

**Irmina Rostek**<http://orcid.org/0000000282548867>

Ignatianum University in Cracow

[irmina.rostek@ignatianum.edu.pl](mailto:irmina.rostek@ignatianum.edu.pl)**Estera Twardowska-Staszek**<http://orcid.org/0000000154997393>

Ignatianum University in Cracow

[estera.twardowskastaszek@ignatianum.edu.pl](mailto:estera.twardowskastaszek@ignatianum.edu.pl)**Krzysztof Biel**<http://orcid.org/0000000288868781>

Ignatianum University in Cracow

[krzysztof.biel@ignatianum.edu.pl](mailto:krzysztof.biel@ignatianum.edu.pl)

DOI: 10.35765/pk.2024.4502.29

## Psychological Well-Being of Women in Poland during two Waves of the Pandemic

### ABSTRACT

The aim of our study was to describe the psychological well-being of women in Poland during the two waves of COVID-19 pandemic. In this cross-sectional study we used standardized tools to assess mood, emotions, optimism and satisfaction with life of the respondents. A questionnaire to collect socio-demographic data and data related to current concerns was also developed and used. The study was conducted twice: in 2020/2021 (T1) and 2021/2022 (T2) in two different, but corresponding groups of women (T1: 352; T2: 372) in terms of demographic variables. The strongest stressors for Polish women in both measurements were associated with difficulties in access to health service, political climate in Poland and the health of loved ones. The mood was negative in both measurements compared to pre-pandemic normative data. Deterioration in emotions was particularly pronounced in the case of negative affect. The distribution of the results in optimism and satisfaction with life was much more balanced and similar to the pre-pandemic norms. No significant differences were found between the two measurements. The results show that the increase in negative emotions does not have to be accompanied by the deterioration of such traits as optimism and satisfaction with life. Thus, the results show the areas that should be covered by support, and the areas that are resources that can be used for this purpose.

**KEYWORDS:** pandemic COVID-19, women, well-being, optimism, life satisfaction

**Sugerowane cytowanie:** Rostek, I., Twardowska-Staszek, E. i Biel, K. (2024). Psychological Well-Being of Women in Poland during Two Waves of the Pandemic. © ⓘ *Perspectives on Culture*, 2(45), pp. 405–417. DOI: 10.35765/pk.2024.4502.29

Submitted: 30.10.2023

Accepted: 10.04.2024

## STRESZCZENIE

### Dobrostan psychiczny kobiet w Polsce podczas dwóch fal pandemii

Celem przedstawionego w artykule badania było opisanie dobrostanu psychicznego kobiet w Polsce w czasie dwóch fal pandemii COVID-19. W prezentowanych badaniach poprzecznych wykorzystano wystandaryzowane narzędzia do oceny nastroju, emocji, optymizmu i satysfakcji z życia. Opracowano i wykorzystano także kwestionariusz do gromadzenia danych socjodemograficznych oraz danych dotyczących bieżących obaw. Badanie przeprowadzono dwukrotnie: na przełomie 2020/2021 (T1) i 2021/2022 (T2) w dwóch różnych, ale odpowiadających sobie pod względem zmiennych demograficznych grupach kobiet (T1: 352; T2: 372). Najsilniejsze stresory dla Polek w obu pomiarach wiązały się z trudnościami w dostępie do służby zdrowia, klimatem politycznym w Polsce oraz obawą o zdrowie bliskich. Nastroj w obu pomiarach był gorszy w porównaniu z danymi normatywnymi sprzed pandemii. Pogorszenie emocji było szczególnie wyraźne w przypadku uczuć negatywnych. Rozkład wyników w zakresie optymizmu i satysfakcji z życia był znacznie bardziej zrównoważony i zbliżony do norm sprzed pandemii. Nie stwierdzono znaczących różnic pomiędzy obydwooma pomiarami. Wyniki pokazują, że wzrostowi negatywnych emocji nie musi towarzyszyć pogorszenie takich cech jak optymizm i satysfakcja z życia. Wyniki wskazują zatem obszary, które powinny zostać objęte wsparciem, oraz obszary stanowiące zasoby, na których można się oprzeć.

**SŁOWA KLUCZE:** pandemia COVID-19, kobiety, dobrostan, optymizm, satysfakcja życiowa

## Introduction

The impact of the Covid-19 pandemic on people's psychological well-being is undeniable. Despite reports indicating some positive changes, in most cases the impact is negative. Studies have identified risk groups, prone to experiencing greater difficulties, one of them being women (e.g., Dragioti et al., 2022; Bojanowska et al., 2021; Xia et al., 2022).

Although initial reports showed that women were at lower risk of severe disease and death with SARS-CoV-2 infection than men (Purdie et al., 2020), several elements contributed to the worldwide deterioration of women's psychological well-being during the pandemic.

Firstly, the societal norms dictating that women assume caregiving roles, contributed to the considerable increase of domestic workloads, as women had to care for both children and seniors, the latter being particularly vulnerable to severe infection. In addition to their ordinary daily

duties (working formal jobs, maintaining their households, taking care of children), women were given tasks of daytime childcare, which significantly increased the social, emotional, spiritual, financial and physical “caregiver burden” (Connor et al., 2020). Furthermore, there was no financial or social reward for carrying out these new tasks, and the isolation made it impossible to use the social support that could help reduce the burden.

Secondly, the pandemic increased the stress experienced by women in relation to their professional careers. The labour market, which represented a challenge for women even in the pre-pandemic period (Milovan-ska-Farrington, 2021), became less accessible. The review of the literature on the effects of the COVID-19 pandemic on gender and work roles showed that more women than men have lost their jobs, many of the jobs held by women were frontline jobs in the fight against the coronavirus, which exposed them to infection and psychological stress, and women had more work disruption because of increases in childcare and other responsibilities (Carli, 2020). According to Adisa et al. (2021) the coexistence of work and family duties within the domestic space poses significant challenges to differentiation between roles. Increasing role overlap affects the performance both at work and home, causing frustration and contributing to the experience of stress.

Thirdly, confinement to the home contributed to an increase in relationship stress. As shown by Schokkenbroek et al. (2021) women reported more perceived relationship stress during the pandemic lockdown compared to before because of conflicts with partners. Women also experienced more relationship stress than men because of conflict and diverging attitudes within their relationship (Schokkenbroek et al., 2021). The pandemic contributed also to an increase of violence, particularly against women (UN Women, 2020), as risk factors accumulate during the pandemic. Among them it is worth highlighting the importance of: low(er) income, social isolation, loss of bearings, narrowness of premises, loss of loved ones, fear of dying, difficulties in accessing medical and social services, inability to escape, increased consumption of addictive substances, etc. An additional difficulty was the fact that police and health services were overwhelmed and less available. Support services were also severely affected by lockdowns (Thibaut & van Wijngaarden-Cremers, 2020). Women became victims of more frequent acts of violence not only in the domestic environment. The increase in the number of cases of different forms of online violence (stalking, bullying, sexual harassment, sex trolling) was also observed (Davies, 2020).

Fourthly, the particular experiences that occur normatively in women’s lives (connected with procreation, pregnancy, postpartum or miscarriage),

became even more stressful to cope with. The pandemic limited access to the healthcare system, including preventative and reproductive healthcare. The meta-analysis of the research on the maternal well-being during pregnancy and postpartum (Hessami et al., 2020) showed that the COVID-19 pandemic significantly increased the risk of anxiety among women during pregnancy and perinatal period. It could be the result of many different factors, e.g.: visitor restrictions during labor, forced separation of SARS-CoV-2-positive mothers and their infants, the potential limitations of anesthesia due to limited resources for respiratory support (Connor et al., 2020). Additionally, during pandemics the reproductive healthcare is often reduced to obstetric medicine (Smith, 2019), which is associated with restricted access to comprehensive family planning.

An additional burden in the case of Polish women was the local political situation. The rising wave of the pandemic was accompanied by actions of the Polish government limiting the existing rights of women, culminating in the Constitutional Tribunal Judgment of October 2020 preventing legal abortion in some cases (Dziennik Ustaw Rzeczypospolitej Polskiej, 2021). This decision sparked much discussion and protest, adding culturally specific stressors to the pool of common ones.

Despite all the odds, women did cope with the stress of a pandemic. Although the pandemic led to a considerable increase of domestic workloads, remote work increased men's amount of childcare which, as pointed out by Carli (2020), may increase men's childcare responsibilities in the long term, reducing the gender gap in domestic responsibilities. In terms of work difficulties, although a larger gap in the duration of unemployment between men and women (with children) relative to before the pandemic was observed, but a widening of the gap in the employment prospects and the earnings between genders was not found (Milovanska-Farrington, 2021). The pandemic became a trigger for conflicts in the family, but at the same time, rediscovery of family values and closeness and reduced juvenile delinquency (as a result of greater involvement of adults in the lives of adolescents) were also noticed by women (Adisa et al., 2021). Women did cope, and in some cases, they fared better than men. A review of studies and journal articles (Helmich & Post, 2021) has demonstrated, for example, the advantage of female leadership during a pandemic over male leadership, due to better communication skills, pro-social orientation, empathy and caring, among other things.

For the sake of our study, an inquiry was made into the psychological well-being of Polish women in the second and fourth waves of the COVID-19 pandemic, because both waves were similar in terms of the season of the year, but also the number of cases and deaths (Suligowski & Ciupa, 2023).

We posed the following questions: What was the mental condition of women in Poland during the Covid-19 pandemic compared to pre-pandemic data? Were there differences between sources of stress and measures of well-being in women in Poland during the second and fourth waves of the Covid-19 pandemic?

## Materials and Method

### Method

**Research participants:** In stage one (T1) 352 and in stage two (T2) 372 women participated in the study. Although these were groups consisting of different participants, they did not differ significantly in terms of age (T1:  $33 \pm 12.83$ ; T2:  $33.48 \pm 13.83$ ), marital status (T1: single 55%, married 38%, divorced or separated 5%; T2: single 57%, married 32%, divorced or separated 6%), children (T1: 59%; T2: 60% had children), place of residence (T1: big city 35%, village 35%, medium or small city 30%; T2: big city 34%, village 35%, medium or small city 31%), education (T1: higher education 47%, students 42%; T2: higher education 44%, students 45%) and employment (T1: full-time jobs 43%, studying 27%, working and studying 20%; T2: full-time jobs 41%, studying 23%, working and studying 27%).

### Measures:

A survey questionnaire and four standardized research tools were used in this study.

Sociodemographic variables were collected using *ad hoc*-designed questions. The second part of the questionnaire concerned stressors experienced during the pandemic.

**Mood** (UWIST Mood Adjective Checklist, UMACL). The UMACL consists of 29 items, which are adjectives describing one's mood. The respondent has to determine to what extent a given adjective describes his or her current mood using a 4-point scale: from "definitely" to "definitely not". The overall mood score includes three mood dimensions: HT – hedonic tone, TA – tense arousal and EA – energetic arousal (Matthews et al., 1990; Goryńska, 2005).

**Emotions** (Positive and Negative Affect Schedule, PANAS/SUPIN). PANAS consists of 20 items, which are adjectives describing positive and negative emotions. The respondent evaluates the intensity in which these emotions occur in him/her using a 5-point scale: from "very slightly" or "not at all" to "extremely". As a result, we obtain scores on two subscales:

PA – positive affect and NA – negative affect (Watson et al., 1988; Brzozowski, 2010).

*Life satisfaction* (Satisfaction with Life Scale, SWLS). The SWLS contains 5 statements relating to one's life. The respondent assesses to what extent he/she agrees with each statement using a 7-point scale: from "strongly disagree" to "strongly agree." The total score indicates the degree of satisfaction with life (Diener et al., 1985; Juczyński, 2012).

*Optimism* (Life Orientation Test-Revised, LOT-R). The LOT-R contains 10 statements, and the participant assesses to what extent a given statement applies to him/her using a 5-point scale: from "strongly disagree" to "strongly agree." The total score of the test indicates an overall life orientation (Sheier et al., 1994; Juczyński, 2012).

The tools used in the study provide normative data based on validations performed before the pandemic.

**Research procedure:** The research was conducted twice: in December 2020/January 2021 and in December 2021/January 2022, using an online survey questionnaire. The survey was conducted using the snowball method via social media. Participation in the study was voluntary and anonymous. The participants could opt out of completing and/or submitting their responses at any time. This study was performed in line with the principles of the Declaration of Helsinki and approved by the Research Ethics Committee of the Jesuit University Ignatianum in Kraków (on 15.06.2021).

## Results<sup>1</sup>

As shown in Table 1, the strongest stressors for Polish women in both measurements were invariably: difficulty accessing treatment for other illnesses, the political climate in the country and the risk of infection in loved ones. Another element which may have been contributing to the perpetuation of the poor psychological condition of Polish women was the growing concern regarding the economic situation in the country. At the turn of 2021/2022 it was indicated significantly more often compared to the previous year. At the same time, the stress resulting from a lack of social contacts was declared significantly less frequently.

---

1 The study presented in this article is a part of a larger project (Twardowska-Staszek et al., 2021a, 2021b; Biel et al., 2023).

Table 1. Sources of stress experienced by Polish women during the second and fourth waves of the pandemic

Stressor **	Time 1 (N = 352)	Time 2 (N = 372)	p
Difficulty accessing treatment for other diseases	210 (59.66%)	236 (63.44%)	p = 0.332
Political climate in Poland	204 (57.95%)	234 (62.90%)	p = 0.199
The possibility of relatives contracting COVID-19	181 (51.42%)	197 (52.96%)	p = 0.734
Lack of social contacts	177 (50.28%)	132 (35.48%)	p < 0.001 *
Economic situation in Poland	166 (47.16%)	209 (56.18%)	p = 0.019 *
Online learning	124 (35.23%)	118 (31.72%)	p = 0.357
Restrictions	107 (30.40%)	121 (32.53%)	p = 0.592
Lack of ventilators and medical staff shortage in hospitals	107 (30.40%)	108 (29.03%)	p = 0.749
Unemployment or the risk of losing a job	90 (25.57%)	73 (19.62%)	p = 0.068
Family's financial problems	83 (23.58%)	85 (22.85%)	p = 0.885
Possibility of contracting COVID-19	71 (20.17%)	90 (24.19%)	p = 0.226

p – for quantitative variables Mann-Whitney test, for qualitative variables chi-square test or Fisher exact test

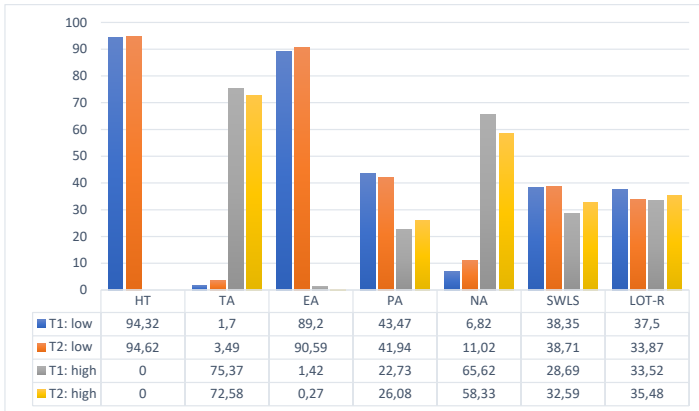
\* Statistically significant difference (p < 0.05)

\*\* Multiple choice question – percentages do not add up to 100

Source: own study.

As shown on Fig. 1 the mood was negative in both measurements compared to pre-pandemic normative data. Low levels of hedonic tone (HT) and low levels of energetic arousal (EA) was observed in almost all respondents, while the high levels of tense arousal (TA) were noted in the vast majority of female participants. In the case of emotions, the effect was particularly pronounced in the case of negative ones. High level of negative affect was observed in around 60% of female participants, while low level of positive affect in more than 40% of women in both measurements. The distribution of the results in life satisfaction and optimism was much more balanced and similar to the pre-pandemic norms.

Fig. 1. Levels of mood, emotions, satisfaction with life and optimism during the second and fourth waves of the pandemic in Polish women



HT – Hedonic Tone, TA – Tense Arousal, EA – Energetic Arousal; PA – Positive Affect, NA – Negative Affect; SWLS- Life satisfaction; LOT-R – Life orientation.

Source: own study.

The measurements in the second and fourth wave of the pandemic, as shown in Table 2, showed no significant differences in the mood, emotions, life satisfaction and optimism of women participating in the study.

Table 2. Differences between the psychological well-being of Polish women between the second and fourth waves of the pandemic

Measure of well-being		Time						p
		Time 1 (N = 352)			Time 2 (N = 372)			
		M/SD	median	quartiles	M/SD	Median	quartiles	
UMACL	HT	25.34±2.04	25	24 – 27	25.19±2.02	25	24 – 26	P = 0.395
	TA	22.75±3.51	23	20 – 25	22.29±3.73	22	20 – 25	P = 0.075
	EA	24.17±3.87	24	21 – 27	23.81±3.86	23	21 – 27	P = 0.201
PANAS	PA	25.59±8.17	26	20 – 31	26.22±8.48	27	20 – 32	p = 0.299
	NA	22.41±8.5	21	16 – 28	21.44±8.91	20	14 – 27	P = 0.052
SWLS		19.22±6.37	20	15 – 24	19.62±6.44	20	14.75 – 25	P = 0.403
LOT-R		13.85±4.85	14	11 – 17.25	14.18±4.89	15	11 – 18	P = 0.376

p – Mann-Whitney test

\* Statistically significant difference (p < 0.05)

HT – Hedonic Tone, TA – Tense Arousal, EA – Energetic Arousal; PA – Positive Affect, NA – Negative Affect; SWLS- Life satisfaction; LOT-R – Life orientation.

Source: own study.



## Discussion

The worldwide spread of the pandemic has caused many changes in human functioning, resulting in deteriorating mental health and reduced well-being. One of the groups most affected by the restrictions of the pandemic were women (e.g., Dragioti et al., 2022; Xia et al., 2022). They were experiencing a greater burden of domestic responsibilities, difficulties in balancing work and family life, and stress in their partner relationships.

The aim of this article was to examine the level of well-being of Polish women during the second and fourth waves of the pandemic. As the results of our study show, the pandemic contributed to the deterioration of the psychological well-being of Polish women. Fear for health, both their own and their loved ones', was accompanied by a huge crisis of trust towards the authorities and institutions. Both measurements indicated a deterioration in mood and emotions compared to pre-pandemic normative data. This deterioration remained at similar levels at the end of the first and the second year of the pandemic. We thus obtained a picture of an entrenched emotional crisis in the studied populations. However, we found no significant deterioration in life satisfaction and optimism. The lack of statistically significant differences (deterioration or improvement in optimism and life satisfaction) can be explained primarily by the fact that these are fairly constant personality traits (Seligman & Csikszentmihalyi, 2000, broader explanation in: Biel et al., 2023). Additionally, although we can expect that subjective well-being is connected with the frequency of positive and negative affect, increasing with higher level of the first and lower of the latter, Marszał-Wiśniewska and Nowicka (2018) suggest that this relationship is not unambiguous. Accepting negative emotions and trying to seek out positive aspects of the situation might be an effective strategy for building life satisfaction.

The surveys were conducted twice: in winters 2020/2021 and 2021/2022. In the process of data collection, we were able to anticipate that with spring and a decrease in the number of cases (as observed in the first two years of the pandemic), concerns about the virus would subside. Meanwhile, however, new stressors emerged. The first of these was fear of inflation, which has become a primary source of worry worldwide (Ipsos 2022). In Poland, consumer inflation in April 2022 reached 12.3% year-on-year (CSO April 2022), the highest increase in 25 years. The second, extremely important stressor has become the geopolitical situation in the region. The war in Ukraine has become the main source of worry for Poles (Ipsos 2022). This stressor has given rise to a number of fears, either concerning the security of one's own country or the involvement in refugee relief. Again, it demands a high level of mobilization with reduced

emotional resources, however, hopefully based on a solid foundation of optimism and life satisfaction.

## Conclusions

The social responsibility assumed by women is a source of weakness and strength at the same time. Activities such as caring for loved ones, taking on the burden of teaching children, performing professional duties in the medical and caring professions, exhaust their resources. At the same time, however, these actions become a source of meaningful existence and enabled them to deal constructively with the uncertainty of a pandemic tomorrow. We believe, however, that a lack of implementation of tools intended to support women's emotional well-being may exacerbate the long-term mental health crisis.

## REFERENCES

- Adisa, T.A., Aiyenitaju O., & Adekoya, O.D. (2021). The work–family balance of British working women during the COVID-19 pandemic. *Journal of Work–Applied Management*, 13(2), 241–260. DOI: 10.1108/JWAM-07-2020-0036.
- Arrosa, M.L. & Gandelman, N. (2016). Happiness Decomposition: Female Optimism. *Journal of Happiness Studies*, 17, 731–756. DOI: 10.1007/s10902-015-9618-8.
- Biel, K., Twardowska-Staszek, E., & Rostek, I. (2023). Optimism and Life Satisfaction of Poles during the Second and Fourth Waves of the COVID-19 pandemic. *The Person and the Challenges*, 13(1), 243–269. DOI: 10.15633/pch.13115.
- Bojanowska, A., Kaczmarek, Ł.D., Kościelniak, M., & Urbańska, B. (2021). Changes in values and well-being amidst the COVID-19 pandemic in Poland. *PLoS ONE*, 16(9), e0255491. DOI: 10.1371/journal.pone.0255491.
- Brzozowski, P. (2010). *Skala Uczuć Pozytywnych i Negatywnych SUPIN: Polska Adaptacja Skali PANAS Davida Watsona i Lee Anny Clark*. Warszawa: Pracownia Testów Psychologicznych Polskiego Towarzystwa Psychologicznego.
- Carli, L. (2020). Women, Gender equality and COVID-19. *Gender in Management*, 35(7/8), 647–655. DOI: 10.1108/GM-07-2020-0236.
- Connor, J., Madhavan, S., Mokashi, M., Amanuel, H., Johnson, N.R., Pace, L.E., & Bartz, D. (2020). Health risks and outcomes that disproportionately affect women during the Covid-19 pandemic: A review. *Social Science & Medicine*, 266, 113–364. DOI: 10.1016/j.socscimed.2020.113364.

- Davies, S. (2020). Risk of Online Sex Trolling Rises as Coronavirus Prompts Home Working. *Reuters*. Retrieved from: <https://www.reuters.com/article/uswomen-rights-cyber~ashing-trfn-idUSKBN2153HG> (access: 24.11.2022).
- Diener, E., Emmons, R.A. Larsen, R.J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49, 71–75. DOI: 10.1207/s15327752jpa4901\_13.
- Dragioti, E., Li, H., Tsitsas, G., et al. (2022). A large-scale meta-analytic atlas of mental health problems prevalence during the COVID-19 early pandemic. *Journal of Medical Virology*, 94, 1935–1949. DOI: 10.1002/jmv.27549.
- Dziennik Ustaw Rzeczypospolitej Polskiej (2021, January 27). Wyrok Trybunału Konstytucyjnego z dnia 22 października 2020 r. Retrieved from: <https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20210000175/O/D20210175.pdf> (access: 24.11.2022).
- Goryńska, E. (2005). *Przymiotnikowa Skala Nastroju UMACL Geralda Matthews, A. Grahama Chamberlaina, Dylana M. Jonesa*. Warszawa: Pracownia Testów Psychologicznych Polskiego Towarzystwa Psychologicznego.
- GUS (April 2022). *Szybki szacunek wskaźnika cen towarów i usług konsumpcyjnych w kwietniu 2022 roku*. Retrieved from: <https://stat.gov.pl/obszary-tematyczne/ceny-handel/wskazniki-cen/szybki-szacunek-wskaznika-cen-towarow-i-uslug-konsumpcyjnych-w-kwietniu-2022-roku,21,1.html> (access: 20.05.2022).
- Helmich, D.W. & Post, E. (2021, 27 May) *Success of Women Leadership during COVID-19: At Risk of Essentialising “The Feminine”?* Retrieved from: <https://www.uu.nl/en/news/success-of-women-leadership-during-covid-19-at-risk-of-essentialising-the-feminine> (22.11.2022).
- Hessami, K., Romanelli, C., Chiurazzi, M., & Cozzolino, M. (2020). COVID-19 pandemic and maternal mental health: a systematic review and meta-analysis. *The Journal of Maternal-Fetal & Neonatal Medicine*, 35(20), 4014–4021. DOI: 10.1080/14767058.2020.1843155.
- Ipsos (April 2022). *What worries the world*. April 2022. Retrieved from <https://www.ipsos.com/en-ch/what-worries-world-april2022> (access: 20.05.2022).
- Juczyński, Z. (2012). *Narzędzia Pomiaru w Promocji i Psychologii Zdrowia*. Warszawa: Pracownia Testów Psychologicznych Polskiego Towarzystwa Psychologicznego.
- Marszał-Wiśniewska, M. & Nowicka, M. (2018). Individual Differences in Mood Changes. *Journal of Happiness Studies*, 19, 1415–1438. DOI: 10.1007/s10902-017-9879-5.
- Matthews, G., Jones, D.M., & Chamberlain, A.G. (1990). Refining the measurement of mood: The UWIST Mood Adjective Checklist. *British Journal of Psychology*, 81, 17–42. DOI: 10.1111/j.2044-8295.1990.tb02343.x.
- Milovanska-Farrington, S. (2021). The Effect of COVID-19 as an Economic Shock on the Gender and Ethnic Gap in Labour Market Outcomes. *Studies in Microeconomics*, 9(2), 227–255. DOI: 10.1177/23210222211046411.

- Purdie, A., Hawkes, S., Buse, K., Onarheim, K., Aftab, W., Low, N., & Tanaka, S. (2020, March 24). *Sex, gender and COVID-19: disaggregated data and health disparities*, BMJ Global Health Blog. Retrieved from: <https://blogs.bmj.com/bmjgh/2020/03/24/sex-gender-and-covid-19-disaggregated-data-and-health-disparities/> (access: 24.11.2022).
- Scheier, M.F., Carver, C.S., & Bridges, M.W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67, 1063–1078. DOI: 10.1037/0022-3514.67.6.1063.
- Schokkenbroek, J.M., Hardyns, W., Anrijs, S., Ponnet, K. (2021). Partners in Lockdown: Relationship Stress in Men and Women During the COVID-19 Pandemic. *Couple and Family Psychology: Research and Practice*, 10(3), 149–157. DOI: 10.1037/cfp0000172.
- Seligman, M. & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5–14. DOI: 10.1037/0003-066X.55.1.5.
- Smith, J. (2019). Overcoming the ‘tyranny of the urgent’: integrating gender into disease outbreak preparedness and response. *Gender & Development*, 27(2), 355–369. DOI: 10.1080/13552074.2019.1615288.
- Suligowski, R. & Ciupa, T. (2023). Five waves of the COVID-19 pandemic and green–blue spaces in urban and rural areas in Poland. *Environmental Research*, 216(3), 114662. DOI: 10.1016/j.envres.2022.114662.
- Thibaut, F. & van Wijngaarden-Cremers, P.J.M. (2020). Women’s Mental Health in the Time of Covid-19 Pandemic. *Frontiers in Global Womens’ Health*, 1, 588372. DOI: 3389/fgwh.2020.588372.
- Twardowska-Staszek, E., Seredyńska, A., Rostek, I., & Biel, K. (2021a). Nastrój i emocje Polaków podczas pandemii COVID-19. *Horyzonty Wychowania*, 20(55), 11–26. DOI: 10.35765/hw.2075
- Twardowska-Staszek, E., Rostek, I., Biel, K., & Seredyńska, A. (2021b). Predictors of Positive and Negative Emotions Experienced by Poles during the Second Wave of the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, 18(22): 11993. DOI: 10.3390/ijerph182211993
- UN Women (2020, March 27). *Gender-Responsive Prevention and Management of the COVID-19 Pandemic: From Emergency Response to Recovery & Resilience*, Retrieved from: <https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/News%20and%20events/In%20Focus/COVID-19/Gender-responsive-prevention-management-COVID19.pdf> (access: 24.11.2022).
- Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070. DOI: 10.1037/0022-3514.54.6.1063.

Xia, C.-L., Wei, A.-P., & Huang, Y.-T. (2022). The COVID-19 Lockdown and Mental Wellbeing of Females in China. *International Journal of Environmental Research and Public Health*, 19, 4960. DOI: 10.3390/ijerph19094960.

**Irmina Rostek** – PhD in psychology, lecturer at the Ignatianum University in Cracow. The area of her scientific and professional interests focuses on human life span development. She takes part in international projects supporting the development of preschool children. During the COVID-19 pandemic she was involved in research – both quantitative and qualitative – on the psychological well-being of Poles.

**Estera Twardowska-Staszek** – PhD in psychology, psychotherapist, sexologist, lecturer at the Ignatianum University in Cracow. The area of her scientific and professional interests focuses on the person, in the context of normal and impaired psychosocial functioning. She participated, among others, in an international research project on bullying and cyberbullying among children and adolescents and a research project on the well-being of Poles during the pandemic.

**Krzysztof Biel** – PhD in pedagogy. His research interests focus on issues of social resocialization pedagogy. Currently, he is the Head of the Department of Resocialization Pedagogy at the Ignatianum University in Cracow and the Rector's Delegate for international affairs. He is the author of numerous scientific publications, recently, among others: *Zrozumieć odstępnie od przestępczości. Definicje, teorie i kierunki badań empirycznych*.

