

Personal & Sustainable Strategies to Prevent Work-Related Burnout

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Introduction

The software development industry has changed how it creates software, by focusing more and more on the client, with the results of that being more projects completed, and a better environment for the customer. While the process, and the steps, for developing software has radically evolved over the years, the practice, and the industry, of it moves at a glacial pace.

In 2018 the industry with the highest turnover rate was the technology industry at 13.2%, beating out each and every industry, including the retail and consumer products industry [1]. Drilling down into the data technology professions like User Experience and Designer are at turnover rates as high as 23.3% [1], while Retail Salesperson, the highest turnover rate in the retail industry, peaked at only 19.3% [1].

When conducting any research on an industry wide problem it is important to understand that while work-related burnout affects every person, profession, and industry differently, there are two industries that at the top:

- Computer Games: Out of all the technology industries this has the highest turnover rate at 15.5% [1].
- Computer Software Development: Computer software makes up a large portion of the technology field and still has a turnover rate of 13.3% [1].

The key difference between the high turnover rate in the technology field verses most of the other fields is that when someone leaves a role in the technology field, they get another job in the technology field, rather than moving to a different industry like most other industries.

Having someone leave a role in the technology industry to take another role in the technology field may not seem too bad at the start, the problems start to arise when I looked at how it takes on average around a month to hire a new developer [2], and it takes about six months to become fully proficient at a new role [3]. With that in mind you're looking at around seven months of a less than optimal performance from the employee, and if an employee is transitioning because of work-related burnout it is possible to extend that duration even longer since work-related burnout already impairs a person's ability to perform their best.

Speaking of work-related burnout, it is important to define what I am using as my definition of work-related burnout, "when your work begins to negatively affect other parts of your life; personal, family, health, mental health". Dr. Christina Maslach, the person who coined the term "burnout", uses this definition of burnout, "a psychological syndrome involving emotional exhaustion, depersonalization, and a diminished sense of personal accomplishment..." [4]. Another way to think about work-related burnout is, "when you are in a state where your work efforts are as likely to result in problems for the company, as they are benefits, and a lack of caring which one it is. [17]"

Background

The term burnout was first coined in the 1970's [5] and since then there has been much research into the empirical, physical, and physiological results of burning out.

With that in mind, my project expands on the body of work that already exists by looking at the often-overlooked information that can be gathered from people who have experienced burnout, and that is the anecdotal stories, and experiences an individual person has.

While working on my project I reviewed multiple research articles written about the study of burnout, and the majority of them focused on the emotional aspects that are presented by burnout and how it differs from other emotional and psychological ailments. I noticed that there was a significant lack of anecdotal responses to these articles since the participants were asked a series of questions and had to rate their experiences on a scale.

Throughout my time researching this project, and interviewing industry professionals I have noticed a trend in project/work related burnout leading to employee's leaving their current positions to take another position in the technology industry. Beyond just my project's findings, according to an article written by Forbes in 2019, 95% of human resource leaders admit burnout is sabotaging workforce retention, and that 46% of HR leaders say employee burnout is responsible for up to half (20% to 50%, specifically) of annual workforce turnover [6]. Additionally, when an employee is suffering from burnout their thinking becomes more linear, their output is reduced, and their mental health suffers, all of which I will discuss in more detail later in this paper.

Relationship to Minor

This project directly related to my minor by focusing on mental health and practices that can be used to allow someone to reduce stress and fatigue. As a student of the Consciousness and Creativity minor, I learned about techniques to reduce stress, increase focus, and enhance personal creativity. Focusing my research throughout this quarter on burnout I learned how much it reduces a person's ability to be creative, making simple tasks stressful, and has a negative impact on every aspect of an individual's life. While taking classes towards my minor I spent time learning, and reinforcing, that what works for one person might not work for another. Each person is different, and while there might be some overlap in personality traits, experiences, or other aspects of an individual's life, you must acknowledge and treat each person as their own individual.

Methodology

The methodology, and overall process behind this project is to look for how an individual experiences burnout, and to acknowledge throughout the process that what works for one person in the study might not work for someone else.

Design

My project is an exploratory study to look for emerging patterns in how burnout affects software development professionals.

The design of this project revolves around talking to individual people to gain a better understanding of their own experiences, and to see how their experiences align with other people's experiences.

For my project I contacted over a dozen software development professionals who have at least five years of professional experience. I scheduled hour-long informational interviews with each

of them. Each of these interviews follow a specific questionnaire that allows for some parts to be expanded upon as I conduct more interviews.

Data Collection Strategy

I collected my data for this project by creating my questionnaire prior to conducting any interviews, and by conducting my informational interviews. During each interview I also confirmed that the information I wrote down from the interviewee was accurate before proceeding to the next question.

In addition to the questionnaire each interview was stored in their own file with the name and date of the person I interviewed.

Metrics

One of the key takeaways from this research project is that this isn't designed to be able to give recommendations across an industry as a whole. My goal here with the research is that I can look for similarities in the signs that people express while they are burning out, and eventually are totally burnt out. I also am looking for similar useful practices that multiple people use to prevent them from burning out, and how they eventually break out of burnout once it sets in.

By looking for patterns and similarities in how people deal with burnout, and the kind of signs that they present I am able to give suggestions that people can use for self-reflection, and to give suggestions on how they can adjust their daily activities to help them reduce their levels of burnout or to give options they haven't thought of to help them deal with their burnout.

Key Decisions

For this project I decided to focus just on the software development industry. When I was defining my project during the first couple weeks of the quarter, I realized that it would be beyond my abilities to do a study of that encompasses the entire experience of burnout, so I decided to narrow it down to just work-related burnout.

In deciding how I wanted to understand the experiences that I heard from the people I interviewed I decided to minimize the amount of demographic information that I received. I chose to ignore gathering information related to age, gender, current company, current position, race/nationality, etc. I decided against gathering that information because I only had one quarter to do everything from defining my project to completing it, while also working on other classes too. The short timeline meant that I had to choose which information I wanted to get the most, and while I feel those demographics are certainly useful, I felt that it was better to treat everybody as an industry professional and simply gather information that way.

My other key decision was in the questions that I decided to ask. I learned while doing my research that in almost every article I read, or person that I talked to when explaining my project that burnout is defined slightly differently. That small difference between each person made me decide to get each person's definition of burnout as they relate it to themselves. Following that I wanted to learn how people see the signs that they present while burning out, and once they are fully burnt. This was an important question to gather since it allows me to look for similar signs between people who have no knowledge of what the other person might say. Getting the practices that people use to prevent burnout and how to get out of it was also an important decision for me since it is the core of this project. By learning how other people either prevent

burnout, or break out of it, it gives different perspectives and ideas that any one person might not have thought of.

Alternatives

What I finalized my research project on isn't what I first thought about doing for my capstone project.

When I initially looked what I wanted to research I thought about analyzing the differences between project management principles taught in universities versus what is practiced in the professional industry. The core of this version of the project still exists in the final project that I did for the class. My goal with this version, and all subsequent versions was to find ways to better the practice of developing software. The thought behind this version was that it would look for the key differences and then propose alternatives that could be implemented. The problem with this is that it requires industry wide solutions/suggestions, and that each class is taught slightly differently, each company is different from each other, and beyond that each team inside each company is different from every other team as well. This monolithic approach to providing solutions to the problem completely negates one of the core learning values of my minor, that each person is different and needs to be treated accordingly.

The other idea I had was examining how corporate culture can lead to burnout. This was slightly more aligned with my final idea because I narrowed it down to just industry professionals. One of my problems with this version is that it only looked at one aspect that can lead to burnout. While company culture can be a big factor in leading to burnout, it only focused on a small portion of the problem. This version of the project also had the problem of me trying to weigh in on how giant corporations should change their culture to better reflect a handful of interviews.

Measured Results

When I finished conducting all of my interviews, I started to aggregate all of the data into a single file. My goal with collecting all of the data isn't to make broad sweeping declarations that affect the industry as a whole, but to make small scale suggestions that can create grassroots changes.

In aggregating all the data, I looked for common words and phrases, once I collected these, I separated them based off of what part of the questionnaire I was in. With the information separated like this I then parsed through it to find the commonalities. I then used these commonalities to rate how many industry professionals recommended similar practices, presented similar signs of burnout, and had shared verbiage in how they defined burnout.

Results

In this section of the paper, I am going to go through my questionnaire and breakdown the results of each section.

Burnout Definition

Since my project is focused on the individual's experience, I decided that it would be useful to learn how each person defines burnout, and then use that definition to frame the perspective of the following answers.

In each of the interviews that I conducted no two people had the same definition of burnout, and beyond just that the approach that people took to how they define burnout differed. Some of the people I interviewed were focused on the numerical changes in a person's performance, others looked at changes in their mental health, and the remaining had as many other ways to define burnout as the ones before them.

Signs

Looking at the signs people present when they are both burning out, and burnt out is important since it allows the person who is being interviewed to be self-reflective. By allowing a person to be self-reflective on what signs they present also puts the person in the right frame of mind to answer the next section.

Pre-Burnout

The top three signs that people mentioned when they talked about burning out were:

- Linear thinking [7-12]. Creativity takes a dive, and people are only able to think about one solution where in the past they would be able to come up with multiple ways to solve a problem.
- Reduced enthusiasm [7-16]. People who would normally be enthusiastic to go to work, or meet up with people, find that just doing anything is hard.
- Work fatigue [7-16]. Along with a lack of enthusiasm, people would feel that there is too much to do, and it's never going to stop.

In Burnout

Every person interviewed talked about how when they were burnt out they had all the same signs as burning out but to greater levels, and the other top signs people talked about were:

- Lack of knowledge of burning out until already burnt [11, 12]. A lot of people interviewed talked about how that they didn't know they were burning out until they were burnt out. Once they realized that they were burnt out they would then be able to look back, and then realize they were burning out.
- Loss of passion [7-12]. Burnout encompasses more than just work, and when people are burnt out, they found that it seeps into all other aspects of their lives too.
- Frustration with everything [7-15]. Every little thing becomes a trigger point, and the smallest task takes every ounce of energy to complete it to the bare minimum.

Practices

Having the interviewed person just finished reflecting, and answering questions on what signs they present when burning out, and burnt out they are in the right mindset to talk about what they do/did to stop from burning out, or to break out from being burnt out.

Before/After the Workday

The practices in this section are designed to bookend the workday. These practices work towards getting a person in/out of the work mindset.

- "Commute to work." [7-11] This can be by, pre-COVID, riding a bus and listening to a podcast or reading a magazine. During COVID, or remote workers, this can be

accomplished by walking around a block a couple of times. The goal of this practice is to get in the right mindset when going to, or coming from work.

- Have a dedicated start/end time, with an end of day ritual [12-16]. The key with this practice is to not let the availability of work leak into every other aspect of a person's life. Having a dedicated start time lets a person not just roll out of bed and start to work, and having a dedicated end time means that you don't let the free access to work cause you to do some work in the middle of the night. The end of day ritual is a short thing that a person can do to signal to themselves, and those around them that work is over, and that it's ok to not start up again until the following day.
- Don't work off the clock, and be ok with a flexible end time, but let that be the exception not the rule [7-11, 12-14]. There are times that having a late end time is ok, and on those nights, it is vital that you acknowledge that it's happening, and that you don't let this become a common thing.

During the Workday

The practices in this section are things that individuals can try to do throughout their workday that can help reduce stress, fatigue, and help people prevent burnout.

- Have a dedicated workspace [7-14]. This can be difficult, and the practicality of this varies based on the living situation of each person. The ability to have a physical space that is only dedicated to work makes it easier to not let work seep into every facet of a person's life.
- Invest in ergonomics, or in any tech that is necessary for your comfort/work [8-13]. Having a setup that allows for comfort while working long hours eases the ability to stay focused, and reduce stress.
- Don't accept non-emergency meetings or calls after a specific time, this will be more or less difficult based on the seniority level of an individual [7-14]. The goal of this practice is to be able to have a block of productivity to finish off the workday.
- Build blocks of meeting and productivity time, and add refresh time between meetings [7-13]. By having chunks of meeting time, and chunks of productivity time it allows a person to get into the flow and get a decent amount of work done. The refresh time between meetings also allows for meetings to run long if necessary, and for people to get up and stretch their legs before going back to their desk.
- Normalize the practice of turning your camera off, and establish ground rules for meetings [9-13]. For large scale meetings, where one person is disseminating information to a group of people, it isn't necessary for every person to have their camera on. Whereas for smaller scale meetings, team or one-on-one, it should be left to the discretion of the team members to determine which way to go.
- Use the appropriate software (MS Teams, Zoom, etc.) [7-13]. The core of this practice is to help individuals and teams mitigate stress. By having the appropriate software and ensuring that individual's have access to it helps boost productivity, and makes working easier.

- Commiserate with colleagues, but this must be done with someone you trust, and who you can relate to [7-15]. Having the ability to blow off some steam with a close friend is incredibly important, and the value of this practice is to understand that people need to be able to release their emotions. This practice can be difficult as it takes practice to not have these sessions end on a negative note, but to end on something positive and is a cathartic release.
- Step away from your desk for lunch [7-14]. While this practice might seem easy, it is all too easy to eat at your desk during lunch and to work through breaks. But the core of this practice is in giving the individual a break from their work, and to let them have a moment to move around, and give their mind a break from working.

Outside of Work

The practices here are centered around things that can be done outside of the normal workday. These practices are designed to help an individual develop a greater sense of self, and realize that they are more than just work and sleep.

- Use your vacation days and take some time off [7-16]. This practice revolves around the idea that vacation time is something an individual earns, and should be viewed as such. Taking a vacation can help ensure that a person is at their best when a company needs them the most.
- Don't be afraid to use your sick days as mental health days [7-15]. More and more people are coming around to the idea that mental health needs to be taken as important as physical health. The value of this practice lies in the understanding that the mind and the body are connected, and if either one isn't right, then it will directly affect the other.
- Go on an adventure [8-10]! This practice doesn't need to be a grand escape, and it can even be as small as exploring the city you live in. The goal of this practice is to give an individual permission to have experiences, and to know that those experiences can offer the opportunity for unexpected growth.
- Invest in a hobby, or create a side project at home [9-14]. This practice can help by incentivizing an individual to get through the workday. But the core value of this practice is centered around the idea that finding individuals outside of work who share a similar passion is important to creating a person who has more dimensions than just work, and home.
- Be realistic: It's progress not perfection [7-16]. This practice is key, it implicitly states that we are people who will make mistakes, and it explicitly states that it is ok to make a mistake. By analyzing why a person failed, and learning from those failures, it is possible to come back healthier than before.

Conclusion

Wrapping up this paper, and this project is bittersweet for me. I had an excellent time interviewing people, collecting their answers, and getting to see them be reflective in ways that most computer scientists don't do very often.

Limitations

Throughout the class I never was short on people willing to talk about their experiences, and I found that most enjoyed the opportunity to talk about it, with almost everybody I talked to being willing to send at least one other person my way as well. My two largest limitations when it came to this project were duration and manpower:

- As the only person working on this project, I had to limit the amount of time that I could put into it at any given week, with the time that I could invest fluctuating based on what my other classes required of me too. This meant that some weeks I would be able to interview three or four people when my courses were light, where other weeks I wouldn't be able to interview anybody because I had a test to study for and couldn't spare the time. To fix this limitation I would have needed to include more people on my project from the beginning, and have them work on conducting their own interviews as well.
- For the duration limitation the way this limitation presented itself is by putting a hard limit on when this project needs to be completed, and enforced a cap on the amount of time I could invest in it. To fix the duration limitation I would need to have either started this project prior to the beginning of the quarter, or I would need to have some of the interview people agree to continue to be interviewed after the quarter is over.

The combination of those two limitations was also apparent in the data that I did collect. Given a longer quarter, and more people I could have looked at more demographics for each person interviewed, and see how those differences may correlate to similar signs of burnout, or practices to prevent it. I could have also looked at how burnout affects a person as a whole, and not just focusing on the small section of burnout that just relates to a person's work, but looked at how external factors contribute to burnout as well.

Future Work

Going forward I feel that there are a couple different avenues that this project can be expanded upon.

- A longitudinal study that follows up with each of the people I interviewed over the next 5, 10, and 15 years. I feel that looking at how a person evolves, and adapts, to deal with burnout could highlight hidden information that wasn't readily apparent with a single quarter study. With the current state of the project this is highly possible, and would only require the approval of the people who have already been interviewed.
- A cross-sectional study that looks at how different demographics (job, gender, race, age, etc.) affect how a person deals with burnout. This path would be difficult as it requires to go back and re-interview every person who was interviewed and gather more demographical data that was omitted in this version of the project.

I feel that out of all the different ways this project can be used to springboard into a future iteration, these two are the most relevant. Out of those two I think that a longitudinal study would provide not only the most information, but also the most potential for unique insights.

Final Thoughts

This project was a dream to work on, and the only thing I wish is that I could have worked on it longer. I gained valuable insights in talking to industry professionals, and applied what I learned from talking to them immediately into a class that I was taking concurrently with this one.

At the start of this quarter, I wasn't sure how my project would be able to affect my future as an aspiring Technical Program Manager. Looking back, I can see how every interview changed my leadership style, and how the advice I gained from each person I was able to directly apply to not only the project that I was currently on, but how I can apply it to the future projects that I am apart of too.

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