

Burnout Syndrome Educational Program: a Case Report

Ricardo Fontes Macedo

Marechal Rondon avenue, São Cristóvão, Sergipe, Brazil
Sergipe Federal University

Maria Aline Moura Reis

Murilo Dantas avenue, Aracaju, Sergipe, Brazil
Sergipe Federal University

Whashington Sales

Marechal Rondon avenue, São Cristóvão, Sergipe, Brazil
Sergipe Federal University

Robelius De-Bortoli

Marechal Rondon avenue, São Cristóvão, Sergipe, Brazil
Sergipe Federal University

Abstract

This case report is about engaging employees in a prevention program for Burnout Syndrome. Objective: to report worker's engagement in an educational program gamified for Burnout Syndrome prevention in a coworking space. Methods: The office managers created a one-week program, which were gamified with missions composed of quizzes and challenges using points, leaderboards, social reinforcement, badges and awards. Results: Most of the employees engaged in all missions of the program and reported that they would continue to carry out some of the tasks encouraged during the program. Discussion and Conclusion: Therefore, the present case report shows an alternative for managers to engage their employees to prevent the Burnout Syndrome.

Keywords: Professional burnout; Experimental games; Motivation; Primary prevention.

1. Introduction

The Burnout syndrome is associated with overwork and can be characterized as a type of mental and physical stress, caused by stressors factors present in the working environment (Llera and Durante, 2014; GALLUP, 2016; Maslach and Leiter, 2016). There is evidence in the scientific literature in various areas regarding the Burnout syndrome (Lima et al., 2007; Carlotto and Palazzo, 2006; Carlotto and Câmara, 2008), with emphasis on the applied psychology to organizations (Moreno et al., 2011; Kompier and Kristensen, 2003).

A study conducted in Germany showed the Burnout syndrome costs 9 billion euros per year for organizations by reducing productivity. In this same survey, the author revealed that 31% of workers feel stressed, 24% tired, 22% reported a bad relationship with their family or friends in three or more days in the past 30 days due to stress, and 12% reported having suffered depression or anxiety disorders in the last 12 months (GALLUP, 2016).

For Maslach and Jackson, Burnout syndrome can be defined as an emotional exhaustion that occurs in the person-job relation, according to the authors is the development of negative attitudes and feelings. It can be understood through three components: emotional exhaustion, depersonalization and the decrease in the work productivity. The employee with Burnout syndrome can have various consequence in its work environment, as state of demotivation, lack of humor and appreciation of their own work, leading very often to other health problems and absenteeism. The first component, Emotional exhaustion, can be understood as the lack of energy and enthusiasm for the accomplishment of tasks. The Depersonalization is linked to emotional insensitivity with people, i.e., aggressive behavior to meet a client or to talk with a co-worker. The decrease in the development of the work corresponds to the worker's tendency to self-evaluate themselves negatively (Moreno et al., 2011). According to Jacques (2003), the work has a constitutive function and is not the cause of the illness of the worker.

While, Carlotto and Câmara (2008) stated that in the new perspective of labour market combines factors such as high expectations of satisfaction and few resources to deal with the frustrations, making them one of the causes of

the development of the Burnout syndrome. In the survey of Dias et al. (2016) it was possible to see that if employees were prepared to deal with the stress factors present in their function, this would prevent the syndrome. Therefore, educational programs are great options for prevention and treatment (Daniels, De Passe and Kamal, 2016).

As a result, there are large amount of studies that seeks solutions to prevent the Burnout syndrome. It involves programs targeted to prevent the physical exhaustion of workers (Cipriano et al., 2014; Després, Alméras and Gauvin, 2014). However, the programs feature a common problem: the struggle to engage workers in these programs for their health. For this, gamification is a process that uses elements and mechanics of video games to improve the engagement of people in a system, service or at work (Hamari and Parvinen, 2016). Global companies have applied gamification to engage their employees or customers in some activity. Thus, the objective of this study is to report the engagement of workers experience in an educational program gamified for prevention of Burnout syndrome in a coworking space.

2. Methods

The following case was accomplished with 16 employees of a coworking space customers from Aracaju. Acoworking consists of a working environment with service companies. The mutual characteristic of the employee's work of this case report are many hours sitting working at the computer. The age of the participants varied from 20 to 40 years old – five have high school, nine are graduated and four are undergraduate.

The coworking's managers together with a research group created an educational program about the Burnout syndrome to be applied at the coworking, because they have identified a number of habits of workers that was creating a stressful work environment. These managers had tried to implement isolated tasks to encourage the improvement of good habits, however, the workers were not engaged in the tasks. Therefore, managers used the Gamification technique –process that uses elements of games and video games (voluntary participation, objective, rules and immediate feedback) to engage people to perform tasks in the real world (Hamari and Parvinen, 2016) – as a strategy to engage these workers in the educational program about the Burnout syndrome.

In this way, managers defined what would be the content and how long would last the Burnout syndrome educational program. Then, this was implemented in the gamification process created by the research group, defining the program's phases, rules, validation of execution of tasks, definition of release schedules and feedback of the tasks, and the feedback that would be given to the participants, as a strategy, to achieve the trophies, awards, and bonuses.

After defining and structuring the process (Figure 1), the managers were in each room of the office to invite the workers to participate of the Burnout syndrome educational program. The invitation was made along the explanation of the program's goal and how it would work. The worker who agreed to participate reported the name and number of the mobile phone that contained the WhatsApp™ application. After the invitations and acceptances, the managers included the participants into a WhatsApp™ group, called "Pura Vida". After the creation of the group, the managers sent a welcome message and reinforced the program's goal. It lasted six business days. Each day was launched a mission which contained quizzes or forms, and a practical challenge. Each mission had a theme as described: 1. Burnout syndrome, 2. Physical Exhaustion, 3. Humor, 4. Social Relations, 5. Stress, 6. Motivation (table 1).

Table 1. Description of the activities that were released during the educational program of the Burnout syndrome during 6 days

MISSIONS	TASKS	DESCRIPTION
I- Burnout syndrome	Quiz	Quiz: What is and how is developed the Burnout syndrome?
II-Physical Breakdown	Quiz	Quiz: About the causes of physical exhaustion and how they are going to lead to the development of Burnout syndrome.
	Challenge	1. Sit and stand up five times and/or raise both arms above your head with clenched fists for 10 seconds 2. Make a list of your everyday tasks and/or focus on a task every 25 minutes
III-Humor	Form	Self-assessment form about your mood
	Challenge	Watch a video of a smiling baby
IV-Social Relationships	Form	Self-assessment form about their relations at work
	Challenge	A photo giving a hug in co-workers and/or a compliment to co-worker
V-Stress	Form	Stress self-assessment form
	Challenge	Redo some of the proposed activities in the days before
VI-Motivation	Form	Define and plan activities that will keep performing on a daily basis.

The quizzes contained questions relating to topics. They were shared through a Google Form's link and after, the answers were automatically stored in the data file from the Drive™ folder. Meanwhile, the challenges had to be acknowledged with a message or a picture confirmation (depending on the task). All missions were launched earlier in the day inside the group. The feedbacks of the answers were given by up to 30 minutes after the execution of a task along with a positive comment (Ex: "Nice job!", "Congratulations", "Well done."), and the score performed in the task. In addition, earlier in the day, a table was thrown with the score and the trophies won from each participant. The researchers gave each other feedback, a social reinforcement. The contestant won bonuses for congratulating the colleague to perform a task on the show.

The analysis of the results was made in a descriptive way, reporting the answers of the participants of the program to the final questionnaire, and a description of the absolute and relative frequency values of their engagement in the program.

3. Results

Table 2. Questions and answers from the interview conducted by the Manager at the end of the program to receive the feedback from participants.

Question 1	
Share what and how you intend to implement the activities practiced during the program in your daily life?	
ANSWER 1	I will say good morning and when I'm in a good mood will think if I'm going to give you a hug
ANSWER 2	When I sit down in my chair, I will lift up my arms and I will stretch it up.
ANSWER 3	Upon arriving at my job, first I will greet all my colleagues. Soon after I drink water, sit in the chair and do my routine work. During the break, I will eat a fruit, do some stretching and talk a bit with my colleagues.
ANSWER 4	All these experiences were well received and accepted for my mind and body. I will use all for sure in my daily life.
ANSWER 5	PS: a hug will come along with the question "How was your week?"
ANSWER 6	The hugs save, do you know that?
ANSWER 7	Every day I'm going to do five minutes of stretching.
ANSWER 8	I'm going to apply everything I learned from this program.
Question 2	
What do you think of this experience of a week?	
ANSWER 1	Cool. Made me re-evaluate some concepts
ANSWER 2	Great
ANSWER 3	Very satisfying, something different. :)
ANSWER 4	Wonderful! 😊
ANSWER 5	Cool
ANSWER 6	Very good, enlightening.
ANSWER 7	Enlightening and fun.
ANSWER 8	Very good.

At the end of the program, managers interviewed some participants (table 2). One of the questions was "How would you maintain the tasks practiced in the program in your daily life?" These were some reports:

"When I sit down in my chair I will lift up my arms to stretch up." "I'll say 'good morning' and when I'm in a good mood I'll think if I'm going to give my colleagues a hug." During the program, physical, emotional and social tasks were stimulated. Thereupon, the participants planned to start keeping a task in at least one of these areas. Social and emotional tasks stood out as their favorites. Probably because these tasks were causing an immediate positive reinforcement on the work environment. For example, when giving a hug on the co-worker, immediate, usually the person receives a reply. Another question asked by managers was which elements were most liked to keep them engaged in the program. They reported that the strategy used to conduct the program was interesting and made sure they knew the syndrome. Most of the participants (nine) replied that the feedback from points and score table were stimulants to engage them in the program.

In relation to the results of engagement during the six-day Burnout syndrome educational program, 75% (12 people) of the participants engaged in at least five missions. Out of these, nine participated in all six missions. The 16 participants executed 127 tasks, i.e. 66.1% of 192 possible. In addition, some employees who were not participating have requested to participate in the program due to the commentaries of their co-workers who were participating. Another reply the program managers received was the participants were excited to run the task. When they saw the program manager, they ask about when they were going to do the task, asked if there was still time, and if it still was worth running the task. At the same time, the stimulus of being able to change the trophies for awards resulted in some requests for more tasks in order to achieve the required score. Despite more than a participant reaches the score required to win a prize, only one employee made use of trophies and traded for a Labor Gymnastics class.

4. Discussion

This case study showed the application of gamification to engage employees in a coworking space in a Burnout syndrome educational program promoted by the coworking managers. It was identified that for the prevention of the syndrome, firstly was necessary to inform people about the significance of the disease and how to avoid the causes, hence the need for an educational program. In addition, the use of the gamification program proved to be a solution to the problem of employee's engagement in occupational health programs proposed by the companies.

The reports of workers after the educational program demonstrated a better understanding of what it means the syndrome and its risks. From this, they traced goals or activities to perform everyday from tasks learned during the program. As demonstrated in the Schwarzer's theory of behavioral change (Schwarzer, 2008), the knowledge of the causes and consequences is the first step to change the behavior of a person. Therefore, employees who are presenting behaviors or symptoms of Burnout syndrome need to be informed of what is happening, what are the consequences on their health, and what better habits to be adopted in the workplace. In the study of Daniels, De Passe and Kamal (2016), it is suggested that the educational programs as a great option for treatment and prevention of Burnout syndrome of surgeons.

About the missions thrown during the educational program, the quizzes had an informative goal about the syndrome, while the challenges were practical tasks to prevent each of the three components of the syndrome. Other studies, use this method to prevent or treat the Burnout syndrome, as Goodman and Schorling (2012), which taught techniques of Hatha Yoga and meditation for doctors. Others research were from Salleh et al. (2009) and Sargent et al. (2009) which also encouraged the practice of exercises and meditation. Insofar as, the present case study, workers practiced some gymnastics exercises.

In relation to the engagement, the gamification demonstrated to optimize the educational program applied in this study. Workers reported that the elements of scoring and leaderboard prompted the execution of tasks. Huang and Hew (2015) showed that the use of points stimulated students to perform tasks more challenging, as well as in the present study had the challenges. Other research demonstrated that the use of the gamification might make the jobs performed by employees more fun and enjoyable (Robson et al., 2016), which are important factors for the prevention of Burnout syndrome because it improves the mood of workers and the workplace.

5. Conclusion

This case report presents the engagement of workers from a coworking in a Burnout syndrome educational program gamified. At the end of the program, participants planned to keep some of the tasks carried out. This case report brings an insight to business managers, indicating that if the employees are informed and empowered to deal with the stressors factors of their jobs, they will prevent the Burnout Syndrome.

In addition, the Gamification showed that can engage participants in the program, which is a difficulty for many companies when proposing any educational program for its employees. On the other hand, in scientific research, researchers in the area of occupational health should investigate the gamification engagement strategy in other situations and with larger samples to test the findings of this case report.

6. References

- Carlotto MS, & Palazzo LS. (2006). Síndrome de *Burnout* e fatores associados: um estudo epidemiológico com professores Factors associated with *Burnout*'s syndrome: na epidemiological study of teachers. *Cadernos de Saúde Pública*. May; 22:1017-26.
- Carlotto MS, & Câmara SG. (2008). Análise da produção científica sobre a Síndrome de *Burnout* no Brasil. *Psico*. Apr;39(2).
- Cipriano G, Neves LM, Cipriano GF, Chiappa GR, & Borghi-Silva A. (2014). Cardiovascular disease prevention and implications for worksite health promotion programs in Brazil. *Progress in cardiovascular diseases*. Apr 30; 56(5): 493-500.
- Daniels AH, DePasse JM, & Kamal RN. (2016). Orthopaedic surgeon *Burnout*: Diagnosis, treatment, and prevention. *Journal of the American Academy of Orthopaedic Surgeons*. Apr 1; 24(4): 213-9.
- Després JP, Alméras N, & Gauvin L. (2014). Worksite health and wellness programs: Canadian achievements and prospects. *Progress in cardiovascular diseases*. 2014 Apr 30; 56(5): 484-92.
- Gallup, (2016), the high cost of worker *Burnout* in Germany. [Online]. Source: <http://news.gallup.com/businessjournal/190049/high-cost-worker-Burnout-ermany.aspx> (march 2018)
- Goodman MJ, & Schorling JB. (2012). A mindfulness course decreases *Burnout* and improves well-being among healthcare providers. *The International Journal of Psychiatry in Medicine*. Feb; 43(2): 119-28.
- Hamari J, & Parvinen P. (2016). Introduction to gamification: motivations, effects and analytics minitrack. In *System Sciences (HICSS), 49th Hawaii International Conference on 2016 Jan 5* (pp. 1307-1308). IEEE.
- Huang B, & Hew KF. (2015) Do points, badges and leaderboard increase learning and activity: A quasi-experiment on the effects of *Gamification*. In *Proc. of the 23rd International Conference on Computers in Education*, Nov (pp. 275-280).
- Jacques MD. (2003). Abordagens teórico-metodológicas em saúde/doença mental and trabalho. *Psicologia and Sociedade*. 2003 Jan; 15(1): 97-116.
- Kompier MA, & Kristensen TS. (2003) As intervenções em estresse organizacional. *Cadernos de psicologia social do trabalho*. Dec; 6: 37-58.
- Llera J, & Durante E. (2014). Correlación entre el clima educacional y el Síndrome de desgaste profesional en los programas de residencia de un hospital universitario. *Archivos argentinos de pediatría*. Feb; 112(1): 6-11.
- Lima FD, Buunk AP, Araújo MB, Chaves JG, Muniz DL, & Queiroz LB. (2007). Síndrome de *Burnout* em residentes da Universidade Federal de Uberlândia-2004. *Rev Bras Educ Méd*. May; 31(2): 137-46.
- Maslach C, & Leiter MP. (2016). Understanding the *Burnout* experience: recent research and its implications for psychiatry. *World Psychiatry*. Jun 1; 15(2): 103-11.
- Monteiro Dias F, Fernandes de Cintra Santos J, & Abelha L, Lovisi GM. (2016). O estresse ocupacional e a Síndrome do esgotamento profissional (*Burnout*) em trabalhadores da indústria do petróleo: uma revisão sistemática. *Revista Brasileira de Saúde Ocupacional*. 41.
- Moreno FN, Gil GP, Haddad MD, & Vannuchi MT (2011). Estratégias e intervenções no enfrentamento da Síndrome de *Burnout*. *Revenferm UERJ*. Jan; 19(1): 140-5.
- Robson K, Plangger K, Kietzmann JH, McCarthy I, & Pitt L. (2016). Game on: Engaging customers and employees through *Gamification*. *Business horizons*. Feb 29; 59(1): 29-36.
- Saleh KJ, Quick JC, Sime WE, Novicoff WM, & Einhorn TA. (2009). Recognizing and preventing *Burnout* among orthopaedic leaders. *Clinical Orthopaedics and Related Research*. Feb 1; 467(2): 558-65.

- Sargent MC, Sotile W, Sotile MO, Rubash H, & Barrack RL. (2009). Quality of life during orthopaedic training and academic practice: Part 1: Orthopaedic surgery residents and faculty. *The Journal of Bone and Joint Surgery*. Oct 1; 91(10): 2395-405.
- Schwarzer R. (2008). Modeling health behavior change: How to predict and modify the adoption and maintenance of health behaviors. *Applied Psychology*. Jan 1; 57(1): 1-29.