Interreg CENTRAL EUROPE

Co-funded by the European Union

BURNOUT PREVENT

D.2.1.3 – TRANSNATIONAL TESTING REPORT OF DIGITAL DETOX ACTIVITIES

Version 1

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CONTENT

1. INTRODUCTION

1.1. About the Project

The BURNOUT PREVENT project addresses the increasing incidence of anxiety, burnout, and depression among employees in small and medium-sized enterprises (SMEs). The initiative adopts a comprehensive perspective on burnout, recognising that its origins and impacts span three interconnected areas: the corporate environment, personal free time, and digital stress.

Anxiety and depression have become leading psychological difficulties in the workplace, contributing to more than 20% of all employees sick leaves. These challenges substantially reduce productivity, limit innovation, and collectively generate economic losses estimated at €202 billion each year in Central Europe. Businesses operating within smart specialisation domains face heightened risks, as they must continually respond to fast-changing and highly competitive global environments.

In response, the project supports SMEs in developing a robust framework for burnout prevention and resilience. It particularly focuses on three smart specialisation areas — Industry 4.0, Smart Health, and Sustainable Food — where demands for innovation and adaptability are especially high. By equipping both managers and employees with evidence-based knowledge, practical tools, tailored trainings and workshops, BURNOUT PREVENT aims to foster long-term well-being, strengthen organisational functioning, and enhance creativity and productivity.

1.2 Purpose of Deliverable

Deliverable *"D.2.1.3 – Transnational testing report of digital detox activities"* is part of Work Package 2, *"Enhancing burnout preventive skills for S3 employees outside working time"*. It belongs to activity *"A.2.1 – Development and testing of "digital detox" activities for prevention of burnout syndrome in workers from S3 sectors outside of their working time."*

The deliverable includes testing reports of 7 focus groups composed of S3 employees who tested selected digital detox actions over a 3-month period. In each country ca. 40 participants (all together 7x40 = 280) were expected to take part in the testing of the activities. The goal of digital detox is to reduce burnout with the aim of achieving at least a 25% reduction in stress as measured by the Burnout Self-Assessment (BS-A) tool. Transnational lessons learned from the testing phase are described as well as report on the efficiency (burnout change) made by the testing phase.

1.3 Relation to Other Project Activities and Deliverables

Deliverable *"D.2.1.3 – Transnational testing report of digital detox activities"* is directly linked to the activities and outputs developed within Work Package 2, specifically activity *"A.2.1 – Development and testing of digital detox activities for prevention of burnout syndrome in workers from S3 sectors outside of their working time."*

Within A.2.1, this deliverable follows *"D.2.1.1 – Catalogue of digital detox activities"*, which provides an overview of digital detox activities available to employees outside working hours and serves as a basis for selecting 2–3 activities for testing within focus groups. Deliverable D.2.1.3 also complements *"D.2.1.2 – Do's and Don'ts check lists for burnout syndrome prevention"*, which summarises stories of people who have successfully overcome burnout syndrome and the lessons they learned throughout the process.

Furthermore, D.2.1.3 will contribute to activity *"A.2.2 - Development of personal guide for reduction of digital stress"*, in particular to *"D.2.2.1 - Personal guide for reduction of digital stress"*, to provide preventive and curative guidance for workers in S3 sectors.

In addition, D.2.1.3 builds on deliverable developed within Work Package 1, specifically "*D.1.1.1 - Burnout self-assessment tool for employees (B-SA tool)*" under activity "*A.1.1 - Assessment of burnout syndrome*", which served as the primary instrument for measuring burnout levels in the testing phase.

Finally, this deliverable is directly linked to output "O.2.1 - *Transnational testing of digital detox activities*".

1.4 Contribution of the Project Partners

The preparation of *"D.2.1.3 - Transnational testing report of digital detox activities"* was led by work package leader PP3 UNIBA. UNIBA was supported throughout the process by the knowledge expert partners: PP2 NIOM, PP11 NNGYK, and PP12 HZJZ. Their contribution consisted primarily of reviewing the proposed methodology and providing expert feedback based on their specialised knowledge.

The testing partners: PP4 SBA, PP5 BCCI, PP6 CCIAA Padova, PP7 CCIS-CAFE, PP8 HGK, PP9 ARMSA, and PP10 bwcon GmbH, were responsible for conducting the testing of the digital detox intervention. Specifically, each partner recruited ca. 40 participants in their respective country and facilitated the implementation of the digital detox activities. PP3 UNIBA was responsible for designing the overall methodology, provided detailed instructions and guidelines to ensure consistency across all participating countries and offered continuous support in addressing implementation-related challenges throughout the testing phase.

The lead partner PP1 E-zavod provided overall coordination and administrative guidance throughout the preparation of this deliverable.

2. METHODOLOGY

2.1. Objective

The primary objective of this deliverable was to evaluate the effectiveness of selected digital detox activities in reducing burnout levels among employees working in S3 sectors. Specifically, the intervention aimed to achieve at least a 25% reduction in stress, as measured by the BS-A tool (see *D.1.1.1, Burnout self-assessment tool for employees*). In addition to assessing overall effectiveness, a further objective was to compare outcomes across countries and generate transnational insights to inform the development of a structured digital detox solution.

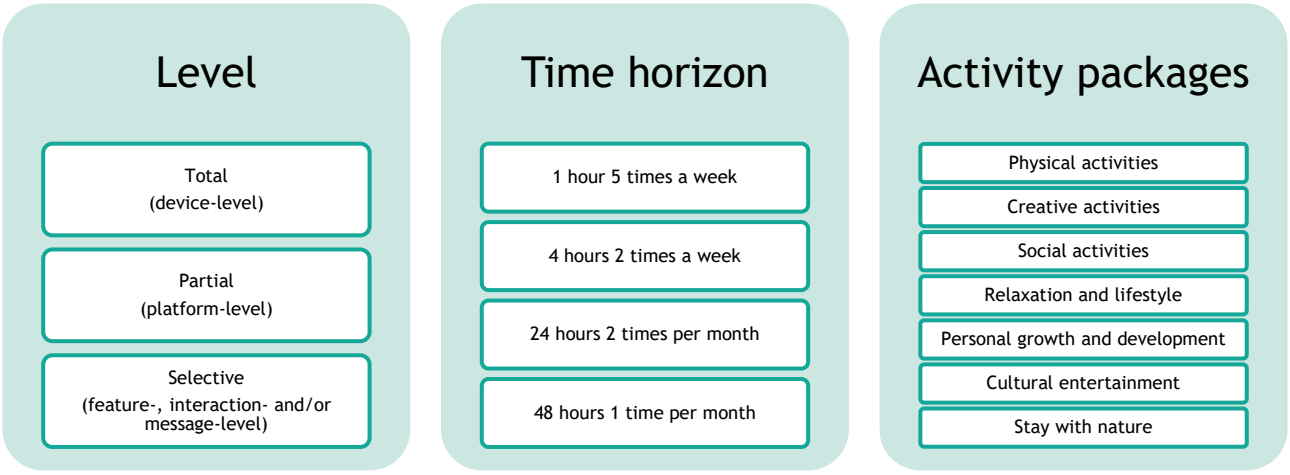
2.2. Design

A 3-month (12-week) experimental intervention was implemented across seven participating countries (Croatia, Germany, Hungary, Italy, Poland, Slovakia, and Slovenia), involving project partners PP4 to PP10. The planned sample size was at least 40 participants per country, with a total expected sample of approximately 270 participants.

The testing followed a focus group-based design, where participants were organized into national groups and engaged in testing at least two digital detox activities outside of their working time. Rather than assigning a fixed intervention, participants were given autonomy to select their detox strategies based on a provided tutorial (see *D.2.1.1, Catalogue of digital detox activities*). This included decisions regarding:

- **Digital detox level** (determines what participants must detox from; the severity of the detox),
- **Time horizon** (duration and frequency of the detox),
- **Activity packages** (alternative activities undertaken during detox).

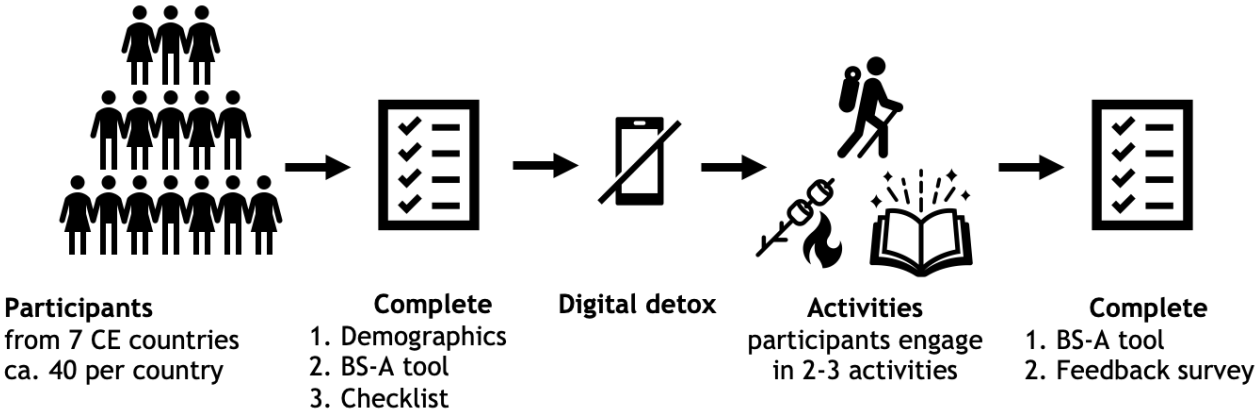
Figure 1. Overview of the proposed digital detox program. The program could be made up of different digital detox levels (1 out of 3), time horizons (1 out of 4) and activity packages (2-3 out of 7).



Stress levels were measured using the BS-A tool at two time points: before the intervention (pretest) and after the 3-month period (posttest). This allowed for the assessment of changes in burnout levels over time. In addition, participants completed checklists documenting their chosen detox strategies and feedback questionnaires capturing their subjective evaluation of effectiveness. To sum up, the following types of data were collected:

- **Demographic data** (e.g., age, gender, employment characteristics)
- **Pretest BS-A scores** (baseline burnout levels)
- **Post-test BS-A scores** (burnout after detox)
- **Checklist data** (selected detox strategies: level, time horizon, activities)
- **Feedback data** (subjective evaluation of effectiveness)

Figure 2. Illustrative overview of the study procedure.



2.3. Implementation Plan

The implementation was guided by a structured document entitled the **Implementation Plan,** which was provided to all testing partners to ensure a consistent procedure across participating countries.

The process began with a **recruitment phase,** during which each partner recruited approximately 40 participants from S3 sectors, who were open to participating. Efforts were made to ensure a representative sample, with an approximately equal distribution of participants across gender, age, and other sociodemographic characteristics. Recruitment activities primarily included email campaigns, personal outreach, social media promotion, websites or landing pages, and dissemination during events. Communication materials used during recruitment included emails, social media posts, videocampaigns shared online, as well as personal contacts and professional networks.

Following recruitment, an **introductory meeting** was organized with each focus group. During this meeting, participants were informed about the purpose, structure, and expectations of the digital detox intervention. At the same time, they completed the initial data collection, including *demographic questions* and the *BS-A tool (pretest)*. In addition, a selection process took place, during which participants chose their preferred detox level, time horizon, and activities by completing a *checklist*.

The intervention phase itself lasted 3 months and was accompanied by a **monitoring phase.** During this period, regular communication was maintained between partners and participants in order to ensure adherence to the protocol and sustain motivation. Participants also had the option to voluntarily document their experiences through personal diaries.

At the end of the intervention, a **closing event** was organized in each country. During this session, participants met again to reflect on their experiences with the digital detox, discussing its perceived benefits and challenges. They also completed the *posttest measurement using the BS-A tool* and were invited to fill in a *feedback survey,* which was optional. This final phase allowed for both quantitative and qualitative evaluation of the intervention outcomes.

2.4. Data Analysis Strategy

The data analysis was structured to systematically evaluate the effectiveness of the digital detox intervention. All analyses were conducted both for the total sample and separately for each country.

First, **demographic variables** were analysed using frequency distributions, reported as absolute counts and percentages. These were summarised in tables to provide a clear overview of the sample structure.

Second, **burnout reduction** (measured by the BS-A tool) was analysed using a combination of descriptive and inferential approaches. The primary indicator was the percentage decrease in burnout, calculated by comparing pretest and post-test scores. Importantly, because the BSA scale does not start at zero (minimum score = 18), the calculation was adjusted to account for this baseline. Specifically, the minimum value was subtracted from both pretest and post-test mean scores before computing the relative change. For example, in the total sample, the pretest mean of 45.70 corresponds to an adjusted value of 27.70 (45.70 – 18), while the post-test mean of 40.52 corresponds to 22.52 (40.52 – 18). This results in an 18.72% reduction in burnout, providing a more accurate estimate of change relative to the scale range.

> To assess the **statistical significance** of this change, Repeated Measures ANOVA (RM ANOVA) was used to test differences between pretest and post-test scores over time, including the possibility to account for additional factors such as country. In this context, the F-value represents the ratio of explained variance (due to the intervention over time) to unexplained variance, with higher values indicating stronger effects. The p-value indicates whether the observed change is statistically significant, with values below 0.05 considered statistically significant, meaning the change is unlikely to be due to chance. Additionally, partial eta squared ($\eta^2 p$) was reported as a measure of

effect size, indicating the proportion of variance in burnout scores explained by the intervention; values of approximately 0.01 are considered small, 0.06 medium, and 0.14 large effects. The results were further visualised using graphs, allowing for intuitive interpretation of burnout changes.

Another indicator of change was the mean difference between pretest and post-test BS-A scores (**mean change**). This was visualised using boxplots, which display the distribution of individual changes in burnout levels, including the average decrease, variability, and potential outliers.

Furthermore, participants' **perceived effectiveness** of the detox intervention was analysed and presented graphically, providing additional insight into subjective evaluations of the program. Perceived effectiveness was measured on a 5-point scale, where 1 indicated the lowest perceived effectiveness and 5 indicated the highest perceived effectiveness.

Third, **detox program preferences** were analysed descriptively based on checklist data. This included the frequency of selected detox levels, time horizons, and activity packages. These results were primarily presented using graphical outputs to highlight dominant patterns and participant choices.

As part of the data analysis, the **internal consistency of the BS-A tool** was evaluated for both pretest and post-test measurements. Internal consistency refers to the extent to which individual items within a scale measure the same underlying construct. It is commonly assessed using reliability coefficients such as Cronbach's alpha (α) and McDonald's omega (ω). Cronbach's alpha provides an estimate of the average inter-item correlation, assuming equal factor loadings across items. McDonald's omega does not rely on this assumption. In general, values above 0.70 indicate acceptable reliability, values above 0.80 good reliability, and values above 0.90 excellent internal consistency.

3. RESULTS

3.1. Overview of Available Data

All testing was completed by April 7, 2026, when the data was also exported. The final dataset consisted of 358 pretest measurements, 182 post-test measurements, 228 checklists, and 143 feedback questionnaires.

First, the ID codes were matched, and datasets cleaned. Only data from participants whose ID codes could be matched and who completed both the pretest and the post-test were retained. As a result, a total of 143 participants provided complete pretest and post-test data and were therefore included in the analyses of burnout reduction and demographic characteristics. Furthermore, 122 participants completed the checklists (in addition to pretest and post-test) and were included in the analysis of detox preferences. See Table 1.

Table 1. Overview of available data (as of April 7, 2026).

Country	Pretests	Posttests	Checklists	Feedback surveys	Analyzable Pretests + Posttests	Analyzable Pretests + Posttests + Checklists
Croatia	46	25	41	25	18	18
Germany	50	28	9	7	20	6
Hungary	42	18	32	14	17	17
Italy	83	15	29	0	13	11
Poland	42	27	42	28	22	22
Slovakia	56	43	47	37	32	32
Slovenia	39	26	28	32	21	16
TOTAL	**358**	**182**	**228**	**143**	**143**	**122**

Internal Consistency of the BS-A Tool

The analysis showed that the BS-A tool demonstrated excellent internal consistency at both measurement points. For the pretest, Cronbach's alpha reached α = 0.914, while McDonald's omega was ω = 0.915. For the post-test, Cronbach's alpha increased slightly to α = 0.929, and McDonald's omega reached ω = 0.931. These results indicate that the scale items were highly consistent in measuring burnout across both time points, suggesting that the BS-A tool provides reliable and stable measurement within this sample.

3.2. Results for the Total Sample

3.2.1. Demographics

The sample was composed of employees working in S3 sectors across the participating countries. Participants ranged in age from 24 to 73 years, with a mean age of 41.30 years (SD = 10.27), indicating a predominantly mid-career population. Detailed demographic characteristics of the sample, including gender distribution, employment background, education, and work-related variables, are presented in Table 2.

Table 2. Demographic characteristics of the total sample.

Variable	Category	N	%
Gender	Female	106	74.13
	Male	37	25.87
Total number of years in employment	6 months-1 year	3	2.10
	1-2 years	4	2.80
	3-5 years	11	7.69
	6-10 years	25	17.48
	>10 years	100	69.93
Years in current employment	6 months-1 year	19	13.29
	1-2 years	24	16.78
	3-5 years	33	23.08
	6-10 years	32	22.38
	>10 years	35	24.47
Employment type	Permanent	108	75.52
	Fixed-term	10	6.99
	Contract	6	4.20
	Self-employed	19	13.29
Education	Bachelor	26	18.19
	High school	23	16.08
	Master+	84	58.74
	Vocational	10	6.99

Work mode	**Hybrid**	58	40.56
	Office	77	53.85
	Remote	8	5.59
Type of work	**Mental**	109	76.22
	Mostly mental	32	22.38
	Mostly physical	1	0.7
	Physical	1	0.7
Position	**Managerial**	62	43.36
	Non-managerial	81	56.64
Company size	**1-50**	62	43.36
	51-100	28	19.58
	101-250	53	37.06

3.2.2. Efficacy on Burnout Reduction

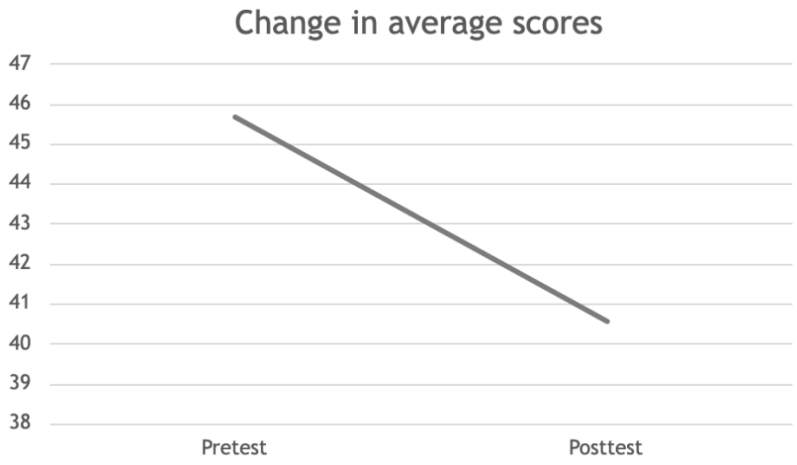
Percentage decrease

The average pretest BS-A score was 45.69, while the average post-test score decreased to 40.59, representing an 18.72% reduction in burnout. Although this indicates a meaningful decrease, it did not reach the predefined target of 25%. See Graph 1.

Statistical significance

The results of the RM ANOVA showed a statistically significant effect of time, $F(1,136) = 61.10$, $p < .001$, with a partial eta squared of 0.31, indicating a substantial effect size. This means that the observed differences between pretest and post-test scores are unlikely to be due to random variation and can be attributed to the effect of the digital detox intervention. The interaction between time and country was not significant, $F(6,136) = 0.45$, $p = 0.84$, suggesting that the reduction trend was relatively consistent across countries.

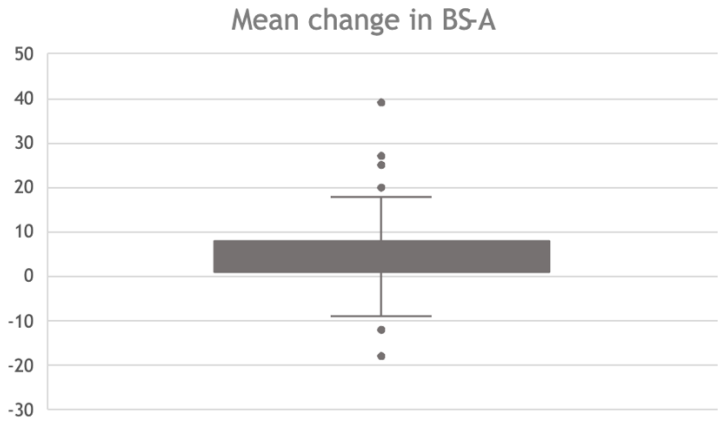
Graph 1. Mean burnout scores (BS-A) at pretest and post-test (total sample).



Mean change in BSA

The mean change in BS-A score was 5.12, indicating that, on average, participants experienced a decrease of approximately five points on the burnout scale between pretest and post-test, reflecting a moderate improvement in burnout levels. For a visual representation of the distribution of these changes, see Graph 2.

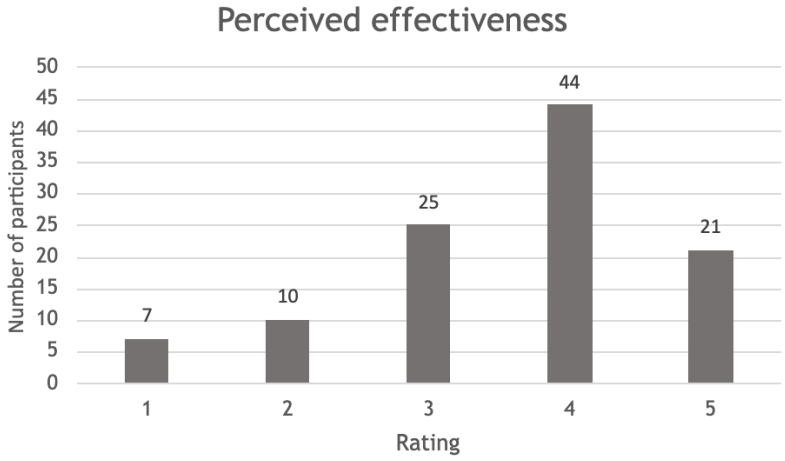
Graph 2. Mean change in BS-A (total sample).



Perceived effectiveness

The average perceived effectiveness of the detox program was 3.58, suggesting a moderately positive subjective evaluation of the intervention. For a distribution of ratings, see Graph 3.

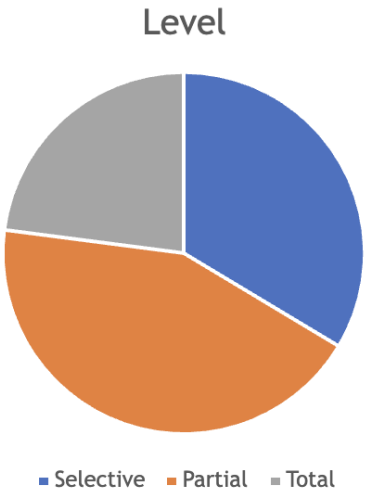
Graph 3. Perceived effectiveness (total sample).



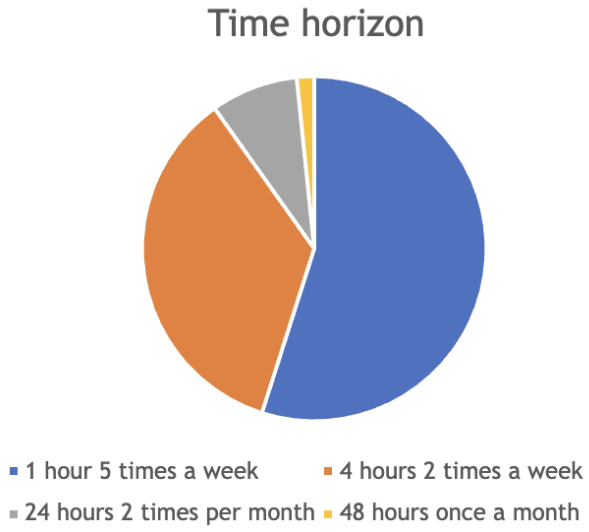
3.2.3. Detox Preferences

In terms of detox preferences, the most frequently selected detox level was *partial* (53 participants), followed by *selective* (41 participants), and finally *total* detox (28 participants). Regarding the time horizons, most people chose *1 hour 5 times a week* (67 participants), followed by *4 hours 2 times a week* (43 participants), *24 hours 2 times a month* (10 participants), and finally *48 hours once a month* (2 participants). Among the activity packages, *physical activities* were the most popular (89 participants), followed by *personal growth* (62 participants) and *stay in nature* (60 participants). The fewest people chose *cultural entertainment* (14 participants). See Graphs 4-6.

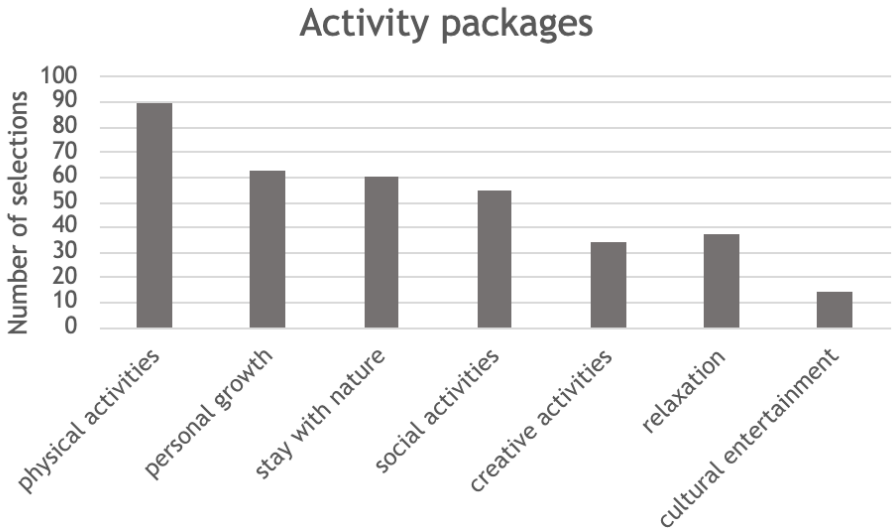
Graph 4. Distribution of selected detox levels (total sample).



Graph 5. Distribution of selected time horizons (total sample).



Graph 6. Distribution of selected activity packages (total sample).



3.3. Results by Country

3.3.1. Demographics

Table 3. Demographic characteristics of the sample.

Variable	Category	Croatia (N=18)	Germany (N=20)	Hungary (N=17)	Italy (N=13)	Poland (N=22)	Slovakia (N=32)	Slovenia (N=21)
Gender	**Female**	14 (77.78%)	14 (70.00%)	12 (70.59%)	8 (61.54%)	18 (81.82%)	21 (65.63%)	19 (90.48%)
	Male	4 (22.22%)	6 (30.00%)	5 (29.41%)	5 (38.46%)	4 (18.18%)	11 (34.38%)	2 (9.52%)
Total number of years in employment	**6 months-1 year**	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (7.69%)	1 (4.55%)	1 (3.13%)	0 (0.00%)
	1-2 years	1 (5.56%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (4.55%)	2 (6.25%)	0 (0.00%)
	3-5 years	2 (11.11%)	2 (10.00%)	0 (0.00%)	1 (7.69%)	2 (9.09%)	3 (9.38%)	1 (4.76%)
	6-10 years	6 (33.33%)	4 (20.00%)	1 (5.88%)	1 (7.69%)	6 (27.27%)	4 (12.50%)	3 (14.29%)
	>10 years	9 (50.00%)	14 (70.00%)	16 (94.12%)	10 (76.92%)	12 (54.55%)	22 (68.75%)	17 (80.95%)
Years in current employment	**6 months-1 year**	0 (0.00%)	3 (15.00%)	3 (17.64%)	0 (0.00%)	5 (22.73%)	7 (21.88%)	0 (0.00%)
	1-2 years	3 (16.67%)	4 (20.00%)	2 (11.77%)	2 (15.38%)	3 (13.64%)	3 (9.38%)	7 (33.33%)
	3-5 years	4 (22.22%)	8 (40.00%)	4 (23.53%)	0 (0.00%)	7 (31.82%)	7 (21.88%)	3 (14.29%)
	6-10 years	4 (22.22%)	2 (10.00%)	6 (35.29%)	4 (30.77%)	3 (13.64%)	10 (31.25%)	3 (14.29%)
	>10 years	7 (38.89%)	3 (15.00%)	2 (11.77%)	7 (53.85%)	4 (18.18%)	5 (15.63%)	7 (33.33%)
Employment type	**Permanent**	16 (88.89%)	14 (70.00%)	16 (94.12%)	12 (92.31%)	15 (68.18%)	16 (50.00%)	19 (90.48%)
	Fixed-term	0 (0.00%)	1 (5.00%)	0 (0.00%)	0 (0.00%)	5 (22.73%)	2 (6.25%)	2 (9.52%)

	Contract	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (4.55%)	5 (15.63%)	0 (0.00%)
	Self-employed	2 (11.11%)	5 (25.00%)	1 (5.88%)	1 (7.69%)	1 (4.55%)	9 (28.13%)	0 (0.00%)
Education	Bachelor	4 (22.22%)	3 (15.00%)	6 (35.29%)	3 (23.08%)	3 (13.64%)	2 (6.25%)	5 (23.81%)
	High school	2 (11.11%)	1 (5.00%)	2 (11.77%)	7 (53.85%)	4 (18.18%)	7 (21.88%)	0 (0.00%)
	Master+	8 (44.44%)	10 (50.00%)	9 (52.94%)	3 (23.08%)	15 (68.18%)	23 (71.88%)	16 (76.19%)
	Vocational	4 (22.22%)	6 (30.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Work mode	Hybrid	5 (27.78%)	13 (65.00%)	10 (58.84%)	6 (46.15%)	4 (18.18%)	19 (59.38%)	1 (4.76%)
	Office	12 (66.67%)	4 (20.00%)	6 (35.29%)	7 (53.85%)	17 (77.27%)	11 (34.38%)	20 (95.24%)
	Remote	1 (5.56%)	3 (15.00%)	1 (5.88%)	0 (0.00%)	1 (4.55%)	2 (6.25%)	0 (0.00%)
Type of work	Mental	9 (50.00%)	18 (90.00%)	13 (76.47%)	10 (76.92%)	20 (90.91%)	24 (75.00%)	15 (71.43%)
	Mostly mental	8 (44.44%)	2 (10.00%)	4 (23.53%)	3 (23.08%)	1 (4.55%)	8 (25.00%)	6 (28.57%)
	Mostly physical	1 (5.56%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Physical	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (4.55%)	0 (0.00%)	0 (0.00%)
Position	Managerial	5 (27.78%)	7 (35.00%)	4 (23.53%)	2 (15.38%)	20 (90.91%)	15 (46.88%)	9 (42.86%)
	Non-managerial	13 (72.22%)	13 (65.00%)	13 (76.47%)	11 (84.62%)	2 (9.09%)	17 (53.13%)	12 (57.14%)
Company size	1-50	11 (61.11%)	15 (75.00%)	4 (23.53%)	4 (30.77%)	3 (13.64%)	22 (68.75%)	3 (14.29%)
	51-100	4 (22.22%)	0 (0.00%)	12 (70.59%)	3 (23.08%)	0 (0.00%)	6 (18.75%)	3 (14.29%)
	101-250	3 (16.67%)	5 (25.00%)	1 (5.88%)	6 (46.15%)	19 (86.36%)	4 (12.50%)	15 (71.43%)

3.3.2. Efficacy on Burnout Reduction

Percentage decrease

The percentage reduction in burnout ranged from 8.17% (Italy) to 22.64% (Slovenia). Although this demonstrates a meaningful decrease in burnout across all countries, none of the countries reached the predefined target of a 25% reduction, indicating that while the intervention was effective, its impact remained below the expected threshold. See Table 4.

Table 4. Burnout reduction by country.

Country	Croatia	Germany	Hungary	Italy	Poland	Slovakia	Slovenia
Mean pretest score	45.33	48.55	44.52	53.77	46.05	40.84	46.19
Mean posttest score	39.67	43.50	40.71	50.85	39.91	36.03	39.81
Reduction (%)	**20.73**	**16.53**	**14.41**	**8.17**	**21.88**	**21.07**	**22.64**

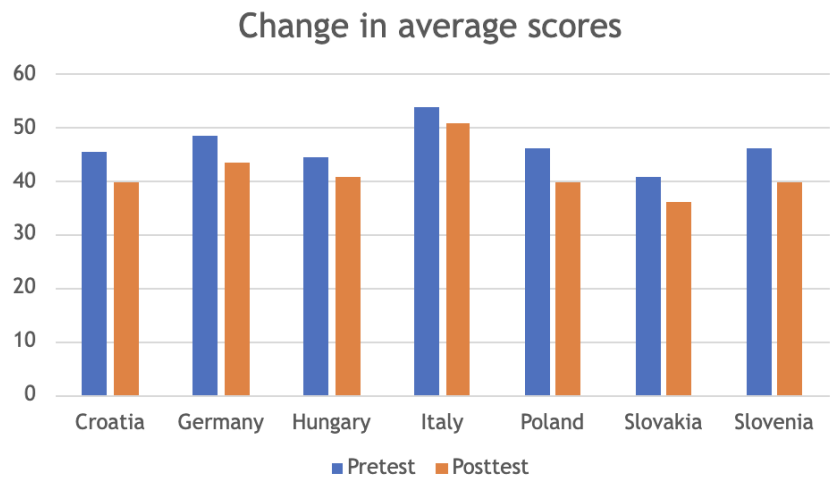
Statistical significance

The results presented in Table Z indicate that all participating countries achieved statistically significant reductions in burnout at the level of $p \leq .05$. Partial eta squared range from moderate to large, further supporting the practical relevance of the findings. See Table 5 and Graph 7.

Table 5. RM Anova results by country.

Country	Croatia	Germany	Hungary	Italy	Poland	Slovakia	Slovenia
F (df1, df2)	F(1,17) = 8.79	F(1,19) = 17.92	F(1,17) = 9.08	F(1,12) = 31.05	F(1,21) = 7.00	F(1,31) = 14.37	F(1,20) = 15.04
p-value	0.009	< .001	0.008	< .001	0.015	< .001	< .001
Partial η^2	0.34	0.49	0.35	0.72	0.25	0.32	0.43

Graph 7. Mean burnout scores (BS-A) at pretest and post-test by country.



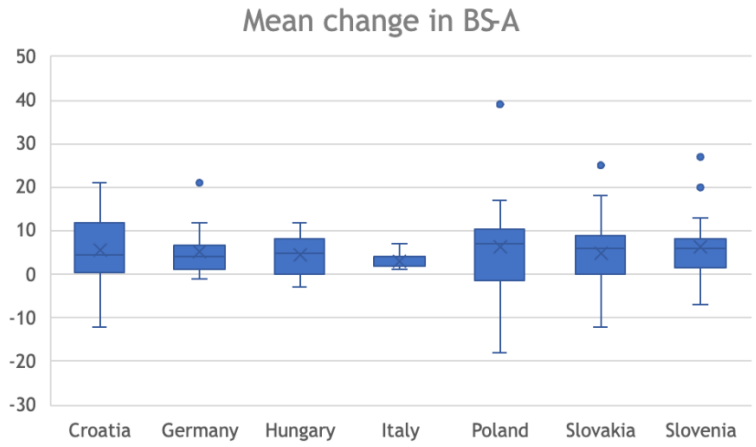
Mean change in BSA

The mean change in BSA scores indicates that burnout levels decreased across all countries, with values ranging from 2.92 (Italy) to 6.38 (Slovenia). This suggests that, on average, participants experienced a reduction of approximately 3 to 6 points on the burnout scale, reflecting a moderate improvement. For a specific values, see Table 6, and for visual illustration of the distribution of these changes, including variability and outliers, see Graph 8.

Table 6. Mean change (BS-A score) in burnout by country.

Country	Croatia	Germany	Hungary	Italy	Poland	Slovakia	Slovenia
Mean change	5.67	5.5	4	2.92	6.14	4.81	6.38

Graph 8. Mean change in BS-A by country.



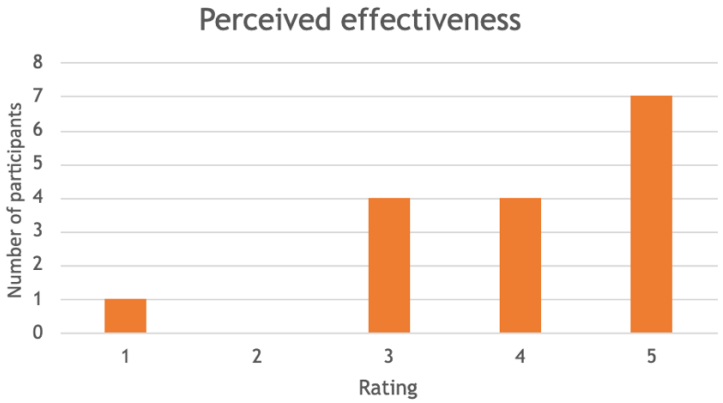
Perceived effectiveness

Perceived effectiveness ratings varied across countries, ranging from 2.25 (Germany) to 4.09 (Slovenia). Overall, the results suggest a moderately positive evaluation of the digital detox intervention, with most countries reporting values around the midpoint of the scale. Data for Italy were not available. For mean ratings, see Table 7, and for detailed distribution of ratings, see Graphs 9-14.

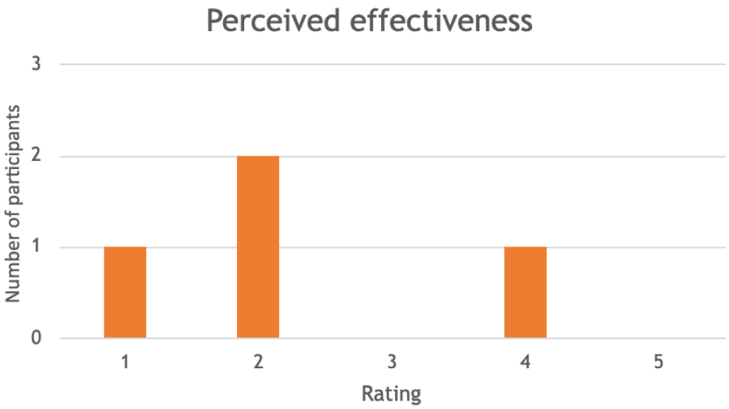
Table 7. Mean perceived effectiveness by country.

Country	Croatia	Germany	Hungary	Italy	Poland	Slovakia	Slovenia
Mean perceived effectiveness	3.88	2.25	3.71	N/A	3.19	2.97	4.09

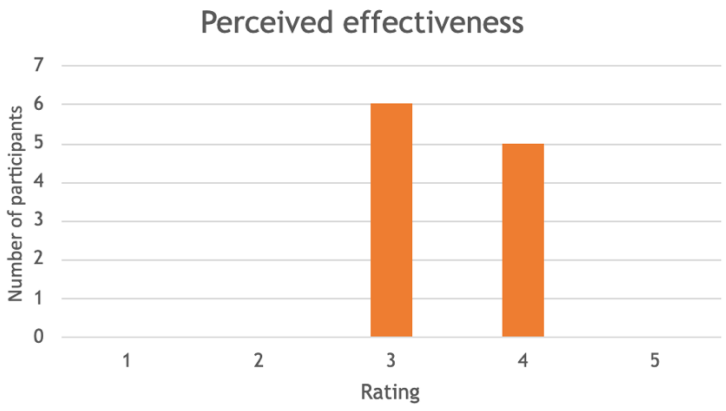
Graph 9. Perceived effectiveness in Croatia.



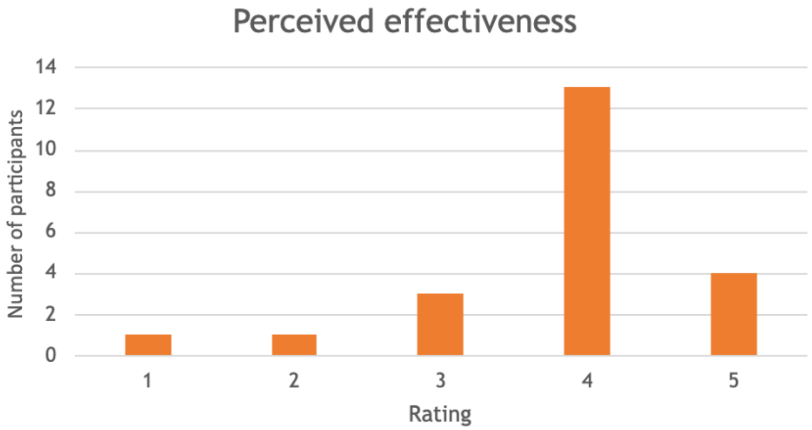
Graph 10. Perceived effectiveness in Germany.



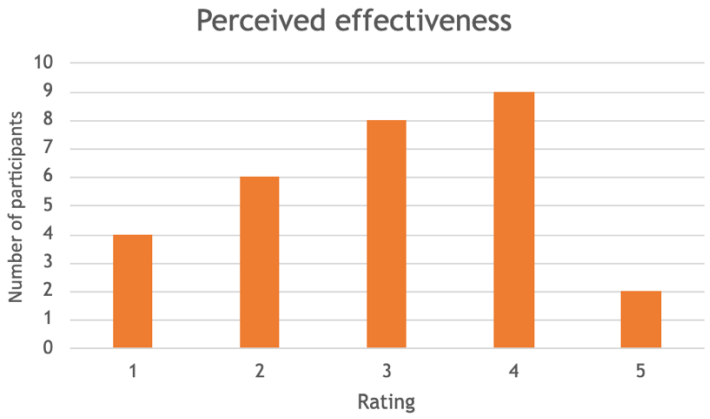
Graph 11. Perceived effectiveness in Hungary.



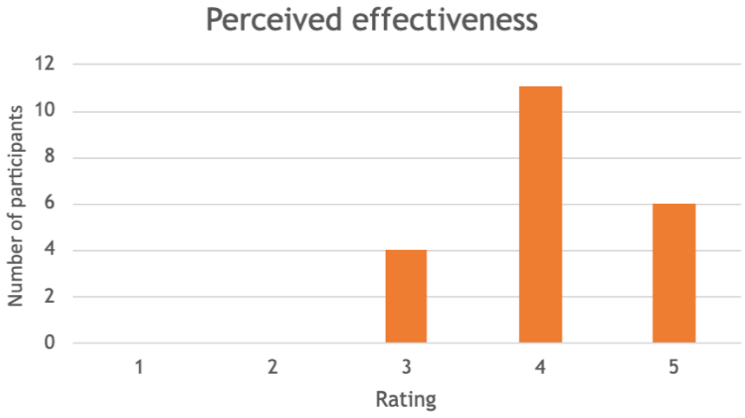
Graph 12. Perceived effectiveness in Poland.



Graph 13. Perceived effectiveness in Slovakia.



Graph 14. Perceived effectiveness in Slovenia.

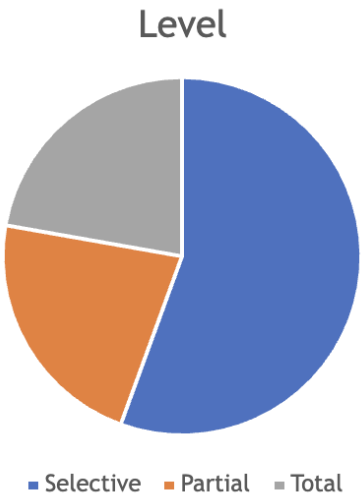


3.3.3. Detox Preferences

CROATIA

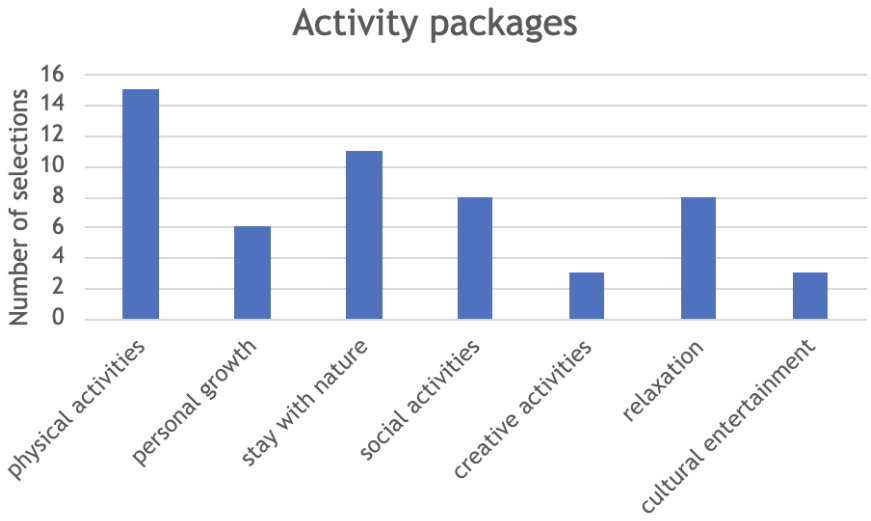
Regarding detox preferences in Croatia, the selective detox level was most frequently chosen (10 participants), followed by both partial and total detox (4 participants each). In terms of the time horizon, most participants chose 1 hour 5 times per week schedule (11 participants), followed by 4 hours twice a week (7 participants). From the activity packages, most participants chose physical activities (15 participants), followed by stay with nature (11 participants). Creative activities (3 participants) along with cultural entertainment (3 participants) were the least popular. See Graphs 15-17.

Graph 15. Distribution of selected detox levels (Croatia).



Graph 16. Distribution of selected time horizons (Croatia).

Graph 17. Distribution of selected activity packages (Croatia).



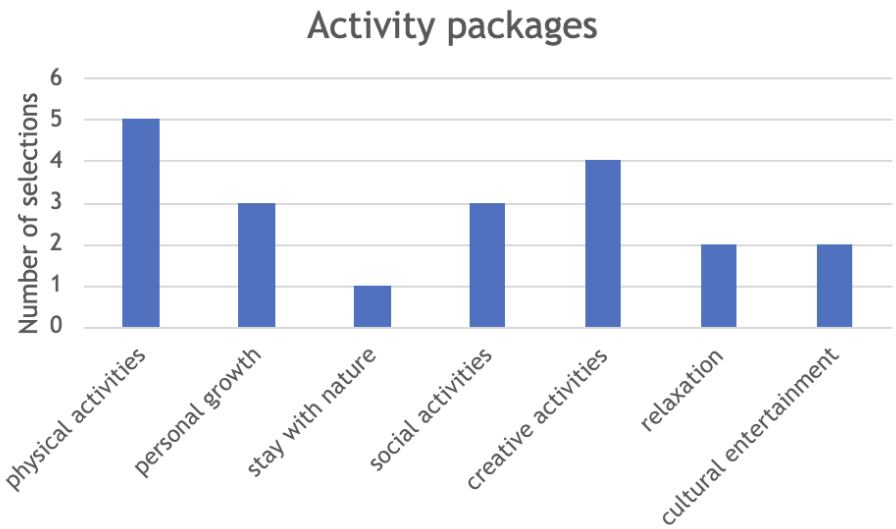
GERMANY

In Germany, the most frequently selected detox level was selective (3 participants), followed by partial (2 participants) and total detox (1 participant). The most common time horizons were equally 1 hour 5 times per week (3 participants) and 4 hours twice a week (3 participants). From the activity packages, most participants chose physical activities (5 participants), followed by creative activities (4 participants). Stay with nature was the least popular (1 participant). See Graphs 18-20.

Graph 18. Distribution of selected detox levels (Germany).

Graph 19. Distribution of selected time horizons (Germany).

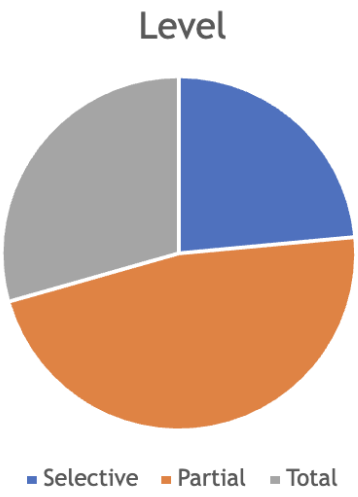
Graph 20. Distribution of selected activity packages (Germany).



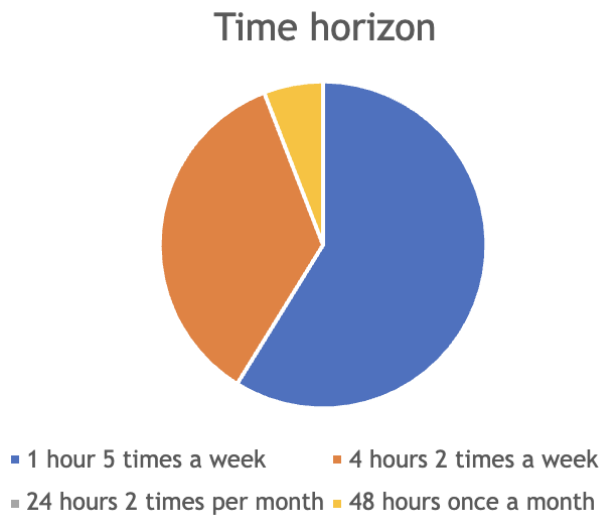
HUNGARY

In Hungary, partial detox was most frequent (8 participants), followed by total (5 participants) and selective detox (4 participants). The most common time horizon was 1 hour 5 times per week (10 participants), followed by 4 hours twice a week (6 participants). One participant selected the 48-hour monthly detox option. From the activity packages, most participants chose stay with nature (14 participants), followed by physical activities and personal growth (11 participants each). No one chose cultural entertainment. See Graphs 21-23.

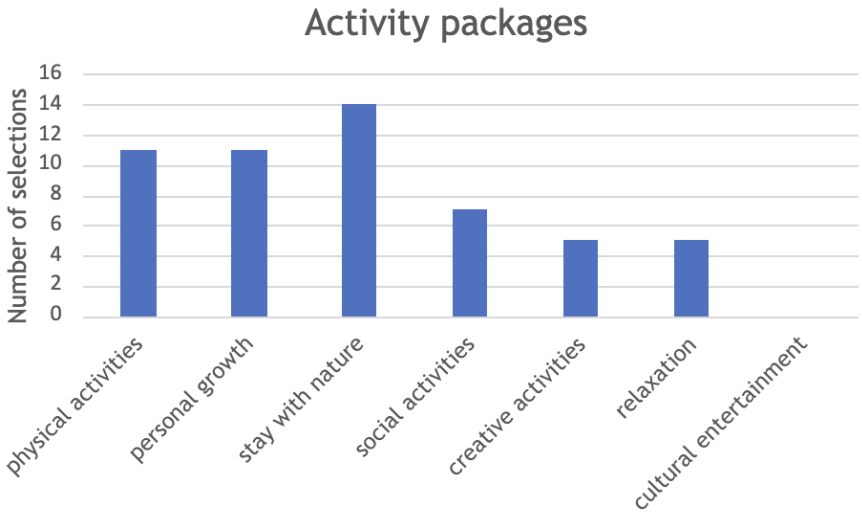
Graph 21. Distribution of selected detox levels (Hungary).



Graph 22. Distribution of selected time horizons (Hungary).



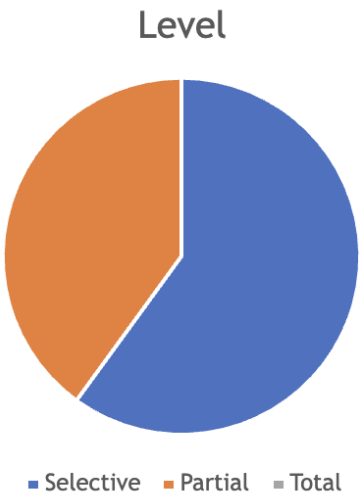
Graph 23. Distribution of selected activity packages (Hungary).



ITALY

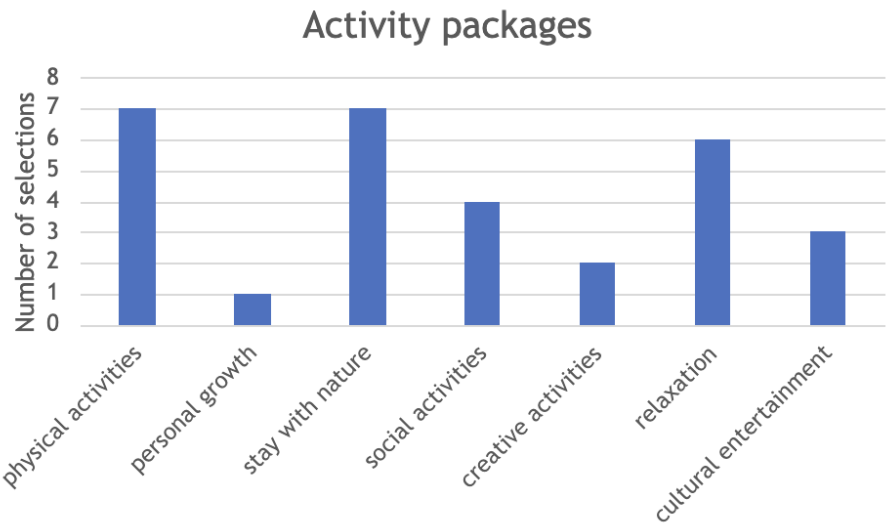
In Italy, the most common detox level was selective (6 participants), followed by partial (4 participants). No participants selected total detox. Within time horizons, 1 hour 5 times per week (4 participants) and 4 hours twice a week (4 participants) were equally represented, followed by 24 hours 2 times per month (2 participants) and 34 hours once a month (1 participant). From the activity packages, most participants practised physical activities (7 participants) and stay with nature (7 participants). Personal growth was chosen by the fewest people (1 participant). See Graphs 24-26.

Graph 24. Distribution of selected detox levels (Italy).



Graph 25. Distribution of selected time horizons (Italy).

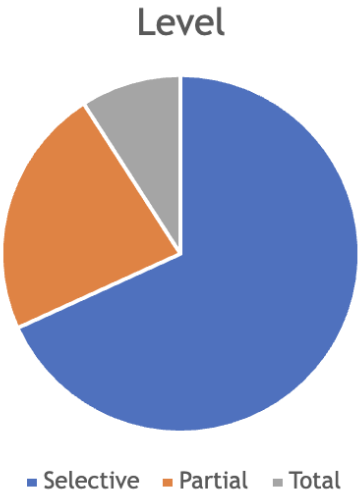
Graph 26. Distribution of selected activity packages (Italy).



POLAND

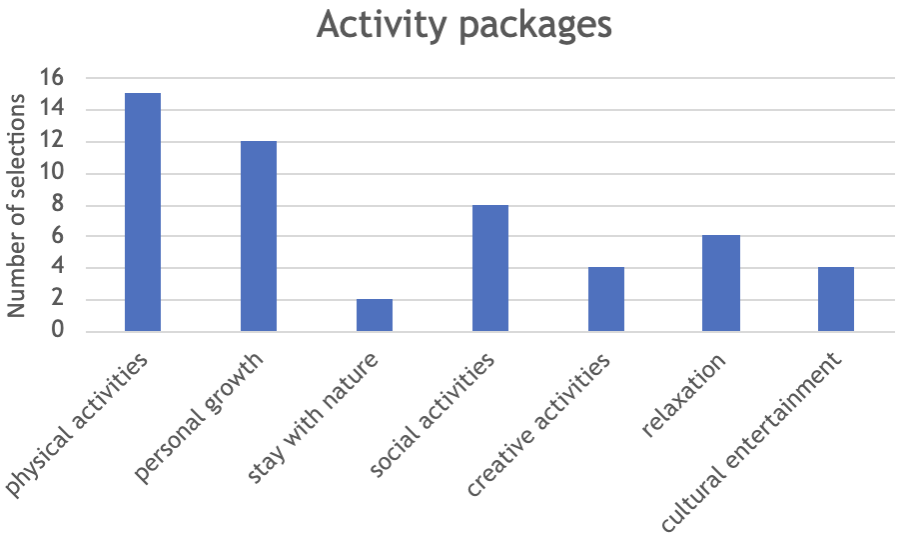
In Poland, the most common detox level was selective (15 participants), followed by partial (5 participants) and total detox (2 participants). The majority selected 1 hour 5 times per week (16 participants), followed by 4 hours twice a week (5 participants), and 24 hours 2 times per month (1 participant). From the activity packages, most participants practised physical activities (15 participants) and personal growth (12 participants). Stay with nature was chosen by the fewest people (2 participants). See Graphs 26-28.

Graph 26. Distribution of selected detox levels (Poland).



Graph 27. Distribution of selected time horizons (Poland).

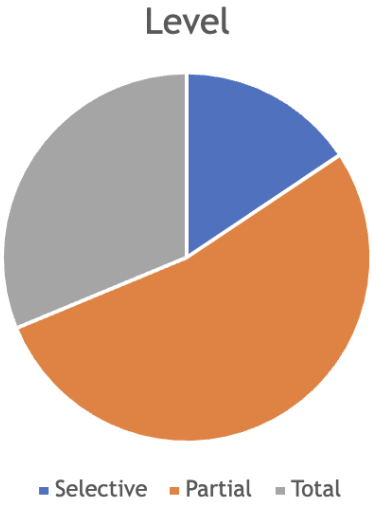
Graph 28. Distribution of selected activity packages (Poland).



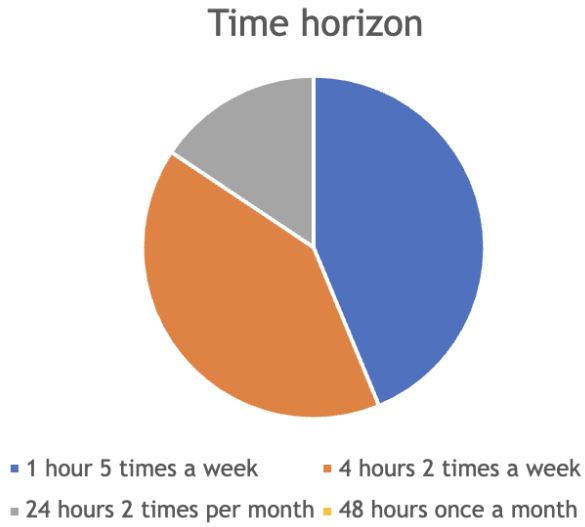
SLOVAKIA

In Slovakia, the most common detox level was partial (17 participants), followed by total (10 participants) and selective (5 participants). Time horizon preferences showed that 1 hour 5 times per week (14 participants) and 4 hours twice a week (13 participants) were both highly represented, followed by 24 hours 2 times per month (5 participants). From the activity packages, most participants practised physical activities (25 participants), followed by personal growth (18 participants) and stay with nature (18 participants). Cultural entertainment was chosen by the fewest people (2 participants). See Graphs 29-31.

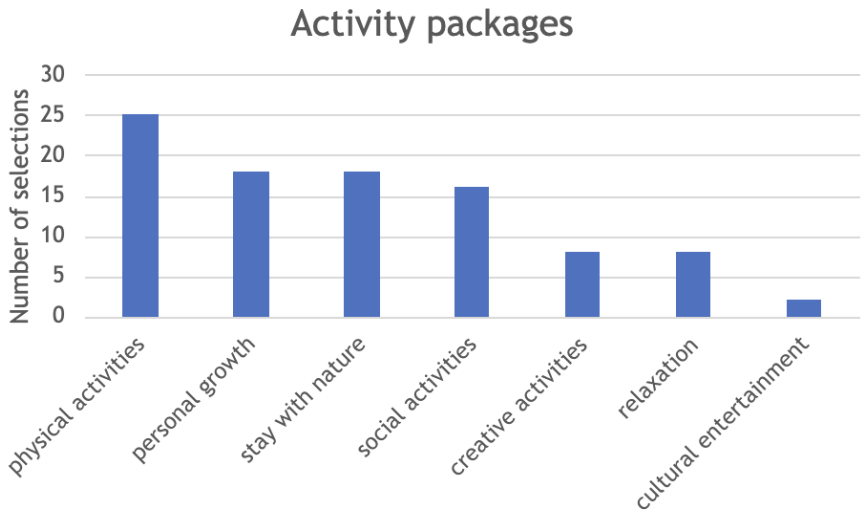
Graph 29. Distribution of selected detox levels (Slovakia).



Graph 30. Distribution of selected time horizons (Slovakia).



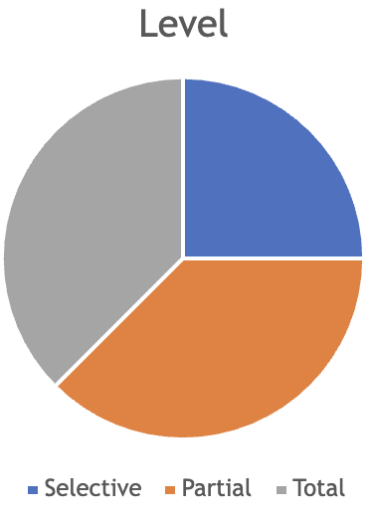
Graph 31. Distribution of selected activity packages (Slovakia).



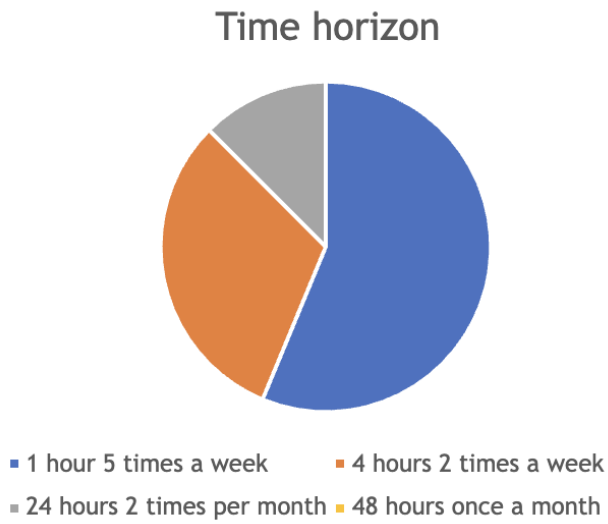
SLOVENIA

In Slovenia, detox levels were more evenly distributed, with partial (6 participants) and total detox (6 participants) being most common, followed by selective (4 participants). The most common time horizon was 1 hour, 5 times per week (9 participants), followed by 4 hours twice a week (5 participants) and 24 hours 2 times per month (2 participants). From the activity packages, most participants practised physical activities (11 participants) along with personal growth (11 participants). No one chose cultural entertainment. See Graphs 32-34.

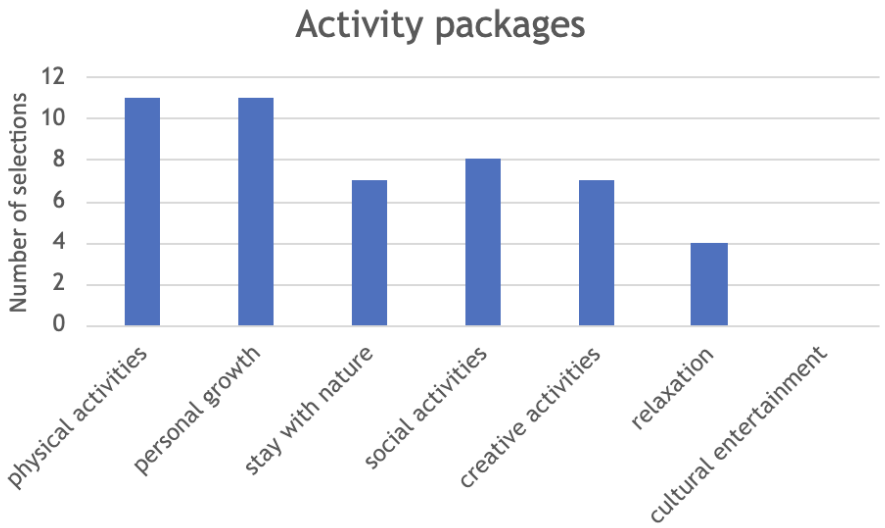
Graph 32. Distribution of selected detox levels (Slovenia).



Graph 33. Distribution of selected time horizons (Slovenia).



Graph 34. Distribution of selected activity packages (Slovenia).



3.4. Summary

The transnational testing phase demonstrated that digital detox interventions may represent a promising approach for reducing burnout among employees from S3 sectors. Across all participating countries, participants showed a statistically significant reduction in burnout levels between pretest and posttest measurements, suggesting that digital detox interventions can contribute positively to psychological well-being. Although the predefined target reduction was not fully achieved in any country, the observed decreases indicate meaningful improvements and support the potential value of such interventions.

At the same time, the results indicate that digital detox is not a simple or universal solution to work-related overload, but rather a complex process influenced by multiple individual and contextual factors. Effective implementation therefore requires **flexibility and personalization,** allowing employees to adapt digital detox practices to their individual needs, work demands, and personal circumstances. This includes the possibility of selecting the duration, timing, and intensity of digital disconnection according to one's own capacities and preferences, rather than adhering to a uniform approach. Overall, selective and partial detox approaches were generally preferred over complete digital disconnection, suggesting that participants may perceive more moderate and realistic interventions as more manageable and sustainable in everyday life. Similarly, shorter but more frequent detox periods appeared to be more acceptable than highly intensive forms of detoxification. Therefore, employees should also be encouraged to identify and apply personally suitable strategies for managing digital connectivity outside working hours in ways that are sustainable and realistic in everyday life.

The experimental intervention also highlighted the **importance of substitute activities** undertaken during periods of digital disconnection, as these significantly contributed to overall well-being and satisfaction. Participants most frequently preferred physical activities and spending time in nature as alternatives to digital engagement. Activities such as walking, hiking, exercise, sports, or simply being outdoors appeared to support psychological recovery, reduce stress, and enhance a sense of presence and balance in everyday life. These findings suggest that the benefits of digital detox may arise not only from reduced exposure to digital technologies, but also from active involvement in restorative offline experiences. Substitute activities therefore appear to represent an important mediator of the positive effects of digital detox on psychological well-being and recovery from work-related strain.

4. LESSONS LEARNED

The testing of the digital detox intervention across seven countries provided several important practical and methodological insights. Although the intervention demonstrated positive effects on burnout reduction, the testing phase also revealed several challenges.

One of the most significant challenges was maintaining participant **motivation** throughout the three-month intervention period. While many participants initially expressed interest in the digital detox program, sustaining engagement over a longer period proved difficult. This was particularly evident in the relatively high dropout rates observed during the testing phase. Participating in a digital detox requires a certain level of personal commitment and willingness to change every day digital habits, which may become demanding over time, especially when combined with work and personal responsibilities. The findings suggest that the effectiveness of such interventions strongly depends on participants' intrinsic motivation and their genuine interest in improving their digital well-being. It is possible that when motivation originated from participants themselves, rather than from external pressure, the intervention appeared to produce more positive outcomes.

A related challenge concerned the **recruitment** process itself. Recruiting approximately 40 participants per country who were willing to engage in a digital detox intervention for three months was more demanding than initially expected. The length of the intervention likely influenced both willingness to participate and long-term adherence. This indicates that future implementations may benefit from more flexible intervention durations or from tailoring the detox to individual participant needs and capacities.

The implementation process also demonstrated the importance of regular communication and participant support during the intervention. **Monitoring** participants over a three-month period required continuous reminders and motivational communication from project partners. This suggests that future digital detox programs should include a more systematic monitoring strategy, potentially involving shorter but more frequent check-ins, automated reminders, or personalized feedback mechanisms to sustain engagement over time.

Another important lesson learned related to the data management. To preserve participant anonymity, **ID codes** were used to match responses. Although this approach was ethically appropriate and necessary for confidential data handling, it also created difficulties during matching procedures. In some cases, incorrectly entered or inconsistent codes complicated the pairing of measurements, which contributed to data loss and reduced the number of complete cases available for analysis. This highlights the importance of implementing clear and user-friendly procedures for anonymous participant identification, if needed.

At the same time, several aspects of the intervention were evaluated positively by both participants and project partners. In particular, the **personal meetings** organized at the beginning and end of the intervention (e.g., the launch events and closing events) were perceived as highly beneficial. These meetings created opportunities for participants to share personal experiences, discuss challenges, and reflect collectively on the detox process. Such social interaction appeared to strengthen engagement and contributed to a greater sense of support and accountability throughout the intervention.

Another positive aspect was the quality of the **materials** prepared for implementation. The methodological guidelines and supporting documents were considered clear, structured, and easy to use for both participants and partner organizations. This contributed to a relatively consistent implementation process across countries.

Based on the experiences from the testing phase, future implementations could benefit from stronger involvement of **Human Resources (HR) departments** and employers. HR departments may facilitate recruitment, communication with employees, and ongoing support during the intervention, as they have direct access to organizational structures and employee networks.