SOCIAL AND EMOTIONAL LEARNING COMPETENCE OF TECHNICAL UNIVERSITY STUDENTS STUDYING ENGLISH DURING WARTIME

СОЦІАЛЬНО-ЕМОЦІЙНА НАВЧАЛЬНА КОМПЕТЕНТНІСТЬ СТУДЕНТІВ ТЕХНІЧНОГО УНІВЕРСИТЕТУ, ЯКІ ВИВЧАЮТЬ АНГЛІЙСЬКУ МОВУ У ВОЄННИЙ ЧАС

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Ukrainian technical university students faced new threats after the beginning of a full-scale war, which led to uncertainty in their lives, putting pressure on their future, let along their study. Being under stress leads to exhaustion or aggression, which creates a tense atmosphere inhibiting learning. Therefore, teachers of English should be aware of that and employ Social and Emotional Learning (SEL), aimed at withstanding global challenges, to support their students during wartime. The study revealed peculiarities of technical university bachelor students' SEL competence studying English during wartime regarding four dimensions: self-awareness, self-management, social awareness, and social management. The quantitative method was used to collect and analyse the results of the survey exploiting a 5-point Likert scale calculating the median (Mdn), and Inter-Quartile Range (IQR). Technical university students demonstrated a high level of self-awareness, agreeing on the importance of a positive attitude and their responsibility for their success in learning English. Regarding social awareness, the respondents were not sure that they could help each other. Nevertheless, they knew whom to ask for help, what resources to use, and were sure of their positive impact on group activities. Concerning self-management, the respondents indicated agreement with the prompt that they could solve problems, stay focused and find effective ways to achieve goals in learning English. The respondents demonstrated a low level of social management as they agreed only with one prompt about discussions with groupmates on learning English. Overall, the research revealed the discrepancy between self- and social awareness, self- and social management, which meant that it was easier for students to solve problems individually while studying English online for three years, during the Covid-19 quarantine and wartime, when opportunities for students to cooperate were limited. The results of the study would be helpful for teachers of English to anticipate potential problems and scaffold technical university students in achieving their learning goals.
Key words: *SEL, self-awareness, self-management, social awareness, social management, competence, wartime.*

З початком повномасштабної війни українські студенти технічних університетів зіткнулися з новими загрозами, що призвело до невизначеності не тільки у їхньому житті, їх майбутньому, але вплинуло і на навчання. Перебування в стані стресу призводить до виснаження

або агресії, що створює напружену атмосферу, яка перешкоджає навчанню. Тому викладачі англійської мови повинні це усвідомлювати та використовувати соціальне та емоційне навчання (SEL), спрямоване на протистояння глобальним викликам, щоб підтримати своїх студентів під час війни. Дослідження виявило особливості компетенції SEL студентів бакалаврів технічного університету при вивченні англійської мови під час війни за чотирма вимірами: самосвідомість, самоуправління, соціальна свідомість та соціальне управління. Кількісний метод був використаний для збору та аналізу результатів опитування з використанням 5-бальної шкали Лайкерта з обчисленням медіани (Mdn) і міжквартильного діапазону (IQR). Студенти технічного університету продемонстрували високий рівень самосвідомості, визначивши важливість позитивного настрою та відповідальності за успіх у вивченні англійської мови. Що стосується соціальної свідомості, то респонденти не були впевнені, що можуть допомогти один одному. Тим не менш, вони знали, до кого звертатися по допомогу, які ресурси використовувати, і були впевнені в їх позитивному впливі на командне навчання. Що стосується самоуправління, респонденти висловили згоду з тим, що вони можуть вирішувати проблеми, залишатися зосередженими та знаходити ефективні способи досягнення цілей у вивченні англійської мови. Респонденти продемонстрували низький рівень соціального управління, оскільки погодилися лише з одним ствердженням про дискусії з одногрупниками щодо вивчення англійської мови. Загалом дослідження виявило невідповідність між само- та соціальною свідомістю, само- та соціальним управлінням, що означало, що студентам було легше вирішувати проблеми індивідуально під час вивчення англійської мови онлайн протягом трьох років, під час карантину Covid-19 та воєнного часу, коли можливості співпраці студентів були обмежені. Результати дослідження будуть корисними для викладачів англійської мови, щоб запобігти виникненню проблем та допомогти студентам технічних університетів у досягненні їхніх навчальних цілей.
Ключові слова: *соціально-емоційне навчання (SEL), самосвідомість, самоуправління, соціальна свідомість, соціальне управління, компетентність, воєнний час.*

Introduction. Political instability, ecological issues, rapid changes in economics and international relations greatly affect the quality of education on a global scale. A sense of insecurity and fear strengthened by the media may be overwhelming for many students who experience uncertainty in real lives putting pressure on their future [12, p. 234]. Confined to their homes due to the Covid-19 for three years, deprived of everyday face-to-face communication with their groupmates, after the beginning of a

full-scale war Ukrainian students faced new threats never experienced before. There were so many choices for them to make, to stay in Ukraine or go abroad, to remain in Kyiv or move to their home-towns, and some had no home anymore, it was either destroyed or under occupation. Studying English during wartime could not be the same as before. Social and Emotional Learning (SEL) aims at withstanding challenges like pandemics, social and political conflicts [10, p. 8]. Unfortunately, such skills do not come naturally. Students need SEL in order to survive and thrive in a real and virtual world, which opens so many opportunities, but at the same time, endangers health and lives through illegal activities, bullying, and distortion of facts [12, p. 235].

Social and Emotional Learning combines behaviours, cognitions and emotions, and may be defined as an ability of a person to recognize and manage emotions, do problem-solving, and build relationships with others [12, p. 232]. SEL competence is a combination of four dimensions: self-awareness, self-management, social awareness, and social management, which are interrelated and cannot be investigated in isolation [3]. SEL and academic growth are interrelated, thus encouraging students to try new learning opportunities, take measures to meet their personal needs, guide them to establish relationships with others [12, p. 235]. During wartime SEL is related not only to academic success, but first of all to survival strategies which insure that the basic needs are met. Being under stress, students could be either exhausted and isolated, or irritable and aggressive, which could be harmful not only for one person, but for others as well as it creates a tense atmosphere which does not promote learning [11, p. 6–7]. Therefore, teachers of English should be aware of the emotional state of their students, anticipate possible problems and take measures to avoid them [10, p. 12–14].

The aim of the study is to reveal the peculiarities of technical university bachelor students' SEL competence studying English during wartime regarding four dimensions: self-awareness, self-management, social awareness, and social management, which will empower teachers of English to create a safe and engaging environment.

Methods. This study investigates SEL competence of technical university students who studied English online during the wartime. The research is based on the responses of 46 bachelor students of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" who completed the survey in May 2023, at the end of the academic year. We used the quantitative method to collect and analyse the results of the survey exploiting a 5-point Likert scale calculating the median (Mdn), and Inter-Quartile Range (IQR). The median measured central tendency, while Inter-Quartile Range measured spread of the responses.

Using "Social and emotional learning competence questionnaire for English learning" questionnaire, we adapted it to accommodate the needs of technical university students [2, p. 24–25]. The qualitative data was presented by feedback from students during the online lessons, everyday communication, their written comments. The participants were informed of the aims and the necessity of the research, they remained anonymous and provided their consent.

An online mode of learning English, as well as other subjects, at Igor Sikorsky Kyiv Polytechnic Institute was introduced in March 2020 due to Covid-19 restrictions. However, after a full-scale invasion on 22nd of February, 2022 it was decided to continue studying online as it was not safe to use university facilities in Kyiv, which was one of the main military targets. In addition, some teachers and students moved to safer places in Ukraine or abroad. Therefore, English lessons were conducted synchronously using Zoom or Google Meet according to the official schedule, and asynchronously with Google Forms, Classtime, and other tools.

Results and Discussion.

Context and participants. Bachelor students of different years of study completed the SEL survey (N=46), more than half of them were first- and second-year students (26% and 39% correspondingly), while the rest were third- and fourth-year students (35%) (See Picture 1).

Such proportion could be explained by the fact that first- and second-year students are usually more active when it comes to completing surveys, participating in extracurricular activities, etc.

We refer to "learning English" in this research, while the official name of the English course for the 1st and 2nd year of study is "English Language", which is General English, and for the 3rd and 4th year of study it is "English Language for Professional Purposes". There are 18 practical lessons of English per one semester with one lesson per week as a rule. At the end of the academic year fourth-year students have to take an English exam, others take an examination.
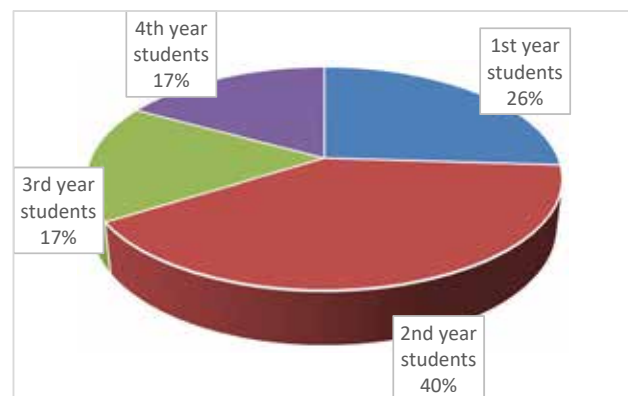
Picture 1. The year of study of technical university students

Considering gender, two-thirds of the respondents were males, which is self-explanatory for the technical university. Some students were forced to leave their homes in February 2022 because of the war. In fact, about 11 percent of the respondents were still abroad for the 2022–2023 academic year, as the university policy made it possible for students to continue studying from another country during wartime in Ukraine.

Dimension 1. Self-awareness. Self-awareness is the ability of students to recognize their feelings and emotions, assess strengths and weaknesses [7]. The respondents demonstrated a high level of self-awareness, agreeing on the importance of a positive attitude and the responsibility for their success in learning English, there were no negative responses (Mdn=1, IQR=1), (Table 1).

Most respondents (91%) believed that positive attitude toward learning English was essential (See Picture 2).

Even more respondents (94%) indicated that they accepted the responsibility for their academic success regarding the English course (See Picture 3).

Students' agreement was not that strong concerning other prompts on being aware of their feelings, performance, setting goals and ways of achieving them in learning English (Mdn=2, IQR=1). Thus, about twenty percent of technical university students were not sure which goals in learning English

they had, and even more, twenty-six percent, were not sure about their feelings toward learning English. One of possible ways to increase students' self-awareness is providing feedback. According to another research, the students' self-awareness of their strengths and weaknesses was possible because of effective feedback provided by teachers of English [2, p. 15]. Therefore, it is vitally important for teachers of English to raise students' competence by awakening their awareness of their positive and negative feelings, encouraging creative and supportive environment which fosters learning English effectively. Teachers should use constructive ways of scaffolding students in managing their emotions and behaviour explaining the connections between their emotional state and academic results in learning English [2, p. 18].

Dimension 2. Social awareness. Social awareness is related to recognition of students' relationships with others. The results of the survey showed that the respondents were mostly not sure if groupmates should help each other (Mdn=3, IQR=2), but they tended to agree with the prompt that group activities helped with learning English (Mdn=2, IQR=2), (Table 2).

In fact, nearly half of the respondents were not sure that helping each other could be effective in learning English (See Picture 4).

We suppose that the experience of studying English online for three years, when students were isolated
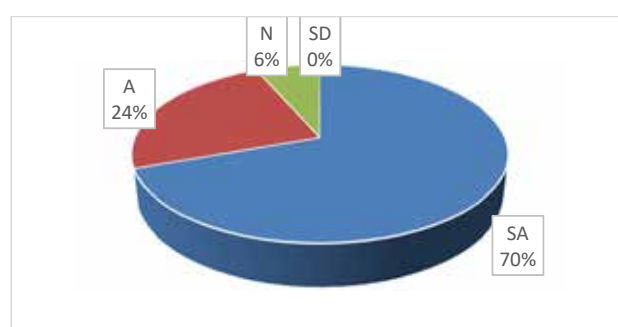
Table 1

Self-awareness of technical university students

Likert scale	SA	A	N	D	SD	Median	IQR
1. I am aware of my feelings when it comes to learning English	23.9	45.7	26.1	2.2	2.2	2	1
2. I know what I do well or not well in learning English	32.6	58.7	4.3	0	4.3	2	1
3. I know what I want to achieve in learning English and how to do that	26.1	50	19.6	2.2	2.2	2	1
4. I am aware of the importance of a positive attitude toward learning English	56.5	34.8	8.7	0	0	1	1
5. I am aware of my responsibility for my success in learning English	69.6	23.9	6.5	0	0	1	1
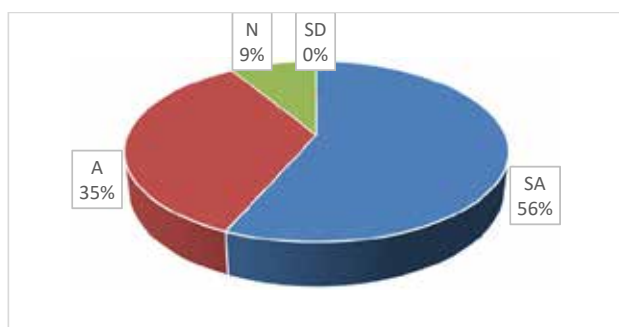
Picture 2. Technical university students' awareness of the importance of a positive attitude toward learning English

Picture 3. Technical university students' awareness of their responsibility for their success in learning English
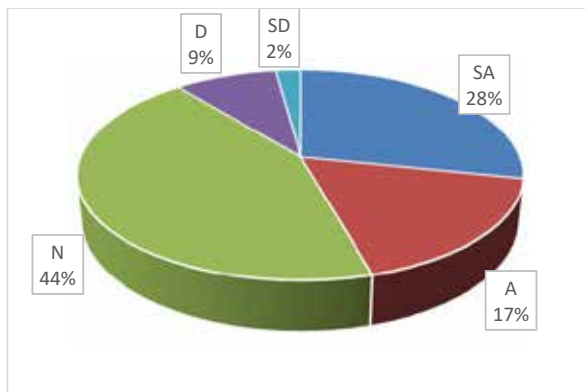
Table 2

Social awareness of technical university students

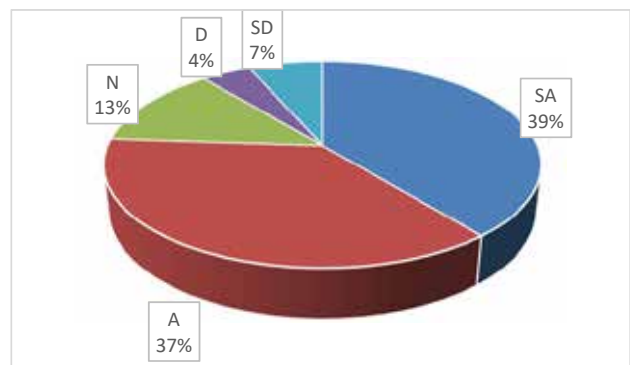| Likert scale	SA	A	N	D	SD	Median	IQR
1. I think that my groupmates should help each other in learning English.	28.3	17.4	43.5	8.7	2.2	3	2
2. I know whom I can ask for help with learning English.	37	39.1	15.2	2.2	6.5	2	1
3. I know what resources I can use in learning English.	39.1	37	19.6	4.3	0	2	1
4. I think that learning English can be better through group activities.	34.8	30.4	28.3	4.3	2.2	2	2
5. I am aware of the importance of my contribution in group activities learning English.	17.4	37	37	4.3	4.3	2	1

during the Covid-19 quarantine and wartime, could limit opportunities for students to ask for help and help others. However, the respondents also knew whom to ask for help, what resources to use in learning English, and they were sure of their positive impact on group activities (Mdn=2, IQR=1). As another study revealed, more than half of technical university students searched for the information on the Internet, others used the given context, and asked their teachers or peers [4, p. 111]. The results of another study demonstrated appreciation of technical university students (75%) who measured emotional support of their teachers as very high which meant that helping related not only to the lack of knowledge but also psychological [1, p. 54]. Another possible reason for high level of

social awareness could be cultural, characterized by a strong sense of belonging to the community, social support and resources [2, p. 15].

Dimension 3. Self-management. Self-management is similar to self-control, which is the basis for students' autonomy, and includes learners' awareness of environment setting, goal planning, time management, assistance seeking, task strategies and self-evaluation [9, p. 121]. According to the results of this research, the respondents agreed with each other on their ability to control their emotions in learning English (Mdn=2, IQR=1). Most respondents indicated agreement with the prompt that they could solve problems, find effective ways to learn English, stay focused, set and achieve goals in learning English (Mdn=2, IQR=2), (Table 3).

Picture 4. Technical university students' attitude to helping each other with learning English

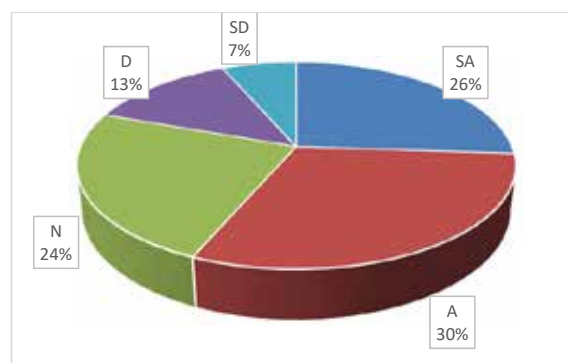**Picture 5. Technical university students' on their ability to control their emotions in learning English**

Table 3

Self-management of technical university students

Likert scale	SA	A	N	D	SD	Median	IQR
1. I can control my emotions in learning English	39.1	37	13	4.3	6.5	2	1
2. I can solve my problems in learning English	30.4	41.3	21.7	2.2	4.3	2	2
3. I can find effective ways to learn English	30.4	34.8	28.3	4.3	2.2	2	2
4. I can set and achieve goals in English learning	30.4	37	26.1	6.5	0	2	2
5. I can stay focused on learning English	26.1	34.8	28.3	4.3	6.5	2	2

In fact, seventy-six percent of the respondents were sure that they could keep their emotions under control (See Picture 5).

However, the results of another study showed that only 11 percent of technical university students were ready to discuss the issues related to the news during wartime in Ukraine, which meant that it was difficult for them to control their emotions talking about sensitive topics [1, p. 55]. Considering another topic for discussion, learning English, more than half of the respondents were positive about discussing it (56%), and a quarter did not mind (See Picture 6).

The results of another research showed that the most challenging for students during the martial law was time management (31%) [1, p. 57]. Indeed, it was difficult to plan daily activities when the day started with an air alert. Teachers had to ask students to go to bomb shelters. Instead of participating in the lesson, students thought about their own safety and spent some time, often hours, in various places like metro stations or underground parking lots. Moreover, if they missed more than half of the lesson, they had to complete assignments asynchronously and then got the points. Most students were positive or neutral about the choice of the learning mode (synchronous or asynchronous), while 23 percent expressed their dissatisfaction [1, p. 55]. At the same time, some students were not happy about another possible option, to go to university and attend lessons on the campus because of safety and financial reasons. The ability of technical university students to set learning goals was confirmed by another research, according to which speaking was the most important skill for them to develop (63%), the use of English (grammar and vocabulary) coming next (22%), which was explained by the necessity to communicate in English at work and prepare for exams [6, p. 110].

Dimension 4. Social management. Social management is related to the ability of students to successfully network, cooperate and collaborate with others. The present research revealed that the respondents agreed only with one prompt about discussions with groupmates on learning English (Mdn=2, IQR=2). They neither agreed not disagreed

Picture 6. Technical university students' on their participation in discussions with their groupmates on learning English

with the other prompts on engaging in collaboration with groupmates and learning more about successes of others (Mdn=2, IQR=2). The responses to the prompts on the necessity of suggestions from others and helping each other were more clustered than others (Mdn=2, IQR=1), which meant that they strongly agreed with each other (Table 3).

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Table 3

Social management of technical university students

Likert scale	SA	A	N	D	SD	Median	IQR
1. My groupmates and I help each other with learning English	19.6	23.9	43.5	8.7	4.3	3	1
2. My groupmates and I engage in collaborative activities in learning English	17.4	26.1	30.4	21.7	4.3	3	2
3. I participate in discussions on learning English with my groupmates	26.1	30.4	23.9	13	6.5	2	2
4. I need suggestions from other people about learning English	17.4	28.3	32.6	15.2	6.5	3	1
5. I'd like to learn more about my groupmates' successes in learning English	15.2	13	32.6	23.9	15.2	3	2

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Dimension 4. Social management. Social management is related to the ability of students to successfully network, cooperate and collaborate with others. The present research revealed that the respondents agreed only with one prompt about discussions with groupmates on learning English (Mdn=2, IQR=2). They neither agreed not disagreed with the other prompts on engaging in collaboration with groupmates and learning more about successes of others (Mdn=2, IQR=2). The responses to the prompts on the necessity of suggestions from others and helping each other were more clustered than others (Mdn=2, IQR=1), which meant that they strongly agreed with each other (Table 3).

According to another research, three-fourths of technical university students were positive about cooperative learning, in spite of the comments about difficulties communicating in Zoom breakout rooms caused by technical issues [4, p. 110]. Such common situations during online lessons are not only demotivating, but may lead to misunderstanding [8, p. 17]. Apparently, lack of face-to-face communication was the most serious drawback of learning English online during the Covid-19 quarantine by technical university students [4, p. 112]. At the same time technical university students practically never experienced technical problems studying English online before the beginning of the war and assessed their overall experience positively [5, p. 9]. A similar study confirmed that the most challenging for technical university students during the martial law was lack of communication (24%) which impeded successful completion of the English course [1, p. 57]. In comparison to another study, a low level of social management skills showed that students in Hong Kong English language classrooms preferred to rely on themselves rather than seek for help or engage in collaborative learning [2, p. 15].

The results of this research showed that there was the discrepancy between self- and social awareness, self- and social management, which meant that it was easier for students to rely on themselves and solve problems individually. It could be explained by technical university students' experience of studying English online for three years, during the Covid-19 quarantine and wartime, when opportunities for students to ask for help and help others were limited. To compare, the research on SEL competence levels of secondary school students in Hong Kong revealed a gap between the students' awareness skills and their management skills, which was explained by a highly competitive environment and teaching to the test [2, p. 14–15]. Therefore, welcoming cooperation and active participation based on common values

should be implemented gradually and consistently in order to promote effective SEL practices [10, p. 12–14].

The research has some limitations like the participants being representatives of few departments, relatively short period of time of data being collected, unpredictable impact of wartime on students' responses. Therefore, future researchers should collect denser data for analyses at several time points and include participants from various departments.

Conclusions. To conclude, technical university students demonstrated a high level of self-awareness, agreeing on the importance of a positive attitude and their responsibility for their success in learning English. Regarding social awareness, the respondents were not sure that they could help each other. Nevertheless, they knew whom to ask for help, what resources to use, and were sure of their positive impact on group activities. Concerning self-management, the respondents indicated agreement with the prompt that they could solve problems, stay focused and find effective ways to achieve goals in learning English. The respondents demonstrated a low level of social management as they agreed only with one prompt about discussions with groupmates on learning English. Overall, the research revealed the discrepancy between self- and social awareness, self- and social management, which meant that it was easier for students to solve problems individually while studying English online for three years, during the Covid-19 quarantine and wartime, when opportunities for students to cooperate were limited.

The results of the study would be helpful for teachers of English to anticipate potential problems and scaffold technical university students in achieving their learning goals.

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