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COVID Anxiety and Social Support from the Perspective of Polish Students in Online Study Time

Abstract

This study aimed to evaluate the COVID-19 pandemic anxiety experienced by students in Poland and its impact on their: social support, satisfaction with studying online and expectations of success in life. The data was obtained from a survey of Polish public and private university students. The research presented here examined the environmental and psychosocial effects of social withdrawal during the first period of the pandemic on the well-being and confidence in their chances for success in academic study. Recognising the individual and social condition of adolescents standing at the threshold of social maturity is essential to understanding the pedagogical and motivational consequences of institutional anti-pandemic regulation.

Keywords: *COVID-19, anxiety, remote education, social support, Polish students*

Introduction

In Poland, the first press reports of a new dangerous virus appeared at the end of 2019. Most of the public and many politicians did not take the news seriously enough to think about preparing preventive measures. On March 12, 2020, the Polish government announced the closure of all schools and that classes would be conducted remotely. All types of schools, including universities, began instituting online education. In the first quarter of 2021, the epidemiological situation worsened. The 485,200 deaths in Poland in the last quarter of 2020 exceeded the

number of deaths in 2019 by as many as 67,100 persons. Between March 12, 2020, and May 17, 2021, 2,855,190 people became ill with COVID-19 and 71,675 died. There were approximately 140,000 people in quarantine per day (Gujski et al., 2020).

The effect of the pandemic was the exacerbation of psychological anxiety and social tensions in everyone's daily life. We do not know its long-term social effects or pedagogical implications for the younger generation. The first published research estimating the consequences of remote education and extended quarantine for Polish students aged 13–19 identified a regression in social skills (Talarowska et al., 2020). University students reported greater flexibility and adaptability and a higher level of uncertainty about their chances of realising their plans for life stability, professional success, and economic independence. Students are the most active human capital resource in an ageing society. Polish society is characterised by one of the highest ageing rates in Europe (Šídlo et al., 2020).

Considering these premises, we conducted a nationwide survey of the level of fear associated with COVID-19 and its impact on Polish students' educational and social conditions from different levels and types of universitiesw.

Study Design

A review of studies on the psychological consequences of the COVID-19 pandemic has already been implemented in various countries. The need to study the impact of the pandemic crisis on social regulation and peer bonding in remote education was pointed out by Sahu (2020), among others. Multiple studies indicate that social isolation affects young people (Imran et al., 2020). Young people are characterised by greater flexibility and adaptability. However, their need to build interactional ties in a new environment increases uncertainty about their chances of pursuing their life plans. Research by a team from Cyprus shows that a "young and relatively healthy part of the population – experienced a significant decline in quality of life, either because of the pandemic itself or because of the control measures implemented" (Panayiotou et al., 2021, p. 24).

 A study in Italy by Meda et al. (2021, p. 75) found that 6% of Italian students aged 18–30 experienced a clinically significant depressive state due to social contact restrictions. However, this negative psychological effect disappeared once the restrictions were lifted about 7 weeks later.

In other European studies (Greece, Albania, and Spain) among nursing students, it was observed that one-third of the nursing student population experienced mild

depression. Higher levels of depression were reported among Spanish students (59.1%), followed by Albanian students (34.5%) and Greek students (21.8%). Multivariate linear regression analysis showed that Spanish students experienced more depression than Greek and Albanian students (p <0.001). Furthermore, lower age across the study population was associated with increased depression (Patelarou, 2021, p. 17). We investigated how the imposed social isolation and the pandemic fear influenced the results of online learning. Perceived fear of COVID-19 was analysed in relation to the surveyed students' feelings of social support and their subjective assessment of their future success.

Research Methodology

The national survey involved student representatives from various majors, grade levels, and public and non-public universities. The research was performed in March 2021, after a year of experiencing societal restrictions and limitations introduced against COVID-19. The primary purpose of the research was to identify the interrelation between COVID-19 anxiety and the social support received by Polish students. The questionnaire included two tests. The Fear of COVID-19 Scale (FCV 19S) (Ahorsu et al., 2020) in a Polish adaptation by Pisula, and Nowakowska, 2020 and the Multidimensional Scale of Perceived Social Support test designed by Zimet and colleagues in 1988, which measures the support received from family, friends, or a loved one. This survey used a new Polish adaptation of the test (published by Buszman and Przybyła-Basista in 2017). All data files are available in the ZENDO database: https://doi.org/10.5281/zenodo.5506610

Ethics and Project Implementation

Ethical principles of research were included. The content of the survey questionnaire and the data collection procedures were positively evaluated by the University of Silesia Ethics Committee for Scientific Research signed no: KEUS.95/02.2021.

The survey, in the form of a supervised online survey (CATI), was conducted through the professional research agency BIOSTAT. Correctly completed questionnaires were obtained from 1,000 students. Respondents were a statistical representation of academic youth from the first and second levels of university studies in Polish state and non-public higher education institutions. Participation was voluntary and confirmed at the beginning of the survey. All participants were

of legal age and were informed that a company conducted the survey on behalf of the University of Silesia in Katowice.

Research Hypotheses and Objectives

The theoretical assumptions of the project were the conclusions of the comparative studies. Young people in Poland are increasingly limiting their activity to the private sphere. They focus on selfrealisation within the nuclear family and in small informal groups. These tendencies were discussed before the COVID-19 pandemic time, among others, in a study by Walker in 2009. She points out the generalised distrust of young people towards institutions and mass media, tamed by ties with family and close friends. She emphasises that in studies of the level of trust of Poles, „students aged 18–24 declared the most distrust toward neighbours and local parish priests overall, with young people aged 15–29 declaring the highest levels of distrust (82.70% according to a World Values Survey)" (Walker, 2009, p. 31).

Studies of the social opinion of Poles about the factors of success in life indicate a reduction of meritocratic orientations. International comparative studies have shown that Polish youth construct their ideas of success mainly through the sense of selfactualisation, visions of individualised achievement of goals, and fulfilment of dreams. More often than their peers from the Czech Republic, Germany and the Netherlands, they associate success in life with family and materialistic values (Hildebrandt-Wypych, 2011). University students are active in the Polish labour market, where 47% work casually and permanently (Zając et al., 2018, p. 200), mainly in the service sector, which has undergone the greatest reduction during the lockdown period. The weakened rank of meritocratic sources of life success in the young generation is accompanied by a „statistically significant lower level of commitment to work [...] young people with less work experience compared to their older counterparts feel less joy and energy related to the performance of professional duties" (Wolupnik-Ochocińska, 2015, p. 81). These social tendencies were already evident before the pandemic. It is feared that the pandemic and social sanitary distance contribute to the weakening of solidarity and social cohesion in the attitudes of the young generation of Poles.

The purpose of the survey was to verify three hypotheses.

The main hypothesis stated: The family support for Polish students increases among those with higher levels of fear of the COVID-19 pandemic.

The second hypothesis stated:

Students with high COVID-19 anxiety show lower levels of satisfaction with their competence and belief in their chances of success in life.

The third hypothesis stated:

Polish students accept online learning mode regardless of the level and direction of higher education, satisfaction with their competencies, belief in success in life, and level of fear of COVID-19.

The assumption of the project was to take these important factors into account as conditioning the cultural orientations of the students studied.

Results

Survey data was collected from 1000 individuals. The results were coded, cleaned, and statistically analysed using IBM PS IMAGO Pro 7.0 package. Data from 7 people aged 30 and 20 students aged 31–49 were rejected. Questionnaires from 973 students aged 18–29 were qualified for substantive analysis. Data from this survey indicated that as of March 2021, one in ten Polish students surveyed was infected with COVID-19, with 2.9% having severe or very severe symptoms. Around 53.3% of the students surveyed had someone with COVID-19 in their immediate circle, including 2.5% who had encountered a fatality. There were 25.1% that observed severe and very severe symptoms of infection among their friends, and 32.5% that observed mild symptoms. The COVID-19 pandemic in Poland became a real-life phenomenon for university students, and it was present in both close proximity and personal experience. The level of fear of coronavirus-FCV 19S among students was found to be significantly associated with having a COVID-19 infection (p=0.10) and with a more severe course of coronavirus disease in the subjects themselves (p=0.011). There was a significant increase in anxiety (p=0.04) among students who were in contact with acquaintances undergoing COVID-19. It is mainly the personal experiences of students rather than events in the social setting that stimulate their fears about the health effects of the pandemic. The summed indications of the FCV 19S scale obtain a value from 7 to a maximum of 35 points. The mean value of anxiety level in the study population was 13.94, and the standard deviation from the mean was 5.35, the median being 13 points. Responses to the 7 questions of the FCV 19S Anxiety Scale scored high in terms of reliability with Cronbach's alpha coefficient (0.862).

For further statistical analyses, a model was adopted to differentiate three categories. The high COVID-19 anxiety category included 197 individuals or 20.2% of the sample. This percentage was determined by a scale value of 19 points –above

the standard deviation of the distribution of COVID-19 anxiety in the study population. The low anxiety category included 26.3% of students with a total score of 9 on the FCV 19S scale. An average level of pandemic fear was experienced by 53.5% of the Polish students surveyed.

The socio-demographic structure of the study population and COVID-19 anxiety scores in the analysed categories are presented in Table 1.

Table 1. Socio-demographic structure and COVID anxiety in Polish students (Analysis of the variance of means ANOVA with Welch's test for the total of 973 students)

Socio-demo-graphic variables	N	%	COVID anxiety test		Level of anxiety		Effect size
			Mean	SD	% low	% high	
Gender:							
Male	343	35.3	13.29	5.36	30.9	17.2	0.008
Female	630	64.7	14.29	5.31	19.7	21.9	
AGE group:							
18–19	91	9.3	13.47	5.20	27.5	20.9	
20–21	394	40.5	13.51	5.07	25.1	17.8	
22–23	270	27.8	14.14	5.08	21.1	20.0	0.012
24–25	161	16.6	14.76	5.96	19.9	24.8	
26–27	35	3.6	13.29	5.78	34.3	17.1	
28–29	22	2.2	16.18	7.31	22.7	36.4	
Level of study:							
First	618	63.5	13.75	5.40	26.2	20.1	0.002
Second	355	36.5	14.28	5.24	19.2	20.6	
Type of study:							
Undergraduate	618	63.5	13.75	5.40	26.2	20.1	
One-cycle degree	187	19.2	13.91	5.01	21.4	19.8	0.004
Postgraduate	168	17.3	14.68	5.48	16.7	21.4	
Year of Study:							
First	390	40.1	13.70	5.36	25.9	18.5	
Second	320	32.9	14.28	5.35	20.6	21.6	
Third	202	20.8	13.99	5.38	23.3	22.3	0.006
Fourth	43	4.4	13.02	5.16	30.2	18.6	
Fifth and more	18	1.8	14.39	5.49	18.8	18.8	

Socio-demo-graphic variables	N	%	COVID anxiety test		Level of anxiety		Effect size
			Mean	SD	% low	% high	
Field of Study:							
Art, Humanistic, and Social Science	447	45.9	13.91	5.51	23.7	20.6	0.000
Natural, Technical and Applied Science	526	54.1	13.94	5.21	23.6	20.0	
Status:							
State/Public Univ.	819	84.2	13.95	5.30	23.6	20.0	0.000
Non-public Univ.	154	15.8	13.90	5.59	24.0	21.4	
Study and Work:							
Only Full-Study	459	47.2	13.75	5.16	23.5	18.7	0.001
Full-Study and Work	514	52.8	14.11	5.50	23.7	21.6	
Permanent Residence:							0.006
Location to 20,000	324	33.3	13.84	5.33	23.8	19.8	
City 21-50,000	133	13.7	14.72	5.56	20.3	26.3	
City 51-100,000	131	13.5	14.39	5.46	18.3	19.1	
Over 100,000	385	39.6	13.94	5.23	26.5	19.0	
Total	*973*	*100%*	*13.94*	*5.35*	*23.6%*	*20.2%*	*-*

Source: own research.

Polish students react very similarly to the threat of a pandemic, regardless of the social environment in which they function. There was little variation based on the age of students and between males and females. Among female students, there were 11.2% fewer individuals with low levels of anxiety and 4.7% more experiencing severe COVID-19 anxiety than in the male group. Only older individuals showed a higher level of anxiety, but older age did not correlate with anxiety.

The data collected in Tab 2. suggest that family was not a major support factor for students. Family support was also not increased among those with high levels of pandemic fear. The support received from loved ones was slightly stronger and higher among female students. Male students with high anxiety levels experienced little reduction due to this type of support. Similarly, their family's support subjectively perceived by them was somewhat waning. These results justify accepting

Table 2. The relationship between social support and the levels of COVID-19 anxiety depending on the students' gender (mean values)

Gender of students		Females			Males		
Fear of COVID-19		Low	Medium	High	Low	Medium	High
Support from:	Family	19.6	19.5	19.6	19.7	19.5	18.6
	Friends	20.8	20.9	20.4	21.2	20.2	20.8
	Loved one	22.3	23.8	22.0	21.5	22.3	19.4
	Social total	51.2	51.7	51.3	52.7	51.1	51.6

Source: own research.

the hypothesis that there is no variation in pandemic anxiety by the socio-demographic characteristics of the students studied. However, the claim in the first hypothesis that students with higher levels of pandemic fear had the strongest support from family was not confirmed. In testing the second hypothesis, we found that the influence of high pandemic fear on lowering one's sense of competence and chances for success was linked to the finding that Polish female students exhibit slightly stronger beliefs than male students about being successful in life. The analysis of the variance of means included socio-demographic variables such as gender, age, year and level of study, work activity, place of permanent residence, and the surveyed students' attitudes toward online learning. Univariate analysis of the variance of means ANOVA with Welch's robust equality test was used to estimate the interdependence of these variables. The results obtained are shown in Table 3.

Table 3. Measuring the significance of the crucial variables in relation to levels of COVID-19 anxiety

Variables analysed	Test of averages	Statistics [a]	df2	Significance
M2 – Gender	Welch	7.556	431.198	0.001
Age groups – 5	Welch	1.000	418.815	0.369
M3 – Professional status	Welch	0.697	434.674	0.499
M6 – Level of study	Welch	4.264	445.291	0.015
M8 – Year of study	Welch	0.297	439.223	0.743
Place of permanent residence	Welch	0.419	432.753	0.658
Level of support – from family	Welch	0.181	434.220	0.834

Variables analysed	Test of averages	Statistics [a]	df2	Significance
Support from friends	Welch	0.392	410.966	0.676
Support from a close friend /loved one	Welch	12.340	400.885	0.000
Social support – Total	Welch	0.468	416.063	0.627
Is full of doubts about their competence	Welch	0.796	438.139	0.452
Is convinced that they are achieving the success they deserve in life	Welch	0.571	426.140	0.565
Is satisfied with studying remotely	Welch	7.556	431.198	0.001

a F asymptotic distribution.
Source: the authors

The test results indicated no significant relationship between anxiety and confidence in one's chances of success and one's competencies. Thus, the claim in hypothesis number two must be rejected in the final analysis.

Statistically significant variation in COVID-19 anxiety levels (p=0.001) of Polish students was associated with gender and support from a loved one. These relationships are partially corrected by the students' beliefs about achieving success in life and by the gender of the respondents. Polish female students were slightly more likely to report higher anxiety levels than their male peers. Combined support from family, friends, and a loved one was important for students with high levels of pandemic anxiety. These results confirm that support from family and friends provides a strong buffer of social safety as primary groups for the general population of young people. They did not vary significantly in correlation to other socio-demographic characteristics of students in the relationship models tested here.

The increased doubts in their competencies partly weakened the students' self-assessment. It was also accompanied by lower satisfaction with studying remotely. In general, students studying and those combining studies with paid employment showed the same average satisfaction with studying remotely – they rated it at 3.07 points against the maximum score of 5 (very satisfied). Polish students generally did not attribute a negative impact on their competencies to this form of studying. Nor did the online study time impinge on the differences in self-esteem between men and women. On the other hand, satisfaction with this mode of education was associated with a higher level of belief among the surveyed students in achieving the success they deserved.

Conclusions

This study confirmed that the threat of the pandemic activates the support commonly obtained by Polish students from their family and circle of friends. The observed decrease in the importance of support from loved ones among students with high levels of fear of COVID-19 may be related to the effect of social isolation. In general, the results of this project, reinforced by the conclusions of the SWPS study, may have practical implications, such as in the documentation of a relatively rapid return of Poles to the control of the level of fear of COVID-19. The sense of relative well-being in the private sphere and a low level of trust in institutions may cause strong resistance of a part of this society against increasing the rigour of social distancing and obligation to participate in universal immunisation programmes.

Limitations

The study discussed here has several limitations. First, we used reports containing tests of anxiety against COVID-19 and social support selected and subjectively found relevant to the community studied. Secondly, the research plan was conceived at the end of the first year of the pandemic, when mainly the results of small national surveys and comparative analyses were available. Our conclusions would have been more reliable if we had data that reflected the experience of the subsequent phases of the COVID-19 pandemic and its social impact on different segments of the social structure. Thirdly, conclusions about the consequences of the COVID-19 pandemic on students' attitudes towards distance education and their sense of chances to succeed were based on declarative indicators. As a result of these limitations, the conclusions obtained describe the characteristics of a surveyed national representation of students but are only an approximation of the consequences of the pandemic on the well-being of Polish society.

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