. 287-303, 2000, doi: 10.1348/096317900167038.
- [32] D. Bertram, "Likert scales," Retrieved November, vol. 2, no. 10, pp. 1-10, 2007.
- [33] J. F. Hair Jr., G. T. M. Hult, C. M. Ringle, M. Sarstedt, N. P. Danks, and S. Ray, Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A workbook. Springer Nature, 2021, doi: 10.1007/978-3-030-80519-7.
- [34] N. Kock and G. Lynn, "Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations," J. Assoc. Inf. Syst., vol. 13, no. 7, pp. 546-580, 2012, doi: 10.17705/1jais.00302.
- [35] J. F. Hair Jr, M. Sarstedt, L. Hopkins, and V. G. Kuppelwieser, "Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research," Eur. Bus. Rev., vol. 26, no. 2, pp. 106-121, 2014, doi: 10.1108/EBR-10-2013-0128.
- [36] S. Dakduk, A. González, and A. Portalanza, Learn about structural equation modeling in smartPLS with data from the customer behavior in electronic commerce study in Ecuador. SAGE Publications, Limited, 2019.
- [37] J. Hair, C. L. Hollingsworth, A. B. Randolph, and A. Y. L. Chong, "An updated and expanded assessment of PLS-SEM in information systems research", Ind. Manag. Data Syst., vol. 117, no. 3, pp. 442-458, 2017, doi: 10.1108/ IMDS-04-2016-0130.

- [38] G. Dash and J. Paul, "CB-SEM vs PLS-SEM methods for research in social sciences and technology forecasting," Techn. Forec. Soc. Change, vol. 173, p. 121092, 2021, doi: 10.1016/j.techfore.2021.121092.
- [39] S. M. Rasoolimanesh, "Discriminant validity assessment in PLS-SEM: A comprehensive composite-based approach," Data Anal. Perspect. J., vol. 3, no. 2, pp. 1-8, 2022.
- [40] W. W. Chin, "The partial least squares approach to structural equation modeling," in Modern methods for business research, G A. Marcoulides, Ed. New York, NY, USA: Psychology Press, 1998, pp. 295-336.
- [41] F. Hilkenmeier, C. Bohndick, T. Bohndick, and J. Hilkenmeier, "Assessing distinctiveness in multidimensional instruments without access to raw data-a manifest Fornell-Larcker criterion," Front. Psychol., vol. 11, pp. 1-9, 2020, doi: 10.3389/fpsyg.2020.00223.
- [42] M. O. Akinwande, H. G. Dikko, and A. Samson, "Variance inflation factor: as a condition for the inclusion of suppressor variable (s) in regression analysis," Open J. Stat., vol. 5, no.7, pp.754-767, 2015, doi: 10.4236/ojs.2015.57075.
- [43] N. Rosa, F. Villena, and E. González, "Process and Product Innovation in the Spanish Construction Industry: The Mediating Role of Organizational Innovation," Int. J. Ind. Eng. Manag., vol. 14, no. 1, pp. 1–12, 2023, doi: 10.24867/ IJIEM-2023-1-320.