

A SYSTEM DYNAMIC MODEL OF WORKER BURNOUT

Nowadays the problem of burnout becomes more and more evident. Depending on the stage of the exhaustion, the consequences can vary from irritability to depression, and inability to job well. This can cause problems for both employee and employer. Therefore, it is extremely important to pay attention to the causes of this psychological syndrome to be able to prevent them as much as it is possible.

The purpose of this research is to understand the process of burnout. The dynamic model is developed based on the paper of Jack B. Homer “Worker burnout: a dynamic model with implications for prevention and control”.

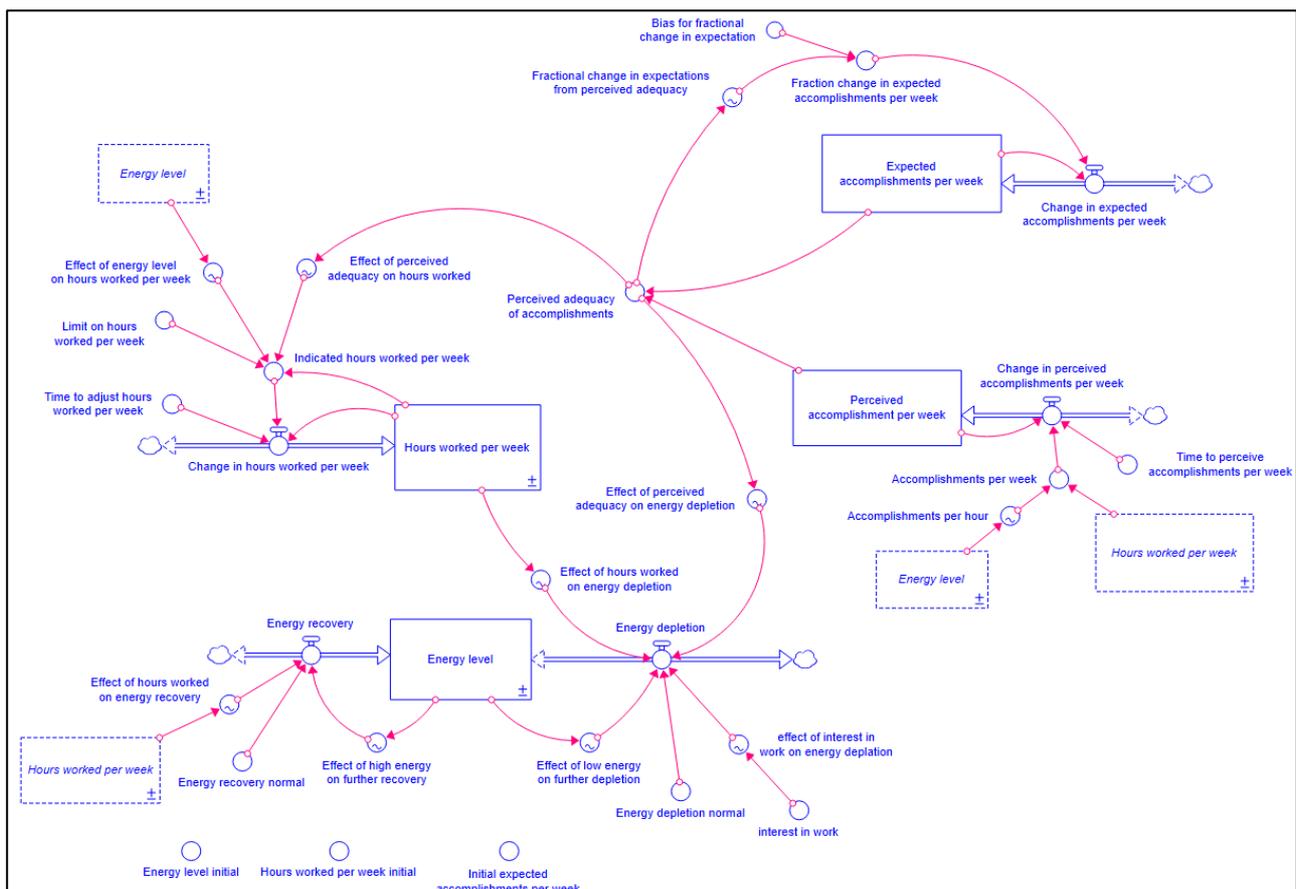


Figure 1. Burnout model

As the author of the article stated: “The purpose of this paper is to present a dynamic model of worker burnout, consistent with both the literature and with my personal experience...”, so my suggestion to the model is to add the effect of interest in work on energy depletion. Having analyzed my own experience of dealing with burnout, I can absolutely declare that this aspect has a significant impact on the development of the syndrome. The higher the interest is, the longer are working hours without experiencing of energy depletion. Table 1 represents the hypothesis of possible effect.

Table 1: Effect of interest in work on energy depletion

Interest in work	Effect of interest in work on energy depletion
0.000	2.000
0.250	1.700
0.500	1.000
0.750	0.800
1.000	0.700

Assuming that the interest in work is 0.5, the model produced behavior, presented in Figure 2.

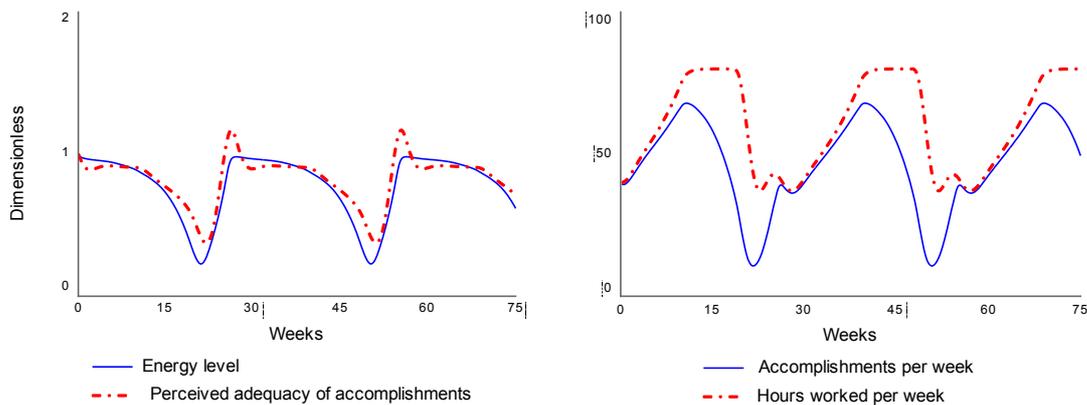


Figure 2: Simulation results with interest in work=0.5

The burnout cycle here is approximately 26 weeks and the process of energy depletion is rather quick. For 10 weeks, energy level drops from 0.85 to 0.23, perceived adequacy of accomplishments – from 0.9 to 0.4, accomplishments per week – 68 to 11 A-units/week, and hours worked per week – 80 to 37 hours/week.

Assuming that the interest in work is 0.75, the model shows the behavior, presented in Figure 3.

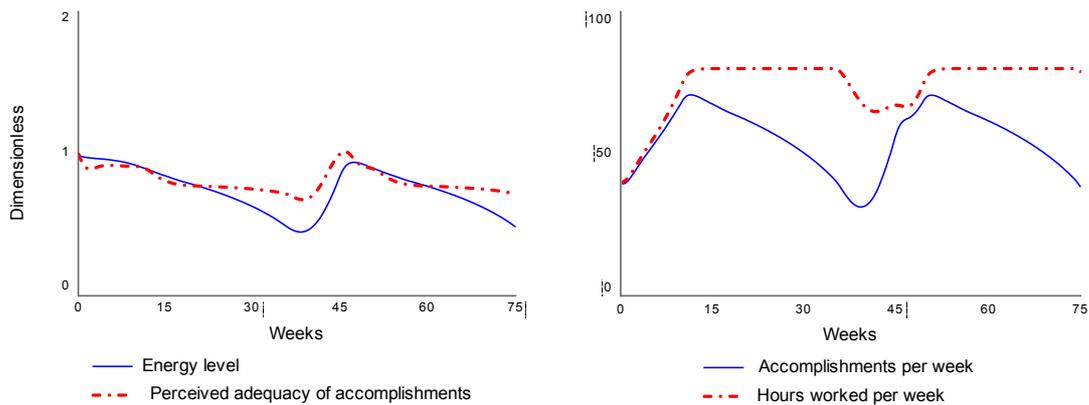


Figure 3: Simulation results with interest in work=0.75

Here burnout cycle is 47 weeks, which is almost two times longer than with lower interest in work. Process of energy depletion is much gentler. For 39 weeks energy level drops from 1 to 0.45, perceived adequacy of accomplishments – from 1 to 0.7. From week 11 to 41 level of accomplishments per week drops from 71 to 31 A-units/week, and for 25 weeks hours worked per week are at the highest level and only then decrease to the point of 65 hours/week. Thus, this situation is much less disastrous for both employee and employer.

Finally, assuming interest in work equals 1, we get the results, presented in Figure 4.

In this situation model stabilizes in equilibrium. When energy level reaches the point of 0.851 it doesn't change anymore. Perceived adequacy of accomplishments drops to 0.801 and stays there. These values are reached in 30 weeks. After 15 weeks hours worked per week grow to its maximum of 80 hours/week and do not fall after. In 29 weeks, accomplishments per week stabilize at the point of 68.1 A-units/week.

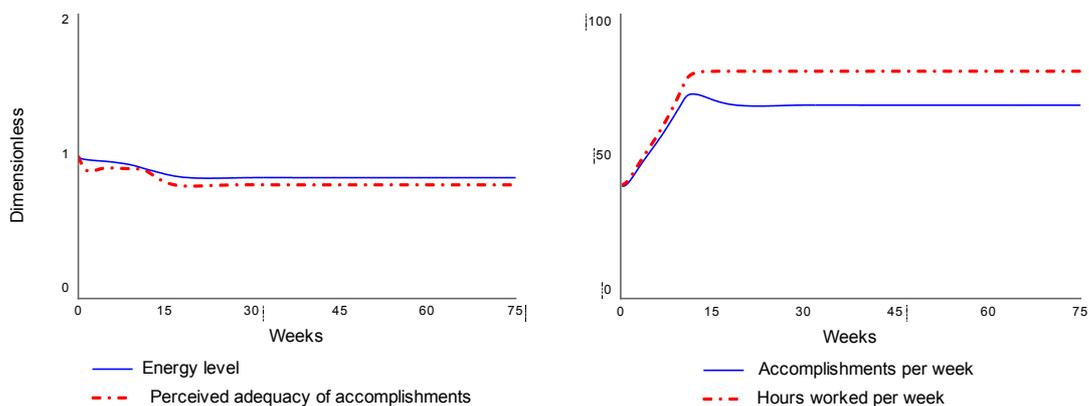


Figure 4: Simulation results with interest in work=1

As the results of the simulations show, the more employer is interested in work, the less is amplitude of the burnout cycle. This means that he can work longer hours without exhaustion and the quality of his work is still high.

References

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WHICH TOOLS ARE BETTER TO TACKLE WITH THE UNDECLARED WORK IN UKRAINE: DIRECT OR INDIRECT?

Undeclared work is a huge problem for most countries around the globe. Those who avoid paying taxes and working legally make labor market unfair and break the law. That is why it is crucial to know which tools will be better for implementation to solve the problem with undeclared work.

Best way to describe those tools is to divide them into two groups where first is “sticks” and second “carrots” (Williams, 2021). “Sticks” represent a punishment for hidden workers. With this tool it is supposed to increase penalties for working informal and to make more supervisions on the labor market. “Carrots” mean the policies which focusing on dealing with public institutions in the long-term perspective. The main idea of such policies is to build trustworthy institutions which will inspire people to work legally.