# JOURNAL OF MODERN SCIENCE

Том 4/53/2023

www.jomswsge.com



DOI: doi.org/10.13166/jms/175587

EWA SOSNOWSKA-BIELICZ University of Maria Curie-Sklodowska in Lublin, Poland ORCID iD: 0000-0003-0132-9820 JUSTYNA SALA-SUSZYŃSKA University of Maria Curie-Sklodowska in Lublin, Poland ORCID iD: 0000-0002-3408-4324

# COMMUNICATION COMPETENCE OF FUTURE EARLY CHILDHOOD TEACHERS – A REPORT ON A STUDY IN POLAND

#### ABSTRACT

**Goal:** The communication competence of future early childhood teachers is still a relevant area of research. We looked at this issue focusing on its social context and modifying factors.

**Methods:** The research was based on a quantitative paradigm. To determine the level of communication competence we used the Self-assessment of Communication Competence Scale (SPCC), stress was examined with the Perceived Stress Scale (PSS), and dispositional optimism was tested with the Life Orientation Test (LOT-R).

**Results:** The analyses showed that prospective early childhood teachers obtained average scores in communication competence. At the same time, they reported high levels of stress and low levels of dispositional optimism. In addition, stress levels correlated negatively with all dimensions of communication competence, meaning that the higher the stress level, the lower the level of communication competence in all the measured dimensions. In contrast, dispositional optimism correlated positively with all dimensions of communication competence, indicating that all dimensions of communication competence as dispositional optimism increased.

### **CONCLUSIONS**

Based on the analyses, we suggest enriching education programs for early childhood teachers with issues related to communication competence, coping with public speaking, and preventive activities related to stress management.

**KEYWORDS:** communication competence, stress, dispositional optimism, early childhood teacher

## INTRODUCTION – Communication competence of early childhood teachers

The quality and level of a teacher's communication competence determines their teaching effectiveness to a large extent. The way the teacher communicates directly affects all components of the learning environment. In addition, it also significantly impacts students' motivation and commitment to learning, as well as the atmosphere and climate in the school classroom (Pankowska, 2010; Guzmán-Simón et al, 2020; Chen, 2021).

Teachers are often the subject of scientific research in Poland (Jakubowicz-Bryx, 2017; Kirenko, 2018; Kulawska, 2019; Kulawska, 2020; Kulawska, 2021; Poplawska, 2022; Jakubowicz-Bryx, Kwiecińska, 2022), whereas future early childhood teachers are not. This was one of the reasons for undertaking research in this group.

Teachers' communication competence is exceptionally important in early childhood education, and its special role stems from the fact that interactions between the teacher and young children are long-lasting and particularly close. The teacher-educator of young children accompanies them for most of their time at school, is a participant in many situations related to education itself, and also takes part in care tasks or provides assistance in self-service activities. At none of the later stages does this kind of bond appear between the student and the teacher (Bochniarz, Grabowiec, 2016, p. 272). This is an extremely important area of teacher competence.

Within the framework of communication competence, university students, as future early childhood teachers, are expected, among other things to 1) use the spoken and written word efficiently, 2) present their own intentions comprehensibly through language to many subjects, including, first and foremost students, 3) have self-presentation skills, 4) cope well in situations of social exposure and, 5) interact efficiently with both children and adults: other teachers and parents (Noskova et al., 2014, p.190).

The undertaken discussion focuses on the social aspect of communication competence and adopts the model developed by Shewryn Morreale, Brian Spitzberg, and Kevin Barge (2007) who define communication competence as, *the use of verbal and nonverbal behavior to achieve preferred goals appropriately to the context* (Morreale et al. 2007, p. 61). The components of this understanding of communication competence are motivation, knowledge, skills, and the communication context. The authors of the model list three types of context: a) interpersonal, b) group, and c) public speaking. Interpersonal context is defined as informal interactions between people who have social and/or personal relationships. Group context involves a larger number of people and usually occurs in a more formal, task-oriented environment. Public speaking,

on the other hand, refers to delivering a formal speech to a large audience (Morreale, Spitzberg, and Barge, 2007, p. 59).

Reflecting on the factors affecting communication competence, after analyzing the literature on the subject, we selected two opposing factors for the present analyses: stress as a factor lowering its level (Maslach, Leiter, 2011) and dispositional optimism as a factor increasing its level (Czerw, 2010).

## STRESS AND DISPOSITIONAL OPTIMISM AS MODIFIERS OF COMMUNICATION COMPETENCE

According to Michael F. Scheier and Charles S. Carver (1985, pp. 219-247), optimism arouses motivation, perseverance, and determination to achieve certain goals. According to the authors, every person has an innate tendency to perceive the world in a certain way. Presumably, it is a fixed personality trait (Atienza, Stephens, Townsend 2004; Lucas, Diener, Suh 1996; Scheier, Carver 1985; Matthews et al. 2004; Segerstrom 2007) manifested in the expectation of having more positive than negative experiences in one's life. Scheier and Carver called this trait dispositional optimism (Scheier, Carver, Briges 1994, pp. 1068-1072). According to Scheier, Carver, and Briges (1994, pp. 1063-1068), optimism regulates people's behavior in problem situations. Thus, in situations requiring communication competence, people with high dispositional optimism will perform much better than people with low levels of this trait (Scheier, Carver, Briges 1994).

Teacher job stress has aroused interest as well as concern for many years. Both the phenomenon itself, its levels, and its main causes are explored around the world in Germany (Sonnentag, Kruel 2006), Greece (Kokkinos 2007), Poland (Grzegorzewska 2007, 2019), and in other countries. From the very beginning, young students of the teaching profession are acquainted with lifelong learning and development, including in the aspect of coping with professional stress so that it does not adversely affect the quality of their work. At the same time, there are studies reporting that students who are to become teachers find activities that involve interacting with people stressful (Sanecki, 2017). Daily encounters with students reveal some of them are reluctant to speak up, present ideas, and concepts, or speak in front of a group, and yet their future work will be based primarily on relationships with people and social exposure.

# Methods

Observing the daily academic life and the behavior and implementation of the tasks assigned to students of teacher education studies, we asked ourselves if students of pedagogy preparing to work as early childhood teachers have high communication competence and if their communication competence is conditioned by any factors.

This text attempts to answer the above questions reflected in the following detailed research questions:

- 1. How do students, future early childhood teachers, assess their communication competence – in general, and in specific areas?
- 2. What is these students' stress level?
- 3. What is these students' dispositional optimism level?
- 4. Is there a relationship between communication competence, stress, and dispositional optimism?

4.1 What is the relationship between communication competence and stress?

4.2 What is the relationship between communication competence and dispositional optimism?

The following research hypotheses were formulated to address the posited questions:

**H1.** Future early childhood teachers are characterized by higher-than-average communication competence.

**H2.** Stress is a modifier of communication competence. The higher the student's stress level, the lower their self-assessment of their communication competence.

**H3.** Dispositional optimism is a modifier of students' communication competence. The higher the level of dispositional optimism, the higher the students will evaluate their communication competence.

# **Research tools**

To answer the question about the level of communication competence and its determinants the following research tools were selected. To determine the level of communication competence we used the Self-assessment of Communication Competence Scale (SPCC), stress was examined with the Perceived Stress Scale (PSS), and dispositional optimism was tested with the Life Orientation Test (LOT-R).

The Self-Perceived Communication Competence Scale (SPCC) by James C. McCroskey and Linda L. McCroskey is a self-report scale developed to obtain information about how competent people feel in different communication contexts and with different audiences. The scale has good reliability (alpha above 0.85) and high accuracy. There is no Polish adaptation of this scale; we translated it. The scale consists of twelve descriptions of situations that may require communication. The respondent is asked to indicate on a scale from 0 to 100% how competent they think they are to communicate in each of the described situations. The results can be interpreted both as an overall self-assessment of communication competence and within its subscales of communication contexts: (public, meeting, group, diad) and recipients (strangers, acquaintances, friends) (McCroskey, McCroskey, 1988).

The Perceived Stress Scale (PSS-10) by Sheldon Cohen, Tom Kamarck, and Robin Mermelstein, in a Polish adaptation developed by Zygfryd Juczynski and Nina Ogińska-Bulik was developed to assess sick and healthy adults. It consists of 10 questions that address various subjective feelings about personal problems, events, and ways of coping. The scale is used to measure and assess individuals' stress level related to their situation over the past month, and can be used for both research and diagnostic purposes (Juczynski, Oginska-Bulik, 2009).

The LOT-R Life Orientation Test-Revised was developed in 1985 on the basis of the optimism theory by Michael F. Scheier, Charles S. Carver, and Michael W. Bridges; the Polish adaptation was prepared by Ryszard Poprawa and Zygfryd Juczynski (2001). The test examines optimism as a dispositional trait expressing generalized expectations of positive events. It is designed to test both healthy and ill adults. It contains 10 statements, and respondents mark their answers on a 5-point scale. Raw scores are converted into stens. LOT-R's Cronbach reliability is 0.76.

The study was conducted online using Google Forms. Questionnaires were distributed to the students of two majors: Preschool and Early Childhood Pedagogy (85%) and Special Pedagogy (15%) (full-time and part-time mode) studying at one of Lublin's universities. Participation was voluntary. Statements obtained from 254 Students were analyzed, all respondents were women, mostly living in the city (67% urban, 33% rural), aged 18 to 24. The study was conducted in November-December 2022.

## ANALYSES

To answer the research questions and verify the research hypotheses, we carried out statistical analyses using the IBM SPSS Statistics 26 package. We analyzed basic descriptive statistics using the Kolmogorov-Smirnov test, performed Spearman's *rho* correlation analysis and the Mann-Whitney *U* test. The significance level for these analyses was  $\alpha = 0.05$ .

In the first step of the analysis, we checked the distributions of quantitative variables. For this purpose, we calculated basic descriptive statistics along with the Kolmogorov-Smirnov test examining the normality of distribution. The result of the test for all introduced variables, except for the total score of the communication competence assessment, was statistically significant, which means that their distributions significantly deviate from the normal distribution. Therefore, as well as due to the presence of outlier observations, we decided to conduct the analysis based on non-parametric tests.

Our first three research questions concerned the level of communication competence, stress, and dispositional optimism in the sample. To examine them, a frequency analysis was performed on the sten scores. In the case of PSS-10 and LOT-R sten 1-4 is a low score, sten 5-6 is an average score, and 7-10 is a high score. For SPCC, on the other hand, scores were related to norms defined as ranges indicating low, average, and high scores (after McCroskey, McCroskey, 1988).

The analyses showed that all SPCC dimensions were dominated by average scores – the percentage of average scores, depending on the analyzed dimension, was up to 52.8% for meetings and up to 66.9% for strangers. Most low

scores were recorded for the dimension relating to meetings (26.8%) and the public dimension (20.6%). The results are shown in Table 1.

	Public	Meeting	Group	Diad	Stranger	Acquaintances	Friend	SPCC total
Low	20,9 %	26,8%	9,1%	15,0%	15,7%	15,4%	15,4%	15,7%
Average	62,6%	52,8%	65,0%	57,5%	66,9%	57,5%	62,2%	64,6%
High	16,5%	20,5%	26,0%	27,6%	17,3%	27,2%	22,4%	19,7%

**Table 1.** Distribution of communication competence scores (SPCC)

Hypothesis H1 stating that future early childhood teachers have higher than average communication competence was verified negatively. This means that the assumption of a higher-than-average level of communication competence among students who are to be early childhood teachers was not confirmed. Hypothesis H1 was rejected.

The next analyses relate to the level of stress and dispositional optimism in the studied group of students (Table 2). The analysis showed that most respondents showed high levels of stress (72.4%) and low levels of dispositional optimism (44.5%).

Table 2. Distribution of scores for stress and dispositional optimism levels

	Stress level		Dispositional optimist level			
Low	Average	High	Low	Average	High	
6,7 %	20,9%	72,4 %	44,5 %	29,9 %	25,6 %	

In order to verify hypotheses H2 and H3, we tested whether the level of communication competence was associated with the level of perceived stress and the level of dispositional optimism (research questions 4, 4.1, and 4.2). For this purpose, Spearman's *rho* correlation analysis was performed (Table 3).

Areas of communication competence (SPCC)		Stress	Dispositional optimism
Public	Spearman's rho	-0,19	0,30
PUDIIC	significance	0,002	<0,001
	Spearman's rho	-0,18	0,29
Meetings	significance	0,004	<0,001
Constant	Spearman's rho	-0,14	0,24
Group	significance	0,028	<0,001
	Spearman's rho	-0,15	0,32
Diad	significance	0,014	<0,001
Character and	Spearman's rho	-0,15	0,28
Stranger	significance	0,016	<0,001
A	Spearman's rho	-0,20	0,31
Acquaintance	significance	0,001	<0,001
Fuiend	Spearman's rho	-0,17	0,29
Friend	significance	0,005	<0,001
General level of	Spearman's rho	-0,20	0,34
communication competence (SPCC)	significance	0,001	<0,001

**Table 3.** *Correlation between the level of communication competence (SPCC), stress (PSS-10), and dispositional optimism (LOT-R).* 

The analysis showed that all relationships were statistically significant. The level of stress correlated negatively with all dimensions of communication competence. This means, the higher the level of stress, the lower the level of communication competence in all the measured dimensions. All the correlations were weak. The obtained data allowed us to verify our research hypothesis H2 stating that stress is a modifier of communication competence. The higher the level of stress in the studied group of students, the lower their self-assessment of their communication competence. The hypothesis was verified positively.

Dispositional optimism correlated positively with all dimensions of communication competence, indicating that all types of communication competence increased with an increase in dispositional optimism. The correlations with the dimensions of diad, acquaintance, and general SPCC were moderately strong, and for the other dimensions, they were weak. The obtained data allowed us to verify research hypothesis H3 stating that dispositional optimism is a modifying factor for students' communication competence. The higher the level of dispositional optimism, the better the students evaluate their communication competence. The hypothesis was verified positively.

## Conclusions

Early childhood teachers face a number of requirements and expectations, both regarding their professional preparation, knowledge, skills, and competencies, and the personal qualities they should possess. Communication skills and competencies are one o t'hem (Sosnowska-Bielicz, 2019; Sala-Suszyńska, 2019; Jakubowicz-Bryx, Kwiecińska, 2022). Few studies on the communication competence of future teachers in Poland oscillate around linguistic abilities (Szumna, Kalandyk, 2017), verbal and non-verbal communication (Salata, 2014), and their impact on teaching effectiveness (Kozlowska, Ryszkowski, 2012). Even fewer studies focus on future teachers of young children. One of the reasons may be researchers' assumption that people with certain predispositions, including high communication skills, choose this profession. We set out to verify this assumption, as reflected in our research hypothesis that future early childhood teachers assess their communication competence highly. The hypothesis was rejected since both the total score of the self-assessment of communication competence (64.6%) and all dimensions of communication competence (SPCC) were dominated by average results (from 52.8% to 66.9%). The obtained results are somewhat surprising if we take only the expectations placed on young students of the teaching profession as the theoretical justification of the hypothesis. But if we return to the observation of academic reality and reports from the few available studies (eg. Sanecki, 2017) we can conclude that our results reflect students' realistic resources in this area.

Teachers are more likely than many other professions to experience occupational stress (Kretschmann et al., 2003; Szczepanowska, 2007). Research has

shown that work involving responsibility for people is associated with higher levels of stress than work involving responsibility for things (Cox, Griffiths, Rial-Gonzalez, 2006). Because of the Covid-19 pandemic, researchers focused on the phenomenon of stress and coping with stress among various social groups, including students (Reddy et al, 2018; Kulawska, 2019; Kulawska, 2021). At the same time, much more attention in research both in Poland and around the world has been devoted to the phenomenon of stress among early childhood teachers, especially as a predictor of professional burnout (Kokkinos, 2007; Herman, et al, 2018; Bottiani, et al, 2019; Carroll, et al, 2022). Addressing the issue of stress, we studied its impact on communication competence in the adopted model. The analyses verified positively the hypothesis of a negative correlation between stress and communication competence, which means that the higher the stress levels in the studied students, the lower they rated their communication competence. Significantly, the lowest scores were obtained by the respondents in social situations requiring social exposure. On the other hand, the overall level of stress among the surveyed would-be early childhood teachers remains high, which corresponds with other research results in this area (Zielinski 2006; Regehr et al. 2013; Kulawska, 2019) This is a worrying phenomenon, which requires not only a deeper diagnosis but, above all, the introduction of specific measures both in the area of support and prevention of coping with stress among students.

Optimism is among the personal resources that promote success in life, and perceiving oneself and one's capabilities in a favorable light (Olbrycht, 2010; Lukasiewicz, Paciśnikowska, 2016). Dispositional optimism positively influences the perception of oneself as a resourceful, goal-achieving, and competent person (Blackwell et al., 2013). The analysis of the obtained data confirmed the relationship between the studied variables: the higher the level of optimism, the more favorably students evaluate their communication competence. This is an interesting piece of information from the presented research, providing opportunities to point to specific solutions to raise self-perception among future early childhood teachers. Despite the fact that dispositional optimism is a stable trait, referring to the literature on the subject, we see opportunities to help students develop the ability to reformulate ways of thinking about themselves and one's resources for instance through interpersonal training (Beck, Allport, 2005).

This sends a clear signal to educational practice that communication competence primarily in group and public speaking contexts (see the Morreale, Spitzberg, Barge, 2007 model) should be more clearly emphasized already at the level of training programs for future early childhood teachers in particular.

#### References

- Article 68(3)(4) of the Act of July 20, 2018. Law on higher education and science (Journal of Laws 2018, item 1668; Journal of Laws 2021, items 478 and 619).
- Atienza, A.A., Stephens M.A.P., Townsend A.L. (2004). Role stressors as predictors of changes in women's optimistic expectations. *Personality and Individual Differences*, 37, 471–484.
- Beck, A.T., Alford, B.A. (2005). *Terapia poznawcza jako teoria integrująca psychote-rapię*. Wydawnictwo UJ.
- Bochniarz, A., Grabowiec, A. (2016). O potrzebie/konieczności rozwijania kompetencji komunikacyjnych przyszłych nauczycieli edukacji wczesnoszkolnej. W: M. Boczkowska, A. Buczak (red.), *Lubelski Rocznik Pedagogiczny*, 35, 3, (pp.271-284). Wydawnictwo UMCS.
- Bottiani, J. H., Duran, C. A. K., Pas, E. T., Bradshaw, C. P. (2019). Teacher stress and burnout in urban middle schools: Associations with job demands, resources, and effective classroom practices. *Journal of School Psychology*, 77, 36–51.
- Chen, R. H. (2021). Fostering Students' Workplace Communicative Competence and Collaborative Mindset through an Inquiry-Based Learning Design. *Education Sciences*, 11(1), 17; 1-13.
- Cox, T., Griffiths, A., Rial-Gonzalez, E. (2006). *Badania nad stresem związanym z pracą*. Europejska Agencja Bezpieczeństwa i Zdrowia w Pracy.
- Czerw, A. (2010). Optymizm: Perspektywa psychologiczna. Wydawnictwo GWP.
- Guzmán-Simón, F., Torres-Gordillo, J.J., Caballero, K. (2020). Understanding Assessment Processes for Communicative Competence through an Analysis of Teachers' Reported Practice. *Educational Sciences*, 10(4), 116; 1-17.
- Grzegorzewska, M.K. (2007). Różnorodność w interpretacji problematyki stresu [Diversity in interpretation of stress]. *Studia Humanistyczne*, 5, 123–129.
- Grzegorzewska, M.K. (2019). Psychospołeczne podłoże stresu w zawodzie nauczyciela. Podstawy diagnozy z wykorzystaniem modelu interakcyjno-transakcyjnego. Wydawnictwo AGH.
- Herman, K. C., Hickmon-Rosa, J., Reinke, W. M. (2018). Empirically derived profiles of teacher stress, burnout, self-efficacy, and coping and associated student outcomes. *Journal of Positive Behaviour Interventions*, 20(2), 90–100.

- Jakubowicz-Bryx, A. (2017). Aktywność edukacyjna studentów pedagogiki wczesnoszkolnej w kontekście ich planów dotyczących własnej przyszłości. *Zeszyty Naukowe Wyższej Szkoły Humanitas. Pedagogika*, 14, 39-250.
- Jakubowicz-Bryx, A., Kwiecińska M. (2022). *Nauczyciel wczesnej edukacji. Perspektywa mistrzostwa.* Wydawnictwo UKW.
- Juczyński, Z., Ogińska-Bulik N. (2009). Narzędzia pomiaru stresu i radzenia sobie ze stresem. Pracownia Testów Psychologicznych.
- Kirenko, J. (2018). Asertywność a radzenie sobie w sytuacjach trudnych studentów kierunków nauczycielskich z różnym poziomem samooceny. *Lubelski Rocznik Pedagogiczny* T. XXXVII, z. 4, 9-23.
- Kokkinos, C. (2007). Job stressors, personality and burnout in primary school teachers. *British Journal of Educational Psychology*, 77, 229–243.
- Kozłowska, D., Ryszkowski, W. (2012). Kompetencje komunikacyjne nauczycieli wychowania fizycznego. *Roczniki Naukowe Wyższej Szkoły Wychowania Fizycznego i Turystyki w Białymstoku*, 39-46.
- Kulawska, E. (2019). Dobrostan psychiczny a poziom odczuwanego stresu i satysfakcji ze studiów w doświadczeniach studentów Pedagogiki przedszkolnej i wczesnoszkolnej. *Forum Pedagogiczne*, 9, 2, 129-149.
- Kulawska, E. (2020). Poziom i korelaty prężności psychicznej studentów wczesnej edukacji w wybranych uczelniach w Polsce. *Forum Pedagogiczne*, 10, 1, 111-128.
- Kulawska, E. (2021). Kształcenie zdalne, poziom stresu i dobrostan psychiczny studentów pedagogiki w pierwszej fazie pandemii choroby covid-19. *Forum Pedagogiczne*, 11, 2, 149-166.
- Kretschmann, R., Kirchner-Liss, K., Lange-Schmidt, I., Miller, R., Rabens, E., Thal, J., Zitzner, M. (2003). *Stres w zawodzie nauczyciela.* Wydawnictwo GWP.
- Lucas, R.E., Diener, E., Suh. (1996). Discriminant validity of well-being measures. *Journal of Personality and Social Psychology*, 71,3, 616–628.
- Łukasiewicz, J., Paśnikowska, B. (2016). Nadzieje i obawy studentów ukraińskich podejmujących studia w Polsce. *Roczniki Teologiczne*, 63, 11, 235-248.
- Matthews, K.A., Räikkönen, K., Sutton-Tyrrell, K., Kuller L.H. (2004). Optimistic attitudes protect against progression of carotid atherosclerosis in healthy middle-aged women. *Psychosomatic medicine*, 66,5, 640–644.
- Maslach, Ch., Leiter, M.P. (2011). *Prawda o wypaleniu zawodowym: co robić ze stresem w organizacji*. Wydawnictwo PWN.
- McCroskey, J. C., McCroskey, L. L. (1988). Self-report as an approach to measuring communication competence. *Communication Research Reports*, 5, 108-113.
- Morreale, Sh.P., Spitzberg, B.H., Barge, J.K. (2007). *Komunikacja między ludźmi*. Wydawnictwo PWN.
- Noskova, T., Pavlova, T., Yakovleva, O., Sharova, N. (2014). Communicative Competence Development for Future Teachers. *The New Educational Review*, 38,4, 188-198.

- Pankowska, D. (2010). Porozumiewanie się w procesie kształcenia. W: D. Pankowska, T. Sokołowska-Dzioba (red.), *Kompetencje nauczyciela przedmiotów zawodowych*, część 1: Praca dydaktyczna, 45–76. Wydawnictwo UMCS.
- Pawiak, A. (2005). O potrzebie kształcenia umiejętności niewerbalnego komunikowania się nauczyciela z uczniami. W: K. Waligórski (red.), *Nauczyciel: eseje i szkice pedeutologiczne*, 50-58. Wydawnictwo UKW.
- Popławska, A. (2022). Kandydaci na nauczycieli o edukacyjnej (nie)codzienności w czasie pandemii COVID-19. Raport z badań. *Annales Universitatis Mariae Curie-Skłodowska Lublin* Polonia vol. XXXV, 2, 51-68.
- Reddy, K.J., Menon, K.R., Thattil, A. (2018). Academic Stress and Its Sources among University Students. *Biomedical and Pharmacology Journal*, 11, 531-537.
- Regehr, C., Glancy, D., Pitts, A. (2013). Interventions to reduce stress in university students: A review and metaanalysis. *Journal of Affective Disorders*, 148, 1, 1–11.
- Sala-Suszyńska, J. (2019). Pedeutologiczne spojrzenie na sylwetkę nauczyciela. W: M. Bogusz, M. Wojcieszak, P. Rachwał. (red.), *Poszerzamy horyzonty* tom XVI, 330-337. Mateusz Weiland Network Solutions.
- Sałata, E. (2014). Kompetencje komunikacyjne przyszłych nauczycieli edukacji techniczno-informatycznej. *Edukacja-Technika-Informatyka*, 5,1, 420-427.
- Sanecki, G. (2017). Postrzeganie stresogenności pracy zawodowej przez studentów pedagogiki i nauczycieli. *Szkoła Zawód Praca*, 13, 80-99.
- Scheier, M.F., Carver, C.S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4, 219–247.
- Scheier, M. F., Carver, C. S., Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem: A re-evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67, 1063–1078.
- Segerstrom, S. C. (2007). Optimism and resources: Effects on each other and on health over 10 years. *Journal of Research in Personality*, 41, 772–786.
- Sonnentag, S., Kruel, U. (2006). Psychological detachment from work during off-job time: The role of job stressors, job involvement, and recovery-related self-efficacy. *European Journal of Work and Organizational Psychology*, 15, 197–217.
- Sosnowska-Bielicz, E. (2019). Wzorzec osobowy nauczyciela edukacji wczesnoszkolnej – perspektywa nauczyciela. *Lubelski Rocznik Pedagogiczny*, 28, 3, 173-187.

Śliwa, S. (2017). *Kompetencje profilaktyczne nauczycieli edukacji wczesnoszkolnej*. Wydawnictwo IŚ. Szczepanowska, J. (2007). Stres w zawodzie nauczyciela próba charakterystyki. *Zeszyty* 

Naukowe Państwowej Wyższej Szkoły Zawodowej im. Witelona w Legnicy, 2, 129-136.

- Szumna, D., Kalandyk, M. (2017). Kompetencje językowe przyszłych nauczycieli edukacji wczesnoszkolnej (na przykładzie prac dyplomowych). *Edukacja Technika Informatyka*, 1, 19, 92-100.
- Zieliński, P. (2006). Redukowanie nadmiernego stresu przez studentów pedagogiki podczas egzaminów i zaliczeń ustnych w powiązaniu z umiejętnością relaksacji. *Prace Naukowe Akademii im. Jana Długosza w Częstochowie. Seria: Pedagogika* t. XV, 133-146.