Impact of online education on student emotional well-being

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Abstract

The shift to full online education has resulted in tremendous changes, such as creation of virtual classrooms, digital collaboration and distance learning. Students not only had to learn how to participate in virtual collaborative environments, but they are still adjusting to new methods of learning and using technology. Conducting online classes and exams at translation and interpreting studies is all the more challenging due to their interdisciplinary nature and a variety of generic and soft skills that suddenly need to be exercised online. Hence, after posing two research questions, it can be initially hypothesized that the digital transformation of education has an impact on students from an emotional point of view as well. Namely, it was visible that students dealt with the new arisen situation as well as with educational and social challenges in different ways and by expressing various emotional responses. This study aims to explore the ways in which tele-education affects student emotions and whether it influences their emotional well-being. For the purpose of this study, survey research was conducted among 91 students at undergraduate translation and interpreting studies in North Macedonia who were given the opportunity to explain how they personally dealt with educational novelties and challenges. The responses indicate whether students experience emotional consequences of (extended) online education. Based on the survey results, conclusions can be made about future practices that would benefit translation and interpreting students from an emotional point of view.

Keywords: online education, distance learning, emotional well-being, emotionally charged words, translation and interpreting studies

Introduction

The global Covid-19 pandemic marked the beginning of a new era in the field of education. It not only affected the methods of teaching and learning nowadays, but it also affected how students communicate with each other and the teachers during class and after class. The digital transformation of education contributed to the advent of technology in all spheres of education, which resulted in inevitable use of technology and digital communication on the one hand, but also in decreased physical contact and socialization among students on the other hand. Some changes were long anticipated and enthusiastically accepted by many members of the academic staff due to the desire to modernize and to improve the quality of teaching as well as in order to keep up with more advanced European universities (Sazdovska Pigulovska 2021a: 262). However, other novelties, such as minimized face-to-face interaction, were not eagerly accepted among students.

During the past two years, all discussions were focused on how online education affected the quality of education. Academic staff across the world made unprecedented efforts to organize conferences on this topic and to take part in scholarly debates and panel discussions on how to improve the quality of online education and student achievements. Students across the world were asked to evaluate teachers and their online teaching and examination methods with the purpose to assess their effectiveness and the level of technology used at their respective universities. However, students were rarely asked how they personally dealt with or felt about introduced changes and whether students experienced

emotional consequences from the shift to full online education. This creates a strong need to investigate how online education affects student emotional well-being, and not just the quality of education.

Subject of research and purpose of the paper

Much attention has been dedicated by researchers all over the world to the impact of the global Covid-19 pandemic on the academic field. Research conducted nowadays centers around students' learning effectiveness by focusing on aspects such as how students perceive their academic performance and satisfaction in e-learning environments (Kerzič et al. 2021), whereas some research studies have been dedicated to students' mental health and overall wellbeing (Lischer, Safi & Dickson 2021, Elmer, Mepham & Stadtfeld 2021). Although some of the research studies have focused on the impact of e-learning on student emotional well-being (Clabaugh, Duque, Fields 2021, Hassan et al. 2021), emotional aspects of online education remain peripheral issues. Moreover, what remains underresearched are emotional aspects of online education in the field of multidisciplinary studies, such as translation and interpreting education.

In fact, with the exception of one study showing tremendous impact of the pandemic on how translators and interprets work professionally and mentally (French Professional Association, 2020) and another study on the effect of emotions on translation performance (Kitanovska Kimovska & Cvetkoski 2021), no studies have focused on emotional aspects of online translation and interpreting education. This particular group of students underwent unprecedented changes by reinventing modes of translation and interpreting in order to adjust to the new reality of online environments so as to be able to pursue their education further. Hence, a need arises to explore how this particular group of students coped with the educational changes and novelties in the current pandemic context from an emotional point of view. This study aims to fill this gap.

The main goal of this paper is to discuss the concept of well-being and to examine contribute factors to well-being as well as whether online education affects students' emotional well-being. On the basis of data collected via online survey research involving Macedonian translation and interpreting students, the author argues that the e-learning environment has an impact on students' emotional well-being.

Definition of emotional well-being

Well-being is a multidimensional and broad concept. According to the Council of Europe, well-being includes mental and physical health, physical and emotional safety and a feeling of belonging, sense of purpose, achievement and success, whereas five major types of well-being can be distinguished: emotional well-being, physical well-being, social well-being, workplace well-being, and societal well-being. Emotional well-being is of particular interest to this study and can be defined as "the ability to be resilient, manage one's emotions and generate emotions that lead to good feelings" and it is often referred to as psychological well-being (Seligman 2011). Moreover, emotional well-being is closely linked with social well-being, which implies "the ability to communicate, develop meaningful relationships with others and create one's own emotional support network." 3

Some research findings suggest that students with higher levels of well-being tend to have better self-esteem, more satisfaction with their schools and life as well as healthier relationships with others (Park 2004). According to OECD research, students' well-being includes subjective, emotional and cognitive functioning (Trends Shaping Education 2018). Hence, it is worth to investigate the link

¹ Council of Europe website: https://www.coe.int/en/web/campaign-free-to-speak-safe-to-learn/improving-well-being-at-school.

² Ibid 1.

³ Ibid 1.

between education and emotional well-being in an academic context. For that purpose, previous research in this field has been taken into account.

To begin with, numerous previous studies have been conducted on the impact of Covid-19 or online education on student mental health. Lischer, Safi and Dickson (2021) investigated the mental health status of 557 undergraduate students at Lucerne University of Applied Sciences and Arts in Switzerland during the 2020 pandemic, whereas their online survey results show symptoms of anxiety or mild anxiety that are caused by various factors, especially challenges of distance teaching which created stress for the surveyed students. A similar study also conducted in Switzerland is that of Elmer, Mepham and Stadtfeld (2020).

Kerzič and others (2021) analyzed academic student satisfaction and performance in the e-learning environment during Covid-19 among 10,092 higher education students in 10 different countries across 4 continents and conclude that e-learning was primarily perceived through the quality of administrative, technical and learning assistance, teachers' active role during online education and IT infrastructure, but less through online interactions. Clabaugh, Duque and Fields (2021), on the other hand, investigated academic stress and emotional well-being of 295 US college students during Covid-19 and conclude that about one-third of those surveyed reported difficulty coping with Covid-19 and elevated levels of emotional stress, with 30% of students' even planning to reduce or withdraw from classes if they continued to be conducted online.

Dubey and others (2020) conducted an international study on the psychosocial impact of Covid-19 and emphasize that anxiety among Chinese college students during the Covid-19 outbreak results from disrupted daily life schedules as well as disrupted academic activities by lockdowns. Moreover, Zapata-Ospina and others (2021) conducted an overall study of mental health interventions for college and university students and conclude that universities must offer specifically-structured mental health programs for students that should be "multidisciplinary, inclusive, dynamic and culturally sensitive", such as "digital psychoeducation" for students facing Covid-related mental issues.

By contrast, the study presented in this paper discusses the impact of online translation and interpreting education during the global pandemic on student emotional well-being. For the purpose of this study, the emotional aspects of online translation and interpreting education were analyzed on the basis of the PERMA model (Seligman 2011). It is a widely used approach to assessing well-being in students and a number of studies have been conducted thus far by applying the PERMA framework (Kern et al. 2015, Lambert & Pasha-Zaidi 2016, Umucu et al. 2020). Namely, the PERMA theory of psychological well-being is founded on the following five building blocks:

- positive emotion (traditional conceptions of happiness tend to focus on positive emotions from past and present experiences and positive emotions about the future);
- engagement (it is an experience involving full deployment of someone's skills, strengths and attention for a challenging task);
- relationships (connections to others are fundamental to well-being and central for adaptation, whereas they are enabled by one's capacity for love, compassion, kindness, empathy, teamwork, cooperation, etc.);
- meaning (a sense of meaning and purpose can be derived from a feeling of belonging); and
- accomplishments (means pursuing achievement, competence, success and mastery).⁴

⁴ The definitions of the five building blocks under the PERMA model are taken over from the University of Pennsylvania website: https://ppc.sas.upenn.edu/learn-more/perma-theory-well-being-and-perma-workshops.

Research questions and hypotheses

After discussing the concept of well-being and establishing a link between education and emotional well-being in an academic context, the following two research questions are discussed in this paper:

R1: Which are the main risk factors to translation and interpreting students' well-being?

R2: Does the digital transformation of education have an impact on students from an emotional point of view?

The two research questions lead to two hypotheses being proposed. Translation and interpreting education relies on experiential education as a non-traditional method where the focus is also put on how students work and cooperate, and not only on how they translate or interpret (Sazdovska Pigulovska 2021b: 56). Based on this fact, the following first hypothesis can be made in relation to the first research question:

H1: Risk factors to translation and interpreting students' well-being extend beyond environmental factors, and include emotional factors as well.

The first hypothesis is made bearing in mind previous research on this topic. According to OECD research, risk factors to well-being include both environmental factors (learning environments) and individual factors (personal experiences) (Trends Shaping Education 2018). Choi determined three factors that affect student well-being including the learning environment, the level of student engagement and the connectedness or relationships with peers and teachers (Choi 2018).

In relation to the second research question, the author makes the following second hypothesis:

H2: Online education affects translation and interpreting students' emotional well-being.

This second hypothesis is based on the author's initial observations showing that many students at the author's institution struggled with the new arisen situation and novelties when education turned online at the beginning of 2020, which resulted in absent students from online classes, visibly diminished interaction of those present, switched off cameras, missed assignments, etc. Hence, the changed behavior of students was also visible through a myriad of emotional responses expressed during online classes, such as low confidence, insecurity and hesitation during class, lethargy and demotivation, absence of empathy as well as under-engagement expressed through absence of interest in teamwork and cooperation, etc.

Methodology

To test the previous hypotheses, the author conducted a survey in order to investigate students' personal opinion, contributing factors and emotional experiences with online translation and interpreting education through an online questionnaire. The survey was conducted at the Department of Translation and Interpreting within the Faculty of Philology in Skopje, North Macedonia in the 2020/2021 academic year and involved a representative sample of undergraduate translation and interpreting students who completed three semesters of online classes. The online questionnaire was voluntarily and anonymously answered by a total of 91 undergraduate students out of a targeted sample size of 100 respondents. The respondents are regular students enrolled in second, third or fourth academic year, with an age range between 20-24 years.

The online questionnaire was distributed via Google forms, as a user-friendly tool for less regular attendees as well as via the Microsoft Teams platform for regular attendees of different online courses taught in second, third or fourth academic year. The questions were comprehensive as they did not focus on specific academic courses, but on the overall online education experience, which extended over a period of three full semesters.

Survey design

The author uses qualitative survey design to assess students' personal experiences and emotional aspects of online translation and interpreting education, considering that it is difficult to quantify emotional aspects and experiences. The online survey questionnaire thus mainly relies on open-ended questions allowing the respondents to elaborate on their experiences and opinions on one side, and which reveal key information such as contributing factors on the other side. In addition to this, the online questionnaire also contains two closed-ended question and three nominal questions, which integrate open-ended components for explanations. Eight questions address issues related to the topic of interest and owing to their conciseness the online questionnaire yielded a high response rate. In order to obtain pertinent responses, this cross-sectional survey study was administered only one time, after the respondents completed three online semesters.

A dichotomous yes or no question was used to open the questionnaire in order to segment the respondents' personal experiences into positive or negative experiences, and help understand whether students regard online education as a positive or negative experience. This question was followed by open-ended questions asking respondents to elaborate further on reasons for their personal experiences, which led to conclusions on contributing factors to student well-being. Three nominal questions with multiple answer choices were used for systematic organization of emotions experienced, so students were given some initial ideas as they could understand various sentiments as emotions (for example, exhausted) and thus provide information that is not pertinent for analysis. In order to avoid false conclusions or confirmation bias by limiting the categories of emotions that were experienced by students, an open-ended component was added to the nominal questions (categorized as "other"), which allowed the respondents freedom to describe other emotions they experienced personally.

The emotional aspects of online education were analyzed on the basis of the five building blocks under the PERMA model (Seligman, 2011), which is a widely used testing technique for assessing well-being in students. Hence, for the purpose of assessing students' emotional well-being and risk factors during online translation and interpreting education, the online questionnaire was constructed by focusing on the following issues:

- whether surveyed students experienced online translation or interpreting education in the current pandemic context as a positive or negative experience (question 1) and which are the main contributing factors for their personal experiences with the new e-learning environment (question 2);
- possibility for establishing student-student and student-teacher relationships and their quality (question 3);
- whether students experienced a feeling of belonging to the educational institution or to peer groups, and thus whether they felt a need for psychological support (question 4);
- whether students achieved accomplishments in the new educational model, and thus whether they prefer to continue with that model in the future (question 5); and
- whether students were sufficiently engaged during online education and which specific emotions they experienced in that process (questions 6, 7 and 8).

Data analysis

For the purpose of analyzing the data collected through an online questionnaire, the author applies a qualitative data analysis. In particular, thematic iterative analysis was conducted as a method of analyzing qualitative data, which enables qualitative insight related to the two research questions posed in this paper. Namely, the open-ended questions gave the respondents freedom for autonomous explanations of their personal experiences as well as opinions, which revealed students' needs and preferences that were previously unknown to the author. This also provides insight into areas for improvement that were previously disregarded and which could improve student experience with online

education. The dominance of open-ended questions was also aimed at avoiding bias, considering that responses on emotional aspects should not be limited with predetermined choices.

Considering that this study involves initial and small-scale research, thematic analysis as a qualitative research method enabled the author to identify patterns among students' emotional experiences and responses relating to online translation and interpreting education, such as positive or negative emotion from personal experiences, engagement, relationships, meaning and accomplishment as well as contributing factors. It also helps identify weaknesses of current online education that could be considered risk factor to students' emotional well-being. It is also possible to use the results from the thematic analysis for determining future trends in online translation and interpreting education.

The results confirming the first hypothesis (on the risk factors to students' well-being) were obtained by identifying patterns among students on the basis of thematic analysis. Namely, the collected data was analyzed by themes, whereby 6 preliminary codes were generated by the author, which will be mentioned bellow. The preliminary codes assigned to data collected were used to identify common themes (patterns) as well as to define and name different themes that enable deeper insight into contributing positive or negative factors to students' well-being.

Additionally, after generating clear names for each theme, they were visually presented on figures, some of which were assigned percentage values to demonstrate which aspects or factors prevail. The online survey results are thus presented on eight figures, which serve as basis for making observations and conclusions, which subsequently lead to a concluding discussion at the end of this paper. Results presented on the figures can also show trends in online translation and interpreting education as well as students' needs and expectations from online education based on the occurrence of their responses.

The results concerning the second hypothesis (on the impact of online education on students' emotional well-being) were obtained by searching for emotional responses among explanations for students' personal experience with online education, classified into two groups as emotionally charged positive or negative words or emotionally neutral words. In particular, the sentiment analysis technique allows understanding of the intentions and emotions of responses, which can be classified as positive, negative or neutral, and were used to determine overriding emotions among students.

Results from the online survey research

The online questionnaire was completed by 91 full-time translation and interpreting students from North Macedonian and it was aimed at investigating emotional aspects of online education in the current pandemic context and assessing students' emotional responses. Bearing in mind that one of the most important aspects for psychological well-being is positive emotion from past and present experiences and positive emotions about the future (Seligman 2011), the questionnaire was opened with a dichotomous yes or no question to determine students' personal experience with the new elearning environment and whether they perceive online education as a generally positive or negative experience. The aim was to segment the respondents' personal experiences into positive or negative, and their subsequent explanations on the reasons. 65.9% of total surveyed students personally consider online education a generally positive experience, compared to 34.1% who generally experience the new e-learning environment in a negative way, as presented on Figure 1.

⁵ Datapine website: https://www.datapine.com/blog/data-analysis-methods-and-techniques/.

 Generally positive experience Generally negative experience 34.1% 65.9%

Figure 1: Student personal experience with online education

The first question results show that the positive experience prevails, however this is a very general first conclusion that could be impressionist. Hence, to explain the reasons for this initial result that could reveal contributing factors, this dichotomous question was followed by an open-ended question allowing respondents to elaborate further on the reasons for their personal experiences by explaining in their own words why online education was a generally positive or negative experience for them personally. The responses were analyzed by conducting thematic analysis, which allows to analyze collected data by themes and to generate clear names for each theme.

Risk factors to translation and interpreting students' well-being

The inductive approach to thematic analysis allows for collected data to govern the themes of relevance to this particular survey. The initial codes served as grounds for mapping 6 common themes of relevance to students' positive or negative experience, which reveal contributing factors and are presented on Figures 2 and 3 bellow. Firstly, six preliminary codes were assigned by the author to data collected from the second question, as follows: easy access, collaboration, personal interest, accomplishments, time management and comfort zone, on the basis of which positive themes were mapped. The results from the second question reveal common patterns in students' positive experiences, as presented on Figure 2.

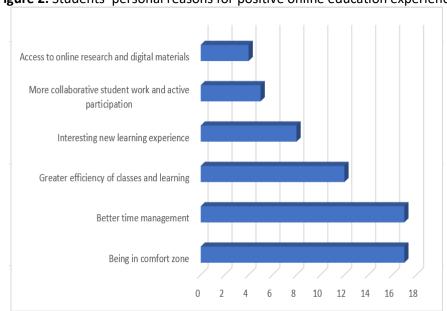


Figure 2: Students' personal reasons for positive online education experience

Figure 2 shows the main reasons for considering the new e-learning environment a positive experience: "being in one's comfort zone" and the possibility for "better time management" after turning online as seen through having more time for research and exam preparation as well as friends and family time. Less commonly specified reasons by students are considering tele-education "an interesting new learning experience" or as being "more efficient" than the traditional educational environment. Several students explained that technology offered "more opportunities for collaborative student work and active participation" especially for shy and introvert students, as well as that technology provided "easier access to online research and digital books and materials", which alleviated some of the stress of learning in the new e-learning environment (as explained by some students).

The themes presented on Figure 2 provide insight into contributing factors for a positive experience and reveal a pattern in students' opinion and personal experiences. Namely, the dominant response showing that most students "prefer to be in their own comfort zones" is an emotional factor because it reveals a possible feeling of insecurity among students. These could be emotional insecurities about the new arisen situation, their future profession as translators/interpreters, personal weaknesses, low self-confidence, low motivation, etc. Emotional factors are related to a person's emotions which induce certain behavior or emotional signs of stress. The analysis reveals other personal factors, which are related to personal growth and circumstances, such as "accomplishments" (greater efficiency of elearning, interesting new learning experience). Other contributing factors for a positive experience include environmental ones related to "engagement" (opportunity for collaborative student work and active participation, better time management).

Furthermore, five preliminary codes were assigned by the author to data collected from the second question, as follows: socialization, collaboration, accomplishments, motivation and technical issues, on the basis of which negative themes were mapped. On the other hand, the results from the second question also reveal common patterns in students' negative experiences, as presented on Figure 3.

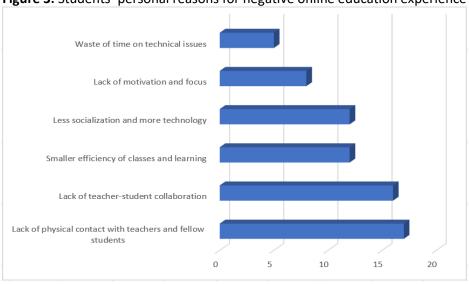


Figure 3: Students' personal reasons for negative online education experience

Figure 3 shows the main reasons for considering the new e-learning environment a negative experience, which include "social distancing", "lack of collaboration" and "less socialization with peers" as main contributing factors. Less commonly specified reasons by students were "smaller efficiency of online education" than the traditional educational environment and "increased use of technology". Motivation and focus are common contributing factors for some students who explained that they

struggled with "lack of motivation and focus" after shifting to online education or that technology implies "waste of time on technical issues", which triggered stress of learning in an online environment (as indicated by some students).

Subsequently, the common themes presented on Figure 3 provide insight into contributing factors for a negative experience and expose a pattern in students' attitudes and personal experiences. Namely, students dominantly indicate social factors for a negative experience with "connectedness" (lack of physical contact with teacher and peers) and "relationships" (less socialization with peers) as overriding factors, which reveal a possible feeling of isolation. The thematic analysis reveals that environmental factors also influenced a negative experience, such as "engagement" (lack of collaboration during and after online class) as well as personal factors related to "accomplishments" (smaller efficiency of elearning) and "motivation" (many of those surveyed struggled with diminished motivation or ability to focus or socialize online). To conclude, these preliminary results presented on Figure 2 and 3 lead to the conclusion that contributing factors for a positive or negative students' experience with the new elearning environment involve a combination of emotional, social and environmental factors.

The third question was open-ended and explored the possibility for establishing relationships during online education and the quality of student-student and student-teacher relationships. Relationships imply connections to others and are considered fundamental to well-being and central for adaptation, whereas they are enabled by one's capacity for love, compassion, kindness, empathy, teamwork, cooperation, etc. (Seligman 2011). Students gave long descriptive answers to the sixth question, which are difficult to quantify, but help detect two problematic aspects of online education: lack of empathy and lack of interdependency among students. Empathy implies awareness of and understanding how others feel (Bar-On 2006: 21). Some students explicated that "teachers lacked empathy" by not considering whether students had sufficient time to complete overwhelming assignments and low understanding when students faced technical problems. Others stated that "teachers did not fully collaborate with students" as they often disregarded student opinion on the online course and focused on covering course material often without detailed explanations, which made students feel "anxious", "insecure" or "scared". These aspects in turn created "exam-related fear" and "anxiety" among students as well as "uncertainty about their professional competencies as future translators and interpreters".

Nooijer, Schneider and Verstegen (2020) conclude that collaborative learning depends on course design, on the roles of teachers and students and requires interdependency. Interdependency implies student collaboration aimed at reaching a common goal, team process, facilitating autonomy, reflecting on collaboration, etc. (Nooijer, Schneider & Verstegen 2020: 1). Interdependency contributes to relatedness because it encourages interaction and provides an opportunity to connect with others (Martin, Kelly & Terry 2018 in Nooijer, Schneider & Verstegen 2020). In this question, as high as 45 surveyed students explained that more focus was put on course material than on student-student interactions as well as teacher-student collaboration, which often resulted in students feeling "bored" or "unmotivated".

To conclude, student responses to the third question reveal two risk factors to establishing relationships in an online environment: empathy and interdependency among students. Empathy and interdependency can be considered interpersonal factors, whereas the experience of the surveyed students demonstrates that they have an impact on their well-being.

Another important form of relationship building is academic advising (Gordon-Starks, 2015). Hence, the fourth question focused on meaning, considering that a sense of meaning and purpose can be derived from a feeling of belonging (Seligman, 2011). In this dichotomous yes or no question students were asked whether they experienced a feeling of belonging to the educational institution or to their peer group, and thus whether they felt a need for psychological support concerning online education. Their responses are presented on Figure 4.

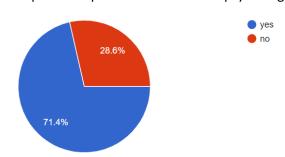


Figure 4: Student opinion on personal benefit from psychological support

As high as 71.4% of surveyed students responded that they felt a need for psychological support from teachers or even from fellow students concerning different aspects that could help them adjust to online education. Only 28.6% did not feel such a need. As for the reasons explaining such a strong need for psychological support, in the open-segment to this question the students explained that they would benefit from psychological support "during challenging times when students struggle with stress and different anxieties". Moreover, in the open-segment many students described that they felt "isolated" and "disconnected", with many describing emotional signs of stress, such as "fear of the unknown", "health-related fear" and "anxiety" during online education. These responses indicate that many students did not experience a feeling of belonging to the educational institution, nor to their peer group. Bearing in mind that students respond to novelties and deal with challenges in various (emotional) ways, numerous international studies indicate that psychological support contributes to positive mental health during online education (Zapata-Ospina et al. 2021, Hassan et al. 2022).

In conclusion, student responses reveal two risk factors to a experiencing a sense of belonging: "connectedness" (lack of physical contact with teacher and peers) and "relationships" (less socialization with peers, and low student-teacher collaboration). This demonstrates a combination of social, emotional and environmental factors. In fact, the results from Figure 4 indicate that students need a sense of community and belonging, especially in such isolated and uncertain times and would benefit from emotional support networks, which is exactly what is currently missing at many universities, including the author's institution. Students' sense of belonging is a key protective factor in times of social isolation, anxiety and depression during the Covid-19 pandemic (Gopalan, Linden-Carmichael & Lanza 2022). According to O'Brien (2020), the "sense of social connection plays a key role in coping with stress". The universities in some countries have started to offer informal support to students from the very beginning of the pandemic, especially during lockdown, such as wellness resources (online yoga or meditation), entertainment (online karaoke, games, etc.) to make up for not being physically connected with peers, especially for first year students who have never attended traditional classes.

At the author's institution, an initial attempt was made to offer psycho-social support to both teachers and students through a pilot project entitled "Psychosocial support for teachers and students at the Faculty of Philology during the global pandemic". In additions to 15 teachers and interested students, a clinical psychologist was also included in the project to aid with self-care and student care, while at the same time promoting the quality of both personal and professional life during the Covid-19 crisis. A series of 9 online workshops were held, whereas the project activities, results and overall project results related to providing self-care and student support are available online, with special

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⁶ University of California website https://thebottomline.as.ucsb.edu/2020/05/st-1-the-psychological-effects-of-covid-19-on-students.

emphasis on mental health.⁷ This specific experience demonstrated that support can come from external professionals, teachers as well as peers. Hence, the project is currently in second phase.

The fifth question explores whether students achieved accomplishments in the new educational model and thus whether they prefer to continue with that model in the future. Accomplishments means pursuing achievement, competence, success and mastery (Seligman 2011). Only 11% replied that they preferred online education to continue in the future, whereas 40.7% replied that they preferred traditional education with attending lectures physically. However, almost half of the respondents (48.4%) chose blended learning as a preferred educational form, which is a combination of physically attending lectures and online classes. Student responses are presented on Figure 5.

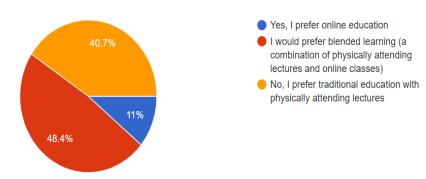


Figure 5: Student preference for future learning environment

The results show that since many students were aware that online education has both opportunities and limitations, they prefer to get the best of both worlds, which is blended learning through physical presence coupled with the advantages of technology and online work. As high as 40.7% said that they did not achieve sufficient accomplishments in the e-learning environment, which is a personal factor related to personal achievements. This means that if online education continues to be conducted to any extent (partial or full) in the future, it will require serious changes and improvements that extend beyond the learning environment and put students' well-being in the focus.

Figures 1 through 5 develop deeper insight into risk factors affecting translation and interpreting students' well-being. For the purpose of this study, contributing factors were divided in three groups: environmental factors related to the e-learning environment, personal factors related to personal growth and circumstances (that can be divided into intrapersonal and interpersonal), social factors related to various social aspects and connectedness, and emotional factors related to emotions and their effect on different behavior or emotional states such as stress, fear, anxiety, etc. It can be concluded that all of the previously described factors were encountered as reasons for students' experience with online education and that students' well-being is not only affected by the quality of online education. In fact, students' well-being is not only affected by environmental factors, such as organization of online classes, access to digital materials and e-learning platforms, but also by a number of other factors ranging from personal to social and emotional factors that contribute to dealing with emotional signs of stress, motivation, establishing peer groups, relationships, connectedness, etc. These are only initial results, so this hypothesis requires a larger-scale study with more in-depth investigation as to which of these risk factors prevail or more significantly affect students' well-being.

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⁷ Psychosocial Support Website https://coda.io/d/_d-BpfE3Oinz/_supjT#_luWLR.

Impact of online education on students' emotional well-being

Emotional well-being implies "the ability to be resilient, manage one's emotions and generate emotions that lead to good feelings". Numerous studies indicate that emotions play a significant role in psychological well-being of students, thus directly affecting all aspects of their academic lives (Health, 2016), whereas emotion management and regulation positively contribute to academic performance (Fuente 2021 in Hassan et al. 2021). Emotions are psychological states with important social and evolutionary adaptive functions (Ekman et al. 1972, Izard 1977) and influence decision-making, creativity, teamwork, negotiation, leadership and job performance (Barsade & Gipson 2007).

Positive emotions (for example, enjoyment and interest) are associated with students' attention, concentration, engagement and persistence in learning activities, which positively correlate with academic achievements (Eccles 2005, Moeller at all. 2020, Schiefele 1996 in Zuniga et al. 2021). Negative emotions (for example, boredom, burnout and anxiety) are known to diminish cognitive resources thus negatively affecting performance and academic achievements (Madigan & Curran 2020, Moeller at all. 2020, Samuel & Burger 2019 in Zuniga et al. 2021).

From sixth through eight question the respondents were asked to describe which emotions they experienced in the new e-learning environment by choosing one or several pre-determined options. These nominal questions also include an open-ended component categorized as "other", which allowed respondents freedom to describe other emotions they experienced. Obtained responses from the sixth question on students' emotions during online classes mainly ranged between "monotony and demotivation" (31%) as a dominant feeling among one student group and "safe" to be in one's comfort zone (27%) as a dominant feeling among another student group. Some students experienced a feeling of "insecurity and uncertainty" (11%) during online classes and/or "fear" (7%), while others indicated "motivation and enthusiasm" (8%) and/or "creativity and desire to interact" with the students and teacher (6%). Only 10% of respondents replied indifferently of having the "same feeling as being physically present in the classroom". Student responses on the sixth question are presented in Figure 6.

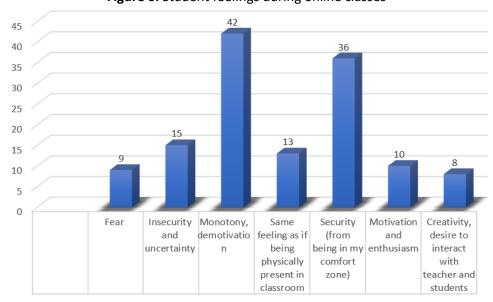


Figure 6: Student feelings during online classes

⁸ https://www.coe.int/en/web/campaign-free-to-speak-safe-to-learn/improving-well-being-at-school.

Based on the responses in Figure 6, a conclusion can be made that the dominant feeling of monotony and demotivation results from a sedentary lifestyle involving countless hours in front of their computer screens as well as from under-engagement during and after class, which also leads to lack of focus and enthusiasm. These occurrences were experienced as a source of "stress and anxiety" as explained by respondents in the open-ended segment, and had a negative impact on their emotional well-being, whereas for some students it even impacted their physical well-being. Furthermore, the fact that most respondents explained that they felt in their comfort zone to work from home demonstrates that students need a sense of stability and that many experience emotional insecurities about the new arisen situation, their future profession as translators/interpreters, personal weaknesses, low self-confidence, low motivation, etc. Some students are already aware that Covid-19 has had a negative impact on the global demand for the translator and interpreter profession.

The results in Figure 6 reveal a variety of emotions experienced by respondents ranging from positive emotions (safe, motivated, enthusiastic, creative) to negative emotions (bored, demotivated, insecure, scared, stressed, anxious). These psychological states experienced by students could explain diminished creativity and teamwork during online education (in line with the findings of Barsade & Gipson 2007) as well as diminished students' attention, concentration and engagement (in line with the findings of Eccles 2005, Moeller at all. 2020, Schiefele 1996 in Zuniga et al. 2021). Hence, the results in Figure 6 do not only reveal an insufficient level of student "engagement" after translation and interpreting education turned fully online, but also show that such psychological states have an impact on students' emotional well-being.

Additionally, when asked how students felt when giving online presentations or participated in online discussions, as high as 30% replied of having the "same feeling as being physically present in the classroom", whereas 18% experienced "insecurity and uncertainty". Some also faced "fear" (11%) and/or "monotony and demotivation" (11%), while others reported "creativity" during online presentations and discussion and "desire to interact" with the students and teacher (12%) and/or a feeling of "security" (10%) as well as "motivation and enthusiasm" (8%). Their responses are presented on Figure 7.

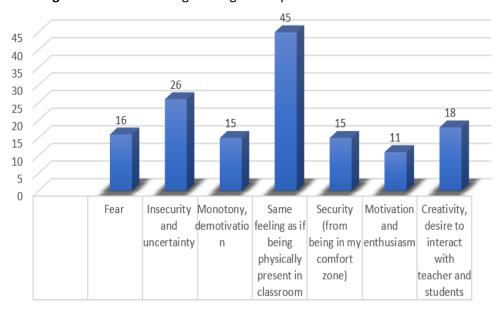


Figure 7: Student feelings during online presentations and discussions

Most respondents (30%) reported an indifferent feeling of whether presentations and discussion were online or given with physical presence in the classroom. However, more emotional signs were reported when students were asked how they felt during online exams in the past year as presented on Figure 8. Respondents mainly experienced "insecurity and uncertainty" during online exams (22.9%) as a dominant feeling in one student group, followed by "fear" (22.1%) and "security when taking exams from home" (22.1%). Certain students also faced "monotony and demotivation" to take online exams (11.4%), while others reported "motivation and enthusiasm" (4.7%) and/or "creativity and desire to interact" with the students and teacher (1.5%). Only 15.3% gave indifferent responses of not being affected by whether taking exams physically or online. Some respondents in the open-ended segment indicated experiencing "stress and anxiety" even during online exams. Their responses are presented on Figure 8.

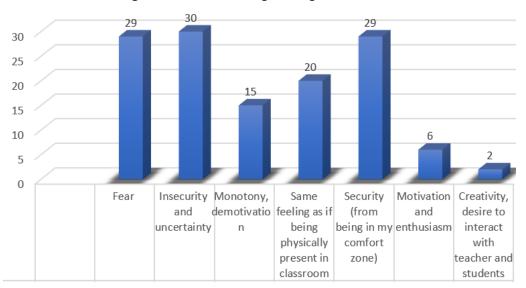


Figure 8: Student feelings during online exams

By comparing results in Figures 7 and 8 it can be concluded that students are more affected by online exams and not very affected by online presentations or discussions. Several negative feelings were associated with online exams, such as fear and insecurity, with many admitting that they prefer to take exams from their homes (or comfort zones). This particularly indicates that online exams are a source of anxiety and low self-confidence and that teachers must address this issue in order to increase student motivation and self-confidence during online examination.

The results in Figures 6, 7 and 8 confirm that students exhibit emotional signs of stress, such as fear, anxiety, demotivation and low self-confidence. Stress is considered "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Folkman & Lazarus 1984 in Thandevaraj; Gani & Nasir 2021). Fear is the most common feelings among surveyed students and it is an emotional response to stress or uncertainty. In the open-ended segment, fear was often associated with anxiety which is a psychological and physical response to treat a self-concept characterized by subjective, consciously perceived feeling of tension (Spielberger 1983). Considering that emotions play a significant role in psychological well-being of students (Health 2016), such psychological states of fear and anxiety experienced by surveyed students during online education have a great impact on students' emotional

well-being. Namely, fear and anxiety affect mind and pose physical and psychological threats (Cassady 2001).

The responses presented in Figures 6, 7 and 8 show that many students experienced strong emotions, some of which are negative emotional responses. Students often used emotionally charged words in the open-ended questions or segments in order to describe their feelings. Students used more words describing negative emotion: demotivated, discouraged, uncomfortable, (over)burdened, scared, anxious, confused, isolated, unemphatic, exhausted, upset, unenthusiastic, drained, frustrated, uncompassionate, stressed, unsafe, tired, bored, uninterested, etc. and less words to describe positive emotion: motivated, encouraged, comfortable, safe, creative, focused, emphatic, enthusiastic, compassionate, relaxed, interested, etc. A much smaller percent of surveyed students used emotionally neutral words to explain their emotions experienced: positive, negative, indifferent, involved, uninvolved and similar words.

The myriad of emotional responses provided by students as well as the emotional signs of stress that were experienced by online students in the new e-learning environment confirm that the digital transformation of education has an impact on students' emotional well-being. Bearing in mind these results as well as the findings presented by Eccles (2005), Moeller at all. (2020) and Schiefele (1996), if positive emotions are experienced during online education, it is reasonable to expect improvement in students' attention, concentration and engagement. The transition to online education due to Covid-19 did not only have educational implications evident through new ways of learning, digital collaboration and materials, etc. It also had considerable emotional implications for students, such as, increased stress, personal insecurity, demotivation and lack of enthusiasm as well as emotional signs of stress, such as anxiety.

Discussion

This paper aims to emphasize the importance of emotional well-being in order for students to achieve a positive experience in the educational process. It can be concluded that online education, which is likely to continue in 2022, must be taken to a different level. Informal skills and competencies, which are of key importance for a future career in translation and interpreting, are usually left out during online education because teachers mainly focus on organizational and digital issues and put student emotional well-being in the background. It is evident that teacher support is need on generic competencies, such as, emotional intelligence-related activities that could help online students focus on self-awareness, self-management, social awareness or adeptness in relationships, motivation and empathy as generic competences (Bar-On 2006: 21).

The main purpose of introducing emotional intelligence in the translation and interpreting classroom at the author's institution was to provide a unique chance for students to work on self-awareness, managing emotions (such as recognizing their emotions, reflecting on how their emotions affected their work and behavior, reflecting on what triggered their negative emotions and whether they managed to control negative emotions during difficult professional situations while working on simulated translation projects), social skills (team work, empathy in a professional environment), adeptness in relationships (conflict resolution with other peers, role playing) and motivation (exercised activities that build self-confidence and self-motivation) (Sazdovska-Pigulovska 2020: 271-278). Such activities help students use their personal experience (positive or negative) in order to understand the connection between students' emotions, thinking and behavior and raise awareness that students must not only focus on professional development, but on personal development as well. This can be achieved through activities that focus on developing a sense of self-worth and self-knowledge, which help students become aware of their strengths and weaknesses (Sazdovska-Pigulovska 2020: 275). For instance, Carrington and Whitten suggest three activities to developing self-knowledge which contributes to building confidence

and emotional maturity: (1) building self-knowledge, (2) noticing your achievement, and (3) best self-visualization (Carrington & Whitten 2006: 11-17). Self-worth and self-knowledge are only one domain under the broader area of emotional intelligence (Goleman 2001).

The main discussion needs to be centered around methods for improving future (online) translation and interpreting education by taking into account students' emotions even after the global pandemic is over and how to empower translation and interpreting students who are online learners in the digital era by taking into account their emotions. However, support should not only come from the teacher in the form of educational or digital support, but also from peers in the form of moral or social support. Teachers must first help students build self-awareness, which implies becoming aware of their own emotions, developing self-knowledge and a sense of self-worth in order to maintain or build a positive image of themselves during isolation. Furthermore, students especially need help with self-motivation and self-regulation, whereas the latter focuses on how to manage personal emotions.

The online survey results based on thematic analysis as a qualitative research method can be used for determining future trends in online translation and interpreting education. Namely, one definite conclusion is that students would benefit from integrating emotional education within translation and interpreting curricula. The link between emotional learning and the future of education deserves attention and needs to be further investigated. If online education continues to be conducted to any extent (partial or full) in the future, it will require serious changes and improvements that extend beyond the learning environment and put students' well-being in the focus. Namely, online education must be taken to a different level that extends beyond the familiar or scheduled framework, for instance by enhancing student support and by focusing on informal skills and competencies, such as emotional skills and competences. The only way to empower students who are online learners in the digital era is by taking into account their emotional well-being in addition to their cognitive well-being.

The online survey results demonstrate that in addition to environmental factors, students' well-being is affected by personal factors, social factors and emotional factors, which contribute to dealing with emotional signs of stress, motivation, establishing peer groups, relationships, connectedness, etc. These are only initial results, so this hypothesis requires a larger-scale study with more in-depth investigation as to which of these risk factors prevail or more significantly affect students' well-being. As for emotional well-being, it can be improved by building on social and emotional skills, such as emotional awareness, emotion management, self-confidence, empathy, self-evaluation, etc. which are usually left out of the curriculum. Namely, in the current pandemic context both teachers and students are primarily focused on dealing with technology-related challenges in order to keep up with educational and digital novelties.

To conclude, support should not only come in the form of educational or digital support, but should also be in the form of moral or social support from peers and in the form of psychological support from teachers and other professional that could help online students focus on self-awareness, self-management, social awareness or adeptness in relationships, motivation and empathy as generic emotional skills and competences that are of key importance during isolated online education as well as for their future profession as translators and interpreters.

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