

# EDUCATORS' WELL-BEING IN THE LONG RUN

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## ABSTRACT

Teacher burnout can be a severe problem in higher education, as it can affect the quality of education. In 2022, we started a career planning course based on Stanford's Design Your Life course (BurnettB and EvansD 2016; 2018; 2020), supplemented with positive psychological exercises, for the teachers and researchers of the Budapest University of Technology and Economics. 4 courses have taken place so far, in two types of organization (classic or intensive), with 53 participants. In the study below, we asked the previous participants to participate in a follow-up research, in which we asked about the usefulness of the course in terms of their well-being and burnout. We asked them for a subjective estimate in both areas and used an objective measurement. Their well-being was measured using the PERMA Questionnaire (ButlerJ and KernML 2016), and Maslach's Burnout Inventory (Maslach et al., 1996) was used to measure burnout. The PERMA Questionnaire was already known to them, as they filled it out at the beginning of the course and three months after the course, and it also showed positive results in the short-term follow-up (Authors 2023). One year later, based on the sample's responses (n=22), the course is particularly effective in terms of well-being, which is supported by medium and significant solid correlations. Based on this, we can conclude that the

course is effective both in the short and long term, thus suitable for permanently improving the mental state of teaching colleagues.

## **1 INTRODUCTION**

In these challenging times, the competitiveness of a higher education institution is crucial. National and international rankings of universities deal partly with the staff's academic performance metrics, such as teaching excellence and rate of publications. The other indicators related to graduates also depend on the effectiveness of the faculty. After all, only prepared and dedicated teachers can train excellent professionals. We see in the literature that the burnout of employees works against the above process, while well-being supports it (RahmT and HeiseE 2019; BallantyneJ and RetellJ 2020; Smetackova et al. 2019).

### **1.1 Programs targeting decrease teachers' burnout and increase well-being**

As Watts and Robertson (2011) emphasized in their review article, a decade ago, burnout among academic staff was spread out. Mironova and Slokta (2021) found in their recent meta-analysis that burnout among academic staff is a common state because university teachers face many stressors that can lead to burnout syndrome. To solve the situation, we must better understand the demands and resources of higher education staff, especially teachers (Khan et al. 2017). The stressors have changed and multiplied over the last few years. However, we see a lack of techniques that can solve the situation and improve academicians' well-being (HyattK 2022).

These two phenomena are interrelated (Kolomitro et al. 2020). Programs targeting the development of critical elements of well-being are complex to study empirically. Researchers focus on specific aspects of well-being in terms of the PERMA model, a widely accepted and well-known framework (Donaldson et al. 2022; Linton et al. 2016). According to Seligman's (2011) updated model, people have to fulfill five different components to reach the state of flourishing. These are positive emotions, engagement, (positive) relationships, meaning, and accomplishment (SeligmanM 2011). Furthermore, well-being considers other factors, such as physical health, absence of negative emotions and loneliness, and presence of the experience of happiness (ButlerJ and KernML 2016).

Several studies found that engagement, dispositional optimism (Barkhuzien et al. 2014), resilience (Johnson et al. 2019), more commitment, and better work-life balance (Fontinha et al. 2019) seem to be necessary for being well (KinmanG and JohnsonS 2019) and reduce burnout in direct and indirect ways.

### **1.2 A possible solution: The Designing Your Life program**

Our Designing Your Life Program (DYLF) is based on Burnett and Evans's "Designing Your Life" and "Designing Your Work Life" methodologies (BurnettB and EvansD, 2016; 2018; 2020). Regarding the authors' idea, a well-designed life is the key to a well-lived life and well-being. The idea came up first as a class at Stanford University designed for design students. In this approach, they used techniques that fit designers' mindsets, which means it is suitable for people who like to solve problems (BurnettB and EvansD, 2016; 2018; 2020). We expected that the design thinking mindset would also fit in with the original thinking patterns of the Budapest University of Technology and Economics teachers (Authors 2023).

Without pretensions of completeness, the most crucial Design thinking mindset elements that we touched on in the DYLF program were (based on BrownT 2008; 2009):

- Empathy: Understanding the needs, desires, and motivations of others is fundamental to design thinking. In the DYLF program, the tasks helped the participants to be empathic about themselves.
- Creative Confidence: The significance of instilling confidence in individuals to unleash their creative potential and innovate.
- Iterative Thinking: advocates for an iterative approach to problem-solving, where ideas are continuously refined through prototyping and testing. In the DYLF program, for example, we organized Living Library with participants who have worked or worked at our university and have already achieved attractive results in several career segments.
- Mindful Observation: design thinkers cultivate the ability to observe the world around them keenly, uncovering insights and opportunities for innovation.
- Collaboration: design thinking is a team sport. Bringing diverse perspectives together and fostering collaboration is critical to unlocking innovative solutions.

We had exciting results based on the data we measured during the program and the short-term follow-up (Authors 2023). First, we saw a statistically positive effect at the short-term follow-up. As relationships are essential for well-being (SeligmanM, 2002; SeligmanM, 2011; KhawD and KernML, 2014) and the program has its' effect on the relationship scale, we could say that the Designing Your Life program seems appropriate for engineering university teachers. At the end of the course, the participants had concrete plans for the following months. They have tools to use daily and planning to be more accurate and flexible simultaneously. These tools and plans can lead them through the difficulties of academic career building so that they can set more appropriate achievements. Participants gave feedback from growing social networks and felt that the university cares more about them than they had felt before the program. We also found that the workshop design is familiar to engineers' thinking, and with these small changes, we adapted it to our university's circumstances (Authors 2023).

### **1.3 Research questions**

Our previous research confirmed that the effect of the design thinking-based career planning course on the well-being of the participating teachers can be felt in the short term (Authors 2023). In the present research, we examine the long-term effects.

Burnout is a syndrome to avoid, while well-being is a generally desirable state. The course provided the tools to achieve and maintain this dual goal. After one year, we were curious to see if the participants used the knowledge they perceived and experienced a positive change in terms of their well-being along the PERMA factors. This study aims to explore whether the course mentioned above is an appropriate tool for engineering educators in the stressful context of higher education to reach a state of well-being and avoid burnout in the long run, i.e., i.e., can the results of the course be felt 1-1.5 years after the program.

## **2 METHODOLOGY**

### **2.1 Study design**

We planned a follow-up study for those who participated in the carrier (re)planning course. In an online questionnaire, we asked for demographic and carrier-regarded data, attitudes about the efficiency of the course, their experiences about the course in the long run with extended text answer possibilities, and some retrospective opinions about their mental state in terms of burnout and well-being.

In addition to the qualitative part, we used quantitative tools. To measure former participants' well-being, we used the PERMA Profiler (ButlerJ and KernML 2016), which they already knew, and the Maslach Burnout Inventory (Maslach et al. 1996). We shared the questionnaire with each former participant in February 2024, 0.5-1.5 years after they finished the course.

Before starting the course, we informed the participants that the program also has a research purpose. By voluntarily participating in the program, they gave informed consent, which they had the right to withdraw at any time. The participants anonymously filled out the course and follow-up questionnaires, but their data was not processed this way.

In this study, we only focus on one part of the data.

### **2.2 Sample description**

We asked 53 former participants to complete the online survey, and 22 responded. In this section, we describe them.

Twelve were female and ten male, which is similar to the distribution of the courses. One was a professor and one associate professor, 10 were senior lecturers, four assistant research fellows, one technical assistant, and 5 PhD students.

Participants work at the university for an average of 8.27 years with a 5.08 years SD. 16 participated in a classical course setting, i.e., 5 times in a 6-week long period, and 5 participated in an intensive course setting, i.e., in a 2.5-day long weekend training. After the first 3 run courses, we offered former participants a 2.0 course to develop themselves, and among our respondents, 11 attended that course too.

50% of the respondents attended the first course (May 2022), 22,7% participated in the second course (October 2022), 13,6% attended the third course (April 2023), and 13,6% participated in the fourth course (September 2023). That means that 53% referred to more than 1.5-1-years effects, 14% to short one-year effects, and only 13% had less than 1-year impact. The data is retrospective and self-reported based on former participants' memories and everyday experiences. In this sense, researchers have to trust respondents as psychological changes are the best experienced by the person themselves.

## **3 RESULTS**

### **3.1 Effectiveness of the course – descriptives**

Half of the sample (n=11) said they had significantly shifted their career since the course ended. Many of them got their degrees or started their doctoral plot (n=6), have successfully won tenders of excellence (n=3), and reached higher or better positions (n=4). However, it is interesting that there is no difference in any of the examined indicators between the participants who achieved progress and those who

did not. From this, we can conclude that the later described changes in well-being are not the results of material changes associated with progress but the totality of the internal changes induced by the course.

On a 10-point Likert scale, participants reported the course's general efficiency at 8.32, which means excellent. We also asked them about the usefulness of the PERMA factors because the course tasks were related to the different aspects of well-being (see Authors 2023) on the same 10-point scale shown in Table 1.

*Table 1. The usefulness of the course in terms of the PERMA factors*

Well-being aspect	Mean	SD	Range
Positive shift in the emotional life (more positive and less negative emotions)	7.27	2.41	1-10
Engagement (finding the intrinsic motivation and one's own goals in work)	7.77	1.95	3-10
Relationships (better and more satisfying network, less feeling of loneliness)	6.55	2.32	2-8
Meaning (finding coherence, meaning, and long-term goals)	7.32	2.01	2-8
Accomplishment (reframing of challenging situations, setting SMART goals with higher demand level)	7	2.05	1-8

In addition, we asked participants to guess how much they were burnt out before attending the course. They referred, on average, 7.27 points on a 10-point Likert scale where one was not at all and 10 was completely burned out. In these terms, the participants were highly loaded and close to complete burnout.

Based on our data, we see that there are positive correlations between work experience (measured in years) and usefulness in positive emotions ( $r=.473$ ,  $p<.05$ ) and motivational changes ( $r=.446$ ,  $p<.05$ ).

### **3.2 Good practices are taken from the course**

Participants shared the three words that came to mind regarding the course. In our translation, these were their primary cognitive and emotional experiences from the course. In Figure 1. we show the diverse answers.



#### 4 SUMMARY AND ACKNOWLEDGMENTS

At the beginning of the DYLF program, the university's main objective was to support colleagues in various critical career stages at a leading national technology university. This is based on preventing burnout and increasing well-being, according to Rahm and Heise (2019), Ballantyne and Retell (2020), and Smetackova and his colleagues (2019).

Critical stages are most often characteristic of periods around the transition of different career stages, for example, before a step forward and at the same time a more significant challenge, or after the step forward, entering a new unknown stage. One of the biggest challenges of the university career is that it typically consists of more significant milestones, with each stage spanning 3-10 years.

Awareness and appropriate human relations are necessary to maintain motivation. During the DYFL course, participants also practice planning short, mid, and long periods. If they become more successful, their commitment and awareness will also increase. The university is interested in providing a long-term perspective for its employees to reduce career-related stress. A better and more satisfying network and less loneliness give inspiration at the critical points.

This follow-up study shows that the DYFL course can support the university's primary goal of keeping and developing employees. So, it can answer the poor toolkit that Hyatt (2022) stated.

We consider the main result of the course that they felt burned out, but based on the follow-up study results', they experienced a positive shift in all areas of well-being elements, according to Seligman (2011), especially in engagement, which allows colleagues to find their intrinsic motivation and look for such goals that lead them to flow experiences as an essential aspect according to Berkhuizen and his colleagues (2014). They are more able to see the big picture, which helps them know the meaning of their huge efforts, strengthening resilience (Johnson et al. 2019; Fontinha et al. 2019). A motivational change appeared as a parallel, mutually reinforcing effect among colleagues with more work experience.

A remarkable result is that they use well-being techniques and exercise what they learned, which is a key to success, according to Kinman and Johnson (2019). This feedback means that they find the course valuable, and the practices fit into their original mindset, so they are familiar with it. This result strengthens the idea that the DYLF-based program is appropriate for the engineering field of higher education, strengthening the main idea that this Designing Your Life program was first dedicated to design students (BurnettB and EvansD, 2016; 2018; 2020).

Last but not least, a good quality of social network and increased collaborative skills are crucial. They mentioned various forms, and almost every time in the follow-up study, the teams at teamwork experiences which are crucial for well-being (SeligmanM, 2002; SeligmanM, 2011; KhawD and KernML, 2014).

However, the ecological validity of the results is limited to our university our former (Authors 2023), and current results are impressive and suggest that the modified DYLF program is a potential and innovative tool to strengthen the psychological capital of engineering educators.

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## 4.2 Limitations and Further Research Directions

Participation in the course was voluntary by the university lecturers, so in a certain sense, motivated staff participated in the study. Hence, the generalizability of the results is limited. It is also important to emphasize that we worked explicitly with teachers participating in engineering education at a university, which may limit the validity to other fields of higher education.

Since the sample size was relatively small, it was just enough for statistical tests; the conclusions are currently valid in our narrow area, i.e., engineering education. As a further research direction, it would be worthwhile to test the program's scenario widely initially with higher education instructors who volunteer and then expand it into a generally available university well-being development program. Our results are positive and perspectival. The empirical impact assessment of both programs is the task of the future.

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