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Influence of Psychological and Social Factors on Work Engagement and Well-being in Organizational Context

Digitalization and Social Support in Organizational Context: First Empirical Results



METHODOLOGY

Participants: **432 participants**, working in private and public organizations in Bulgaria

Procedure: an anonymous online survey

Measures:

- **Perceived Benefits of Digitalization at Work** – a new, author scale; an 8-item scale.
- **Utrecht Work Engagement Scale (UWES-9)** – a shortened version; a 9-item scale (Schaufeli, W. B. et al., 2006).
- **World Health Organization Well-Being Index (WHO-5)** – version 1999; a 5-item scale (Topp, C. W. et al., 2015; Staehr, J. K., 1998).
- **Proactive Behaviour Scale** – a shortened version; a 7-item scale (Frese, M. et al., 1997; Beltrán-Martín, I. et al., 2017).
- **Work-Life Balance Scale** – a 4-item scale (Brough, P. et al., 2014).
- **Social Support Scale** – a 4-item scale + 3 additional relevant items (Caplan, R. D. et al., 1975) etc.

Statistical Techniques: Data was processed with SPSS Statistics 25. Reliability Analysis, various types of T-Test comparisons, Mean Differences with Eta Coefficient and One-Way ANOVA analyses, correlation and regression analyses were performed.

RESULTS

PERCEIVED BENEFITS OF DIGITALIZATION AT WORK SCALE

The Reliability Analysis – an excellent internal consistency of the methodology ($\alpha=.911$)

The Factor Analysis – a one-factor structure of the instrument, with all items loading on a single factor that explains 72% of the variance.

In response to the question, **“Has digitalization been introduced into your work over the past two years?”**, **82.3% of the 413 participants answered affirmatively**. The types of digitalization introduced are illustrated in Fig. 1.

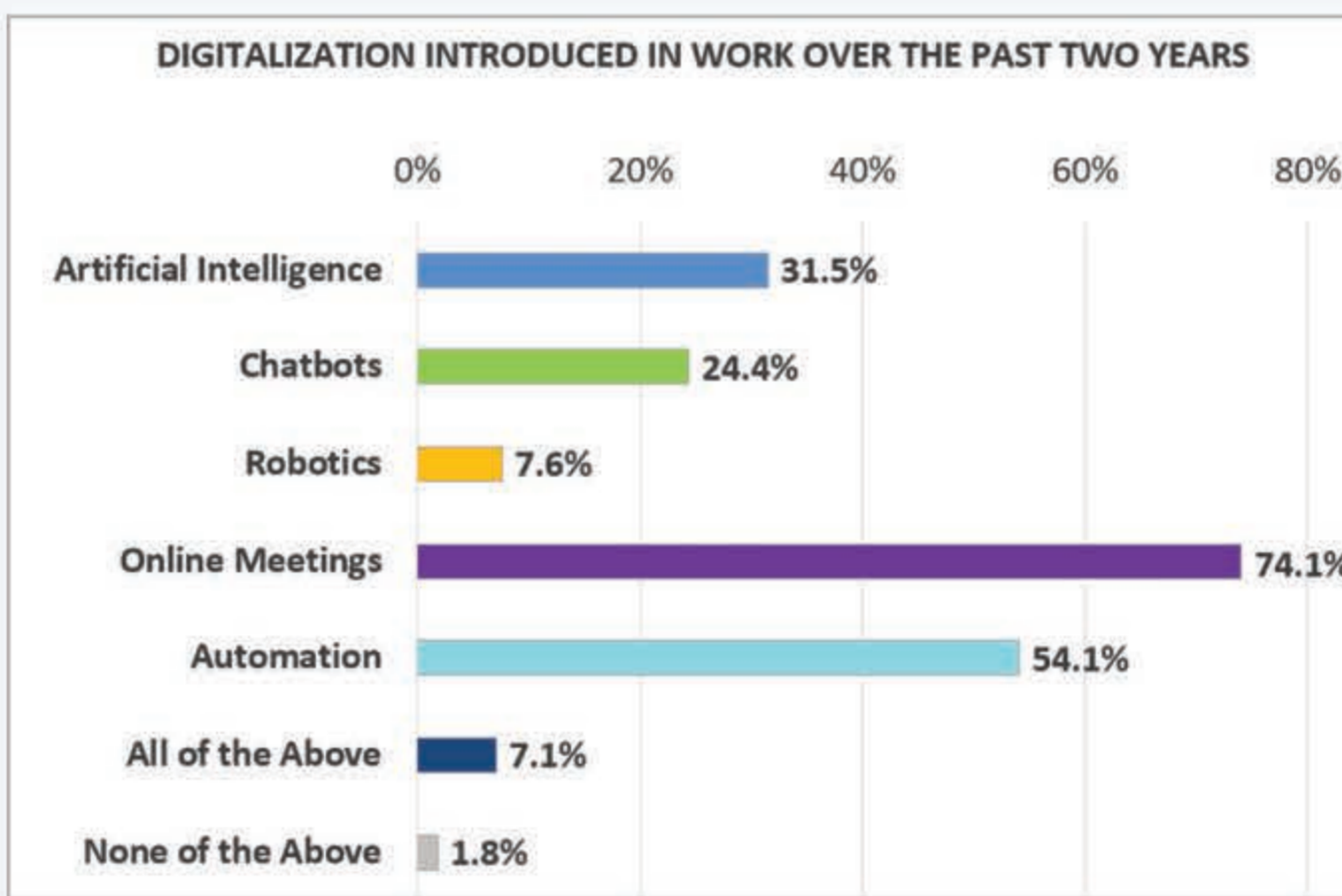


Figure 1. Types of digitalization introduced into work over the past two years

Over 80% of participants reported that some form of digitalization had been introduced into their work during the past two years:

- this exceptionally high proportion clearly indicates that digital transformation is no longer an isolated phenomenon, but a widespread organizational process in the Bulgarian context;
- digitalization has become a structural characteristic of contemporary work;
- from a psychological perspective, the high proportion of employees who experienced digital change suggests that working people have been placed in situations requiring adaptation, learning, and changes in established habits.

Online meetings were introduced for 74.1% of respondents:

- this is the most widespread change in workplace communication;
- this shift may affect emotional closeness and social exchange;
- although online meetings are convenient and sometimes more efficient, they often involve lower emotional intensity and, when prolonged, may be more tiring and make emotional connection more difficult.

Automation was introduced for more than half of the participants (54.1%):

- it implies changes in the content of work itself;
- psychologically, this may be experienced in two ways: as relief from routine and demanding tasks, but also as a threat to job security, especially in activities that have previously been a source of competence and recognition.

The comparatively lower rates of adoption of artificial intelligence (31.5%) and chatbots (24.4%) indicate the gradual introduction of more complex and intelligent technologies, which have the potential to change not only work processes, but also the role of employees within the work context.

Images: AI-generated illustrative images by ChatGPT

CAPLAN ET AL. SOCIAL SUPPORT SCALE

The Reliability Analysis – a very good internal consistency of the methodology ($\alpha=.836$)

The Factor Analysis – confirmed the three-factor structure of the original scale, explaining 68.5% of the total variance:

- Factor “Social Support from Direct Supervisor”;
- Factor “Social Support from Colleagues”
- Factor “Social Support from Family and Friends”

The study results indicate that participants perceive the **highest level of support coming from their family and friends** (mean 3.52), followed by colleagues (3.19), and direct supervisor (3.17) – a level of support between “somewhat” (3) and “a lot” (4). Data is presented on Fig. 2.

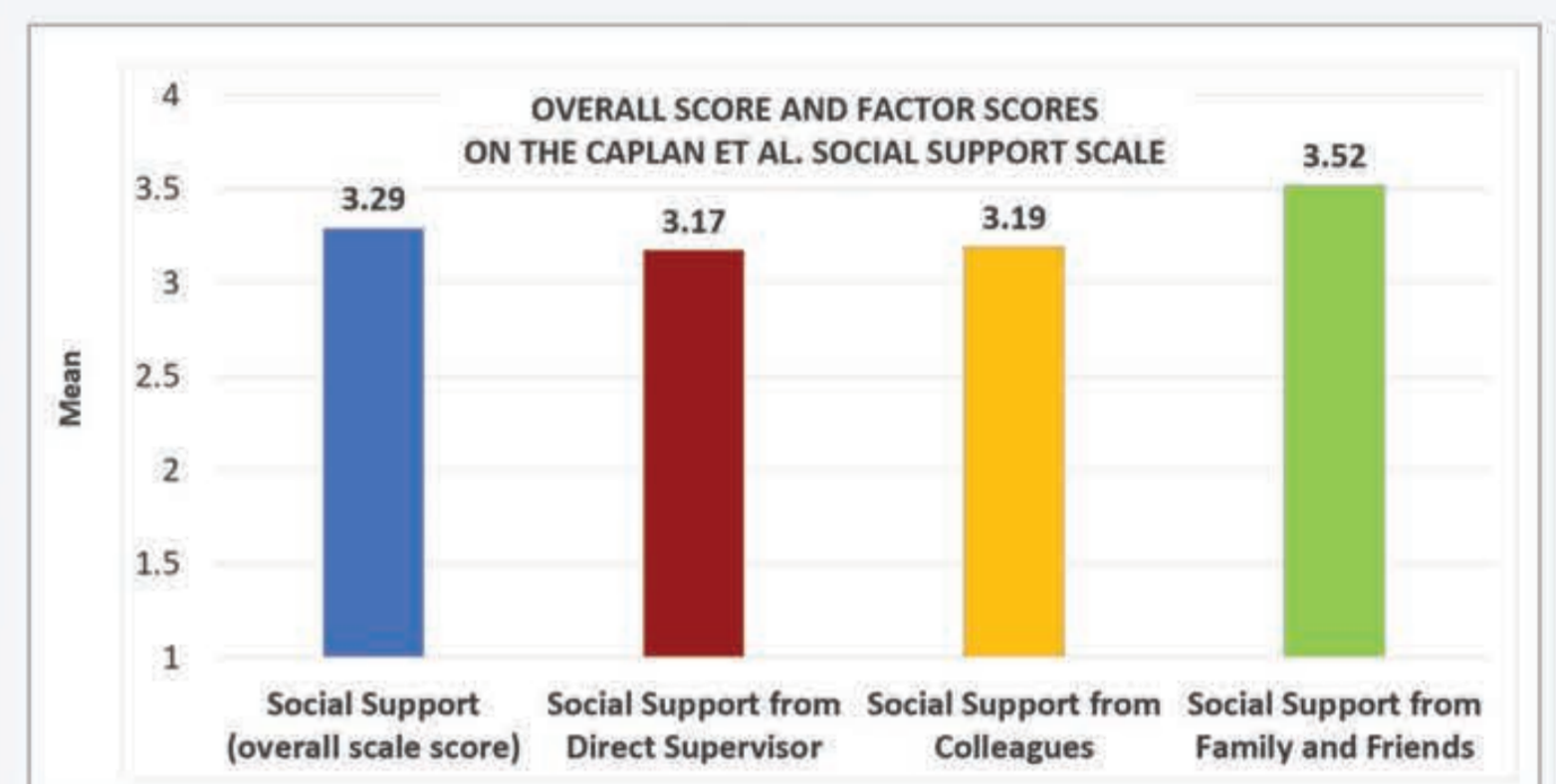


Figure 2. Differences between the overall score and the factor scores on the Caplan et al. Social Support Scale

CONCLUSION

Digitalization is **one of the most significant phenomena** in the contemporary economy and social reality. It transforms not only business models and organizational structures, but also the very content of work and the psychological experiences of employees. With the growing adoption of artificial intelligence, automation, digital networks, and related technologies, work is acquiring new dimensions – from optimization and increased productivity to the emergence of specific challenges and risks. Research on work and well-being shows that digitalization promises higher productivity and satisfaction, but may also lead to technostress and reduced well-being, especially in the absence of support, training, and appropriate organizational design.

Given the new challenges associated with digitalization, particularly the rapid expansion of artificial intelligence, **human support and the development of relationships based on trust and mutual assistance will be of key importance for employee engagement and retention**. The findings of the present study are optimistic and show that Bulgarian participants perceived the highest level of support from their families and friends, followed by colleagues and direct supervisors. Perceived social support, both from family and friends and within the work environment, showed relatively high levels among the Bulgarian participants, allowing for **positive conclusions**.

The scales used in the present study, exploring perceived benefits of digitalization at work and social support from different sources demonstrated **good psychometric properties** and can be used for research purposes.



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INTRODUCTION

The project was implemented over a 24-month period. Its primary objective was to achieve at least one **Web of Science** publication within the first 12 months, followed by the preparation of **additional publications in English and Bulgarian** during the second phase of the project.

The project plan comprised the following stages:

- Preparation of the theoretical framework
- Preparation of the empirical study
- Development of new scales and interview materials
- Design of the online questionnaire
- Implementation of the quantitative study
- Data collection and analysis
- Preparation of scientific articles
- Publication activity in Web of Science and other academic outlets

PROJECT GUIDELINES

The project „Influence of Psychological and Social factors on Work Engagement“ aimed to examine the **influence of various factors on work engagement and well-being in the organizational context**. Also to explore **digitalization** in organizational context and the attitudes towards it.

Another objective was to explore **respondents' current work-life balance** in the post-COVID-19 period.

The study also focused on **different forms of work – remote, hybrid, and on-site** – and their impact on engagement, self-reported job performance, and well-being.

In addition, **different sources of social support** were examined, including supervisors, colleagues, and family/friends.

A further focus of the project was a relatively underexplored topic: **the impact of artificial intelligence and digitalization in the workplace**.

Both the positive and negative perceptions of digitalization were investigated.



Project publications

1. Naydenova, V. G., Nedeva-Atanasova, V. G., Haralampiev, K. V., & Getova, A. (2024). Engagement and work-life balance in organizational context. *Philosophy/Filosofiya*, 33(3), 331-346. ISSN 0861-6302 (Print) ISSN 1314-8559 (Online) <https://doi.org/10.53656/phil2024-03-09>
2. Naydenova, V., & Nedeva-Atanasova, V. (2025). Remote, hybrid and on-site work in organizations in Bulgaria: Interactions and influence on well-being, work engagement and work-life balance. *Anthropological Researches and Studies*, 15, 297-321. <https://doi.org/10.26758/15.1.20>
3. Naydenova, V., Nedeva-Atanasova, V., & Haralampiev, K. (2025). Age Dynamics of Work Engagement: A Foundation for Developing a Training Programme within the Framework of Career Counselling. *Psychological Thought South-West University "Neofit Rilski"*, 18(1), 326-358 <https://doi.org/10.37708/psyc.v18i1.1107>
4. Николай, Н., Недева-Атанасова, В., Найденова, В., & Харалампиев, К. (2025). Социална подкрепа – изследване в организационен контекст със скалата на Каплан. *Българско списание по психология*. том 53, брой 1 – 4, 84-115. ISSN 0861-7813 http://psychology-bg.org/wp-content/uploads/BJP_2025.pdf