Age and the functioning of academic teachers in the conditions of the covid-19 epidemic in Poland (based on their self-assessment)

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Abstract. The subject of the considerations of this publication is the functioning of academic teachers in terms of the consequences of their remote work, in the era of the Covid-19 epidemic in Poland, in their own assessment in relation to their age. The article consists of two parts: theoretical, in which the authors explain the concepts of remote work productivity, quality of life and mental well-being of academic teachers, and empirical, prepared on the basis of a qualitative analysis of the results of the study. The study was conducted in a group of 21 academic teachers (n = 21). It was a part of a project devoted to the study of the mental and social feeling of academic teachers in Poland in the Covid-19 era, in connection with the need to work remotely in higher education, with the use of 21 structured in-depth interviews, dealing with

the issue of the functioning of the professional quality of life of this group of people. The aim of the research procedure was to identify one's own level of competences in remote teaching and the assessment of the quality of professional life, as well as the sense of well-being among academic teachers of various ages in the situation of the Covid-19 pandemic. The conducted research showed a different level of evaluation of academic teachers regarding their own productivity in the area of media competences for remote work as well as evaluations related to the quality of professional life and the sense of mental well-being in the situation of the Covid-19 epidemic. Thus, age turned out to be the factor differentiating statements. Although a number of statements indicate a negative assessment of their own productivity, the quality of professional life and the sense of mental well-being, and that in all statements, stress is observed in the situation, it is optimistic that some teachers revealed pro-social values, the implementation of the mission of the teaching profession and the search for coping opportunities, in the face of difficulties and inconveniences. The conducted research also allowed to observe a lower level of self-productivity assessment, quality of professional life and sense of well-being in people aged 60 plus, compared to younger colleagues.

Wiek jako determinanta funkcjonowania nauczycieli akademickich w warunkach epidemii covid-19 w Polsce (na podstawie ich samooceny)

Słowa kluczowe: wiek, kształcenie na odległość, kompetencje medialne, nauczyciele akademiccy, Covid-19, jakość życia, dobrostan psychiczny

Streszczenie. Przedmiotem rozważań niniejszej publikacji, jest funkcjonowanie nauczycieli akademickich w aspekcie konsekwencji ich pracy zdalnej, w dobie epidemii Covid-19, w Polsce, w ocenie własnej w relacji do ich wieku. Artykuł jest złożony z dwóch części: teoretycznej, w której autorzy wyjaśniają pojęcia produktywności pracy zdalnej, jakości życia i dobrostanu psychicznego nauczycieli akademickich oraz empirycznej przygotowanej w oparciu o analizę jakościową wyników przeprowadzonego badania. Badanie zostało przeprowadzone w grupie 21 nauczycieli akademickich (n=21). Jest ono częścią projektu poświęconemu badaniu poczucia psychicznego i społecznego nauczycieli akademickich w Polsce w dobie Covid-19, w związku z koniecznością podjęcia pracy zdalnej w szkolnictwem wyższym, z wykorzystaniem 21 ustrukturyzowanych wywiadów pogłębionych, podejmujących problematykę funkcjonowania zawodowego jakości życia tej grupy osób. Celem postępowania badawczego była identyfikacja własnego poziomu kompetencji do nauczania zdalnego oraz oceny jakości swojego życia zawodowego, a także poczucia dobrostanu, wśród nauczycieli akademickich, w zróżnicowanym wieku, w sytuacji epidemii Covid-19. Przeprowadzone badania wykazały zróżnicowany poziom ocen nauczycieli akademickich dotyczących własnej produktywności w obszarze kompetencji medialnych do pracy zdalnej jak i ocen odnoszących się do jakości życia zawodowego i poczucia dobrostanu psychicznego w sytuacji epidemii Covid-19.Tak więc wiek okazał się czynnikiem różnicującym wypowiedzi. Mimo że, szereg wypowiedzi wskazuje na negatywną ocenę własnej produktywności, jakości życia zawodowego i poczucia dobrostanu psychicznego i że we wszystkich wypowiedziach zaobserwowano odczuwanie stresu w zaistniałej sytuacji, optymizmem napawa fakt ujawnienia przez niektórych nauczycieli prospołecznych wartości, realizacji misji zawodu nauczyciela i poszukiwania możliwości radzenia sobie wobec trudności i niedogodnych sytuacji. Przeprowadzone badania także pozwoliły zaobserwować niższy poziom oceny własnej produktywności, oceny jakości życia zawodowego i poczucia dobrostanu u osób w wieku 60 plus, w porównaniu z młodszymi kolegami.

Introduction

The subject of this publication is the functioning of university teachers in terms of their competence to work remotely, as well as the quality of working life and psychological well-being in the era of the Covid-19 epidemic, based on a qualitative analysis of the results of a survey conducted. It was widely observed that the Covid-19 epidemic changed the conditions of functioning of this selected professional group and significantly affected the labour market in Poland (Ewa Flaszyńska, 2020, pp. 122–127). The introduction of the state of epidemic threat, which was declared in Poland on 12.03.2020, followed by the introduction of the epidemic state from 20 March 2020 (Medexpress, 2020), imposed additional requirements on working conditions, implying higher levels of stress in the working environment, which negatively affected the health and well-being of employees (Nina Ogińska-Bulik, Zykfryd Juczyński 2010; Marta Stasiła-Sieradzka, Elżbieta Turska, 2019).

The aim of this article is to identify the own level of competence to teach remotely and their assessment of the quality of their professional life, as well as their sense of well-being, among university teachers, of varying ages, in a Covid-19 epidemic situation. This article is thus devoted to four aspects of teachers' lives: values, goals, productivity assessments and quality of life – which relate to professional work and psychological well-being – linked to subjective aspects of assessing the quality of one's own life (Magdalena Ciechowska, Maria Szymańska, 2018, p. 236).

Teachers in the Covid-19 epidemic situation

The Covid-19 epidemic in Poland has not only changed the professional functioning of many people, but has particularly modified the professional situation of university teachers. The closure of universities almost overnight necessitated the acquisition of new competences, where the situation was similar to when the Internet appeared on a massive scale for the first time in the world (Patricia Wallace, 2001, p.7). Hence, university teachers had to take part in a kind of experiment (Ben Williamson et al., 2020, p.112) related to remote teaching, especially online teaching (Jagoda Rydelek et al., 2016, p.22). According to Wacław Strykowski, these types of competences can include: having an understanding of media resources related to the subject, subject block or educational path being taught; having the ability to analyse and evaluate the content and pedagogical evaluation of existing media resources; having knowledge of particular media including the ability to assign them appropriate tasks in the process of education and upbringing; having the motivation to modernise their own workshop and that of their students (Ewelina Brzyszczy, 2017, p.34).

On the other hand, regarding the situation of university teachers, the necessity to implement core curricula using remote teaching and assessment was imposed on universities in Poland within a few days. As a result, the nature of academics' work changed. It became necessary to change the proven methods of transmitting and verifying knowledge, labour-intensive preparation of classes, placing them on educational platforms for use in classes online, i.e. in real time. It should be remembered that the technical preparedness of the universities to teach on educational platforms, which not all of them had, also played an important role. And if they did, this required differentiation in terms of their operation as well as a higher standard of compliance with the legal requirements of GDPR. In addition to the above, universities were forced to make increased financial efforts to purchase the necessary IT technology and take other necessary related measures. This state of affairs required lecturers to acquire new competences, greater tolerance, increased effort related to excessive workload, as well as an open attitude towards the student, determination to achieve professional goals; and at the same time a conscious acceptance of their own weaknesses when attempting to overcome them.

Hence, it is presumed that the analysed situation affected the professional relations of the studied social group. This is because the need to share knowledge may lead to the strengthening of collegial bonds, the creation of new forms of cooperation, but at the same time to the development of a new hierarchy of professional positions, in connection with the possession of the necessary competences and the diversification of persons with specific attitudes towards distance learning, who acquire new competences with more or less difficulty.

At the same time, the conditions for the psychosocial functioning of the professional group undergoing analysis have changed. Restrictions have emerged regarding the need to remain isolated, to spend time at home with their families. Proven methods of improving mood and relieving stress, especially important in the case of extraverted people, no longer worked. The daily experience of frustration brought to light unresolved conflicts in family, partner and also professional relationships. The mutual strangeness of the household members, the behaviour of the children, who, despite their own schoolwork, often demanded that time be organised for them, the heterogeneous living together in a small space, the changing space-time, the persisting emotional tension, all added to the feeling of psychological discomfort. Obviously, the need to interact with each other had the effect of tightening the strained emotional bonds.

At the same time, there was a complete blurring of the boundaries between professional work and family life (Augustyn Bańka, 2001). In other words, teachers were falling asleep at work and waking up at work, with no prospect of this situation changing in the near future. The situation was aggravated by the fact that the sense of health insecurity was disrupted, compounded by the mass media, and sometimes by people in the immediate environment and the awareness that the prospect of the worst scenario – loss of life – was becoming real. A persistent sense of threat can trigger syndromes of behaviour bordering on pathology, compounding the discomfort of the situation. A modification of recognised values can be expected in this situation. The realisation of the "fragility of life", impermanence, uncertainty and transitoriness of hitherto realised instrumental goals may on the one hand lead to a turn towards ultimate values or lead to their complete rejection. Thus, the situation of this professional group bore the hallmarks of a "classic stress situation".

The importance of age in the experience of stress

There is evidence in the literature to suggest that the experience of stress varies according to a person's life stage (Hermann Burr et al. 2017; Nathalie Donders et al. 2012; Rosana F. Sampaio and Viviane G. Augusto 2012; Kenneth Shultz 2010). There is no consensus among the authors on this issue; moreover, a controversial study was conducted by Sandra Götz and colleagues (2018), who found a small (but at the same time statistically insignificant) relationship between age and experienced stress. In this study, older respondents appeared to experience stress to a slightly greater extent than their younger counterparts. However, as was established as a result of the study, the researchers were not able to obtain unambiguous results to draw conclusions regarding the existence of this influence, at particular stages of life. The aforementioned lack of conclusiveness motivated the authors of this article to delve deeper into the issues involved.

Some of the theories reported in the literature take into account age differences in both the quantity and quality of work-related stressors, with most of them making positive predictions in favour of older workers. One of these is the hypothesis that job satisfaction increases with age (cf. e.g. James D. Wright and Richard F. Hamilton, 1978; David Drabe, Sven Hauff, Nicole F. Richter, 2014) which has been presented and verified to explain that, on average, older workers show higher levels of job satisfaction than their younger colleagues (Robert P. Quinn et al., 1974; cf. Thomas W.H. Ng and Daniel C. Feldman, 2010; Niro Shivanathan et al. 2007; George Vaillant, 2007). This hypothesis gave rise to the claim that career development is most often age-dependent, assuming that professional work is an important element of the sense of quality of life (e.g. Janusz Czapiński, 2009; Barbara Mróz, 2011). This statement seems particularly pertinent with regard to university teachers. It implies that the longer employees are engaged in their professional work, the more willing and better they perform it. Therefore, it could be argued that by working longer in specific work environments, building coping strategies, longer-serving employees face fewer work-related stressors. It therefore seems interesting to examine the specifics of the Covid-19 pandemic threat and thus to what extent it is a stressor for them in a situation of limited control.

Reflecting on the benefits of worker age, Paul B. Baltes and Margaret M. Baltes (1990) proposed a normative model of successful development over the working

life (*life-span*), the selective optimisation with compensation (SOC) theory which includes three general strategies: selection; optimisation; and compensation.

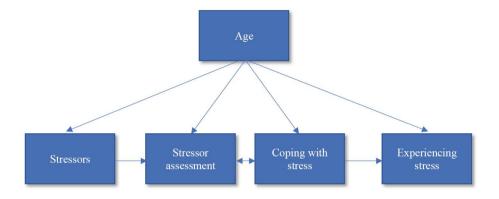


Figure 1: A model of the relationship between age and components of occupational stress Source: own elaboration based on Dorien Kooij, Annet de Lange, Paul Jansen, Josje Dikkers, 2011, p.201.

The category selection refers to selecting and focusing resources on those goals that seem most valuable to the subject. Another category, optimisation, aims to achieve a higher level of functioning by developing and extending one's competences (e.g. in the form of appropriate training or new experiences). Finally, compensation refers to the strategy of minimising losses by investing resources in other activities that counteract losses. Employees can also use optimisation and compensation as strategies for coping with stress, and the same strategies can be successfully applied in both the work-life area and the private life area to minimise stressors. In the case of an epidemic threat, this would mean taking measures to prevent infection, with regard to one's family and immediate environment. This can be achieved, for example, by focusing on other goals, including family goals, and consequently by eliminating, for example, responsibilities within one's work that involve less travel (e.g. by carrying out purely local projects), although it is clear that not every profession or job offers such opportunities. However, choice as a strategy can manifest itself in different ways. For example, one particular manifestation is job shaping - job crafting, which can be seen as correlated with age. Job crafting is understood as "the physical and cognitive changes that individuals make to the task or relational boundaries of their work" (Amy Wrześniewski & Jane E. Dutton, 2001, p. 179; Justin M. Berg,

Jane E. Dutton, Amy Wrześniewski, 2013; Grażyna Bartkowiak Agnieszka Krugiełka, 2018; Grażyna Bartkowiak, 2021). Although there is currently no clear research in the literature confirming the existence of this relationship, it can be expected that the shaping of work even under particularly difficult epidemic conditions may be age-dependent, as older workers often place a higher value on work as a meaningful activity in their lives (Laura L. Carstensen, 2006) and may have a greater spectrum (level of autonomy, work enrichment) of opportunities to do so (Ruth Kanfer and Philip L. Ackerman, 2004). Under epidemic conditions, as might be expected, the modification of academics' work may have amounted to a greater focus on research work (depending on the specific discipline represented) and editorial work involving the preparation of publications.

Returning to age-related determinants, however, researchers suggest that older workers may experience increased levels of work-related stressors (e.g. Saidi Ghezzi et al., 2020). At the same time, there is data alluding to functioning, societal stereotypes e.g. the view that older workers are perceived as less creative (William C. Levin, 1988, Ian Stuart-Hamilton, 2006; Monisha Pasupti and Corrina E. Lockenhoff, 2002), less interested in evolving information technology and less suitable for teamwork (Phil Lyon and David Pollard, 1997; Izu Nwachukwu et al., 2020) due to greater adaptive difficulties.

Although strategies derived from the theory of selective optimisation with compensation (P.B. Baltes and M.M. Baltes, 1990) may enable employees to actively reduce the occurrence of stressors in both their work and family life cycle, the opposite may also be true, especially with regard to the partial selection strategy. Employees may be able to engage in selection strategies within their current job, while at the same time they may not be able to do so. As a consequence, any job-to-job swap within a selection strategy may be completely limited and even impossible for long-serving employees, especially university teachers.

In conclusion, diverse theoretical approaches produce ambiguous prognoses regarding the impact of age on work stressors. This situation appears to be particularly stressful in the work of university teachers, during the Covid-19 epidemic. While most age-related theories predict lower levels of stressors for older workers, age stigma and limitations in the ability to modify one's work suggest the opposite. Currently, no empirical studies are known to provide a clear answer as to whether older workers face more or fewer, or even the same number of stressors as their younger colleagues.

Productivity, quality of working life and sense of psychological well-being

In the study, the functioning of university teachers during the epidemic due to the above circumstances will be analysed due to the three criteria of teacher productivity, quality of working life and sense of psychological well-being (Siti I.D. Ishak et al. 2018). This assumption requires making definitional arrangements relating to the concepts in question:

- a) teacher work productivity *level of productivity* (LOP);
- b) quality of working life working life quality (WLQ);
- c) mental well-being (MWB);
- d) working life quality versus mental well-being WLQ / MWB).

Teacher performance appraisal (LOP)

The evaluation of teacher work both in the Polish (where we can find mainly references to procedures and legal acts) and English-language literature is full of counter-arguments, and the presented models are ambiguous in the above category. Some authors, when commenting on the productivity of university teachers, pay attention to objective factors, i.e. the level of students' preparation and their competence, as well as their time management in preparing for classes (Anisrah Ahmed and Nirhizarh Gistituati, Rusdinal, 2020; Ndugu, 2014).

In them, the authors highlight the particular difficulty of defining the work of a teacher that does not refer solely to referring to standards set by specific bodies and focuses on the mission of the profession. Most of them explicitly emphasise the subjectivity of establishing such criteria (Linda Darling-Hammond et al., 2012).

Given that the Covid-19 epidemic has almost forced academics to embrace remote working, the project adopted previously unused subcategories for assessing the academic's own familiarity with using new technologies in their work. Thus, the assessment of one's own competence in the use of applications and the ability to use the platforms within which remote learning takes place is taken as an indicator of academic teachers' work productivity.

Quality of working life of university teachers (WLQ)

The concept of quality of working life was first used by I. Bluestone, an employee of General Motors of America, in a designated programme for employees that allowed them to play an active role in deciding on the working conditions offered. Intense further work on quality of working life issues continued in the first half of the 1970s, by the International Council on Quality of Work, with extensive research on workers' mental health (Jean Martel, Gilles Dupuis, 2006, pp. 333–368). A decade and a half later, Stephen P. Robbins defined quality of work life as: "[...] the process by which an organisation responds to the needs of employees by putting in place mechanisms that enable them to participate fully in decisions about their lives at work" (Stephen P. Robbins,1989, p. 207). A further definition by other authors (David Efraty, Joseph M. Sirgy, Dong-Jin Lee, 2001) indicated that quality of work life: "[...] involves the impact of the workplace on satisfaction, satisfaction with life outside work and subjective feelings of happiness" (D. Efraty et al., 2001, p 224).

The cited definitions initiated further considerations, concerning the measurement of quality of work life professional life. The first measurement criteria had already been forged earlier by Richard E. Walton (1973) and then Gordon L. Lippitt (1978).

These included:

- sense of security;
- relationships with others;
- a sense of personal utility;
- experiencing recognition for achievements;
- opportunities to improve one's competence (R.E. Walton, 1973, pp. 12-16).

Mental well-being (MWB)

Fifty years ago, the World Health Organisation defined health as:

"[...] a state of complete physical, mental and social well-being and not merely the absence of disease or disability" (Carol D. Ryff and Burton Singer, 1998, pp. 1069–1081). The relationship between physical health and mental health has been characterised by a systemic view of the aforementioned aspects; each first factor influences the second both as a cause and an effect (Wally Barr, et al., 2005, pp. 260–265). Moreover, over the past 50 years, psychologists have discovered that psychological well-being does not only refer to the elimination of pathology, but also includes the study of growth, optimism, hope, insight capacity; interpersonal skills, predictive thinking, courage, work ethic and other factors (Martin E.P. Seligman and Mihaly Csikszentmihalyi, 2000, pp. 5–14).

It is a branch of positive psychology that was first initiated by the representative of humanistic psychology Abraham Maslow in 1954, and developed 40 years later by Martin E. Seligman (Shane J. Lopez and Matthew Gallagher, 2009). This branch of psychology, focuses on subjective levels of well-being, satisfaction and contentment with past achievements; hope and optimism about the future; and experiencing happiness in the present (Carmelo Vazquez, et al., 2009, pp. 15–27). For this reason, the literature on the determinants of psychological well-being has in recent years placed more emphasis on psychological well-being and well-being than on disorders and dysfunctions (Felicia A. Huppert, 2009, pp. 137–164).

In the adopted research design, in line with the assumptions of positive psychology, well-being (leaning towards the eudaimonistic approach, whose representative was, among others, M.E. Seligman) means optimal human functioning, acting in accordance with oneself, i.e. the recognised value system, self-realisation, balance between work and private time (Teresa Chirkowska-Smolak, 2008; Jeffrey H. Greenhaus and Garry N. Powell, 2006). One of the most popular types of psychological well-being is the model of C.D. Ryff (2008). It is composed of six dimensions, namely:

- autonomy;
- ability to "control" the environment;
- personal development;
- positive relationships with others (based on trust);
- awareness of values (life goals);
- self-acceptance (C.D. Ryff and B. Singer, 2008, p.13-39).

The above model was adapted to the research planned in the project.

Quality of working life and mental well-being (WLQ / MWB)

The relationship between quality of working life and psychological wellbeing in research usually takes the form of co-occurrence and, although the fact of its occurrence is not in doubt, it is difficult to clearly define the reciprocal relationship of the two variables. Thus, psychological well-being in the opinion of some authors is associated with a subjective sense of happiness, including at the same time job satisfaction as a causal factor (Poja Garg, Renau Rasogi, 2009, pp. 42–51). On the other hand, well-being is a factor that increases employee productivity and is an outcome of a sense of job satisfaction (Broke Envick, 2012; J. Sirgy et al. 2001, pp. 21–32). The lack of congruence in the research completed to date led to the inclusion of the relationship between quality of work life and psychological well-being in the planned research.

The aforementioned categories have been adapted to study teachers' occupational quality of life (S.I.D. Ishak et al., 2018). Research conducted to date has shown that teachers' sense of quality of professional life is influenced by a number of factors, including their sense of security, their motives for making the decision to choose their profession (Christopher Day et al., 2005, pp. 563–577). Another study conducted in Turkey in the teaching community showed a relationship between work engagement and sense of quality of life (Mustafa Erdem, 2010, pp. 511–537). In view of some variation in the results obtained, and taking into account the situation of the Covid-19 epidemic, the authors of this article undertook their own research.

Research method

The aim of the presented research was to identify their own level of competence to teach remotely and to assess the quality of their professional life, as well as their sense of well-being, among university teachers in the Covid-19 epidemic situation in relation to their age.

In undertaking the above, it was necessary to formulate specific research problems:

- 1. How do university teachers assess their competence in the use of information technology, in a situation of remote learning in relation to their age (P1)?
- 2. How do university teachers determine their level of psychological well-being during the epidemic in the context of their age (P2)?

In order to answer the questions formulated in this way, it was necessary to operationalise the measurement partly using the C.D. Ryff model cited earlier (C.D. Ryff, B. Singer, 2008, p.13–39).

For the purpose of the research project, an in-depth interview was planned, for which specific dispositions were arranged.

- 1. How would you rate your level of familiarity with the remote working software you use?
- 2. How do you feel about working remotely?

- 3. To what extent are relationships with friends and other people a condition for psychological well-being?
- 4. How can you describe your attitude to the world?
- 5. What values do you consider important?
- 6. What life goals would you like to achieve in the near future?
- 7. How do you assess your level of mental balance? To what extent do you manage to balance your work, family and leisure activities?
- 8. What does personal development mean to you and to what extent do you pursue it?

In order to obtain answers to the question formulated in this way, a study was planned, using an in-depth interview with 21 academic staff (n=21), all of whom were teaching remotely in the aforementioned time frame. Twelve women and nine men participated in the study. The age of the participants in the study ranged from 31-67 years (mean was x = 48.8). The selection of participating teachers was purposive. Participants in the study included those with a doctoral degree (10 people) as well as those with a post-doctoral degree (9) and a professorial title (2 people). The study took place between May and November 2020. The individuals represented the humanities and social sciences (11) and polytechnic sciences (10) and were employees of both public (12) and non-public universities (9).

Prior to the survey, the individual question contents were coded. Based on these, specific categories were created after the results were obtained, which allowed the research material obtained to be operationalised. The creation of categories took place using the method of competent judges.

Research ethics

The research was conducted in accordance with research ethics. The research pro-cesses analysed were presented through verifiability. The research problems posed took into account ethical issues of a social and individual nature, i.e. in relation to the content of their formation and presentation to the respondents. The research procedures were similarly addressed (Chava Frankfort-Nachmias, David Nachmias, 2001, p. 90–94). In proactive measurement in action, research activities were undertaken that were informed, that is, the respondents knew what would happen in relation to their life situation with the help of the presented study and in relation to the research activities undertaken through the specific aims, paths and tools used in the study (Tadeusz Pilch, Danuta Lalak, 2006, p. 1025).

Each person surveyed knew that he or she could withdraw from participation in the measurement at any time. In addition, the anonymity of the study and the security of the personal data that were not openly linked to the results of the study were ensured. The research also in no way compromised the sense of freedom of any of the individuals surveyed (Ch. Frankfort-Nachmias, D. Nachmias, 2001, p. 90–94).

Survey results

The following survey results present a subjective assessment of the productivity level of teachers in terms of their use of information technology in remote working. By analysing the statements of those who participated in the survey, the types of academic teachers surveyed, presented in the table below, were generated. The basis for the analysis was not only the assignment to a specific conceptual category (high rating / not very high rating) of competence to work remotely, but the declared motivation for further learning.

No.	Category of self-evaluation of productivity in remote working technology	Category symbol for assessing your own productivity of remote working	Examples of evaluating one's own productivity in remote working technology within a specific category
1.	People who are particularly committed to working remo- tely and who rate their media competence highly as an in- dicator of productivity, being people up to the age of 35 and still working to improve their craft.	LOP1	LOP _{1a} : "I'm happy to finally be able to do what I enjoy, figuring out ways to work in teams on Teams. Maybe I'm immodest, but I know a bit more software than my col- leagues, because I live a bit of it" (Male, 33, PhD).
2.	People who rate their compe- tence in remote working well , showing interest in improving their learning from using new forms of remote working so- ftware. The most common age group is 36–60 years old.	LOP2	LOP _{1b} : "I'm currently going from better to worse I didn't know I would be able to learn so many new things and I am still learning I try to explain every difficulty and mistake and I do it at every opportunity (Female, 55, PhD hab.).

Table 1. Categories of evaluation of the productivity of own work (LOP) of remote academic teachers

No.	Category of self-evaluation of productivity in remote working technology	Category symbol for assessing your own productivity of remote working	Examples of evaluating one's own productivity in remote working technology within a specific category
3.	People who work remotely, with a not very high assess- ment of their own competen- ce, but who are not motivated to learn the possibilities of using new types of softwa- re, who do not accept remote learning. Most often, these are people over the age of 60.	LOP3	LOP ₁ : "I'm heartily sick of working remotely, I'm just waiting to sneak out of this activity, it's not for me. I know I'm bad at these things, but I'm also getting on in years (Male, 67, professor).

Source: own study.

In the presented study, in relation to the problem of possessed competence (P1) in the use of information technology, the surveyed academics in terms of their level of productivity in remote working (LOP) presented three types of evaluation. The first type, a positive appraisal, was characterised by teachers who were particularly committed to working remotely, focused on acquiring new competences, using new applications indicating an optimistic approach to working remotely (LP1), and regarding the skills they possessed, which was reinforced by continuous learning of new skills (LP2). The second group of evaluations coming from academics interested in acquiring new competences presents a similar, although less optimistic, position. The third group of evaluations became the section of teachers who are definitely less committed to improving their media competence, treating the analysed form of teaching as a not very acceptable necessity (LP3). It is noteworthy that the assessment of one's attitude towards acquiring media competence seems to be correlated with the age of those participating in the study. The analysis of the statements showed that older teachers (over 60 years of age) in their post-production age felt less motivated to acquire remote working competences and a low state of their productivity (LP3).

It can be expected that the observed attitudes towards remote working and the evaluation of their productivity are due to both differential motivation to learn, the acquisition of media competences and the previously observed effectiveness of the activities undertaken. In addition, older academics appear to be less experienced in the use of IT applications, which may reduce motivation to learn to use differentiated tools in remote working.

Modification of the professional quality of life (WLQ) of university teachers in a Covid-19 situation

The criterion used for the analysis was the assignment of statements to the categories of positive, negative and partially positive evaluation based on the differentiated justifications given. Those who took part in the study and gave their answers most often emphasised that the source of the lowering of the quality of life value was the loss of security in terms of health security, in relation to oneself and one's loved ones, and the loss of security related to work, particularly in relation to those employed in non-public higher education institutions.

No.	Category of teachers' assessment of quality of working life	Category symbol for self-assess- ment of quality of working life	Examples of self-assessment of quality of working life
1	Negative assessment . A certain group of the surveyed teachers, in re- lation to their current workplace and the situation related to the epidemic, are worried about their life situation in the future and this situation has a negative impact on their evaluation of the quality of their professional life.	WLQ1	WLQ _{1a} : "Besides the fact that we have Covid, and I may not survive, I regret moving to a non-public school; after every term I fear I may be dismissed from my job" (Female, 45, PhD).
2	Negative assessment. Some teachers were sceptical about their sense of usefulness, which is reflected in a lowered evaluation of their pro- fessional quality of life, suggesting that contact with students is basically limited, which means that they can only seemingly participate in classes, while opportunities to test knowl- edge due to the size of the groups are limited.	WLQ2	WLQ _{2a} : "I often wonder if it wouldn't be better to have the students read the texts themselves, they don't listen to us anyway and we, because of the size of the groups, don't have the opportunity to quiz them how do we feel professionally fulfilled here?" (Male, 47, PhD hab.).

Table 2. Categories of evaluation of quality of life (WLQ) of working life of the surveyed group of university teachers

No.	Category of teachers' assessment of quality of working life	Category symbol for self-assess- ment of quality of working life	Examples of self-assessment of quality of working life
3	Partially positive assessment. Among the interviewees, there were statements suggesting that by work- ing from home and not wasting time on commuting, they could devote more time to their academic work, finish unfinished monographs or ar- ticles, and therefore rated the less time-consuming remote learning higher, despite all the negative aspects.	WLQ3	WLQ _{3a} : "Finally, when working from home I can finish my research, I waited a year and a half I also have an article started; I will sit down to it soon. This Covid also has its strengths." (Female, 51 years old, PhD hab.).
4	Partially positive assessment. A small number of those who participated in the study indicated participation in webinars broadened the possibilities to use more ad- vanced forms of remote working and to pursue professional interests.	WLQ4	WLQ _{4a} : "I follow Polish and English-language webinars to learn some- thing moreI have some more time to research what I like, not what the money is for."(Female, 31, PhD).

Source: Own survey

The respondents' statements relating to quality of life can be classified into two categories: negative (WLQ1, WLQ2) and partly positive (WLQ3, WLQ4). It is optimistic that some teachers, when commenting on the quality of their professional life, regardless of the perceived inconveniences, saw an improvement in the situation in the acquisition of new competences useful in remote work and in the realisation of research plans. Equally optimistic, although in line with the mission of the teaching profession, seems to be the concern for the quality of the teaching process as an element of professional fulfilment (WLQ2) and greater involvement in scientific work particularly observable among university teachers over 45 years of age.

Level of experienced psychological well-being (MWB) among university teachers

Mental well-being was assessed by making an estimate of the level of well-being (categories of decreased, unchanged, associated with taking action to maintain or increase it) associated with its personal determinants, indicating its causes or manifestations. This assessment, as a more general exponent of subjectively perceived quality of life among the interviewees during the in-depth interview, showed variation both in terms of the assessment criteria and the personal and demographic

issues characterising the persons. At the same time, irrespective of it, the possibility of achieving predefined life goals turned out to be an important factor.

Table 3. Category assessment of experienced well-being in relation to taking up remote working

No.	Assessment category of the experi- enced psychological well-being	Category symbol	Examples of assessments of experi- enced psychological well-being
1	Reduced well-being . Individuals assessed as extraverted on the basis of the interview complained about re- duced opportunities for social as well as work-related contacts (a).	MWB1	MWB ₁ : "I feel very bad when I can't meet my friends and students, I can't imagine it going on any longer." (Female, 56 years old, PhD hab.).
2	Reduced levels of well-being (b) . Some lamented the difficulty of com- pleting the intended research, which ended ahead of schedule, presenting non-personal values as important (b).	MWB2	MWB _{2a} : "I was so keen to complete the research I'm thinking of mate- rial for the implant, lasting a dozen years for patients" (Male, 62 years old, PhD. hab.).
3	Reduced well-being (c). Some experienced academics highlighted the inability to balance work, personal life and leisure time.	MWB3	MWB _{3a} : "I sit in front of a screen all day and sit and root around, there's no time for anything, as long as I can manage'. (Female, 60 years old, PhD hab.).
4	Reduced levels of well-being (d). Others focused exclusively on caring for their own health and their loved ones, i.e. children, grandchildren.	MWB4	MWB ₄ ; "My back hurts every day my children are constantly interacting with clients my grandchildren are so vulnerable; they can easily get sick I can't see the light at the end of the tun- nel" (Female, 61 years old, PhD).
5	Reduced level of well-being (e). Analysing the attitudes to the world of the university teachers participating in the study, it was possible to observe the attitude of a person frustrated in life, with a sceptical view of people's lives and the surrounding reality.	MWB5	MWB ₅₃ : "I don't know what to say, I am disappointed and even angry, after all, the epidemic could have been predicted beforehand, we are led by incompetent people, I see everything in black I don't understand my wife" (Male, 61 years old, PhD).
6	Reduced well-being (f). Negative self-reflection related to one's own psychological well-being (depressive attitude) combined with an attempt to cope with the difficulty.	MWB6	$\begin{array}{l} \textbf{MWB}_{6a} : \\ \textbf{,} I \text{ often feel very broken} \\ \textbf{and it is really difficult for me} \\ I \text{ am active in our association, there} \\ \textbf{is constantly something going on,} \\ \textbf{without it would be difficult for me}^{'} \\ (Female, 67 years old, PhD). \\ \textbf{MWB}_{6b} : \\ \textbf{,} I \text{ now understand what} \\ \textbf{the concept of the fragility of life} \\ \textbf{means} (Male, 68 years old, professor). \\ \end{array}$

No.	Assessment category of the experi- enced psychological well-being	Category symbol	Examples of assessments of experi- enced psychological well-being
7	Well-being, unchanged. Some of the mature teachers, when com- menting on the meaning of their lives especially in the professional aspect, said that they did not perceive any change from before the epidemic.	MWB7	MWB _{7a} : "I don't see any drastic changes in my life during the covid period, I'm doing what I've always done, I probably like it, and that's what I'll continue to do". (Male, 67, PhD).
8	Pointing to a way of coping with difficulties . Respondents stressed the importance of life values to survive the most difficult situations, i.e. love, friendship.	MWB8	MWB _{8a} : "In the current situation, my wife and my closest friends allow me to survive and pursue other goals that are subordinated to sustainable values." (Male, 64 years old, professor).
9	Coping through immersion in re- sponsibilities. Those with less seniority in academia, perhaps because they were more preoccupied with everyday matters and burdened with family responsibilities (irrespective of gender) and professional work seemed to be less burdened by the threat of Covid-19 than their older colleagues or peers. The university teachers repeatedly stated that they were so preoccupied with their daily lives that they treated reflections on the meaning of their own activities as an "unsuitable luxury for their lifestyle", which tended to have a demotivating effect on them.	MWB9	 MWB_{9a}: "I don't have time to think about Covid, my son has an eighth-grade exam, my daughter is in kindergarten and I'm running I don't feel particularly threatened". (Female, 35 years old, PhD). MWB_{9b}: "I don't know what to put my hands in, I don't think about the epidemic, I have so many issues and responsibilities, and I have to finish the project" (Male, 39, PhD). MWB_{9c}: "I try not to think about the threat, that doesn't mean I deny its existence, but I really can't allow myself to think about it because then I lose energy." (Male, 34, PhD).
10	Coping by drawing on emotional support. For those giving statements, an attitude of affiliation was also observed, but only among mature ac- ademics, directed at maintaining pos- itive social relationships from which emotional support can be drawn.	MWB10	MWB _{10a} : "We have to get through this, be together and support each other, it's the only way we can cope with a nasty virus" (Female, 62, PhD hab.).
11	A focus on complementing media competence as a source of maintain- ing well-being. When considering their personal development, univer- sity teachers mostly focused on im- proving their media competence, although there were some individuals who currently found time to improve their passions. These individuals undertook a range of activities, from the ambitious such as painting por- traits, to those related to household management such as cooking.	MWB11	 MWB_{11a}: "Finally I can paint portraits of my children" (Female, 54, PhD hab.). MWB_{11a}: "Now I cook my favourite dishes twice a week, bake a cake that I didn't have time for before." (Male, 41, PhD).

Source: self-reported survey

The analysis of the posted categories of evaluations of psychological well-being among academics allows us to observe reduced levels of well-being due to factors such as reduced social contacts (MWB1), inability to maintain balance between work and personal life (MWB3) (which seems to be typical of remote work carried out at home) thoughts of a depressive nature (MWB6), threats to one's own health and the health of loved ones (MWB4), more often occurring in persons 60 plus. In the case of people in their 60s, the following factors are more frequent: inability to complete tasks related to non-personal goals (MWB2); life frustration, which is difficult to identify, perhaps due to personality traits and low tolerance for adversity (MWB3). Another category of evaluations of experienced well-being also emerged in the statements of the interviewees, emphasising the 'peculiar stability' of this feeling, regardless of the presence of an epidemic (MWB7). This condition indicates the resilience of a certain group of academics and a strong focus on achieving life goals (including, presumably, professional goals).

Of note are suggestions suggesting options for coping with reduced feelings of psychological well-being as a remedy for difficulties arising from the Covid-19 epidemic. These include emotional support as an effective means of counteracting psychological strain, in (MWB10), satisfying relationships with friends as a significant life value (MWB8), indicated by people in their 60s and over, and as a popular method of coping with stress, indulging in a number of mentally absorbing activities that allow one to forget about the threat (MWB9) and focusing on developing media competence (MWB11).

Thus, in conclusion and referring to the next problem (P2) related to possessed psychological well-being (MWB), the opinions of the academy teachers participating in the study were divided into positive in relation to the situation; most often among those of working age and negative most often among those of post-working age, who did not show optimism in this regard. Hence, despite the difficult situation, having some activity or support from relatives or others made it possible not to become depressed about the situation.

Regardless of the reasons given, all individuals, regardless of age, indicated feeling stressed about the situation.

Discussion of results and conclusions

The study showed varying levels of university teachers' evaluations of their own productivity in the area of media competence for remote working, as well as evaluations relating to quality of working life and feelings of psychological well-being in a Covid-19 epidemic situation. Although a number of statements indicate a negative assessment of one's own productivity, quality of working life and sense of psychological well-being, and all statements showed feelings of stress in the situation, it is encouraging that some teachers revealed pro-social values, realised the mission of the teaching profession and sought ways to cope with difficulties and inconvenient situations.

Some of the more senior respondents (aged 60 plus), regardless of the discomfort caused by working remotely, showed concern for the quality of education and its effectiveness, demonstrating a desire to fulfil the honourable mission of their profession, while others emphasised the role of the enduring values of closeness and friendship as an antidote to threats to health or life. Noteworthy was the willingness to use the epidemic period to supplement their media qualifications or professional interests. For another group of people as a method of coping with psychological strain. It was found "beneficial" to be a concentrated focus on numerous duties, distracting from dwelling on negative event scenarios.

The study observed lower levels of self-assessment of productivity, assessment of quality of working life and sense of well-being in people aged 60 plus compared to the younger colleagues.

Confronting the research results with those of earlier studies partly confirms the conclusions formulated by other authors, although at the same time it provokes controversy.

As a result, the research presented by S.W. Parker, M.A. Hansen and C. Brendowski, academics were on average rated by their students regarding their media competence (Susan W. Parker et al. 2020, p. 7), thus also in a study by American researchers, students also indicated that academics were more involved in the preparation of offline than online classes (Parker et al. 2020, p. 8). Notwithstanding, the understanding of teacher productivity adopted by the authors of this article is a completely subjective category, these results do not coincide, with the self-assessment of the respondents in this study. On the other hand, in relation to the subcategory of self-assessment of productivity, they coincide with the research of T. Huk, who, based on the theory of withdrawal, indicated that above the age of 45, in fear of the pace of change and the inability to adapt to it, people of the above presented age limit their activity in certain spaces of social life (Tomasz Huk, 2014, p. 27). Similarly, the demonstration of motivation to take up activities in other areas of activity overlaps and correlates with the withdrawal theory described above (T. Huk, 2014, p. 87). Well, people who are already of mature, non-mobile age, unable to realise themselves in certain areas of life, here in education through distance learning, try to realise themselves in other areas of life, above in art and cooking.

As already mentioned in the presented study, people with longer seniority indicated a lower sense of psychological well-being than younger people. At the same time, in a study by KDV Prasad, Rajesh W. Vaidya, Mruthyanjaya Rao Mangipudi, the results of the analyses conducted by these researchers did not confirm the fact that stress related to the threat posed by the work situation in the epidemic era is not in any way related to age. Nonetheless, researchers have shown that constant stress and the need to work remotely have a significant impact on employees' psychological well-being (K. Prasad et al., 2020, p. 9).

Therefore, it is necessary to further observe and study a group of university teachers in relation to the necessity to work remotely in the era of the Covid-19 epidemic. A longitudinal study could be particularly interesting in order to analyse the consequences of the Covid-19 impact in the long term. It is also worth pointing out at this point the benefits of the in-depth interview method used, which, in addition to the cognitive assumptions, allowed the interviewees to gain a greater awareness in the area of not only their own experiences in the pandemic era, but in terms of their own relationships with their environment.

This fact contradicts the aims and objectives that characterise the quantitative study used by K. Prasad, R.W. Vaidya, M.R. Mangipudi (K. Prasad et al., 2020, pp. 1–13).

For this reason, it seems necessary to continue the research on the analysed issue and to compare the research results analysed in this article with the results of the quantitative survey, which is also part of the research project within which the presented study was presented.

The presented research is not free of limitations, which, despite the fact that the research is qualitative in nature, certainly include a not very large research sample, making it impossible to generalise the results obtained. Regardless of this, the study certainly brings the situation of Polish university teachers' functioning in the Covid-19 pandemic situation closer in the context of their age.

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