Revista Românească pentru Educație Multidimensională
ISSN: 2066-7329 | e-ISSN: 2067-9270
Covered in: Web of Science (WOS); EBSCO; ERIH+; Google Scholar; Index Copernicus; Ideas RePeC; Econpapers; Socionet; CEEOL; Ulrich ProQuest; Cabell, Journalseek; Scipio; Philpapers; SHERPA/RoMEO repositories; KVK; WorldCat; CrossRef; CrossCheck

2024, Volume 16, Issue 1, pages: 554-574 | https://doi.org/10.18662/rrem/16.1/837
Submitted: October 14th, 2023 | *Accepted for publication:* January 09th, 2024

Pandemic Emotional Impact on Academic and Professional Worries while Controlling for Satisfaction with Life and Perceived Social Support

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Abstract: *In this article, we test the associations between the Covid-19 pandemic's emotional impact and academic and professional worries among social work students when controlling for life satisfaction as a part of subjective well-being and perceived social support. Therefore, we aim to test the controlling variables' role as mediators in explaining how academic and professional worries can be reduced. The survey was conducted in Romania in 2021 on a sample of 329 students attending full-time courses in the field of social work, both bachelor's studies and master. The study was cross-sectional but considered a causal orientation for the variables (i.e., past pandemic emotional impact – present social support and satisfaction with life – future academic and professional worries). The findings showed that although life satisfaction does not significantly determine academic and professional worries, perceived social support has a significant direct effect. Indirect effects indicate a decrease in academic and professional worry when controlling for perceived social support alone and while controlling for both perceived social support and satisfaction with life. Additionally, our findings show that students who were less emotionally impacted by the pandemic effects had no worries about their capacity to continue or complete their studies or their employment perspectives.*

Keywords: *pandemic emotional impact; academic worries; professional worries; satisfaction with life; social support.*

How to cite: Rădoi, M., Apostol, A. C., Irimescu, G., & Tofan, C. M. (2024). Pandemic emotional impact on academic and professional worries while controlling for satisfaction with life and perceived social support. Revista *Românească pentru Educație Multidimensională, 16*(1), 554-574. https://doi.org/10.18662/rrem/16.1/837

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Introduction

The Covid-19 pandemic debuted in the town of Wuhan, China, in December 2019, and extended rapidly; in a short time, it became a health issue for the entire world. The answer of the WHO (2020) to the new challenge was the lockdown – the first argument was to protect the persons and limit the spread of the pandemic.

In Romania – like in many other European countries during the pandemic, the government enforced a set of restrictive measures, including the shutdown of education establishments and the transfer of jobs online (Decree No. 195 of 16 March 2020).

To our knowledge, there is no specific or direct study relating the pandemic emotional impact and academic and professional worries alone or by controlling perceived social support and satisfaction with life, but somewhat similar reports indicate these variables as affecting mental health in general (i.e., anxiety, depression, well-being, etc.). Nevertheless, worry is the most critical aspect of anxiety and depression, and previous studies indicate how important it is to also relate to protective factors that could decrease these outcomes.

The educational impact of the pandemic at the European and global levels was acutely perceived. The first months of 2020 brought significant changes in the everyday life of students related to lifestyle (Cao et al., 2020), the physical and emotional welfare of themselves and other family members (Baltà-Salvador, 2021; Aslan et al., 2020; Apgar & Cadmus, 2021; Elmer et al., 2020), interactions and social support (Brooks et al., 2020; Taylor et al., 2020; Farris et al., 2021; de Jonge et al., 2020).

Social support based on social relations acts for students as a buffer against adverse life events (Steese et al., 2006; Lloyd-Jones, 2021). More than ever, social relations are social support channels in times of crisis, such as the one caused by the Covid-19 pandemic, which may contribute to the improvement of mental health and the welfare of students. Even before the onset of the pandemic, it has been said that social support not only reduces the socio-psychological pressure during a crisis but can also beneficially change the attitude regarding the need for social support and the methods of seeking help. Hence, this aspect suggests efficient and robust social support during public health emergencies.

Another study before the Covid-19 pandemic reported a strong connection between the social interaction of students and the academic involvement levels, in the sense that – by creating social support networks – academic stress decreases as a form of worry (Salmela-Aro, 2017).

However, as Covid-19 began, scientific studies were carried out reporting the lack of social support perceived by students as correlated with a high level of worry, for instance, various forms of anxiety (Cao et al., 2020) and impairment of welfare and mental health (Boda et al., 2020; Savitsky et al., 2020). Against this background, the social distancing measures during the Covid-19 pandemic minimalised the face-to-face interactions specific to the learning and socialising process but favouring the focus on significant, stable social relations – limited to the family, close friends, or neighbours (Elmer et al., 2020).

In addition, the lack of social contact and direct communication with the teachers and colleagues aggravated the negative educational experiences (academic failure, fear of not completing the studies, boredom, college dropout, etc.) of students (Luan et al., 2020). As the isolation period extended, the sense of not belonging to the academic community amplified. In non-pandemic conditions, the academic setting influences the students' sense of belonging, including the sense of acceptance and appreciation (Masika & Jones, 2016), while involvement depends on the student's learning and interactions with the peers and teachers (Boulton et al., 2019).

At the same time, another essential element strongly impaired by the Covid-19 pandemic referred to satisfaction with life, which is seen as a part of subjective well-being (Diener et al., 1985). In this respect, recent studies have highlighted that the pandemic significantly impacted students' satisfaction with life negatively (Rogowska et al., 2020; Rogowska et al., 2021; Kokkinos et al., 2022).

The studies carried out before the non-pandemic period show that youths are prone to experiencing episodes of transition – from one individual development phase to another, marked by emotional instability (Mahmoud et al., 2012), which may entail states of depression, anxiety, and stress. Furthermore, they manifest more acutely than the general population (Arnett, 2007; Beiter et al., 2015; Regehr et al., 2013).

Though youths are not part of any group specifically exposed to the high risk of infection with SARS-CoV-2 related to the severe consequences on health due to infection, they were significantly affected by the first waves of the Covid-19 pandemic from an emotional standpoint (Bauman et al., 2021; APA, 2020). Recent research regarding the mental health of students due to the rapid shift to the online educational systems and course attendance under restriction highlights that they perceived an increase in stress, anxiety, and depression (Aslan et al., 2020; Odriozola-González et al., 2020; Son et al., 2020).

At the same time, they perceived the intensification of negative feelings such as isolation, fear, worry, and boredom (Apgar & Cadmus, 2021; Aristovnik et al., 2020; Son et al., 2020; Baltà et al., 2021), generating frustration (Brooks et al., 2020). The frustration was exacerbated by the limitation of everyday social activities, while the sense of isolation was more acutely perceived.

Restricted access to university campuses (Driessen et al., 2020; Apostol & Netedu, 2020), lack of involvement in the practicum and volunteering activities specific and necessary to access the labour market (Rădoi et al., 2021) – all accentuated students' worries concerning the academic path (Crocetto, 2021; Apostol et al., 2021), and the completion of studies (Cohen et al., 2020; Apostol et al., 2022).

Students had to adapt very rapidly to remote learning during the semester, which required a quick technological endowment process (Radu et al., 2020), and the acquisition or development of technical skills. Another effect generated by the restriction of access to campuses as students return home to a new learning setting – often inadequate, thus losing the learning routine (YoungMinds, 2020; Grubic et al., 2020; Tannert & Gröschner, 2021), slow Internet connection (Baltà-Salvador, 2021; Papouli et al., 2020; McFadden et al., 2020; Son et al., 2020), the lack of personal space adapted to study. Usually, the space at home was shared with other family members; students had no access to libraries and reading halls (Baumann et al., 2021).

The changes recorded after the onset of the Covid-19 pandemic pointed out the differences in students' styles and learning capabilities. Some students can work independently, manage their time effectively, and apply a healthy lifestyle combining time for study and leisure methods harmoniously. On the other hand, other students find it quite difficult because they lack discipline, focus, and time management skills. Primarily but not exclusively for them, direct and face-to-face interaction with colleagues (creating social networks) and teachers ensures the necessary emotional support (Versteeg et al., 2022).

Hence, the challenges caused by Covid-19 (i.e., lack of social networks, lack of social support and interaction, and physical isolation) were associated with an impairment of students' mental health during the pandemic (Brooks et al., 2020; Elmer et al., 2020).

Main goal of the study

The current study is based on cross-sectional data considering relevant time points for testing the causal influence of the main variables over academic and professional worries among social work students. Our

choice of a research sample comprising social work students is a response to similar recent studies conducted in the European space (de Jonge et al., 2020, Banks et al., 2020, Doolan et al., 2021; Kindler et al., 2022). They point out that the primary challenge for the social work training system is to build a bridge between students' interests in their well-being, future perspectives regarding their educational and professional path, and the specifics of professional practice.

We test the associations between the Covid-19 pandemic's emotional impact and academic and professional worries when controlling for satisfaction with life as a part of subjective well-being and perceived social support. Therefore, we aim to test the controlling variables' role as mediators in explaining how academic and professional worries can be reduced. Finally, we aim to understand each primary variable's role (see Figure 1 for graphic representation).

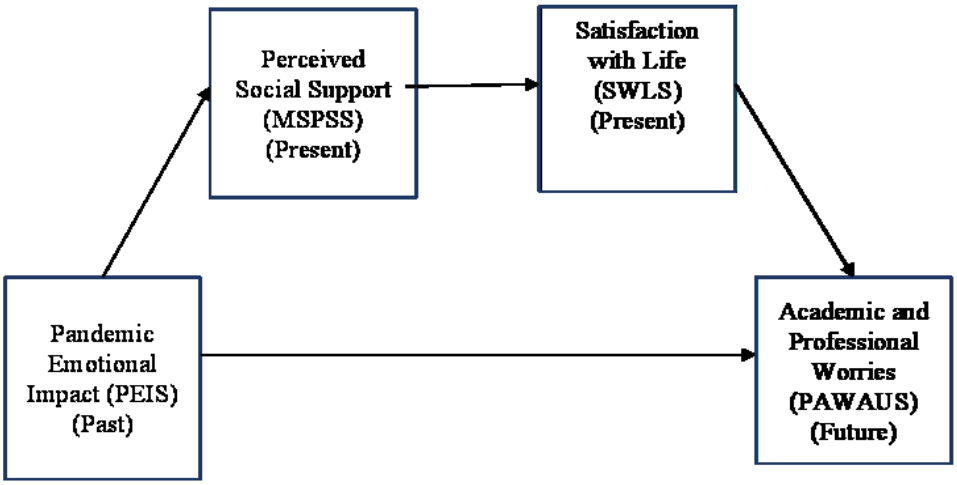


Figure 1. Mediation model through satisfaction with life as a subjective well-being part and social support for the relation between pandemic emotional impact and academic and professional worries. (Authors' work)

Study design

The study was conducted at the oldest state university in Romania – "Alexandru Ioan Cuza" University in Iaşi (UAIC), in the North-East region at the border of the European Union. Data collection took place between 17 May 2021 and 30 May 2021 within the Faculty of Philosophy and Social-

Political Sciences (FPSPS), the speciality of social work (SW). The study was cross-sectional but considered a causal orientation for the variables (i.e., past pandemic emotional impact – present social support and life satisfaction – future academic and professional worries). The period of questionnaire application coincided with the last two weeks of the second semester in the 2020-2021 academic year, before the weeks dedicated to the final exams. We state that the didactic speciality of SW had online classes due to the decisions taken successively from March 2020 by the academic management to reduce the risk of contamination with the SARS-CoV-2 virus. In this respect, we also note that from 16 March 2020 to 27 March 2022, in the context of the health crisis caused by the Covid-19 pandemic, most didactic activities within the FPSPS were organised online. Hence, we used the Google Forms platform to collect the data, with the questionnaire self-administered online.

We designed the study in conformity with the Declaration of Helsinki (World Medical Association, 2013), thus observing the ethics and deontology principles of research. The participation of the subjects was voluntary, based on informed consent. No material or symbolic benefits were promised in exchange for filling in the questionnaire. At the same time, no personal data of the respondents were used (e.g., the last name, given name, e-mail addresses, IPs, etc.) to allow their identification, thus considering the execution of a global, not individual, analysis. It took approximately 20 minutes to fill in the questionnaire. We used IBM SPSS Statistics version 21 and Process v.3 to analyse the data (Hayes, 2018).

We included four scales in the questionnaire – the *Satisfaction With Life Scale* (SWLS), *The multidimensional scale of perceived social support* (MSPSS), the *Pandemic Emotional Impact Scale* (PEIS), and the *Pandemic Academic Worries among University Students scale* (PAWAUS). We will describe them in the section dedicated to the measurements used.

To design the instrument, we considered a distribution of the scale instructions on a temporal axis: *present* (manifest experiences concerning students' satisfaction with life and perceived social support when the study was conducted), *past* (latent experiences, already lived, regarding the impact of the pandemic context on subjective well-being and emotional state), *future* (worries anticipated by students related to their subsequent academic and professional path in the context of the Covid-19 pandemic).

A certified translator translated the instructions and items within the SWLS, MSPSS, and PEIS scales from English into Romanian and the instructions and items within the PAWAUS into English for the statistical analysis of this paper.

Participants

The total volume of the population studied comprised 329 students (*n*) attending full-time courses in the field of social work (SW), both bachelor's studies – BSW (*n* = 260, 79%) and master – MSW (*n* = 69, 21%). Concerning the total number of students enrolled in SW studies within FPSPS at the beginning of the 2020-2021 academic year, the participation rate was around 40%. Hence, the population studied can be considered relevant, and the high participation rate is reflected in the sociodemographic characteristics featured below.

Of all the students investigated, 7% are male, while 93% are female. The gender distribution of the respondents is similar to that of the general population. The average age of the participants was 23.1 (*n* = 329, *SD* = 6.33), lower among BSW students (*M* = 21.44, *SD* = 6.33), compared to that recorded among MSW students (*M* = 29.33, *SD* = 9.03). The structure of the sample included subjects of all study years, namely the BSW years (first year – *n* = 94, 36.2%; second year – *n* = 89, 34.2%; third year – *n* = 77, 29.6%) and the two MSW years (first year – *n* = 28, 40.6%; second year – *n* = 41, 59.4%). We point out that, from 2008, the university studies within UAIC have been organised according to the Bologna process on three levels: bachelor's studies (3 years, six semesters), master studies (2 years, four semesters), and doctoral studies (3 years, six semesters).

Over half of the subjects reported living in urban areas (*n* = 190, 57.8%) in the previous year, while the rest of the students were in rural areas (*n* = 139, 42.2%). At the same time, most students reported living primarily with the members of their families in the 12 months before the research (*n* = 213, 64.7%), while around a fifth noted having leased a residence (*n* = 65, 19.8%). Furthermore, the population studied also comprised respondents who lived in their place – excluding family, hostels, or rent-based systems (*n* = 31, 9.4%), or student dorms within the university campus (*n* = 20, 6.1%). Using a ratio scale, we measured the level of academic performance recorded by the population studied. Hence, most students obtained an average between 9 and 10 (*n* = 151, 45.9%), followed by the categories of respondents with general averages between 8 and 8.99 (*n* = 119, 36.2%), between 7 and 7.99 (*n* = 47, 14.3%), between 6 and 6.99 (*n* = 8, 2.4%), and under 6 (*n* = 4, 1.2%), respectively.

Measurement tools

This part synthesises general information regarding the scales used in the data-collection tool. We highlight that the scales are featured in their order within the questionnaire.

Satisfaction With Life Scale (SWLS). An essential element of subjective well-being is the "cognitive component" (Pavot & Diener, 1993), measured by the classic SWLS (Diener et al., 1985). The items reflect the level of satisfaction with life among students as they filled in the research tool without referencing past or future experiences. The total calculated values range between 5 – 35, with low scores proving extreme dissatisfaction and high scores very high satisfaction. After applying the internal consistency test, results indicate high reliability (Cronbach's alpha = .895).

The multidimensional scale of perceived social support (MSPSS). Concerning the measured social support perceived by students, we applied the MSPSS (Zimet et al., 1988). This tool allows a "self-report measure of subjectively assessed social support" (Zimet et al., 1988, p. 30), comprising 12 items, each measured using scores from 1 (Very strongly disagree) to 7 (Very strongly agree). Thus, calculated scores may vary between 12 and 84, with low values indicating a low level of social support, while high prove a high level of social support. In our analysis, we used the scale as a whole; by calculating Cronbach's alpha coefficient, we concluded the existence of very high reliability (Cronbach's alpha = .946). By formulating the items – using the present tense, we asked the students to reflect on perceived social support at the moment of the research.

Pandemic Emotional Impact Scale (PEIS). To measure the emotional impact of the pandemic on students, we used the PEIS (Ballou et al., 2020). The tool comprises 16 items; the scores for each item comprise 5 points from 1 (Not at all) to 5 (Extremely). High scores show a strong impact of the pandemic emotionally, while low scores indicate a minor impact. It is worth noting that Ballou et al. (2020) used a scale from 0 (Not at all) to 4 (Extremely), but because we used five levels of intensity, the numbering from 1 to 5 did not affect in any way the accuracy of the analysis. After conducting the reliability analysis, we have concluded that the scale has very high internal consistency (Cronbach's alpha = .944).

The academic and professional worries were measured using the Pandemic Academic Worries among University Students scale (PAWAUS), a recently developed tool (Apostol et al., 2021), in the context of translating all didactic and practical activities from an on-site, face-to-face setting to the online. Hence, low values indicate a high degree of worry, while high scores a low degree of worry. To introduce items targeting both academic and

professional worries, we have started from the assumption that SW students are more likely to feel the need to benefit from educational training interconnected between the didactic and professional training sides. At the moment of the research, they are "in the middle of forming their professional identity in the academic context, marked in the last two years by the Covid-19 pandemic." (Apostol et al., 2021, p. 154). Furthermore, this scale targets how the students anticipated the influence of the adaptations and transformations incurred by the didactic activities in a pandemic context on their academic and professional path in the near future. Not least, we point out that the internal consistency score is high (Cronbach's alpha = .841).

Preliminary analysis

After using the T-tests, we did not identify among the population studied significant differences concerning satisfaction with life, general perceived social support and academic worries in a pandemic context by gender, education level, and living area, $ts(327) < 1.86$, all $ps > 0.06$. At the same time, we have not found significant differences concerning the emotional impact of the pandemic by gender and area of residence, $ts(327) < 1.49$, all $ps > 0.13$. However, the T-test indicated a significant difference concerning the emotional impact of the pandemic by academic cycle, $t(327) = 3.26$, $p = 0.001$, in the sense that among BSW students, the negative emotional impact of the pandemic was perceived more acutely ($M = 2.88$, $SD = 0.91$), compared to MSW students ($M = 2.47$, $SD = 0.96$).

The One-Way ANOVA test showed no significant differences concerning satisfaction with life, general perceived social support, the emotional impact of the pandemic and academic worries in a pandemic context by academic achievement in the previous semester prior to the study conducted, $Fs(4, 324) < 1.86$, all $ps > 0.11$. We did not identify differences concerning perceived social support, by students' residential status, in the year preceding the research, $F(3, 325) = 1.30$, $p = 0.27$. There are significant differences by the residential status of the population studied related to satisfaction with life, $F(3, 325) = 3.65$, $p = 0.013$, the emotional impact of the pandemic, $F(3, 325) = 3.73$, $p = 0.012$, as well as pandemic worries, $F(3, 325) = 2.95$, $p = 0.033$. Hence, following post hoc analysis, by applying the Games-Howell test, we identified the following aspects: students who lived in a rent-based system reported lower levels of satisfaction with life ($M = 3.99$, $SD = 1.30$) compared to students who lived with their family ($M = 4.55$, $SD = 1.40$); students who lived in their residence (excluding family, dorm, rent-based) perceived a lower emotional impact of the pandemic (M

= 2.34, *SD* = 0.84) compared to their peers who lived with their family (*M* = 2.79, *SD* = 0.92) or in a rent-based system (*M* = 2.96, *SD* = 0.93); subjects who reported having lived in student dorms reported higher academic worries levels (*M* = 1.74, *SD* = 0.67), compared to students who lived with their family (*M* = 2.33, *SD* = 0.99), in a rent-based system (*M* = 2.36, *SD* = 1.12) or in their residence (*M* = 2.58, *SD* = 1.02).

Furthermore, we identified a positive and significant correlation between the age of the participants and SWLS, $r = 0.172$, $p = 0.002$, and PAWAUS scale, $r = 0.222$, $p < 0.001$, respectively. Thus, as age increases, life satisfaction improves and academic worries in a pandemic context decrease. At the same time, another significant correlation, this time negative, is that between students' age and PEIS, $r = -0.211$, $p < 0.001$. Against this background, it may be stated that, as we get older, the emotional impact of the pandemic lowers. Not least, it is worth noting that we have failed to find a significant correlation between the age of the participants and MSPSS, $r = 0.098$, $p = 0.077$.

Correlations

In this part we have analysed the correlations between the scores of the four scales used in our study (Table 1)

Table 1. Correlations between satisfaction with life (SWLS), perceived social support (MSPSS), pandemic emotional impact (PEIS and academic worries (PAWAUS).

Scale	*M*	*SD*	1	2	3
(1) SWLS	4.47	1.38			
(2) MSPSS	5.39	1.36	0.59*		
(3) PEIS	2.80	0.94	-0.37*	-0.26*	
(4) PAWAUS	2.32	1.01	0.14**	0.19*	-0.29*

Notes. * $p < 0.001$; ** $p = 0.01$
Authors' work

Findings show that students who benefitted from higher social support experienced significantly higher satisfaction with life ($r = 0.59$, $p < 0.001$), thus less emotionally impacted by the pandemic ($r = -0.26$, $p < 0.001$) and scoring lower levels of academic worries in the pandemic context ($r = 0.19$, $p < 0.001$). Furthermore, the subjects who reported a high degree of satisfaction with life did not perceive a high negative impact of the pandemic emotionally ($r = -0.37$, $p < 0.001$), while academic worries in a pandemic context scored relatively low ($r = 0.14$, $p = 0.01$). Furthermore, subjects who perceived a higher negative emotional impact generated by the Covid-19

pandemic manifested higher worries regarding the academic path (r = -0.29, $p < 0.001$).

Testing the role of pandemic emotional impact on academic and professional worries among social work students while controlling for satisfaction with life and perceived social support

First, we tested the predictive role of pandemic emotional impact and the associated controlling variables, satisfaction with life, perceived social support, age, level of education and living area. Results show that they significantly explain 14% of the variance of academic and professional worries (R^2 = .14, F (6, 322) = 8.29, $p < .001$; (see all direct effects in Figure 2).

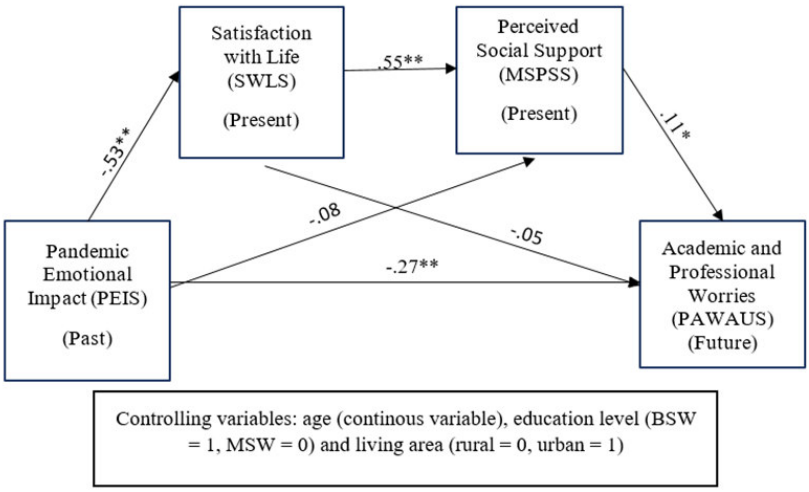


Figure 2. Mediation model through satisfaction with life as a subjective well-being part and social support for the relation pandemic emotional impact and academic and professional worries. (Authors' work)

Moreover, results show that the pandemic's emotional impact directly affects academic and professional worries (B = -.27, SE =.06 p < .001). Satisfaction with life has a direct insignificant effect (B = -.05, SE = .05 p = .27), and perceived social support has a significant direct effect (B = -.11, SE = .05 p = .02), indicating that high social support level determines a decrease in academic and professional worries. Age significantly and positively determines academic and professional worries (B = .03, SE = .01, p < .001). Level of education has a direct insignificant effect

(B = .14, SE = .15, p = .34). Living area determines the academic and professional worries (B = -.04, SE = .11, p < .001) insignificantly.

The total effect of the predictive model shows that all main variables significantly explain 12% of the academic and professional worries variance (R^2 = .12, F (4, 324) = 10.86, p < .001). Pandemic emotional impact significantly and directly increases academic and professional worries (B = -.29, SE = .06, p < .001), while age has a significant and positive effect (B = .03, SE = .01, p < .001), education level has an insignificant effect (B = .10, SE = .13, p = .48) and living area also has an insignificant effect (B = -.06, SE = .11, p = .60).

Finally, the indirect effects of the pandemic emotional impact while controlling for satisfaction with life are insignificant (B = .02, SE = .02, CI 95% [-.02; .06]. Results show a significant indirect effect of pandemic emotional impact while controlling for perceived social support (B = -.04, SE = .02, CI 95% [-.08; -.01]. An indirect insignificant effect of pandemic emotional impact is registered while controlling for both perceived social support and satisfaction with life (B = -.03, SE = .01, CI 95% [-.01; -.03], indicating a decrease in academic and professional worries.

Discussions

Students felt less connected to the academic community during online classes than during face-to-face classes (Puljak et al., 2020; Son et al., 2020; Balta et al., 2021). This conclusion, correlated with the findings of our analysis, points out the significance of direct contact with the academic setting. The primary goal of this study was to test the direct relationship between the pandemic emotional impact and academic and professional worries while controlling for perceived social support and satisfaction with life. Concordant with other studies, results indicate that these variables, along with age, level of education and living area, are significant factors for the variance of academic and professional worries and in managing general stressful factors (Aslan et al., 2020).

Although satisfaction with life does not significantly determine academic and professional worries, perceived social support has a significant direct effect. This is similar to what other studies have highlighted, with a general recommendation regarding mental health prevention. For example, Apgar and Cadmus (2022) previously emphasised the role of social support in coping with Covid-19 emotional impact and worries. Boda et al. (2020) also emphasise the relevance of social support in reducing the pandemic emotional impact and strengthening students' mental health. Mutual support throughout the learning process – including the socialisation process in both

the academic setting and the professional community of the social workers – learning by participation and reflection, the combination of theoretical and practical knowledge and the direct activity with the beneficiaries of the social services (essential for social work training) were all impaired during the pandemic. We are still to determine how it will influence, in the long run, the graduates' capacity to adjust to the requirements of the professional community.

Furthermore, such interests concerning the specifics of adapting the activity of social workers during the pandemic have multiplied in empirical investigations (Bela et al., 2021; Devlieghere & Roose, 2020). Moreover, indirect effects indicate a decrease in academic and professional worry when controlling for perceived social support alone and while controlling for both perceived social support and satisfaction with life. These results align with pandemic empirical results regarding the need for students to develop or strengthen healthy coping strategies (Baumann et al., 2021).

Regarding gender and educational variables, results generally indicate no significant differences, except for pandemic emotional impact, where BSW reported being more negatively affected compared to those in master studies. Furthermore, we observed a significant age pattern regarding satisfaction with life and academic and professional worries. Ageing is related to more satisfaction with life, lower academic and professional worries level, and lower pandemic emotional impact.

Regarding satisfaction with life, results indicate that living area is an essential factor to consider; students living in rent reported lower satisfaction levels than those staying with their families. Similarly, those living in student households reported higher academic worries than those living with their families or having their place. However, the sudden shift to online learning made even more vulnerable the category of students requiring support (youths from disadvantaged settings) from both their peers and teachers to adapt to the educational demands specific to student life. Thus, the physical distance from the secured familial environment determined a lower level of satisfaction with life among students. Lower perceived social support among students who chose to remain in the proximity of the academic space (living on the university campus even during the difficult period of restrictions) makes us state that universities should always be ready to provide support, mentoring, and socio-psychological counselling to overcome crisis similar to that generated by the Covid-19 pandemic. No other significant differences were reported regarding social support, satisfaction with life, emotional impact and academic and professional worries.

In addition, our findings show that students who were less emotionally impacted by the effects of Covid-19 had no worries about their capacity to continue or complete their studies or their employment perspectives. We mention that SW students were significantly affected by limited access to social and socio-medical institutions. This is concordant with previous works regarding the emotional effects of conditions during pandemic times (Baltà-Salvador et al., 2021). Furthermore, results also show that academic and professional concern is an even higher risk for mental health issues previously related to anxiety and depression for students (Beiter et al., 2015).

Hence, students were prevented from completing their practicum or volunteer activities, so necessary to acquire specific skills. It may factor in the increase in academic worries concerning the educational or professional path. We are yet to determine whether the significant limitation of face-to-face didactic activities – including two-year practicum and volunteer work – will erode the learning process for SW students, with potential negative consequences on the socio-professional integration of the graduates.

Limits of the study

Some limits of the study should be addressed in future research. First, most important, we acknowledge that our process model is tested using a cross-sectional design and not by using time-points in measuring main variables. This is difficult for our model because by testing mediation we infer causal effects. Still, our measures and items of measures are formulated by considering different time points – past, present, and future. Future studies should test this model using longitudinal designs or a log linear method. Furthermore, measures used are self-report questionnaires and this also limits the interpretation and generality of results due to desirability effects. Hence, the self-reported questionnaires constitute a limitation in the study due their subjective nature. Also, we determined that perceived social support and satisfaction with life mediate the direct effect of pandemic emotional impact over academic and professional worries, but also consider the fact that some of our controlling factors related to type of studies or their living conditions are related to our main outcome. We believe that some other factors could be addressed here in future studies for a clearer image of how conditions in the academic setting could influence worries. Finally, although our previous analysis indicate that academic and professional worries can be measures globally, we still believe that insight for each dimension could help analyse which factors could be improved (i.e., voluntary activities or meetings with professionals).

Author contributions

Authors equally contributed in writing this manuscript.

Disclosure statement

The authors report there are no competing interests to declare.

Acknowledgment

„Authors are thankful to Romanian Ministry of Research, Innovation and Digitization, within Program 1 – Development of the national RD system, Subprogram 1.2 – Institutional Performance – RDI excellence funding projects, Contract no.11PFE/30.12.2021, for financial support"

References

American Psychological Association [APA]. (2020). *Stress in America 2020: A National Mental Health Crisis*. https://www.apa.org/news/press/releases/stress/2020/report-october

Apgar, D., & Cadmus, T. (2022). Using mixed methods to assess the coping and self-regulation skills of undergraduate social work students impacted by COVID-19. *Clinical Social Work Journal*, *50*(1), 55-66. https://doi.org/10.1007/s10615-021-00790-3

Apostol, A. C., & Netedu, A. (2020). University students during pandemic. A case study on a Faculty of Philosophy and Social-Political Science undergraduates. *Scientific Annals of the "Alexandru Ioan Cuza" University, Iaşi. New Series Sociology and Social Work Section, 13*(1), 129- 142. https://doi.org/10.47743/asas-2020-1-600

Apostol, A. C., Irimescu, G., Rădoi, M., & Ioniţe, C. (2022). Education during the pandemic. Professional training of final-year social work and medical students. *Revista Românească pentru Educaţie Multidimensională*, *14* (1Sup1), 223-242. https://doi.org/10.18662/rrem/14.1Sup1/547

Apostol, A. C., Rădoi, M., Bostan, C., & Irimescu, G. (2021). Professional identity in a fluid pandemic context. Measuring academic worries of university students: initial validation of a scale. *Scientific Annals of the "Alexandru Ioan Cuza" University, Iaşi. New Series Sociology and Social Work Section*, *14*(2), 141-159. https://doi.org/10.47743/asas-2021-2-664

Arnett, J. J. (2007). Emerging adulthood: What is it, and what is it good for? *Child development perspectives*, *1*(2), 68-73. https://doi.org/10.1111/j.1750-8606.2007.00016.x

Aslan, I., Ochnik, D., & Çınar, O. (2020). Exploring perceived stress among students in Turkey during the Covid-19 pandemic. *International Journal of*

Environmental Research and Public Health, 17(23), 8961. https://doi.org/10.3390/ijerph17238961.

Ballou, S., Gray, S., & Palsson, O. S. (2020). Validation of the pandemic emotional impact scale. *Brain, behavior, & immunity-health*, *9*, 100161. https://doi.org/10.1016/j.bbih.2020.100161

Baltà-Salvador, R., Olmedo-Torre, N., Peña, M., & Renta-Davids, A. I. (2021). Academic and emotional effects of online learning during the COVID-19 pandemic on engineering students. *Education and information technologies*, *26*(6), 7407-7434. https://doi.org/10.1007/s10639-021-10593-1

Banks, S., Cai, T., De Jonge, E., Shears, J., Shum, M., Sobočan, A. M., ... & Weinberg, M. (2020). Practising ethically during COVID-19: Social work challenges and responses. *International Social Work*, *63*(5), 569-583. https://doi.org/10.1177/0020872820949614

Baumann, C., Rousseau, H., Tarquinio, C., Batt, M., Tarquinio, P., Lebreuilly, R., ... & Bourion-Bédès, S. (2021). Effect of the COVID-19 outbreak and lockdown on mental health among post-secondary students in the Grand Est region of France: results of the PIMS-CoV19 study. *Health and Quality of Life Outcomes*, *19*(1), 1-10. https://doi.org/10.1186/s12955-021-01903-9

Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S. (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal of affective disorders*, *173*, 90-96. https://doi.org/10.1016/j.jad.2014.10.054

Bela, B., Broka, A., Rajevska, F., & Rasnača, L. (2022). Transformative change in social service delivery and social work practice in Latvia during the COVID-19 pandemic. *European Journal of Social Work*, *25*(5), 816-828. https://doi.org/10.1080/13691457.2021.1977255

Boda, Z., Elmer, T., Vörös, A., & Stadtfeld, C. (2020). Short-term and long-term effects of a social network intervention on friendships among university students. *Scientific reports*, *10*(1), 1-12. https://doi.org/10.1038/s41598-020-59594-z

Boulton, C. A., Hughes, E., Kent, C., Smith, J. R., & Williams, H. T. (2019). Student engagement and wellbeing over time at a higher education institution. *Plos One*, *14*(11), e0225770. https://doi.org/10.1371/journal.pone.0225770

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*, 395(10227), 912-920. https://doi.org/10.1016/S0140-6736(20)30460-8

Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, *287*, 112934. https://doi.org/10.1016/j.psychres.2020.112934

Cohen, A. K., Hoyt, L. T., & Dull, B. (2020). A descriptive study of COVID-19–related experiences and perspectives of a national sample of college students in spring 2020. *Journal of Adolescent Health*, *67*(3), 369-375. https://doi.org/10.1016/j.jadohealth.2020.06.009

Crocetto, J. (2021). When field isn't field anymore: Innovating the undergraduate social work field experience in response to the COVID-19 pandemic. *International Social Work*, *64*(5), 742-744. https://doi.org/10.1177/00208728211031950

de Jonge, E., Kloppenburg, R. & Hendriks, P. (2020). The impact of the COVID-19 pandemic on social work education and practice in the Netherlands. *Social Work Education*, *39*(8), 1027-1036. https://doi.org/10.1080/02615479.2020.1823363

Decree No. 195 of 16 March 2020 on the institution of the state of emergency on the Romanian territory. Published in the OFFICIAL JOURNAL No. 212 of 16 March 2020. http://legislatie.just.ro/Public/DetaliiDocumentAfis/223831

Devlieghere, J., & Roose, R. (2020). Social work during the Covid-19 pandemic: staying close while maintaining social distancing. *European Journal of Social Work*, *23*(4), 541-542. https://doi.org/10.1080/13691457.2020.1794288

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment*, *49*(1), 71-75. https://doi.org/10.1207/s15327752jpa4901_13

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment*, *49*(1), 71-75. https://doi.org/10.1207/s15327752jpa4901_13

Doolan, K., Barada, V., Buric, I., Krolo, K., & Tonkovic, Ž. (2021). Student life during the COVID-19 pandemic lockdown: Europe-wide insights. *European Students' Union*. https://esu-online.org/publications/student-life-during-the-covid-19-pandemic-lockdown-europe-wide-insights/

Driessen, E., Beatty, A., Stokes, A., Wood, S., & Ballen, C. (2020). Learning principles of evolution during a crisis: An exploratory analysis of student barriers one week and one month into the COVID-19 pandemic. *Ecology and evolution*, *10*(22), 12431-12436. https://doi.org/10.1002/ece3.6741

Elmer, T., Mepham, K., & Stadtfeld, C. (2020). Students under lockdown: Comparisons of students' social networks and mental health before and during the COVID-19 crisis in Switzerland. *Plos one*, *15*(7), e0236337. https://doi.org/10.1371/journal.pone.0236337

Farris, S. G., Kibbey, M. M., Fedorenko, E. J., & DiBello, A. M. (2021). A qualitative study of COVID-19 distress in university students. *Emerging Adulthood*, *9*(5), 462-478. https://doi.org/10.1177/21676968211025128

Glowacz, F. & Schmits, E. (2020). Psychological distress during the COVID-19 lockdown: the young adults most at risk. *Psychiatry research*, 293, https://doi.org/10.1016/j.psychres.2020.113486.

Grubic, N., Badovinac, S., & Johri, A. M. (2020). Student mental health in the midst of the COVID-19 pandemic: A call for further research and immediate solutions. *International Journal of Social Psychiatry*, *66*(5), 517–518. https://doi.org/10.1177/0020764020925108

Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis second edition: A regression-based approach*. New York, NY: Ebook The Guilford Press.

Kindler, T., Schmid, T., & Graf, B. (2022). Studying in challenging times–a longitudinal study on social work students' situations during the Covid-19 pandemic. *European Journal of Social Work*, 1-12. https://doi.org/10.1080/13691457.2022.2124507

Kokkinos, C. M., Tsouloupas, C. N., & Voulgaridou, I. (2022). The effects of perceived psychological, educational, and financial impact of COVID-19 pandemic on Greek university students' satisfaction with life through Mental Health. *Journal of Affective Disorders*, *300*, 289-295. https://doi.org/10.1016/j.jad.2021.12.114

Lloyd-Jones, B. (2021). Developing competencies for emotional, instrumental, and informational student support during the COVID-19 pandemic: A human relations/human resource development approach. *Advances in Developing Human Resources*, *23*(1), 41–54. https://doi.org/10.1177/1523422320973287

Luan, L., Hong, J. C., Cao, M., Dong, Y., & Hou, X. (2020). Exploring the role of online EFL learners' perceived social support in their learning engagement: a structural equation model. *Interactive Learning Environments*, 1-12. https://doi.org/10.1080/10494820.2020.1855211

Mahmoud, J. S. R., Staten, R. T., Hall, L. A., & Lennie, T. A. (2012). The relationship among young adult college students' depression, anxiety, stress, demographics, life satisfaction, and coping styles. *Issues in mental*

health nursing, *33*(3), 149-156. https://doi.org/10.3109/01612840.2011.632708

Masika, R., & Jones, J. (2016). Building student belonging and engagement: Insights into higher education students' experiences of participating and learning together. *Teaching in higher education*, *21*(2), 138-150. https://doi.org/10.1080/13562517.2015.1122585

McFadden, P., Russ, E., Blakeman, P., Kirwin, G., Anand, J., Lähteinen, S., ... & Tham, P. (2020). COVID-19 impact on social work admissions and education in seven international universities. *Social Work Education*, *39*(8), 1154-1163. https://doi.org/10.1080/02615479.2020.1829582

Odriozola-González, P., Planchuelo-Gómez, Á., Irurtia, M. J., & de Luis-García, R. (2020). Psychological effects of the COVID-19 outbreak and lockdown among students and workers of a Spanish university. *Psychiatry Research*, 290, 113108. https://doi.org/10.1016/j.psychres.2020.113108

Papouli, E., Chatzifotiou, S., & Tsairidis, C. (2020). The use of digital technology at home during the COVID-19 outbreak: Views of social work students in Greece. *Social Work Education*, *39*(8), 1107-1115. https://doi.org/10.1080/02615479.2020.1807496

Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Psychological Assessment, 5*(2), 164–172. https://doi.org/10.1037/1040-3590.5.2.164

Puljak, L., Čivljak, M., Haramina, A., Mališa, S., Čavić, D., Klinec, D., Aranza, D., Mesarić, J., Skitarelić, N., Zoranić, S., Majstorović, D., Neuberg, M., Mikšić, Š, & Ivanišević, K. (2020). Attitudes and concerns of undergraduate university health sciences students in Croatia regarding complete switch to e-learning during COVID-19 pandemic: a survey. *BMC Medical Education*, 20, 416. https://doi.org/10.1186/s12909-020-02343-7

Rădoi, M., Apostol, A. C., Irimescu, G., Ioniţe, C. (2021). Perspectives and concerns of final-year medical and social work students regarding online education during the Covid-19 pandemic lockdown: A comparative study. *Social Work Review*, Issue 2, 35-47. http://www.swreview.ro/index.pl/numar-2-2021-ro

Radu, M. C., Schnakovszky, C., Herghelegiu, E., Ciubotariu, V. A., & Cristea, I. (2020). The impact of the COVID-19 pandemic on the quality of educational process: A student survey. International. *Journal of Environmental Research and Public Health*, *17*(21), 7770. https://doi.org/10.3390/ijerph17217770

Regehr, C., Glancy, D., & Pitts, A. (2013). Interventions to reduce stress in university students: a review and meta-analysis. *Journal of affective disorders*, *148*(1), 1–11. https://doi.org/10.1016/j.jad.2012.11.026

Rogowska, A. M., Kuśnierz, C., & Bokszczanin, A. (2020). Examining anxiety, life satisfaction, general health, stress and coping styles during COVID-19 pandemic in Polish sample of university students. *Psychology Research and Behavior Management*, *13*, 797-811. https://doi.org/10.2147/PRBM.S266511

Rogowska, A. M., Ochnik, D., Kuśnierz, C., Jakubiak, M., Schütz, A., Held, M. J., ... & Cuero-Acosta, Y. A. (2021). Satisfaction with life among university students from nine countries: Cross-national study during the first wave of COVID-19 pandemic. *BMC Public Health*, *21*(1), 1-19. https://doi.org/10.1186/s12889-021-12288-1

Salmela-Aro, K. (2017). Dark and bright sides of thriving–school burnout and engagement in the Finnish context. *European Journal of Developmental Psychology*, *14*(3), 337-349. https://doi.org/10.1080/17405629.2016.1207517

Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on college students' mental health in the United States: Interview survey study. *Journal of medical internet research*, *22*(9), e21279. https://doi.org/10.2196/21279

Steese, S., Dollette, M., Phillips, W., Hossfeld, E., Matthews, G., Taormina, G. (2006). Understanding girls' circle as an intervention on perceived social support, body image, self-efficacy, locus of control, and self-esteem. *Adolescence*, *41*(161), 55–74.

Tannert, S., & Gröschner, A. (2021). Joy of distance learning? How student self-efficacy and emotions relate to social support and school environment. *European Educational Research Journal*, *20*(4), 498–519. https://doi.org/10.1177/14749041211024784

Taylor, S., Landry, C. A., Paluszek, M. M., Fergus, T. A., McKay, D., & Asmundson, G. J. (2020a). COVID stress syndrome: Concept, structure, and correlates. *Depression and anxiety*, *37*(8), 706-714. https://doi.org/10.1002/da.23071

Versteeg, M., Kappe, R. F., & Knuiman, C. (2022). Predicting student engagement: The role of academic belonging, social integration, and resilience during COVID-19 emergency remote teaching. *Frontiers in Public Health*, *10*. https://doi.org/10.3389/fpubh.2022.849594

World Medical Association. (2013). World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects. *Jama*, *310*(20), 2191-2194. doi:10.1001/jama.2013.281053

World Health Organization [WHO]. (2020). Coronavirus disease (COVID-19) pandemic. https://www.who.int/emergencies/diseases/novel-coronavirus-2019

YoungMinds. (2020). Coronavirus: Impact on young people with mental health needs. https://youngminds.org.uk/media/3708/coronavirus-report_march2020.pdf.

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of personality assessment*, *52*(1), 30-41. https://doi.org/10.1207/s15327752jpa5201_2