



**IT Productivity Discrepancies:  
Impact on Job Satisfaction, Motivation and  
Burnout, in Multigenerational Employees**

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## Abstract

2022 is the year where most of those born in 2004 finish their senior year of high school and are eligible to enter the job market legally, without the need of permission from a tutor. These freshly made 18-year-olds may still seem like children in our eyes, but they are bound to leave TikTok and enter our companies, becoming our peers.

Is the workplace ready for the new generation? Can the older ones work well with Gen Z? Are they somewhat on the same IT level? In the present Master thesis, “*IT Productivity Discrepancies: Impact on Job Satisfaction, Motivation and Burnout, in Multigenerational Employees*” by Mariana Almeida, the objective is to understand how working alongside co-workers from another generation, who have a different level of IT friendliness, influence employees’ job satisfaction, motivation, and Burnout. Further, the thesis examines whether Gen Z and older generations react to such scenarios differently.

Through the quantitative study conducted, results show that indeed IT productivity discrepancies influence one’s satisfaction and motivation towards their job, making them more prone to suffer from Burnout. This influence is shown by a positive or negative emotional outcome and here it was found that the younger cohort experiences more negative emotions, thus less satisfaction and motivation, and are more prone to develop BOS<sup>1</sup> than older cohorts.

**Keywords:** Gen Z; Millennials; Gen X; Baby Boomers; IT; Technology; Emotions; Satisfaction; Motivation; Burnout

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<sup>1</sup> Burnout Syndrome

## Resumo

2022 é o ano em que a maioria das pessoas nascidas em 2004 terminam o 12º ano e podem ingressar no mercado de trabalho legalmente, sem necessitarem de autorização de um tutor. Estes jovens de 18 anos podem continuar a parecer crianças aos nossos olhos, mas estão destinados a sair do *TikTok* e a entrar nas nossas empresas, tornando-se nossos colegas.

Na presente dissertação, “*Discrepâncias de Produtividade Tecnológica: Impacto na Satisfação, Motivação e Burnout no Trabalho, em Colaboradores Multigeracionais*” de Mariana Almeida, o objetivo é compreender como é que trabalhar junto de pessoas de outras gerações, que não são tão produtivas tecnologicamente, influencia a satisfação e motivação no trabalho, e Burnout. Para além disso, este trabalho tenciona compreender se a Gen Z e gerações mais velhas reagem a tais cenários de forma diferente.

Através do estudo quantitativo desenvolvido, os resultados mostram que efetivamente discrepâncias de produtividade tecnológica têm impacto na satisfação e motivação que uma pessoa sente relativamente ao seu trabalho e torna-a mais ou menos passível de desenvolver BOS<sup>2</sup>. Este impacto apresenta-se na forma de emoções positivas ou negativas, sendo que a geração mais nova demonstra sentir mais emoções negativas do que gerações mais velhas, o que implica que é também a geração com menor satisfação e motivação, e maior risco de desenvolver Burnout.

**Palavras-chave:** Gen Z; Millennials; Gen X; Baby Boomers; Tecnologia; Emoções; Satisfação; Motivação; Burnout

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<sup>2</sup> Síndrome de Burnout

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## 1. Introduction

Some of us may find it disturbing that kids nowadays learn how to access YouTube on a tablet before they can even talk. However, can we blame them for being so technologically friendly when most of us spend a lot of time looking at a screen?

Since 2015, the newer generation of workers have been entering the job market – the generation Z. Being a generation that grew up using Google as a tool for research for as long as they can remember, and being the children of social media, these young people developed a whole new set of skills just by being in constant contact with screens.

Generation Z, according to McCrindle (2006), consists of those who were born between 1996 and 2009 which makes the oldest of them 26 in the year of 2021. With this new generation being so IT friendly it is to be expected that their productivity is higher if their work requires the usage of technological devices such as computers and other mobile devices. This is great for companies, since Gen-Z is the future and higher productivity leads to better corporate results. However, older workers should not be forgotten, and any unfavourable situations they face are worth of attention.

The present thesis intends to understand, when in an environment where work-related tasks are done on an IT device, how Generation Z feels that they outperform their peers and older generations (Baby Boomers, Generation X and Millennials) worry to fall behind, how such feelings affect their job satisfaction, motivation and if they feel more prone to suffer from Burnout.

With this knowledge, companies could prevent certain practices that end up disturbing their employees' emotions, such as not reassuring current workers about their worth, not promoting healthy competition and relationships, not offering the right amount of training... This way organizations can learn how to support this new generation who can so easily manage their way through technology, without leaving other generations who might not be so tech efficient on their own out of the picture.

In terms of the structure, this research paper consists of one quantitative study, in which the method was a scenario-based experiment with follow-up survey questions, applied to office workers from all age groups, where they face a specific workplace scenario (102 respondents). Throughout the whole process of elaborating this master thesis, only the online platform Qualtrics and the Statistical Package for the Social Sciences (SPSS) software were used to gather and analyse the data and test the hypothesis.

The next chapter reviews research on the characteristics of different generations and on technology use at work, and analyses how the two streams of literature are related. The chapter also presents the overarching theory that supports the thesis and the hypotheses that will later on be analysed.

The third chapter refers to the methodology and is divided into four sections: Research Design, Participants and Procedure, Measurements and Analytic Strategy. Research Design presents an outline of the research model in question, as well as how the data for the study was collected, which is then explained in the analytic strategy how it was examined. Participants and Procedure briefly explains to whom and where the survey was distributed, and Measurements clarifies the scales used throughout the research.

Next to methodology, the fourth chapter presents and analyses the results obtained whereas the last chapter includes the discussion of the research objectives and the research conclusions, as well as the limitations found throughout the investigation and recommendations for future research.

## 2. Theorization

### 2.1. Literature review

#### 2.1.1. Generations

Defining the years that separate each generation is quite challenging, and there are a lot of different opinions about it in the existing literature. However, according to Mark McCrindle (2006), we can divide each generation by the following years:

- *Baby Boomers*, are those who were born between 1946 and 1964 meaning that, in the year 2021, the youngest of this generation are 57 years old.
- *Generation X*, those born between 1965 and 1979, are a great part of the job market since their age, in 2021, goes from 42 to 56 years old.
- *Millennials*, also called Generation Y, born between 1980 and 1994, are the other big portion of the market with them being 27-41 years old.
- *Generation Z*, the youngest workforce, are those born between 1995 and 2009 which makes the oldest of them 26 years old in 2021.

Since each generation grew up with different resources, it is only natural that their characteristics inside and outside of work are unlike. Multiple authors have gathered the traits shared by cohorts, and according to Sezin Baysal Berkup (2014), the oldest generation mentioned above, the Baby Boomers, are seen as being extremely individualists, selfish and competitive but they also find teamwork extremely valuable when it's in order to attain their personal goals. This is the generation that appreciates being recognized by others for their hard work and get motivated by monetary benefits, plus material ones such as having their own parking spot (Olson, 2011) but, just like every other generation, they also get motivated by intrinsic factors such as recognition, inspiration, autonomy... However, it's important to remember that most Boomers will be exiting the job market within the next few years due to their age!

For the next generation, Gen-X differs from the previous generation in a lot of ways. They are less competitive, due to the fact that there's not so many of them (there wasn't a "boom" like with the Baby Boomers), they're also more creative and are able to give a faster response to the challenges they face since they are quick to analyze things and find solutions (Berkup, 2014). This cohort needs the guarantee that there's professional growth in the organization they work in, which goes along with the fact that, in general, people from this age group are open for change and, if the environment in their

job or their tasks don't satisfy them anymore, they will most likely look for opportunities elsewhere (Berkup, 2014) (Miller & Washington, 2011). Regarding their motivation, they are more easily motivated by extrinsic factors, mainly social ones (Mahmoud et al., 2020).

And the most known, popular generation, Millennials, were indeed the first "internet babies" since the information age is dated after the 1980s. This generation revolutionized the market by being the most different from the prior ones and gave organizations the push to become even more tech friendly and, according to Sezin Baysal Berkup (2014) again, Millennials are known to be highly educated, always ready and eager to learn more, and use technologies for their everyday tasks in both work and personal life, which allows them to match the fast-paced evolution of things. However, this trait of living a "fast" life took from them the quality of being patient but gave them an extreme ability to multitask and filter information to answer the challenges they face, and like generation X, Gen-Y enjoys being challenged and can easily switch employers if not motivated enough.

In contrast, Generation Z is said to be extremely confident in themselves, while having no problems with expressing their thoughts regarding certain situations. Regarding their work life expectations, most Gen-Zs are not as ambitious as previous generations "in the rise of the corporate ladder" but this doesn't mean that they are less motivated at work (Gupta, 2020). Still, according to Ali B Mahmoud et al. (2020), the present cohort is more sensible to suffer from being demotivated than the previous age groups but are more easily motivated by intrinsic factors (receiving recognition for their work, being given responsibilities and autonomy, ...) than extrinsic (wage increase, health insurance, permanent parking spot, ...). These "kids" are addicted to technology, speed, freedom...and for them, IT is not perceived as being innovative but as being normal and common everywhere, plus they too share the Millennial's multitasking and fast adaptability skills, the Generation X's creativity and individualism from Baby Boomers (Berkup, 2014).

### **2.1.2. Information Technology**

If there's one thing that is constantly evolving and makes the whole world evolve with it is technology and, these technologies have been adopted and implemented by companies who hoped to improve their workers ability to accompany the fast-paced work-environment we live in (Gilroy & Desai, 1986).

Cascio and Montealegre (2016) defined, in their *How Technology is Changing Work and Organizations* article, the technologies that are most revolutionary for organizations and industries nowadays, them being:

1. Cloud and mobile computing.
2. Big data and machine learning.
3. Sensors and intelligence manufacturing.
4. Advanced robotics and drones.
5. Clean-energy technologies.

The emergence of technology in corporate work as we know it, occurred in what is called “digital era”. In this era, when a company chooses to implement technology into its business, they need to take into consideration some important questions: are those IT easy for employees to use? Are the employees ready to adopt and learn how to use it? Is the company choosing to implement it to create competitive value for either the organization as a whole or for its employees? (Cascio & Montealegre, 2016). Wayne Cascio and Ramiro Montealegre (2016) took these questions into consideration and stated that “If technology is to enable people at work, it should foster self-motivation and well-being; ... enhance productivity; and promote job satisfaction ...” but if the implementation restricts those who use it, then we can only expect the opposite (demotivation, unproductivity, stress...).

According to Stephen Bradley (2016), the digital business went from being electronic (e-business), to being mobile (m-business) to now being what it’s called the ubiquitous business (u-business). Basically, the u-business refers to a domain where technology is behind it all, giving people the power to manage their lives from wherever they are and at any time (Cascio & Montealegre, 2016). However, just having the means to use technology in our daily lives doesn’t mean that we are all capable of putting it to a good and productive use.

Yoram Eshet, in his *Thinking in the Digital Era: A Revised Model for Digital Literacy* (2012), stated that “Having digital literacy requires more than just the ability to use a software or to operate a digital device; it includes a large variety of complex skills such as cognitive, motoric, sociological and emotional skills that users need to master in order to use digital environments effectively.” This being said, besides people having the need to learn how to use the technology per se, they also need to work on their own capabilities.

### **2.1.3. The usage of IT by different generations**

According to Michael G. Morris and Viswanath Venkatesh (2000), when using a new technological system for 3 or more months, older generations can match younger cohorts' productivity. This was expected, since multiple authors have studied how age impacts multiple aspects related to learning, for example it is known that the older a person is the more difficult it may be for them to process complicated spurs (Plude & Hoyer, 1985), a person's perception becomes slower and scarce (Minton & Schneider, 1980), vision and hearing weaken with age so it's harder to perceive the motions (Forteza & Prieto, 1990), amongst other discoveries. The same authors attempt to answer why younger generations of workers value more the usage of IT than older ones, stating that people in their twenties/thirties have been more exposed to it from the moment they first entered school which contrasts with the fact that some of the older employees only gained access to technologies in their last school years or just when they entered the workplace.

With Zoomers<sup>3</sup> being the first generation to be considered completely global, as they are in constant and consistent contact with the internet since they were born (Gupta, 2020), they do not require the same adaptation period as older generations, nor do they have the same age-related problems with learning.

## **2.2. Overarching theory**

The study in question can be supported by the Affective Events Theory (AET) (Weiss & Cropanzano, 1996) that explains how the work environment in which a person is in is susceptible to suffer from inconveniences and rewarding situations regularly, and thus leads to their feeling positive or negative emotions. This emotional outcome, according to this theory, has a direct influence on the person's job satisfaction and performance.

More in depth, the psychologists who came up with the AET explain that a single event can set off multiple emotional experiences, both past and current, that formulate the emotional episode. Besides how good and bad events at work influence one's job performance and satisfaction, this theory also advises people and organizations to not ignore emotions since they accumulate and cause a negative impact on productivity.

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<sup>3</sup> Popular nickname used to describe generation Z, which contrasts with the Baby Boomers.

According to Paul Ekman (1984), humans can perceive only six basic emotions, and all other emotions descend from these:

1. Happiness
2. Surprise
3. Anger
4. Disgust
5. Fear
6. Sadness

Sieun An, Li-Jun Ji, Michael Marks and Zhiyong Zhang (2017), took the basic emotions from Ekman and discovered that those emotions contain both negativity and positivity even if one of the two is more prominent (e.g., sadness is more negative than positive, however it still contains positivity to it). A good and simple example of this is fear: no one enjoys being afraid (negative impact) however, without this emotion our survival skills wouldn't kick in (positive impact) but evidence shows that it pushes more to the negative side.

Basically, negative emotions alert us of possible threats and challenges that while they make us uncomfortable, they also focus our consciousness so that we can concentrate on the thing that triggered said emotion in order to solve it. Nevertheless, if a person is submerged in negative emotions, their problems may seem impossible to solve and it may trigger more negative feelings (Gavin, 2018). As stated by Amrisha Vaish, Tobias Grossmann and Amanda Woodward in their *Not all emotions are created equal: The negativity bias in social-emotional development* (2008) “adults use positive versus negative information to make sense of their world; specifically, across an array of psychological situations and tasks, adults display a negativity bias, or the propensity to attend to, learn from, and use negative information far more than positive information.”

In the present research paper, the emotions used aren't considered as being both good and bad and aren't from the basic ones Ekman suggested in 1984, these emotions are either positive or negative to facilitate the understanding of how a "good" emotional outcome and a "bad" one influences the variables in study. Still, there's one emotion that is hard to place inside a single category which is "Competitiveness", therefore it is classified as being ambiguous and it presents three definitions on the Oxford English Dictionary (OED):

“[uncountable]

1. *The fact of people or organizations competing against each other*
2. *The fact of being as good as or better than others*
3. *The fact of trying very hard to be better than others”*

The positive emotions are quite simple, and each is more directed for either generation Z or older generations, them being feeling proud of themselves and inspired by others. Once again, according to the Oxford English Dictionary, feeling "Pride" is:

“[uncountable, singular] *a feeling of being pleased or satisfied that you get when you or people who are connected with you have done something well or own something that other people admire”*

Whereas inspiration means:

“[uncountable] *the process that takes place when somebody sees or hears something that causes them to have exciting new ideas or makes them want to create something, especially in art, music or literature”*

Due to adults availing oneself more of negative emotions, the "Bad emotions" category is wider than the positive ones. This category consists of four usually perceived as negative emotions, which are the following and that, still according to the OED, mean:

- Resentment:

“[uncountable, singular] *resentment (towards/against somebody) a feeling of anger or unhappiness about something that you think is unfair”*

- Frustration:

“[uncountable] *the feeling of being frustrated*<sup>4</sup>”

- Fear:

“[uncountable, countable] *the bad feeling that you have when you are in danger or when a particular thing frightens you*”

- Boredom:

“[uncountable] *the state of feeling bored*<sup>5</sup>; *the fact of being very boring*”

### 2.3. Hypothesis development

When confronted with a certain scenario, every person is bound to react in a certain way. However, according to Cascio and Montealegre (2016) again, if technology is implemented and used in order to allow people to have more autonomy, be more productive... they will experience an increase in motivation, job satisfaction and be less stressed.

According to the research model, the first relationships to study consist of how a change in scenario alters one’s positive, ambiguous, and negative emotions. Therefore, the first three hypotheses are the following:

**H<sub>1</sub>:** *Facing a situation where technological productivity discrepancies exist, positive emotions decrease.*

**H<sub>2</sub>:** *Facing a situation where technological productivity discrepancies exist, people tend to feel more competitive.*

**H<sub>3</sub>:** *Facing a situation where technological productivity discrepancies exist, negative emotions increase.*

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<sup>4</sup> Frustrated: “[adjective] *feeling annoyed and impatient because you cannot do or achieve what you want*” (Oxford English Dictionary)

<sup>5</sup> Bored: “[adjective] *feeling tired and impatient because you have lost interest in somebody/something or because you have nothing to do*” (Oxford English Dictionary)

### **2.3.1. Job Satisfaction**

One can explain job satisfaction as being “a pleasurable or emotional state resulting from the appraisal of one’s job or job experiences” (Locke, 1976) and this is something that has been subject to numerous studies, and two authors (Huseman & Hatfield, 1990) stated that a person feels satisfied with their job when there’s a match between what they give to the organization and what they receive in return, meaning that when these are unmatched, one suffers from dissatisfaction.

A study directed by Payal Mehra and Catherine Nickerson (2018) states that organizational communication through constant feedback and brainstorming improves the job satisfaction felt not only by workers but also by their managers. This research paper analysed not only the satisfaction and communication but also how the generational differences influence the two, where it was found that Millennials seem to be the least satisfied cohort at work, which impacts their evasion of communication with adults from older generations. Whereas Boomers and those from generation X reveal more positive attitudes towards their job, seem to experience less negative feelings and tend to describe their work environment in a more flattering way (Kollmann et al., 2019).

For this, it is expected that a different productivity scenario leads to a change in the positive and negative emotions felt, which then alters the job satisfaction. Therefore, the hypothesis in question (H<sub>4</sub>) is:

*H<sub>4</sub>: Facing a situation where technological productivity discrepancies exist, job satisfaction decreases.*

### **2.3.2. Job Motivation**

Several authors and researchers have focused their time on understanding what motivates people regarding their job. It is well known and expected that unmotivated employees put little to no effort in their job decreasing their productivity and the quality of their work, give more thoughts to abandoning their workplace and switching companies, which will increase the turnover ratio for the organization. Employers have the extreme necessity to know their workers and how to keep them motivated based on their own wants and needs (Ganta, 2014).

The easiest way for a company to know their employees is to get a sense of the expectations of each generation. This new cohort entering the market expects to find in

their workplace the opportunity to make decisions in an autonomous way (Boscha, 2011), be challenged and given the chance to be competitive while being creative and given a voice within the organization (Schawbel, 2014), have chances of growing and developing their careers (Mitchell, 2016), and if their company doesn't meet their expectations they will most likely be unmotivated since Gen-Z seems to be extremely career oriented (Sharma & Pandit, 2021).

The generation closer in age to the Zoomers, the Millennials, also prioritize non-monetary motivation factors (Fero & Dukoupilová, 2019) but studies have shown that generations X and Baby Boomers are more on the opposite side.

According to a study done by Maznah Wan Omar, Kamaruzaman Jusoff and Harniyati Hussin (2010), employees are more loyal to their organization when they perceive their manager as being a good leader, who is able to motivate them to excel their jobs and aim for the best quality. But having a great leader isn't everything when it comes to motivation but also being in a good work environment with good relationships with colleagues, hence why situations where productivity discrepancies exist can influence motivation ( $H_5$ ):

***H<sub>5</sub>:** Facing a situation where technological productivity discrepancies exist, job motivation decreases.*

### **2.3.3. Proneness to Suffer from Burnout**

The term "Burnout" came from the German psychologist Herbert J. Freudenberger in the 1970s and can be considered a syndrome. The Burnout Syndrome (BOS) embodies exhaustion (which is extreme fatigue due to dedicating a lot of effort and time to a specific task or overall project where the person doesn't perceive it as being useful), depersonalization (having a detached and/or indifferent attitude towards work, where it can be manifested when interacting with colleagues, clients by, for example, lack of empathy and rudeness) and reduced personal accomplishment (the predisposition to feel like they can't perform their job correctly, having poor self-esteem on a professional level) and it can derive from within the person due to their expectations, financial problems, bad coping mechanisms... and it can be caused by the organization where the person works, for example, for being submitted to a heavy workload, not being correctly

rewarded, understaffing, conflicts or poor relationship with co-workers (Mealer et al., 2016).

According to Monique Valcour (2016), a person can prevent and ease their way out of feeling burned out by shifting their perspective in order to solve what bothers them, for example by delegating specific tasks in order to ease the workload or establish good and supportive relationships with colleagues, seek help from others in the same organization that may also be suffering from Burnout. The same author also states that diminishing the contact with nuisances by lowering expectations on both people and situations can help.

Before offering solutions to Burnout caused by different IT productivity situations, we need to understand if indeed there is a cause-effect relation between these variables. Thus, the following hypothesis ( $H_6$ ):

***H<sub>6</sub>:** Facing a situation where technological productivity discrepancies exist, the proneness to suffer from Burnout increases.*

#### **2.3.4. Generational Impact**

As it was stated in each of the previous sections, belonging to a specific generation means that we tend to prioritize a specific set of things, materialistic and not, which will then influence our satisfaction and motivation towards our job.

Since the main subject of the present research is understanding the impact of IT productivity discrepancies amongst the youngest generation in the job market and the older ones, we expect that older generations will present worse scores when asked about the variables in study meaning that they experience fewer positive emotions and more negative ones.

Thus, if the generational factor presents a significant effect on the emotional outcome from facing a different efficiency scenario, we can assume that that outcome will affect the dependent variables job satisfaction, motivation, and proneness to suffer from Burnout if those are sustained by the previous hypotheses. With that, the last hypothesis to test is (*H*<sub>7</sub>):

***H**<sub>7</sub>: The relationship between facing a different IT productivity scenario and (a) positive emotions, (b) competition, (c) negative emotions, (d) job satisfaction, (e) job motivation and (f) proneness to suffer from Burnout is stronger among older generations and weaker among Gen Z.*

### 3. Methodology

#### 3.1. Research design

The empirical study used in the present research paper consists of one quantitative study in the form of an online survey, which was made using the Qualtrics platform. The research model in question was designed to assess one’s satisfaction, motivation, and proneness to suffer from Burnout when faced with a certain technological productivity issue in their workplace, and it is the following:

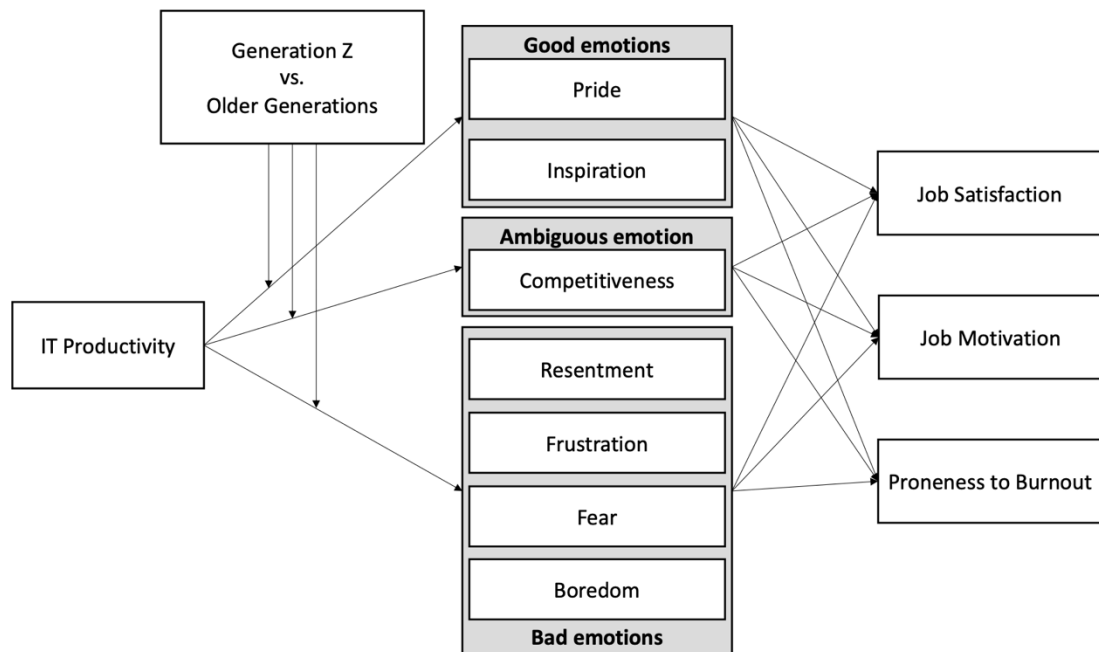


Figure 1 - Research Model

Taking into consideration the independent variable “IT Productivity”, the aim is to comprehend its impact on the dependent variables “Job Satisfaction”, “Job Motivation” and “Chances of Burnout” through the moderators “Good Emotions”, “Ambiguous Emotion” and “Bad Emotions”, where each of them contains certain emotions that, based on what their main impact on someone is, were categorized as being positive, negative, or neutral.

When the participant initiates the survey, they have two control variables: gender and age. The second one is crucial for this study, since it dictates whether the participant is shown the Gen-Z situation or the older generations’ one. Afterwards, a specific scenario is given where the productivity amongst co-workers is either equal or different and the entrant must state how they would feel, regarding the seven emotions present on the research model, if faced with the situation in question.

In the following questions, the participants are asked to keep the emotions and situation stated previously in mind. To assess the variable “Job Satisfaction”, the *Job Satisfaction Survey* (JSS) by Paul E. Specter (1984) served as a foundation from which a few of its points were taken and used, such as the following:

1. I feel like I’m being paid a fair amount for the work I do.
2. I like the people I work with.
3. When I do a good job, I receive the recognition for it that I should receive.
4. I like doing the things I do at work.

To appraise “Job Motivation”, Maznah Wan Omar, Kamaruzaman Jusoff and Harniyati Hussin (2010) use six variables such as employee loyalty, reward and compensation, working environment and peer cooperation, position and titles, benefits, and relationship with superior. Taking into consideration some of these, there are three questions on the survey to measure one’s motivation:

5. I feel motivated by my leaders to maintain my productivity.
6. My colleagues serve as inspiration for my productivity.
7. I am able to stay motivated due to the emotions I feel.

And finally, regarding Burnout, the *Maslach Burnout Inventory* (MBI) (Maslach & Jackson, 1981) was used as inspiration for the following questions:

8. I work more and harder than my peers, but I'm not as efficient.
9. At the end of the day, I feel exhausted from all I’ve done at work.
10. I don't enjoy going to work and I feel more emotional detached from my job than when I started it.

### **3.2. Participants and procedure**

The survey was distributed online, during the month of November 2021. The link to the questionnaire was shared amongst friends and relatives via social media and face-to-face interactions.

For the established time that the survey was running, 102 people answered. There was also no discrimination regarding the job title, or which sector the respondents work in, since everyone was asked to imagine a certain scenario given by the researcher.

It is not possible to confirm whether all participants live and work in Portugal, since there wasn’t a question to assess their geographic location in the questionnaire. However, since the questionnaire was directly distributed amongst known people, all of them are indeed currently working in Portugal, either in person or remotely.

### **3.3. Measurements**

The first questions that the respondents were in presence of were the control variables Gender and Age, for which they could only choose if they relate with being “Female”, “Male”, “Non-binary or third gender” or “Prefer not to say” and which age group they belong to, “18-26 years”, “27-41 years”, “42-56 years” or “>57 years”.

Throughout the rest of the questionnaire, the process to measure the other concepts of the research model in question was through Likert scales. When assessing the mediators, the scale used had seven points ranging from “1 - Not at all” to “7 - A lot” so that people would more accurately state their feelings when facing the situation, they were presented with.

According to Kraig Finstad (2010), Likert scales with seven points are more appropriate for online surveys and allow for more precise results. This author suggests that five-point scales aren't as to capture one's true evaluation of what's asked. However, the scale used to assess the dependent variables had indeed only five points.

In contrast to what Finstad stated about five-point Likert scales having less quality than a seven-point, multiple authors before him affirmed that, for example, when applying questionnaires in Europe a five-point scale is better (Prentice, 1998), and having only five points improved the response rate and quality since it won't frustrate people (Babakus, E. & Mangold, W. G., 1992). From a personal perspective, the usage of a five-point scale when assessing people's satisfaction, motivation and proneness to Burnout made more sense, therefore the scale ranged from “1 - Strongly disagree” to “5 - Strongly agree”.

### **3.4. Analytic strategy**

In order to analyse the data collected through the survey, the software platform SPSS by IBM.

After uploading the data into the software, the first step was to compile the multiple variables into only the eight shown in the model. The variable correspondent to the IT Productivity, received the name “Scenario” and there were two types of scenarios, one where the productivity was equal for all team members, and one where there are discrepancies, therefore equal productivity corresponds to 1 and different productivity to 2.

Regarding “Generation”, since in the present thesis we are comparing Generation Z to older generations, the data from “Age” was rearranged into only two categories: 1 corresponds to Gen-Z and 2 to Older Generations.

With these two variables created, when multiplying “Scenario” and “Generation” we got the “Productum\_ScenarioxGeneration” variable that will later be used in order to regress the positive, neutral and negative emotions.

Moving on to the emotional outcome, a variable called “Good emotions” was made and its data corresponds to the average of “Pride” and “Inspiration”. The same method was used for “Bad Emotions”, where the average of “Resentment”, “Frustration”, “Fear” and “Boredom” was computed. Since there’s only one neutral emotion on the research model, “Competitiveness”, there was no need to compute the average and this variable’s name was changed to “Ambiguous emotion”.

Following the same method used for the emotional outcome, the average of each “Satisfaction”, “Motivation” and “Burnout” questions were calculated and put under the respective variable.

With all variables clearly organized, the first step consists of doing a frequency distribution table in order to comprehend who the respondents are and how many saw each scenario. Besides this, also doing a descriptive statistics table allows us to see, independently on which scenario, generation and emotional outcome, what the average of each emotional group, job satisfaction, job motivation and proneness to suffer from Burnout are.

The second phase of this analytic strategy entails the elaboration of a bivariate correlation table, to understand if the variables in the model have significant relationship between them. For this, the control variables “Gender” and “Age” were selected alongside “Scenario”, “Generation”, “Good\_emotions”, “Ambiguous\_emotion”, “Bad\_emotions”, “Satisfaction”, “Motivation” and “Burnout”.

The next step is the hypothesis testing. For this, the immediate logic is to test the direct relationship first, meaning that each emotional outcome category was regressed by the scenario, and then “Satisfaction”, “Motivation” and “Burnout” were each regressed by “Good\_Emotions”, “Ambiguous\_Emotion” and “Bad\_Emotions”.

However, since in the present study we intend on understanding if being part of the youngest generation entering the job market nowadays or being from an older generation influences the emotional outcome when facing a specific scenario, we take the variable “Productum\_ScenarioxGeneration” that was previously computed and test this

hypothesis. Therefore, “Good\_Emotions”, “Ambiguous\_Emotion” and “Bad\_Emotions” are regressed by the “Productum\_ScenarioxGeneration”.

## 4. Results

### 4.1. Descriptive and preliminary findings

Regarding the first control variable, and as seen below in Table 1, 58,8% of the surveyed people are women and only 41,2% are men, which may influence the overall results since, according to Margaret M. Quinn and Peter M. Smith (2018), women are more susceptible to suffer from Burnout since they tend to divide their attention through several tasks at the same time, which proves to increase their stress levels.

However, this doesn't apply to job satisfaction, since according to Paul Redmond and Seamus McGuinness (2019), men report less job satisfaction than women due to females tend to have lower career expectations due to their wage, discrimination and less promotion opportunities (Clark, 1997), and motivation in the workplace depends on different factors regarding gender. For example, as published by Renáta Vašková (2006), on the Eurofound, men tend to value more monetary factors whereas to women interpersonal relationships and respect motivates them more. Even so, the present research doesn't evaluate the variables regarding gender.

		Gender / Género			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male / Masculino	42	41,2	41,2	41,2
	Female / Feminino	60	58,8	58,8	100,0
	Total	102	100,0	100,0	

Table 1 - Frequency table of Gender

By fault of the questionnaire platform used, instead of having a 50/50 situation regarding the scenario presented to the respondents, more than half of the people who participated faced the equal productivity situation, as it is shown in Table 2.

		Scenario			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Equal	53	52,0	52,0	52,0
	Different	49	48,0	48,0	100,0
	Total	102	100,0	100,0	

Table 2 - Frequency of Scenario

Table 3 displays the frequency of the control variable age, where the majority of respondents are Gen-Z (50,98%), in contrast to Baby Boomers (7,84%). The second most affluent participants were Millennials (24,51%), meaning that only 15 people that belong to Generation X participated (14,71%).

		<b>Age / Idade</b>			
		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
<b>Valid</b>	<b>18-26 years / anos</b>	<b>52</b>	<b>51,0</b>	<b>51,0</b>	<b>51,0</b>
	<b>27-41 years / anos</b>	<b>26</b>	<b>25,5</b>	<b>25,5</b>	<b>76,5</b>
	<b>42-56 years / anos</b>	<b>16</b>	<b>15,7</b>	<b>15,7</b>	<b>92,2</b>
	<b>&gt;57 years / anos</b>	<b>8</b>	<b>7,8</b>	<b>7,8</b>	<b>100,0</b>
	<b>Total</b>	<b>102</b>	<b>100,0</b>	<b>100,0</b>	

*Table 3 - Frequency of Age*

Independently on which scenario was presented to the participants, on average the most felt emotion was the ambiguous one (4,6176) followed by positive emotions (4,3676). Considering the mean value of 1,90, there seems that most people don't feel prone to suffer from Burnout and experience lower motivation (2,02) than satisfaction (3,70) at work, as can be seen in Table 4.

<b>Descriptive Statistics</b>					
	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Age / Idade</b>	<b>102</b>	<b>1</b>	<b>4</b>	<b>1,80</b>	<b>,975</b>
<b>Good_Emotions</b>	<b>102</b>	<b>1,00</b>	<b>6,50</b>	<b>4,3676</b>	<b>1,11676</b>
<b>Ambiguous_Emotion</b>	<b>102</b>	<b>1,00</b>	<b>7,00</b>	<b>4,6176</b>	<b>1,54179</b>
<b>Bad_Emotions</b>	<b>102</b>	<b>1,25</b>	<b>6,75</b>	<b>3,4387</b>	<b>1,29471</b>
<b>Satisfaction</b>	<b>102</b>	<b>2</b>	<b>6</b>	<b>3,70</b>	<b>,866</b>
<b>Motivation</b>	<b>102</b>	<b>1</b>	<b>3</b>	<b>2,02</b>	<b>,468</b>
<b>Burnout</b>	<b>102</b>	<b>1</b>	<b>4</b>	<b>1,90</b>	<b>,694</b>
<b>Valid N (listwise)</b>	<b>102</b>				

*Table 4 - Descriptive Statistics*

Before testing the hypothesis previously stated in this research paper, the correlation table on page 23 suggests that, even with a small correlation of 0,112 women experience more job satisfaction than man do, same thing happens with motivation even if not so significative (0,020). The proneness to suffer from Burnout however shows that men are more prone, as it is shown by the negative correlation of -0,105 which ends up contradicting what Margaret M. Quinn and Peter M. Smith (2018) said on their "Gender, Work and Health" paper, regarding women suffering more from this condition than men.

Keeping the control variable “Gender” in mind, it appears that females experience slightly less positive, neutral, and negative emotions than males do independently of the scenario they were presented in the beginning of the survey, due to the negative correlation between the variables “Gender” and “Good Emotions” (-0.001), “Ambiguous Emotion” (-0,170) and “Bad Emotions” (-0,082). These however are not significant since all of them have p-values bigger than 0,05.

As one’s age increases, it appears that positive emotions and feeling competitive decreases due to the negative correlations of -0,129 and -0,268 respectively, and negative emotions faintly increases (0,092). However, this doesn’t seem to be the case if instead of speaking of “Age” we speak of the variable “Generation”, since here all emotional outcomes show negative correlations (“Good emotions”= -0,139; “Ambiguous emotion”= -0,126; “Bad emotions”= -0,060). Just like it happened with the variable “Gender”, the correlation between both “Age” and “Generation” with the emotional outcome are not significant at a level of 0,05.

Both “Age” and “Generation” are positively correlated with the variables in study, “Satisfaction” (p-value when correlated with age: 0,003 & when with generation: <0,001), “Motivation” (p-value when correlated with age: 0,010 & when with generation: 0,001) and “Burnout” (p-value when correlated with age: <0,001 & when with generation: 0,003).

The independent variable in the research model, “Scenario”, presents a strong negative correlation of -0,742 with “Good Emotions” ( $p = <0,001$ ) and a -0,093 correlation with the “Ambiguous Emotion” which is not significant ( $p = 0,353$ ). With the variable “Burnout”, there’s a strong positive correlation with the value of 0,678 ( $p = <0,001$ ). If there was a straight relation between the independent variable and the last dependent ones, then when the scenario presented is one of different productivity, job satisfaction and job motivation decrease since their correlation is -0,198 ( $p = 0,046$ ) and -0,294 ( $p = 0,003$ ) respectively, and burnout increases by 0,498 ( $p = <0,001$ ).

Feeling positive emotions is positively correlated with higher job satisfaction (0,350) and motivation (0,366) whereas it is negatively correlated with the proneness to suffer from burnout (-0,359). All these correlations are significant on a level of 0,05, due to their p-value being <0,001.

From this point onwards we can easily perceive that feeling competitive isn’t a significant emotion for the present study due to it being slightly negatively correlated with all the dependent variables, where the p-values are greater than 0,05.

Negative emotions however present a bigger relation with the dependent variables than the positive emotions. They decrease job satisfaction by  $-0,489$  ( $p = <0,001$ ), job motivation by  $-0,467$  ( $p = <0,001$ ) and increase the variable burnout by  $0,493$  ( $p = <0,001$ ).

We can also discuss the fact that the more a person is satisfied with their job, the more motivated they are as well due to the high correlation of  $0,703$  ( $p = <0,001$ ). And as expected, higher satisfaction means less burnout,  $-0,293$  ( $p = 0,003$ ) and more job motivation also leads to a somewhat lower burnout of  $-0,253$  ( $p = 0,010$ ).

## Correlations

		Gender / Género	Age / Idade	Scenario	Generation	Good_Emotions	Ambiguous_Em otion	Bad_Emotions	Satisfaction	Motivation	Burnout
Gender / Género	Pearson Correlation	1	-,087	-,073	-,096	-,001	-,170	-,082	,112	,020	-,105
	Sig. (2-tailed)		,385	,468	,337	,992	,088	,411	,263	,845	,294
	N	102	102	102	102	102	102	102	102	102	102
Age / Idade	Pearson Correlation	-,087	1	,235*	,845**	-,129	-,268**	,092	,292**	,254**	,352**
	Sig. (2-tailed)			,018	<,001	,198	,007	,356	,003	,010	<,001
	N	102	102	102	102	102	102	102	102	102	102
Scenario	Pearson Correlation	-,073	,235*	1	,274**	-,742**	-,093	,678**	-,198*	-,294**	,498**
	Sig. (2-tailed)		,018		,005	<,001	,353	<,001	,046	,003	<,001
	N	102	102	102	102	102	102	102	102	102	102
Generation	Pearson Correlation	-,096	,845**	,274**	1	-,139	-,126	-,060	,328**	,321**	,296**
	Sig. (2-tailed)		<,001	,005		,163	,206	,550	<,001	,001	,003
	N	102	102	102	102	102	102	102	102	102	102
Good_Emotions	Pearson Correlation	-,001	-,129	-,742**	-,139	1	,177	-,530**	,350**	,366**	-,359**
	Sig. (2-tailed)		,198	<,001	,163		,075	<,001	<,001	<,001	<,001
	N	102	102	102	102	102	102	102	102	102	102
Ambiguous_Emotion	Pearson Correlation	-,170	-,268**	-,093	-,126	,177	1	-,028	-,094	-,030	-,161
	Sig. (2-tailed)		,007	,353	,206	,075		,780	,348	,765	,107
	N	102	102	102	102	102	102	102	102	102	102
Bad_Emotions	Pearson Correlation	-,082	,092	,678**	-,060	-,530**	-,028	1	-,489**	-,467**	,493**
	Sig. (2-tailed)		,356	<,001	,550	<,001	,780		<,001	<,001	<,001
	N	102	102	102	102	102	102	102	102	102	102
Satisfaction	Pearson Correlation	,112	,292**	-,198*	,328**	,350**	-,094	-,489**	1	,703**	-,293**
	Sig. (2-tailed)		,003	,046	<,001	<,001	,348	<,001		<,001	,003
	N	102	102	102	102	102	102	102	102	102	102
Motivation	Pearson Correlation	,020	,254**	-,294**	,321**	,366**	-,030	-,467**	,703**	1	-,253*
	Sig. (2-tailed)		,010	,003	,001	<,001	,765	<,001	<,001		,010
	N	102	102	102	102	102	102	102	102	102	102
Burnout	Pearson Correlation	-,105	,352**	,498**	,296**	-,359**	-,161	,493**	-,293**	-,253*	1
	Sig. (2-tailed)		<,001	<,001	,003	<,001	,107	<,001	,003	,010	
	N	102	102	102	102	102	102	102	102	102	102

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 5 - Correlations

## 4.2. Hypothesis testing

### 4.2.1. Emotional Outcome

The first hypothesis ( $H_1$ ) to be tested is if, when the respondent faced the scenario where they and their peers suffer from different IT productivity, if the positive emotions felt decrease.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6,953	,365		19,041	<,001
	Gender / Género	-,118	,153	-,052	-,770	,443
	Age / Idade	,051	,080	,044	,638	,525
	Scenario	-1,682	,154	-,756	-10,895	<,001

a. Dependent Variable: Good\_Emotions

Table 6 - Coefficients table of Good Emotions regressed by the Scenario

As it can be seen on the table above, beta equals -0,756 with a significance level of <0,001. Therefore,  $H_1$  is supported.

Secondly,  $H_2$  consists of an increase in the ambiguous emotion when IT productivity discrepancies are proved to exist.

Table 7 - Coefficients table of Ambiguous Emotion regressed by the Scenario

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6,568	,713		9,214	<,001
	Gender / Género	-,613	,299	-,197	-2,053	,043
	Age / Idade	-,434	,155	-,275	-2,796	,006
	Scenario	-,131	,301	-,043	-,436	,664

a. Dependent Variable: Ambiguous\_Emotion

Even though the beta is negative and can indicate that the ambiguous emotion decreases when productivity is different, it is very small (-0,043) and not significant ( $p = 0,664$ ) so the second hypothesis is not supported.

Thirdly, the next assumption ( $H_3$ ) is that negative emotions increase if the scenario increases — different productivity situation. By regressing one by the other, we got the following coefficients table:

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,131	,464		2,438	,017
	Gender / Género	-,100	,194	-,038	-,517	,606
	Age / Idade	-,098	,101	-,073	-,965	,337
	Scenario	1,785	,196	,692	9,100	<,001

a. Dependent Variable: Bad\_Emotions

Table 8 - Coefficients table of Bad Emotions regressed by the Scenario

With a beta of 0,692 ( $p = <0,001$ ) we can successfully state that  $H_3$  is supported as well.

#### 4.2.2. Job Satisfaction

Now that it is confirmed that different IT productivity decreases the positive emotions and increases the negative ones felt by people, it is time to understand if this emotional outcome alters the dependent variables satisfaction, motivation and proneness to suffer from Burnout.

$H_4$  estimates that an increase in scenario leads to a decrease in job satisfaction, so with the relationship confirmed between scenario and positive emotions, if positive emotions and satisfaction present a significant positive relationship it will sustain the hypothesis in test.

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,388	,437		3,174	,002
	Gender / Género	,251	,153	,143	1,640	,104
	Age / Idade	,316	,078	,356	4,040	<,001
	Good_Emotions	,307	,068	,396	4,517	<,001

a. Dependent Variable: Satisfaction

Table 9 - Coefficients table of Satisfaction regressed by Good Emotions

Even though the beta isn't that great, it is still significant ( $p = <0,001$ ) therefore  $H_4$  is supported based on positive emotions since a different scenario decreases the positive emotions, and satisfaction increases if positive emotions increase as well.

As it was seen on the test of  $H_2$ , there's no significant relationship between the scenario and the ambiguous emotion.

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,780	,491		5,668	<,001
	Gender / Género	,246	,171	,141	1,436	,154
	Age / Idade	,273	,089	,308	3,073	,003
	Ambiguous_Emotion	,007	,057	,012	,122	,903

**a. Dependent Variable: Satisfaction**

Table 10 - Coefficients table of Satisfaction regressed by the Ambiguous Emotion

Thus, it is not a surprise that feeling competitive doesn't really affect job satisfaction since its beta is only 0,012 and not significant ( $p = 0,903$ ). With this,  $H_4$  is not supported.

The last set of emotions to test regarding satisfaction are the negative emotions. As it can be seen on the table below, an increase in negative emotions leads to a significant decrease in job satisfaction (beta = -0,513 &  $p = <0,001$ ) which means that the present hypothesis is supported.

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4,039	,338		11,952	<,001
	Gender / Género	,175	,142	,100	1,232	,221
	Age / Idade	,309	,072	,348	4,289	<,001
	Bad_Emotions	-,343	,054	-,513	-6,314	<,001

**a. Dependent Variable: Satisfaction**

Table 11 - Coefficients table of Satisfaction regressed by Bad Emotions

Now with all three emotional outcomes tested,  $H_4$  is supported when we take into consideration that a person can experience positive and negative emotions, and not when the ambiguous emotion is experienced.

### 4.2.3. Job Motivation

Similarly to job satisfaction, job motivation is expected to decrease when the scenario increases ( $H_5$ ). Once again, both  $H_1$  and  $H_3$  proved to be true which means that, to assess if the IT productivity discrepancies impact motivation, we only need to test the relationship between the positive emotions and the negative emotions with the dependent variable “Motivation”.

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,934	,241		3,869	<,001
	Gender / Género	,045	,084	,047	,528	,599
	Age / Idade	,149	,043	,310	3,454	<,001
	Good Emotions	,170	,038	,406	4,533	<,001

**a. Dependent Variable: Motivation**

Table 12 - Coefficients table of Motivation regressed by Good Emotions

Based on the table above, the beta of the relation between positive emotions and motivation is both positive (0,406) and significant ( $p = <0,001$ ) which means that, based on this emotional outcome  $H_5$  is supported.

Just like an increase in the scenario doesn't cause a significant impact on the ambiguous emotion, and like it was seen with the dependent variable satisfaction, feeling competitive doesn't have a significant ( $p = 0,618$ ) influence on motivation, as it can be seen by the small beta of 0,052 (Table 13).

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,629	,271		6,021	<,001
	Gender / Género	,049	,095	,052	,521	,603
	Age / Idade	,131	,049	,272	2,666	,009
	Ambiguous Emotion	,016	,031	,052	,501	,618

**a. Dependent Variable: Motivation**

Table 13 - Coefficients table of Motivation regressed by the Ambiguous Emotion

According to the table below, people who feel an increase of negative emotions suffer a decrease in job motivation, beta = -0,495 ( $p = <0,001$ ) meaning that the  $H_5$  is supported once again.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,363	,191		12,394	<,001
	Gender / Género	,005	,080	,005	,059	,953
	Age / Idade	,144	,041	,300	3,543	<,001
	Bad_Emotions	-,179	,031	-,495	-5,841	<,001

**a. Dependent Variable: Motivation**

Table 14 - Coefficients table of Motivation regressed by Bad Emotions

With positive and negative emotions presenting a significant relationship with motivation, the  $H_5$  is proved to be true.

#### 4.2.4. Burnout

The last dependent variable to appraise is the proneness to suffer from Burnout when there are divergences in technological productivity amongst co-workers.  $H_6$  expresses that with IT inconsistencies, the chances of developing the BOS<sup>6</sup> augments.

When the scenario increases, we saw before that it has a significant impact on positive emotions. Now, we can see in Table 15 that positive emotions have a significant impact ( $p = <0,001$ ) on decreasing burnout, where its beta is -0,320.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,557	,357		7,162	<,001
	Gender / Género	-,111	,125	-,079	-,885	,378
	Age / Idade	,216	,064	,304	3,392	,001
	Good_Emotions	-,199	,056	-,320	-3,581	<,001

**a. Dependent Variable: Burnout**

Table 15 - Coefficients table of Burnout regressed by Good Emotions

Therefore,  $H_6$  is supported since different productivity does alter the proneness to suffer from Burnout, when one feels positive emotions.

<sup>6</sup> Burnout Syndrome

Taking into consideration the values shown on the table below, the hypothesis in question is not supported, since “Competitiveness” presents a slightly negative beta of -0,091 which is not significant due to its p-value being 0,364.

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,887	,386		4,889	<,001
	Gender / Género	-,130	,135	-,092	-,961	,339
	Age / Idade	,228	,070	,320	3,254	,002
	Ambiguous_Emotion	-,041	,045	-,091	-,911	,364

a. Dependent Variable: Burnout

Table 16 - Coefficients table of Burnout regressed by the Ambiguous Emotion

Table 17 shows the positive relationship between an increase in negative emotions and an increase in Burnout (beta = 0,462) which is significant (p = <0,001).

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,750	,276		2,719	,008
	Gender / Género	-,056	,116	-,040	-,487	,627
	Age / Idade	,218	,059	,306	3,703	<,001
	Bad_Emotions	,247	,044	,462	5,585	<,001

a. Dependent Variable: Burnout

Table 17 - Coefficients table of Burnout regressed by Bad Emotions

Hence why  $H_6$  is supported. Based on these three linear regressions, the proneness to suffer from BOS does increase when IT productivity is different amongst peers, so  $H_6$  is supported.

#### 4.2.5. Generation Z vs. Older Generations

Thus far, belonging to either generation Z or an older generation wasn't taken into consideration. Therefore, with the variable “Productum\_ScenarioxGeneration”, it is time to regress the emotional outcome that proved to be significant when only regressed by the scenario.

First, the variable “Good\_Emotions” does not have a significant relation with the productum,  $\beta = 0,076$  ( $p = 0,824$ ).

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6,973	,788		8,849	<,001
	Gender / Género	-,114	,154	-,050	-,736	,463
	Age / Idade	-,036	,145	-,031	-,247	,806
	Scenario	-1,803	,496	-,811	-3,632	<,001
	Generation	,100	,545	,045	,183	,855
	Productum_ScenarioxGeneration	,070	,314	,076	,223	,824

a. Dependent Variable: Good\_Emotions

Table 18 - Coefficients of the Productum regressed by Good Emotions

So, the hypothesis is not supported and we can conclude that belonging to a specific generation does not alter the positive emotions perceived by those who answered the questionnaire.

Even without the moderator, the ambiguous emotion did not present a significant relationship with the scenario, nor with the dependent variables. That still happens when comparing generations, since  $\beta = 0,032$  ( $p = 0,947$ ) (Table 19). For this reason, generational differences in nothing affect the perception of feeling competitive –  $H_7$  is not supported.

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5,967	1,512		3,945	<,001
	Gender / Género	-,592	,296	-,190	-2,001	,048
	Age / Idade	-,893	,279	-,565	-3,204	,002
	Scenario	-,277	,953	-,090	-,291	,772
	Generation	1,020	1,045	,332	,976	,331
	Productum_ScenarioxGeneration	,040	,603	,032	,067	,947

a. Dependent Variable: Ambiguous\_Emotion

Table 19 - Coefficients table of the Productum regressed by the Ambiguous Emotion

Based on the values of Table 20, the last hypothesis ( $H_7$ ) is not supported, which explains that when the scenario is one of different productivity, older generations experience less negative emotions than generation Z and the formulated hypothesis stated the opposite.

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,855	,790		-1,082	,282
	Gender / Género	-,143	,155	-,055	-,926	,357
	Age / Idade	,654	,146	,493	4,492	<,001
	Scenario	4,099	,498	1,590	8,235	<,001
	Generation	,383	,546	,148	,701	,485
	Productum_ScenarioxGeneration	-1,450	,315	-1,366	-4,606	<,001

**a. Dependent Variable: Bad\_Emotions**

*Table 20 - Coefficients table of the Productum regressed by Bad Emotions*

## 5. Discussion

### 5.1. Main findings and conclusions

This study found only a significant moderating effect of generation (Generation Z vs. Older Generations) on the relationship between the productivity scenario and feeling negative emotions. This means that, belonging to the youngest cohort or to an older one doesn't alter one's positive and ambiguous emotions if that person faces a situation where the technological productivity is different amongst co-workers, but the Zoomers demonstrate an increase in negative emotions when facing that situation as opposed to what was expected in hypothesis 7.

This discovery regarding generation Z's negative emotions could be due to them being one of the two generations that experience the most stress and anxiety – the other one are the Millennials – as it was discovered by Deloitte Touche Tohmatsu in their “*Deloitte Global 2021 Millennial and Gen Z Survey*”. Also, since this younger cohort is one of the most tech efficient generations, they expect flexibility with their job and workhours and wish to have value-based careers, meaning that Zoomers are willing to switch jobs if they feel like their employer doesn't work in society's best interest (Evans-Reber, 2021). In the specific scenarios presented to all respondents in this dissertation research, they could only move on from their tasks after their co-workers were finished with it as well, therefore in a different productivity scenario this wait impacts Gen Zs work flexibility and delays their productivity.

Independently on which generation a person belongs to, the ambiguous emotion competitiveness doesn't have a significant effect on either of the variables in study nor is it significantly impacted by being in a situation with differences in productivity and was also not significantly correlated with any of the variables in study.

There is no denial that the evolution of technology has improved not only our personal lives but also how and what we do at work. However, the use of devices in the workplace does not only have benefits, but also some disadvantages. As a person ages, it is only natural that their physical and mental aptitude changes and they may not be able to follow IT innovations as smoothly.

Therefore, the present study was conducted in order to assess if younger people, more specifically generation Z, show different satisfaction and motivation towards their job and if they are more susceptible to suffer from Burnout when working alongside older generations who cannot match their IT productivity, than older people do.

The conclusions, drawn from the results explained in the previous sections, allow us to understand that belonging to a specific cohort does not influence one's satisfaction, nor motivation and doesn't increase or decrease the vulnerability to develop BOS if positive emotions are taken into consideration. However, it seems that Gen Z experiences more negative emotions than older generations which leads us to conclude that, this younger generation faces lower job satisfaction, motivation and is more likely to suffer from Burnout.

Overall, the findings are aligned with the overarching theory Affective Events Theory, explained in the section 2.2, since indeed facing an inconvenience – different IT productivity – influences the emotions felt at the time which, according to their effect, have an impact on job satisfaction and performance.

## **5.2. Theoretical and practical contributions**

The present thesis contributes to the literature by adding to what is known about the new cohort entering the job market. Up until now, little to no information can be found regarding generation Z except for what is expected of them. According to Deloitte, this generation will be the most diverse one just by 2020 and the New York Times states in one article that “37-year-olds are afraid of the 23-year-olds who work”, this however only happens due to lack of information on these “children”.

From a practical point of view, understanding that technological productivity discrepancies affect job satisfaction, motivation, and proneness to suffer from BOS is critical for companies that don't want their overall performance and results to decrease.

Since working in a team where not everyone is so technologically friendly decreases the positive emotions felt and increases the negative ones, which then decreases satisfaction and motivation while increasing the chances of developing Burnout, overall this has a negative impact on the company's results due to the performance of the employees being affected.

With this knowledge proved by the quantitative study conducted, corporations can and should assess if there is a match between the technological skills of its employees and, in cases that indeed there's a gap between older generations and Gen Z, invest in proper training from both an IT point of view and an emotional intelligence one, the last one especially to younger employees since they are the ones who experience more negative emotions.

An article from Finnish researchers Miia A. Paakkanen, Frank Martela and Anne B. Pessi (2021) on the benefits of validating the positive emotions of co-workers, states that if someone's good feelings are acknowledged by their peers and managers then their interpersonal relationships improve, they are more willing to collaborate and trust each other, which will then improve the organizational outcome. Therefore, it's important to not only try to avoid the negative emotions felt by younger generations but to also validate and encourage the positive emotions felt by all generations.

#### **5.4. Limitations and future research**

Due to this study being conducted online, no respondent had a direct interaction throughout the process with the researcher which can compromise the reliability of the answers given (Queirós, Faria & Almeida, 2017). Another limitation is the number of respondents being quite small (102 respondents), which can prevent the detection of some small effects. Also, the number of emotions used to assess the emotional outcome could have been wider and more complete and having "Competitiveness" listed and part of the study proved to be insignificant due to it being indeed both a positive and negative emotion.

Future research should exclude the ambiguous emotion for each of the dependent variables and deepen into the positive and negative emotions by expanding the number of emotions used in the study. For example, the positive emotions can also include the following:

- Gratitude
- Awe
- Interest
- ...

Another thing that could be done is compare all generations or some, not grouping Millennials, Generation X and Baby Boomers all in one especially since Millennials were the first generation to grow up with access to technology and the internet, making them the first revolutionizers in the workplace and quite similar to Generation Z.

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## List of abbreviations

**Gen-Z:** Generation Z

**Zoomers:** Generation Z

**Gen-X:** Generation X

**Boomers:** Baby Boomers

**AET:** Affective Events Theory

**BOS:** Burnout Syndrome