Length of employment and burnout among programmers in the conceptualisation of ressentiment[1]

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Abstract: The paper discusses the relationship between the length of employment and burnout among programmers in conceptualising ressentiment. Due to the lack of extensive studies in the literature on the impact of the length of employment on burnout in programmers, in the light of ressentiment, the authors decide to broaden the knowledge on this topic. This study aims to demonstrate the impact of the length of employment on the occurrence of burnout in programmers. A total of 80 men who deal with programming every day were studied. The respondents were characterised by various lengths of employment from 1 year to 40 years. In order to measure the variables, *the Burnout Questionnaire (LBQ)* and *the OLBI Questionnaire (The Oldenburg Burnout Inventory)* were used to examine burnout and its components: psychophysical exhaustion, lack of engagement with clients, sense of lack of professional effectiveness, and disappointment. Research tools such as *the Ressentiment Questionnaire and the Gotland Male Depression Scale (GMDS)* were also used to measure distress.
Keywords: professional burnout, length of employment, programmers, ressentiment

Introduction

In today's fast-paced work environment, programmers are a key professional group whose role is indispensable to contemporary technology-driven economy. However, increasing demands, time pressure, information overload, and intense work, often occurring in the IT industry, can lead to burnout.

This study aims to show the potential relationship between burnout and the length of employment among programmers and to show the negative emotions that make up ressentiment. Therefore, the research question was asked: whether longer employment in this industry is associated with a higher risk of burnout, or whether professional experience can act as a protective factor? The goal is also to conceptualise ressentiment and identify potential factors that may affect the development of burnout among programmers with different seniority.

As part of the study, some existing research and theories on burnout and its relationship with the length of employment were analysed. The analysis allows to verify the hypotheses regarding the relationship between burnout and the length of employment, as well as to identify potential factors affecting the conceptualisation of ressentiment.

1. Burnout

Work has accompanied man since the beginning of his existence. Without it, we would not be at such a highly developed, urbanistically and intellectually, level as we are today. Each subsequent day of work brings us even closer to reaching new stages in the humanity's development. However, there may be a problem, which is the phenomenon of burnout.

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[1] Article in polish language: https://www.stowarzyszeniefidesetratio.pl/fer/58P_Karb.pdf

Burnout itself most likely appeared from the moment a person began to receive remuneration for the performed work, but it was defined and described in the literature for the first time by psychiatrist Herbert Freudenberger in 1974 (after: Bliska, 2004). His definition first appeared in the "Journal of Social Issue". The author defined burnout as a "state of exhaustion of an individual caused by excessive tasks imposed on him by the physical or social work environment", which is the result of devoting oneself to a cause or a way of life, which did not bring the expected reward (Bliska, 2004, p. 2).

Cary Cherniss (1980; 1993) proposed a definition in which the main source of burnout is competence, or rather a sense of lack of it. Excessive workload, lack of administrative support, and bureaucratic constraints are stressful not only because systemic factors do not allow professionals to use their skills in a way that allows them to achieve their goals, as Cherniss (1993) believes. The highlighted factors make employees believe that what they do is meaningless, which is why they nurture a lack of a sense of effectiveness in their work. The same approach to burnout is also shared by Helena Sęk (2009, p. 36): "In my opinion, self-efficacy and a sense of competence are so important because they give professionals a sense of meaning in existence. If my work matters, then I also matter". An alternative understanding of burnout was introduced by Ayala Pines together with Elliot Aronson, according to whom it is a "state of physical, emotional, and mental exhaustion caused by long-term involvement in emotionally burdening situations" (after: Pines, 2011, p. 35).

The most popular, used, and most frequently cited theory of burnout is the one proposed by Christina Maslach and her colleague Susan Jackson. They present the concept of this process as a "psychological syndrome of emotional exhaustion, depersonalisation, and a reduced sense of personal achievement, which occurs in people who work with people in a certain way" (Maslach & Jackson, 1981, p. 99). Psychophysical, emotional exhaustion is treated as the first symptom of burnout syndrome. It can be described as a person's feeling that they are emotionally overburdened, and their emotional resources are consistently used up and tend to be

exploited. Such exhaustion is identified with a state of mental and physiological overload closely related to the interpersonal contact intensity. Exhaustion is also characterised by a sense of excessive overload, disgust with work, and reduced activity. It is also manifested by a progressive decrease in interest in professional matters, pessimism, constant psychophysical tension, and irritability. This phenomenon can be compared to the depletion of life energy, which gives us strength. An increasing amount of sleep and free time is needed, which, after all, does not bring the necessary body regeneration. In order to do the work at the same level we are forced to put more and more effort into it than at the beginning. People who are exhausted at every step feel that they are not able to continue to do effective work. Symptoms such as anxiety, a sense of tension, physical fatigue, insomnia, psychosomatic symptoms, e.g., headaches, may appear (Maslach, 2011).

Due to the expansion of the theory of burnout, authors increasingly refer to it as the erosion of work engagement, i.e., what was once important, meaningful, and challenging, after time becomes unpleasant, meaningless, "usually complaining of a sense of meaninglessness in life or an inner emptiness" (Karbowski, 2021, p. 39).

1.1. Mechanism of Burnout Development

The mechanism of burnout development and its stages were most clearly presented by Jerry Edelwich and Archie Brodsky (1980). Defining burnout as a "progressive loss of idealism, energy, and purpose at work, experienced by people in *helping professions* as a result of their work" (Tucholska, 2013, p. 7). They perceive burnout as a process of growing disappointment, in which they distinguish four phases: enthusiasm, stagnation, frustration, and apathy. Therefore, the various concepts of burnout formulated by Freudenberger and Richerlison, later by Maslach, and then by Ayale Pines and Eliot Aronson, can be reduced to one common factor, are motivational models. Pines (1993, p. 41) believed that "only people with a very high initial motivation can become a victim of burnout syndrome. This is conditioned by entering professional life with huge

expectations, burning passion and hopes, which is why they measure their self-esteem by professional success". However, most often, we encounter the model of burnout development, which consists of eight phases, which was created by Robert Golembiewski (after: Golembiewski & Munzenrider, 1991), and his work was based on the model created by Maslach presented in Table 1.

Table 1. Golembiewski's eight-phase model of burnout

Burnout phases	Dimensions of burnout		
	Depersonali-sation	Loss of en-gagement	Emotional exhaustion
I	Low level	Low level	Low level
II	High level	Low level	Low level
III	Low level	High level	Low level
IV	High level	High level	Low level
V	Low level	Low level	High level
VI	High level	Low level	High level
VII	Low level	High level	High level
VIII	High level	High level	High level

Source: Golembiewski and Munzenrider (1991, p. 491).

Some authors, such as Michael Leiter, suggest that job demands are more strongly associated with emotional exhaustion, and resources mainly with depersonalisation and a sense of personal achievement, but the research results are not always unequivocal

in this respect (Maslach & Leiter, 2008). On the other hand, Evangelia Demerouti and her team believe that the lack of the appearance of resources is not due to burnout, but to lack of commitment (after: Bakker et al., 2002). In terms of organisational reasons and mechanisms, it is worth summarising all the elements developed by Tucholska (2003). They were classified into four distinct groups, namely: emotional, cognitive, behavioural, and mobilising and presented in Table 2.

1.2. Individual Causes of Burnout

Individual factors are primarily related to a person's personality, in this case the employee, and their specific predispositions. It mainly applies to people with great ambitions, temperament, energetic, hungry for achievements and competition, setting the bar high for themselves, as well as others, because such employees, in addition to ambitious professional goals, also have lofty aspirations in relation to their workplace, identifying with it and deriving satisfaction and a sense of meaning from it (Borys & Majkowicz, 2006, p. 195).

In the literature, there are also mentions of a positive correlation between type D personality and the occurrence of burnout. A person with this type of personality is characterised by Tucholska (2009), distinguishing: the persistence of negative emotions, such as: stress, anxiety, worry, pessimism, anxiety

Table 2. Factors concerning the organisational level specified by Stanisława Tucholska

Emotional	Cognitive	Behavioural	Powerful
Loss of job satisfaction	Contempt	Limiting the dynamics of activities	Minimising work motivation
		Decrease in the quality of work	Reluctance to take up work
		Changing jobs	Loss of initiative
		Absence	Reduced job satisfaction
	Lack of a sense of security in relation to co-workers and superior authorities	Aversion to novelty	
		Increase in accident rate	
		Legalism intensifies	
		Reducing working time	
		Reducing the time of contact with the residents	

Source: Tucholska (2003).

and negative internal and external attitudes towards oneself, people, the future, the world, hiding and suppressing emotions in social situations, problems in interpersonal contacts, and social situations as a source of lack of comfort. According to research by Nina Geuens et al. (2015), we conclude that nurses with type D personality are five times more susceptible to stress than those with other personality types, regardless of environmental and organisational factors in the workplace. People with type D personality perceive the environment as stressful to a greater extent than others and are afraid to reach out for help, mainly because they hide their difficult emotions and feelings inside, they are unable to externalise it (Tucholska, 2009).

An equally important factor related to the development of burnout, as well as personality, is temperament, and especially its biological features. These features include the strength of excitation, defined as the efficiency and persistence of nerve cells in coping with high-strength stimuli (Wontorczyk & Wróbel, 2013). Research shows that the "risk of burnout is higher in people who are mostly lonely, usually new employees, with a shorter length of experience, showing high levels of neuroticism, defined as anxiety and emotional instability, and those with low levels of self-esteem" (Maslach, 2011, p. 23).

Ayala Pines (2000, p. 634), the creator of the psychodynamic-existential concept of burnout, claims that the "pursuit of fulfilment at work occurred after the rejection of religion, which provides answers to existential questions. When people choose to work for religion, they try to find in it justification, sense and significance for their whole lives". The author believes that when people decide to take up a job, they follow the satisfaction of their childhood needs, which have not been met in some way. To sum up, it is not only the emotional burden of working with other people that causes burnout, but also the experience of failure in response to the demands of the work environment; to quote Ayala Pines (2011, p. 36): "if you are dedicated to your work and emotionally involved in it, if you expect to derive a sense of meaning from your work – and you feel that you have failed, then you are probably a candidate for burnout".

1.3. Length of Employment and Stress Levels

Work-related stress can lead to the disturbance of harmonious biological, mental, and social systems, which results in the manifestation of adverse mental and somatic symptoms. The most common consequences of mental overload include deconcentration, irritability, constant dissatisfaction with oneself and one's work, alcohol or tobacco abuse (Makara-Studzińska, 2008). Considering the heterogeneity of human behaviour in the face of stress, Lazarus and Folkman (1984) developed two basic coping functions: instrumental, related to problem-oriented coping methods, and regulatory – related to emotion-focused coping strategies. Stress occurring at work, which has been accumulated and the lack of proper application of coping strategies, can take the form of a crisis, and ultimately lead to the burnout syndrome (Płotka, 2005). At the turn of 2011 and 2012, a study was carried out to check whether the length of employment of midwives impacts the level of perceived stress and coping strategies and the presence of burnout syndrome. Based on the results, it was not confirmed that the "level of perceived work-related stress may lead to the development of burnout syndrome" (Gruszczyńska et al., 2014, p. 276). Analysing the scientific literature, we can come across several important factors that affect stress levels.

According to Hobfoll (2006), the strength derived from interpersonal, everyday contact in which a person participates can effectively protect and strengthen their well-being and mental health. Janusz Czapiński (2024) thinks similarly, he himself indicates that close and social relationships help accurately identify and overcome stressful events in connection with seniority.

1.4. Burnout and Ressentiment

Studying ressentiment as a difficult emotion derived from internal tensions in social relations began in 1887. This term was first introduced by Friedrich Nietzsche in his work *From the Genealogy of Morals*. He showed ressentiment as the attitude and source of morality of weak people with a slave mentality,

which is a negation of primitive and active morality, realising the will of power of masters (Nietzsche, 2022). At the beginning of the twentieth century, two German social scientists, Max Weber and Max Scheler, revisited the topic of ressentiment. Max Weber wrote: "(…) based on the Jewish ethical religiosity of salvation, a certain element, first noticed by Nietzsche, which does not occur in any magical and animistic caste religiosity, becomes important. This element is *ressentiment.* In Nietzsche's understanding, this is a phenomenon accompanying the religious ethics of the negatively privileged, who, by making a direct reversal of the old faith, think that the source of the inequality of earthly fate is the sin and injustice of the positively privileged, sin and injustice, which sooner or later must bring God's vengeance. In the form of such a theodicy of the negatively privileged, moralism serves as a means of validating the conscious or unconscious desire for revenge" (Hogget, 2018, p. 154-155). These feelings transform into ressentiment, arousing revenge, vindictiveness, hatred that does not lead to harm, or jealousy without confirmation of the scenes of jealousy (Hogget, 2018, p. 154-155). Therefore, an "inhibited and suppressed set of negative emotions applies not only to the psychological experiences of an individual, but can also be transferred to emotional states or components of cultural attitudes" (Karbowski, 2023, p. 57). As Max Scheler writes, this is when the desire for revenge becomes vindictiveness, and the intensifying Weber recently show clear links between burnout and a sense of ressentiment, which may undermine the existence of a separate burnout construct and suggests that it may be one of the forms of depression (Bianchi et al., 2021).

Therefore, it can be assumed that the primary difference between burnout and distress lies in the conceptualisation of ressentiment, i.e., that depression affects all aspects of life, while burnout is limited to the professional context (Bakker et al., 2002).

2. Own Research

2.1. Description of Methods and How the Data was Collected

The survey was conducted from December 2022 to April 2023 and was individual. It was carried out among 80 adult participants – men, programmers, with professional experience. Subjects were recruited by a verbal invitation to participate in studies to which they had previously consented. The person was invited to a previously prepared office, the investigator conducted the survey starting from filling in the metrics and giving the following questionnaires to be completed:

1. The Burnout Questionnaire (LBQ) by Santinello (2014) in Jaworowska's Polish adaptation was used to measure the level of burnout. The questionnaire distinguishes four dimensions of burnout: psychophysical exhaustion, lack of involvement in client relations, a sense of professional ineffectiveness, and disappointment as an existential dimension of burnout;
2. The OLBI (The Oldenburg Burnout Inventory) – a questionnaire allows to measure two dimensions of burnout (and engagement): exhaustion and withdrawal of commitment/cynicism (Chirkowska-Smolak, 2018);
3. Ressentiment questionnaire – a pentabase method developed based on the "Method of systemic description of professional competencies" (Rogalińska, 2011). The study focused on subjective assessments of four aspects of ressentiment, using the pentabase method in the following dimensions: temporal, spatial, energetic, informational;
4. Gotland Male Depression Scale (GMDS) adapted to Polish conditions by Jan Chodkiewicz in 2016. The items concern both typical symptoms of depression, such as anxiety, sleep problems, fatigue, difficulty in making decisions, tendency to self-pity, as well as atypical symptoms – feeling excessive stress, burnout, and frustration, difficulties with self-control, alcohol and drug abuse, increased activity through excessive work

and/or physical exertion, as well as changes in the current functioning noticed by the respondent and their relatives (Chodkiewicz, 2017).

2.2. Research Objectives, Variables, and Hypotheses

The task's aim was to examine the relationship between the length of employment and burnout among programmers in the context of ressentiment.

The independent variable at work is the length of employment and the dependent variables are: burnout which consists of: psychophysical exhaustion, lack of commitment to client relations, a sense of professional ineffectiveness, disappointment, exhaustion, withdrawal of commitment/cynicism, as well as distress and ressentiment.

The research paper indicates the following main research problem:

Is there a relationship between the length of employment and burnout?

In this context, the following specific questions have been formulated:

1. Does the level of burnout among programmers depend on the length of employment?
2. Does the level of ressentiment increase with the length of employment?
3. Is there a connection between burnout and ressentiment?
4. Does the sense of professional ineffectiveness affect the level of distress?
5. Do disengagement and exhaustion correlate with the length of the internship?

The paper formulates the main hypothesis, which states that:

The level of burnout among programmers depends on the length of employment.

Detailed research hypotheses are also specified, claiming that:

1. there is a relationship between the length of employment and the appearance of ressentiment;
2. there is a relationship between burnout and ressentiment;
3. there is a relationship between the sense of professional ineffectiveness and the level of distress;
4. lack of commitment and exhaustion correlate with the length of employment.

2.3. Demographic Characteristics of Respondents

The research involved adults, men who deal with programming in the broad sense of the word on a daily basis. The distribution of sociodemographic characteristics among the respondents is presented in Graph 1.

The vast majority of the respondents had higher education (81.3%), the rest had secondary education (16.3%), and primary education (2.4%). A significant proportion of people live in a large city with more than 100,000 inhabitants (75%), while the rest live in a small town with 5,000 to 100,000 inhabitants (13.8%), and in rural areas with less than 5,000 inhabitants (11.3%).

3. Research Results

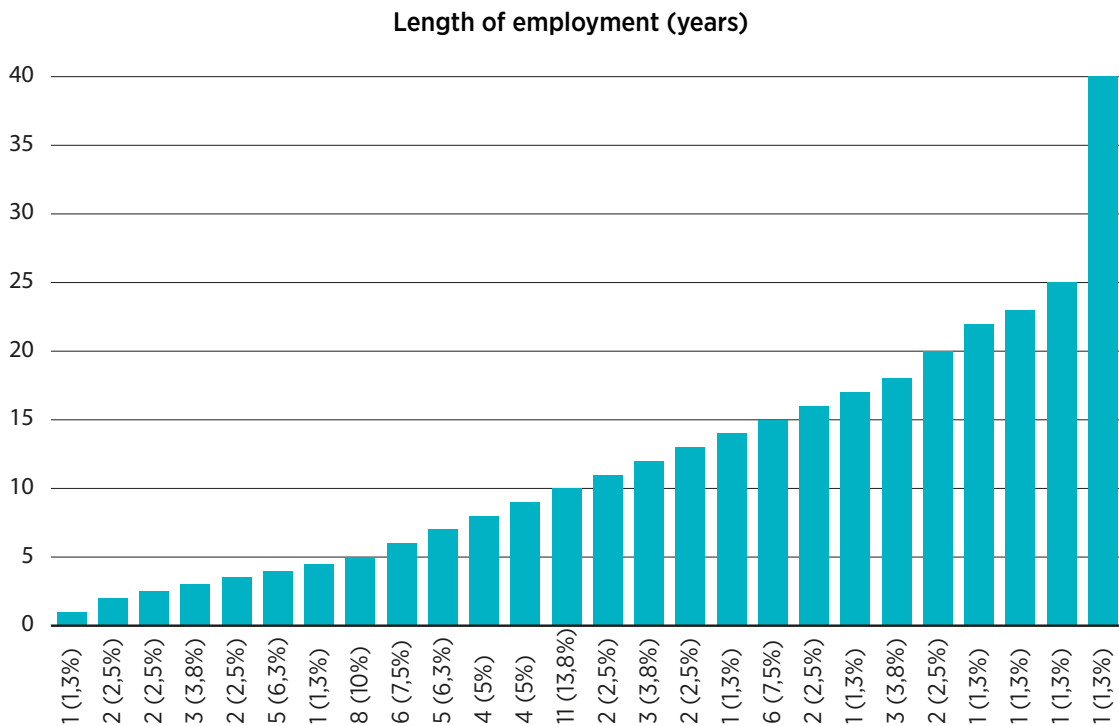### 3.1. Correlation of the Length of Employment with Burnout

Table 3 presents the Shapiro-Wilk normality test for variables: length of employment and burnout.

Table 3. Normality of distribution test for variables: length of employment and burnout

Shapiro-Wilk normality test		
Variable	W	p
Length of employment	0.883	0.001
Burnout	0.985	0.496

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Age of people surveyed
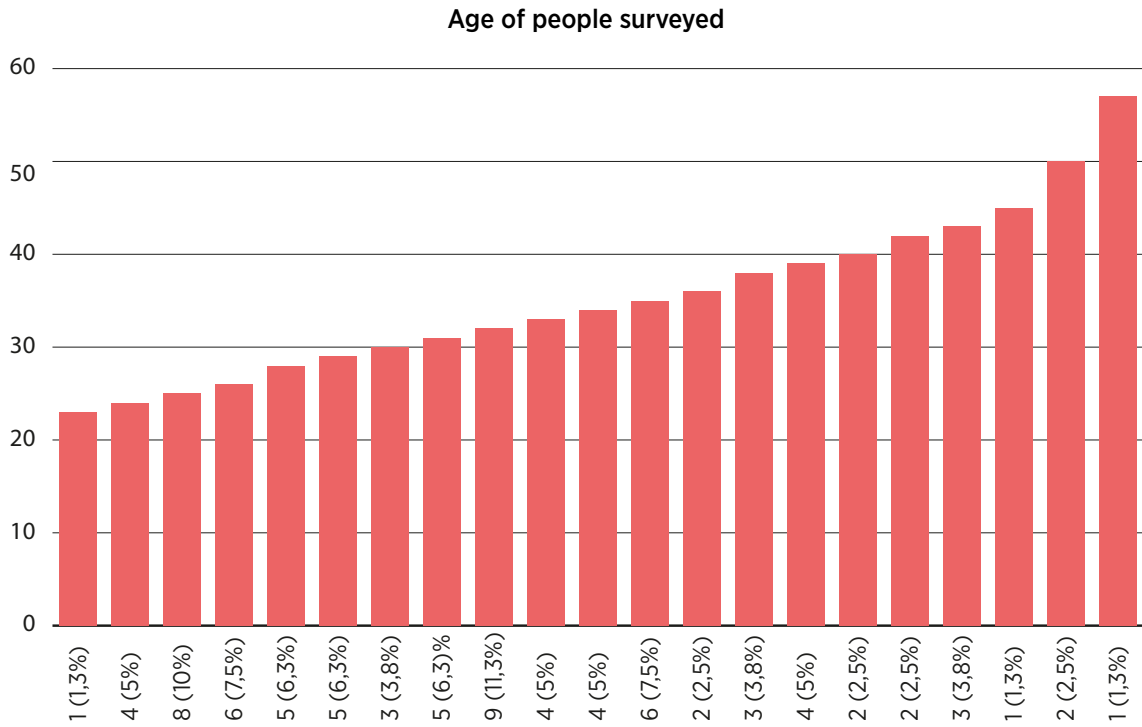
Graph 1. The number of people surveyed at a given age and their percentage distribution. Source: own study.

Length of employment (years)

Graph 2. Number of surveyed people with a given length of employment and their percentage distribution. Source: own study.

In Table 3, we can see that the results for the length of employment variable did not meet the assumption of normality of the distribution, so the rho-Spearmen correlation test was used to calculate the correlation.

Table 4. Correlation between length of employment and burnout

Scale	Length of employment	
	Rho	p
Burnout	0.066	0.564

Table 4 presents the correlation between the length of employment and burnout. As we can see, the result is not statistically significant (rho = 0.066; p = 0.564), i.e., there is no correlation between the variables.

3.2. Correlation of Length of Employment with the Overall Level of Self-Esteem

Table 5 presents the Shapiro-Wilk normality test for variables: length of employment and general level of ressentiment.

Table 5. Normality of distribution test for variables: length of employment, and general level of ressentiment

Variable	Shapiro-Wilk normality test	
	W	p
Length of employment	0.883	0.001
General level of ressentiment	0.976	0.145

The normality test of the distribution for the variable "length of employment" was not met. Therefore, the correlation between the variables was calculated using the rho-Spearman correlation test, and its results are presented in Table 6.

Table 6. Correlation between the length of employment and the general level of ressentiment

Scale	Length of employment	
	Rho	p
General level of ressentiment	0.023	0.840

Based on the results presented in Table 6, it can be stated that there are no statistically significant correlations between the variables: length of employment and the general level of ressentiment (rho = 0.023; p = 0.840).

3.3. Correlation of Burnout with the General Level of Ressentiment

Variable burnout and overall ressentiment levels will be checked by the Shapiro-Wolf Normality Test, and the results are shown in Table 7 below.

Table 7. Normality of distribution test for variables: burnout and general level of ressentiment

Variable	Shapiro-Wilk normality test	
	W	p
Burnout	0.985	0.496
General level of ressentiment	0.976	0.145

The results in Table 7 indicate that each of the variables met the assumptions of the normality of the distribution, so the Pearson correlation test was used to calculate the correlation, the results of which are shown in Table 8.

Table 8. Correlation between burnout and overall ressentiment levels

Scale	Burnout	
	r	p
General level of ressentiment	-0.532	0.001

Table 8 shows the correlation between the variables: general level of ressentiment and burnout. As we can read from it, the results indicate there is a statistically significant relationship between the variables (r = -0.532; p = 001) (negative mean correlation).

3.4. Correlation of the Sense of Professional Ineffectiveness and Distress

Table 9 presents the results of the Shapiro-Wilk normality test for the variables: the "sense of professional ineffectiveness" and distress.

Table 9. Normality test for variables: the sense of professional ineffectiveness and distress

Shapiro-Wilk normality test		
Variable	W	p
A sense of professional ineffectiveness	0.945	0.002
Distress	0.980	0.239

For the variable the "sense of professional ineffectiveness", the assumptions about the normality of the distribution were not met, so the rho-Spearman correlation test was used to calculate the correlation between the variables.

Table 10. Correlation between the sense of professional ineffectiveness and distress

A sense of professional ineffectiveness		
Scale	Rho	p
Distress	0.352	0.001

As can be seen from Table 10, the correlation between the variables: "distress" and "sense of professional ineffectiveness" were statistically significant, showing a slight positive correlation (rho = 0.352; p = 0.001).

3.5. Correlation of Disengagement and Exhaustion with the Length of Employment

Table 11 presents the results of the Shapiro-Wilk normality test for the variables: the length of employment and the lack of commitment and exhaustion.

Table 11. Normality of distribution test for variables: length of employment, disengagement, and exhaustion

Shapiro-Wilk normality test		
Variable	W	p
Length of employment	0.883	0.001
Lack of commitment	0.975	0.122
Exhaustion	0.985	0.472

Based on the results presented in Table 11, it can be concluded that for the variable "length of employment", the conditions of normality of the distribution were not met. To calculate the correlation between the variables, the rho-Spearman correlation test was used, the results of which are presented in Table 12.

Table 12. Correlation between the length of employment, disengagement, and exhaustion

Length of employment		
Scale	Rho	p
Lack of commitment	0.079	0.487
Exhaustion	0.058	0.606

Analysing the results in Table 12, it can be clearly stated that there is no statistically significant correlation between the variables of length of employment and lack of commitment (rho = 0.079; p = 0.487). The same applies to the case between the variables: length of employment and exhaustion (rho = 0.058; p = 0.606).

4. Discussion of Results

The verification of the research hypotheses was carried out after statistical analyses. In order to verify the main hypothesis, detailed hypotheses were presented to help answer the question whether the length of employment impacts the development of burnout among programmers in the conceptualisation of ressentiment.

The main research hypothesis was as follows: "The level of burnout among programmers depends on the length of employment". The results in Table 4 indicate that the correlation between the length of employment and burnout is not statistically significant (rho = 0.066; p = 0.564). Therefore, it can be concluded that the hypothesis has not been confirmed, i.e., there is no correlation between the length of work of programmers and professional burnout. When we consider what the work of a programmer looks like (sitting at a desk for many hours, repetitiveness in sequences of writing programming code, monotony, sometimes looking for an error in the created program, which can be one wrongly placed letter), it can be concluded that the length of employment has a significant impact on the possible occurrence of burnout, which, however, has not been confirmed by research. With possible further research or reconduct, it would be necessary to narrow down the group of programmers to those who only write programming code. Research was conducted on a broader group of programmers (who have contact with customers, run their own businesses, work in companies that take care of their employees, deal with various projects, take part in training, are constantly developing, etc.). As it turns out, there are also other studies confirming that the length of employment does not have to affect burnout, but applies to other professions. Sowińska et al. (2012) studied burnout in nurses and how it affects the length of their employment. Her research did not find a relationship between burnout in nurses and their length of employment. In her work, Sowińska also cites three other studies that also did not confirm such a hypothesis. Sicińska's (2015) research also did not confirm the relationship between burnout and the length of employment. In her case, the study concerned massage therapists and cosmetologists (Sicińska, 2015).

The first detailed hypothesis was: "The level of ressentiment increases with the length of employment". The results presented in Table 6 undermine the assumed hypothesis by demonstrating the lack of relationship between the length of employment and ressentiment (rho = 0.023; p = 0.840). It was assumed that the longer someone works in a given profession, the skills, experience, self-confidence increase in direct proportion, and all this translates into the level of ressentiment. Unfortunately, it was not possible to find any research in the literature stating the relationship between the length of employment and ressentiment.

Moving on to the second detailed hypothesis, formulated as follows: "There is a relationship between burnout and ressentiment", a statistically significant correlation was found at the level of the negative mean correlation (r = -0.532; p = 001). The hypothesis was confirmed and the results are illustrated in Table 8. Negative correlation indicates a feedback loop between these two variables. It means that if the level of burnout in programmers increases, their ressentiment increases, and similarly, if the ressentiment decreases, the level of burnout decreases. There are also studies that have already been done in 1995 to confirm the hypothesis. A study conducted by Koeske and Kelly (1995) showed the existence of an inverse relationship with the occurrence of burnout (r = -0.24, p<0.05). It may be related to one of the symptoms of burnout, which is cynicism. Cary Cherniss writes that cynicism includes negative self-esteem, experiencing fears about the future and stability of the workplace, feeling guilt and harm (Fengler, 2001).

The third detailed hypothesis states that "There is a relationship between the sense of professional ineffectiveness and the level of distress". The hypothesis was confirmed by the rho-Spearman correlation test, the results of which are presented in Table 10. The correlation between ineffectiveness and distress (rho = 0.352; p = 0.001) was determined to be slightly positive. So, when the sense of professional ineffectiveness grows, distress grows with it. It also works the other way around, so if one of the variables decreases, the other does too. Stress is usually divided into two categories: positive stress (eustress) and negative stress (distress). Distress is a form of stress that arises in the body in response to a threat and other unpleasant

and stressful situations that are the result of a stress factor. Messimo Santinello (2014, p. 4) writes about the sense of professional ineffectiveness that "it is a dimension relating to the assessment of one's own professional competencies. One end of this dimension is characterised by a sense of effectiveness at work, effectiveness in achieving professional goals, while the other – a sense of ineffectiveness and lack of results at work". The correlation in the case of these two variables was probably revealed due to the fact that a person facing ineffectiveness at employment stress, which in this case is negative. Another argument that may support the correlation of distress with a sense of professional ineffectiveness is the correlation between stress and burnout. Distress as negative stress causes a sense of professional ineffectiveness and is a component of burnout, causing intensification of ressentiment. Maslach (2011) argues that burnout syndrome is very much associated with occupational stress, which results from the interaction of many different factors in the workplace.

The last, fourth detailed hypothesis, "Lack of engagement and exhaustion correlate with length of employment" has not been confirmed. The results in Table 12 show that there is no statistically significant correlation between these variables. In some respect, this hypothesis coincides with the first detailed hypothesis, where the relationship between burnout and the length of employment was studied. The scale, disengagement, and exhaustion are part of the overall burnout score. Based on a review of the available literature on burnout, it was not possible to find a satisfactory explanation of the results.

Based on discussions and analyses of detailed hypotheses and all results, it can be concluded that the length of employment does not affect the development of burnout in programmers. It is very possible that many other factors are responsible for the lack of connection between the length of employment and professional burnout, such as combining passion with work, salary at a very high level, numerous bonuses and training in companies, contact with other people who share a passion for programming, business trips, etc. It may be important to continue research on programmers and expand knowledge about this professional group.

In the literature, we can find more research on the links between burnout and length of employment, but they concerned other professions. Interestingly, as Santinello (2014) states, the highest risk of burnout applies to people who work for a relatively short time (2-4 years). At the beginning of their professional career, they have idealistic ideas about work, but over time they encounter a reality that often does not meet their expectations, arousing emotions and a sense of ressentiment. This gradually leads to the development of burnout. In the next research, we can collect a group of programmers with a small work experience of 2 to 4 years and try to confirm the hypothesis that during this period, the risk of burnout is the highest.

Summary

This paper's aim was to answer the question whether there is a relationship between the length of employment and the level of professional burnout among programmers in the conceptualization of resentment. The scientific areas that the researchers were interested in were burnout and its components (psychophysical exhaustion, lack of involvement in relationships with clients, a sense of professional ineffectiveness and disappointment). It was decided that examining variables such as ressentiment would allow us to see a broader picture of the research, as well as the burnout syndrome in programmers. In this study, no statistically significant correlation was observed between the length of employment and the occurrence of burnout among programmers (rho = 0.066; p = 0.564). These results suggest that the length of employment has no effect on the level of burnout in this group. On the other hand, significant associations were identified between burnout and ressentiment (r = -0.532; p = 0.001), and a sense of professional ineffectiveness and distress (rho = 0.352; p = 0.001). It means that the occurrence of burnout among programmers causes ressentiment, as well as an increase in symptoms of distress.

The research results provide the basis for further planning of explorations, which may deliver additional information on the studied depend-

encies, e.g., on the impact of low ressentiment as a factor protecting against burnout in programmers. The growing interest in programming may be a motivation to continue research in this field.

Therefore, it is worth considering conducting further research, this time focusing on the female gender, as there are a significant number of women actively involved in programming.

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