Post-Pandemic Disruptions in the Communication Process: A Comparative Analysis of Polish and Vietnamese Students

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Abstract:

Purpose: The COVID-19 pandemic significantly impacted global communication, forcing people to adapt to new forms of interaction. The study aimed to understand how the pandemic affected interpersonal and mass communication among young adults in Poland and Vietnam.

Design/Methodology/Approach: Online surveys were conducted with 384 students from Poland and 91 students from Vietnam.

Findings: The results indicate that the pandemic increased the level of tension and stress during direct communication, especially in Poland. Vietnamese students more frequently observed positive changes in information transmission during the pandemic. The conclusions suggest that cultural differences significantly influence communication preferences and adaptation to new conditions, and the pandemic highlighted the need for flexibility and innovation in communication.

Practical Implications: The findings of this study have practical implications for educational institutions and policymakers in both Poland and Vietnam. By highlighting the distinct communication preferences and challenges faced by students in each country, this research provides actionable insights for designing communication strategies and support systems tailored to young adults in a post-pandemic context. Institutions may consider implementing training sessions focused on enhancing digital communication skills and active listening techniques, which could help reduce the communication barriers that emerged during the pandemic. Additionally, understanding the socio-cultural nuances in communication can assist educators and mental health professionals in creating more inclusive, effective support structures for students dealing with post-pandemic stress and social reintegration challenges.

Originality/Value: This study is original in its comparative analysis of the impact of the COVID-19 pandemic on communication processes among young adults from two distinct cultural backgrounds—Poland and Vietnam. While previous studies have examined

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pandemic-related communication challenges, this research uniquely explores how cultural differences shape communication preferences, adaptation strategies, and the socio-emotional impacts of the pandemic. The study contributes valuable insights to the fields of cross-cultural communication and education, particularly by offering a nuanced understanding of how young adults adapt their communication styles in response to global crises. The findings emphasize the importance of cultural context in shaping effective communication and highlight potential areas for future research into intercultural differences in response to social disruptions.

1. Introduction

"The lack of communication can be lethal." These words by Robert Bolton from *People Skills* resonate strongly in the context of the COVID-19 pandemic, which transformed communication approaches dramatically. In times when social distancing became the new norm, communication showed its dual nature: both as a challenge and a solution.

The pandemic, acting as a global catalyst for change, forced a reevaluation of how we establish and maintain connections. It became an unexpected experiment, testing humanity's adaptability in communication during increased uncertainty and isolation.

This article, based on responses from students of different cultures, aims to explore how the pandemic affected communication. It examines the new forms communication has taken and its implications for future interpersonal interactions in a globalized world. In the face of Bolton's "lethal" lack of communication, this study provides insights into how young people from various cultures adapt creatively to new conditions to overcome isolation and stay connected.

Through the lens of COVID-19, the article underscores the importance of flexibility and innovation in communication, highlighting that overcoming communication barriers is crucial not only for survival but also for building deeper, more meaningful relationships.

2. Literature Review

2.1 Communication Challenges During the Pandemic

The COVID-19 pandemic accelerated the shift to digital communication. This shift allowed the continuation of interpersonal interactions and business activities during isolation (Smith and Duggan, 2020; Khan *et al.,* 2020; Grima *et al.,* 2020). However, it also intensified issues like misinformation and information overload (Johnson and Kaye, 2020). Social media's role as platforms for emotional support and information exchange increased, though not always reliably (Gupta and Abdelmaksoud, 2021).

In mass communication, the pandemic forced media to quickly adapt, changing reporting and information delivery methods. This impacted public trust in these media (Thompson and Wan, 2020) and increased the risk of spreading misleading information (Chou *et al.,* 2018; Dix *et al.,* 2022). Interpersonally, there was a noted increase in the importance of empathy and emotional communication for maintaining long-distance relationships (Miller, 2021).

The pandemic pushed people to seek safer forms of interaction, significantly boosting the popularity of digital communication like video conferences and social media (Kumar and Nayar, 2020). Asynchronous communication also gained value, offering users greater flexibility in managing time and balancing work-life commitments (Greenwood and Wattal, 2020).

In mass communication, there was a shift towards greater trust in traditional media, such as television and radio, as sources of information about the pandemic. This reflected a search for reliable and authoritative information (Hoffman and Hawkins, 2020). Simultaneously, there was an increase in skepticism towards information from social media, highlighting the problem of misinformation and fake news (Brennen *et al.,* 2021).

2.2 Barriers in Communication Due to the COVID-19 Pandemic

The barriers to communication resulting from the COVID-19 pandemic have become challenges on many levels, affecting both interpersonal and mass communication. The shift to virtual communication, while allowing the maintenance of social contacts and continuation of work, also exposed inequalities in access to technology and digital skills among different social groups, deepening communication exclusion (Van Dijk, 2020; Smith and Reeves, 2020).

Social isolation and restrictions on direct personal interactions increased dependence on digital communication, but also highlighted its limitations, such as the lack of non-verbal and emotional nuances in messages (Walther, 2020). All these changes have sparked the need for intensified research on ways to overcome newly emerged communication barriers to ensure effective information exchange and social support

during times of crisis (Gomez and Ramkissoon, 2020; Greenwood and Wattal, 2020).

2.3 Specificity of Communication Among Young Adults

Young adults, defined as individuals aged approximately 18 to 25 years, are in a crucial transitional period from adolescence to full adulthood. This is a time of exploration, both in terms of personal and professional identity, which Erik Erikson describes as the stage of "identity exploration" in his theory of psychosocial development (Erikson, 1968).

Erikson emphasizes that for young adults, finding their own life path is key, often involving experimentation in various areas of life, including education, professional work, and interpersonal relationships. Jean Piaget, focusing on cognitive development, pointed out that young adults reach the stage of formal operations, enabling abstract thinking and hypothesizing about the future (Piaget, 1972). This allows for a deeper understanding of the world's complexities and better management of the uncertainty often accompanying this life period.

Arnett introduces the concept of "emerging adulthood," highlighting the uniqueness of this life stage characterized by exploration, variability, and discovery (Arnett, 2000). Young adults explore various life possibilities in education, career, and personal relationships, reflecting their pursuit of independence and self-acceptance.

From a humanistic perspective, Carl Rogers emphasizes the importance of "facilitating conditions" such as empathy, unconditional positive regard, and authenticity in the personal development of young adults (Rogers, 1961). He argues that emotional support and acceptance are crucial for young adults in shaping their self-concept. Today, young adults also face challenges related to rapid technological and social changes, influencing their communication methods, relationship building, and identity management in a digital environment.

2.4 Specificity of Communication Among Young Adults

The communication habits of young adults, especially students around 20 years old, reflect the dynamic technological and social changes characteristic of their generation. Often referred to as "digital natives" (Prensky, 2001), these individuals are highly comfortable using modern technologies and social media, which are integral to their daily communication (Smith and Duggan, 2013).

Social media platforms such as Instagram, TikTok, Snapchat, and Twitter serve not only to maintain social relationships but also as platforms for information exchange, opinion expression, and academic life organization (Junco, 2012). Young adults use various communication channels to build and maintain social networks, preferring

those that offer quick and efficient message exchange and the ability to express and share their individuality (Bayer *et al.,* 2016).

This communication is characterized by a high degree of informality, spontaneity, and directness, which influences how relationships are built and a sense of community is fostered (Lenhart *et al.,* 2010).

At the same time, young adults face the challenge of managing their privacy and online image, which requires a conscious and strategic approach to online communication (Boyd, 2014). Academically, students increasingly use digital educational tools and remote learning platforms, which demand not only technical skills but also the ability to self-organize work and communicate with instructors and peers in a virtual space (Selwyn, 2016).

This age group also tends to seek information in diverse ways, often relying on quickly scanning content from various sources, which can affect the depth of knowledge acquisition (Hargittai *et al.,* 2010). The pandemic and the associated isolation increased the use of media for interactions with family and peers and brought new dynamics to work, redefining the consumption of time, space, and media (Barile and Bovalino, 2020; Shehata and Abdeldaim, 2021).

2.5 Impact of COVID-19 on Communication and Education

During the COVID-19 pandemic, young adult students faced specific challenges and barriers that fundamentally changed their educational and social experiences. The transition to remote learning required rapid adaptation to new forms of communication and work organization, which was difficult for many due to limited access to digital resources and varying levels of technological skills (Selwyn, 2016; Smith and Reeves, 2020).

The lack of direct contact with instructors and peers made maintaining motivation and a sense of belonging to the academic community more challenging, negatively impacting the mental well-being of many students (Walther, 2020; Gomez and Ramkissoon, 2020).

The pandemic also intensified the problem of "infodemia" or information overload, including false or misleading information about COVID-19, which made it difficult for students to find reliable sources of knowledge (Zarocostas, 2020). Additionally, social isolation and restrictions aimed at limiting the spread of the virus increased feelings of loneliness and isolation among students, which was a new and difficult experience for many (Smith and Duggan, 2013).

Young adults, in a transitional period to full independence, encountered difficulties managing the uncertainty and changes brought by the pandemic to their professional

and educational lives. Balancing studies, work, and personal life in home isolation was challenging (Greenwood and Wattal, 2020).

Excessive internet use poses health risks, leading to potential health implications (American Psychiatric Association, 2013). Dependence on social networks can lead to depression, harassment, and anxiety, affecting daily life, including academic responsibilities (Gómez-Galán *et al.,* 2020). These issues required students to be flexible and adaptive, while also needing support from universities and communities regarding mental health and access to educational and technological resources (Chen *et al.,* 2020).

3. Research Methodology

In this study, three research objectives were established:

1.   Analyze the impact of the COVID-19 pandemic on interpersonal and mass communication among young adults in Poland and Vietnam.
2.   Assess cultural differences in communication preferences and ways of coping with communication limitations.
3.   Examine the socio-cultural consequences of the pandemic on the quality of life, mental health, and levels of stress and discomfort in direct social interactions.

Additionally, the following research hypotheses were formulated:

1.   The COVID-19 pandemic negatively affected interpersonal communication, increasing levels of tension and stress among young adults.
2.   There are significant cultural differences between Polish and Vietnamese students in communication preferences and methods of adapting to communication limitations.
3.   The pandemic had varying impacts on the quality of life and mental health of young adults in Poland and Vietnam, due to different socio-cultural contexts.

Several research tools were used in the study. The primary research tool was an online survey. The survey was conducted during classes at universities in Poland and Vietnam. The research in Vietnam was carried out in September 2023 during a scientific internship, while the research in Poland was conducted between October 2023 and February 2024.

The survey consisted of closed and open questions aimed at collecting data on communication preferences, experienced communication barriers, and the impact of the pandemic on daily life and mental health. The survey included multiple-choice questions, Likert scale questions, and open-ended questions that allowed respondents to express their experiences in detail. In the article, the Chi-square test and Cramér's V coefficients were used to analyze the relationships between variables and assess the strength of these relationships.

The study group consisted of a total of 384 students from Poland and 91 students from Vietnam. The respondents were aged between 18 and 25, allowing the focus to be on young adults who are in a critical transitional period between adolescence and full adulthood. Detailed information is provided in Table 1.

Table 1. *Structure of the research sample [%]*

Specification		Structure			
		POLAND		**VIETNAM**	
		Number	**%**	**Number**	**%**
Gender	Female	263	68,5	51	56,0
	Male	121	31,5	40	44,0
Age	Up to 20 years old	73	19,0	89	97,8
	Over 20 years old	311	81,0	2	2,2
Education	Secondary	330	85,9	91	100,0
	Higher	54	14,1	-	-
Field of study	Economics	164	42,7	79	86,8
	Management	191	49,7	7	7,7
	Other	29	7,6	5	5,5
Place of Residence	Village	214	55,7	17	18,7
	City up to 500,000 inhabitants	118	30,7	27	29,7
	City over 500,000 inhabitants	52	13,5	47	51,6
TOTAL		384	100,0	91	100,0

Source: Own elaboration.

Data analysis included both quantitative and qualitative methods. Quantitative data were analyzed using statistical tests such as the Chi-square test to examine relationships between variables, and Cramér's V coefficients to assess the strength of these relationships. Qualitative data from open-ended questions were analyzed using content analysis to identify main themes and patterns in respondents' answers.

4. Results

The survey results were divided into four main dimensions, reflecting various aspects and communication challenges encountered by young adults in Poland and Vietnam during the pandemic.

Key Elements in Communication (questions 1, 2, 4, 15):
This dimension focuses on preferences regarding communication channels, active listening signals, and the evaluation of the most important elements in effective communication.

Barriers and Challenges in Communication (questions 3, 7):
This section analyzes the obstacles in communication perceived as the most burdensome by respondents and the benefits associated with the partial shift from direct communication to other forms of contact.

Communication Adaptation in the pandemic context (questions 5, 6, 8):
This dimension evaluates changes in information transmission during the pandemic and the consequences of limiting direct communication.

Socio-Cultural Consequences of the Pandemic (questions 9, 10, 11, 12, 13, 14):
This section examines the impact of the pandemic on the perception of society, quality of life, mental health, and the intensity of stress and discomfort during direct social contacts post-lockdown.

Figure 1. *Four dimensions of communication challenges*
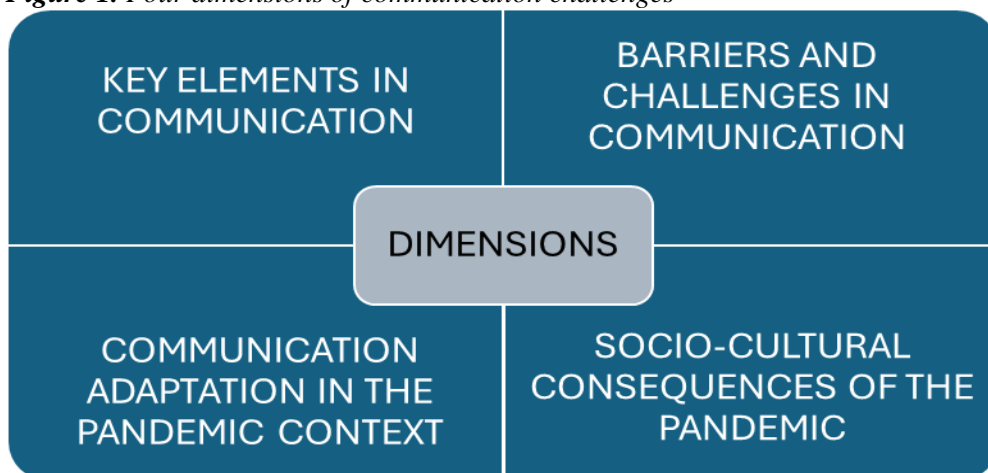
Source: Own elaboration.

Dimension I: Key Elements in Communication:
An analysis of communication channel preferences among Polish and Vietnamese students reveals interesting differences that may reflect both cultural predispositions and adaptation to modern communication methods.

In Poland, there is a dominant tendency to choose direct face-to-face communication, preferred by 65.4% of respondents. This underscores the value of personal contacts and direct interpersonal relationships. SMS, though significantly less preferred (24%), also plays an important role as a convenient and quick alternative to direct contact.

Among Vietnamese students, while direct communication also enjoys the greatest popularity (45.1%), they significantly more often than Polish students choose other electronic communication methods, such as video calls (9.9%) and phone calls

(8.8%). This may indicate a greater adaptation to various forms of digital communication that enable easy long-distance contact.

The high percentage of Vietnamese students choosing SMS (29.7%) as their preferred communication method may reflect a cultural preference for written communication, which allows for thoughtful information delivery. Differences in preferences may stem from factors such as differences in technological infrastructure, communication service costs, or cultural values.

For Polish students, the most significant signal of active listening is when the interlocutor gives their opinion after hearing a story (68%). This is the highest score among all responses, suggesting that the Polish group values reactions indicating individual reflections and personal engagement from the interlocutor. Maintaining eye contact is also significant (66.7%), indicating that direct eye contact is seen as a fundamental element of attention.

Questions consistent with the statement are also highly valued (60.4%), highlighting the importance of dialogue and confirming understanding. Among Vietnamese students, maintaining eye contact is also the highest-rated signal of active listening (73.6%), suggesting the universal importance of this non-verbal cue in interpersonal communication. However, a significantly higher percentage than in Poland considers convergent verbal and non-verbal communication (46.2%) and appropriate paralinguistic sounds (38.5%) important.

It appears that for Vietnamese students, non-verbal signs of active listening, such as facial expressions and gestures, are as important as words. These differences may result from different cultural communication contexts, where in Poland, there is a greater emphasis on exchanging and verifying information in conversation, while in Vietnam, harmony and consistency between what is said and how it is communicated through body language are crucial.

This may also reflect different upbringing and educational methods, where in Asian culture, listening and observation skills are often emphasized, while in Western culture, open exchange of thoughts and ideas is promoted.

The encouragement method (26.2%) is the highest rated by Polish students, indicating a cultural value in showing interest and engagement in conversation. This aligns with Western educational models that promote open communication and active participation.

Clarification (21.8%) and paraphrasing (19.4%) are also considered effective methods, reflecting a preference for accuracy and certainty in information transmission, as well as building mutual understanding and verifying that the message has been correctly interpreted.

The selection of methods such as reflecting (7%) and summarizing (14.5%) appeared less frequently, suggesting that Polish students may focus less on the emotional aspect of communication and synthesis of information, and more on the exchange and verification of specific content.

Figure 2. *Selected elements of communication by country of origin [%]*
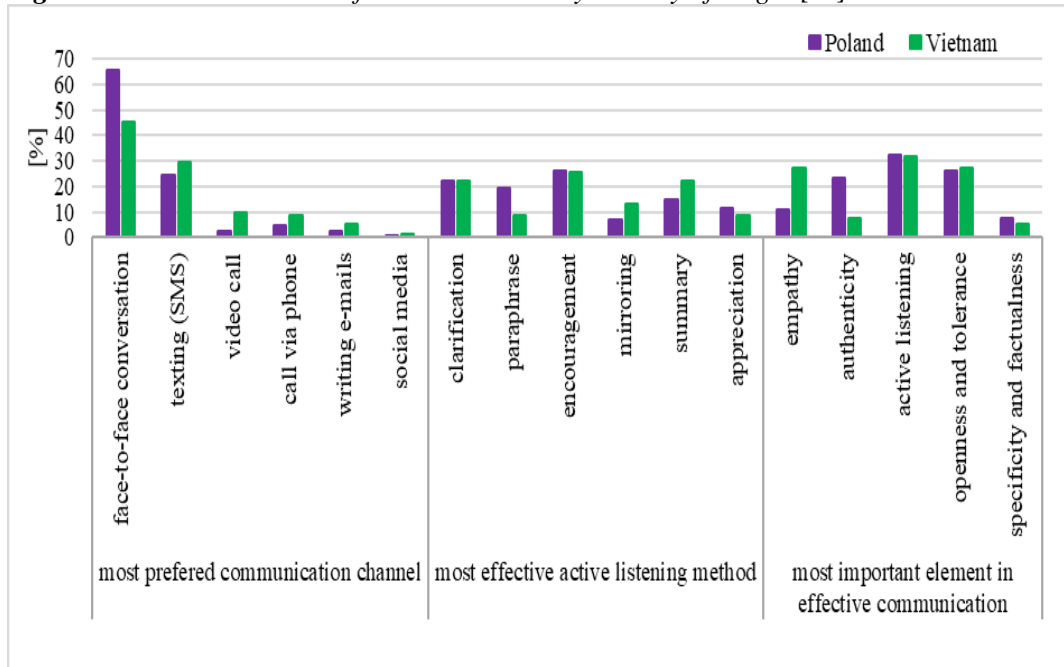
Source: Own elaboration.

Vietnamese results indicate a greater balance between methods, except for paraphrasing (8.8%) and validation (8.8%), which are less preferred. This may indicate a lesser tendency to personally confirm received messages and a less pronounced expression of personal recognition in communication.

Clarification (22%) and summarizing (22%) are the highest rated, suggesting a need for clear message understanding and conversation summary to achieve complete communication. Reflecting (13.2%) appeared more frequently in Vietnamese results, indicating a greater significance of emotions and empathy in communication in Vietnamese culture.

In summary, Polish students seem to prefer activating and verifying techniques in communication, while Vietnamese students focus more on message clarity and comprehensiveness, as well as emotional aspects. These differences may reflect deeper social values, such as individualism and collectivism, influencing how communication is constructed and perceived in different cultures.

Key Elements in Effective Communication:

Analyzing preferences regarding the most important element of effective communication among Polish and Vietnamese students shows that both groups consider active listening key. This underscores the universal value of attention and engagement in the communication process. The Polish score for active listening is 32.3%, and the Vietnamese score is very close at 31.9%. This indicates that regardless of cultural background, active listening is perceived as fundamental for understanding and effective messaging.

Differences appear in other elements. In Poland, authenticity (23.2%) and openness and tolerance (26%) are valued almost equally high, reflecting cultural inclinations towards openness in self-expression and acceptance of diverse perspectives. In Vietnam, empathy (27.5%) and openness and tolerance (27.5%) are equally rated as important, indicating that the ability to understand others' emotions and openness to different viewpoints is significant in Vietnamese culture.

The least important element for both Polish and Vietnamese students is concreteness and objectivity. This is interesting as it suggests that in both cultures, emotional and interpersonal aspects of communication are more important than dry facts or direct information. In both groups, this value does not exceed 10%, indicating that young people in both countries seek a deeper level of understanding and connection in communication beyond just the content of the message.

Table 2. *Communication preferences by country*

Specification	Preferred communication channel	Effective method of active listening	Most important element in effective communication
Pearson's Chi-Square	21.468	11.003	23.484
p-value	0.001	0.051	0.000
Cramér's V	0.213	-	0.222

Source: *Own elaboration.*

There is a statistically significant relationship between the country of origin of the student and the preferred communication channel as well as the most important element in effective communication. This means that the country-of-origin influences which communication channels are preferred, and which elements of communication are considered most important.

The relationship between the effective method of active listening and the country of origin is on the borderline of statistical significance, suggesting that this relationship may be less clear or influenced by other factors. The Cramér's V values indicate a moderate strength of association in the case of the preferred communication channel and the most important element in effective communication.

Table 3. *Chi-square test results – actively listening signal and respondent's country of origin*

Specification	Signs	Chi-square Pearson	*p* value	Contingency coefficient
maintaining eye contact	A	1,638	0,201	-
nodding	B	1,876	0,171	-
adequate paralinguistic sounds	C	1,489	0,222	-
convergent verbal and non-verbal communication	D	21,666	0,000	0,209
the interlocutor gives his opinion after listening to the story	E	8,595	0,003	0,133
the interlocutor approaches my every statement emotionally	F	53,373	0,000	0,318
the interlocutor does not interrupt my speech	G	6,601	0,010	0,117
the interlocutor interjects his thoughts during my speech	H	4,262	0,039	0,094
the interlocutor asks questions consistent with my statement	I	107,470	0,000	0,430
the interlocutor does not look at the phone, does not fidget, does not yawn	J	0,387	0,534	-

Source: *Own elaboration.*

Table 3 shows a significant relationship between the country of origin and asking consistent questions by interlocutors and the emotional approach to statements. This suggests that Vietnamese students more frequently ask questions closely related to the speaker's statement, indicating greater attention and engagement in the conversation. The emotional approach to statements indicates that Vietnamese students more often engage emotionally in conversations, which can lead to deeper interpersonal relationships.

Dimension II: Barriers and Challenges in Communication:
For Polish students, the dominant communication barrier is imposing opinions and lack of flexibility and openness to others' views, indicated by as many as 67.7% of respondents. This high percentage may reflect the value placed on dialogue and democratic forms of thought exchange, where respect for diverse opinions and flexibility in conversation are considered key.

The tendency to condemn, criticize, and judge by the interlocutor (55.2%) and lack of empathy and understanding (45.6%) are also perceived as significant barriers, suggesting that in the Polish interpersonal context, an atmosphere of mutual respect and understanding is important.

In contrast, Vietnamese students more often than Polish students experience difficulties arising from a lack of knowledge about customs, traditions, and culture (56%), indicating a greater sensitivity to intercultural aspects of communication. The high value placed on empathy and understanding (53.8%) and experiencing the

interlocutor's emotional instability (34.1%) suggest a cultural emphasis on harmony and emotional balance in interactions.

Interestingly, stereotypes are perceived as less burdensome by Vietnamese students (28.6%) than by Polish students (35.9%), which may suggest differences in coping with prejudices and generalizations in the social context.

These results highlight how different cultural backgrounds influence the perception of communication barriers. In Poland, aspects related to openness in dialogue and respect for diverse perspectives seem crucial, while in Vietnam, intercultural context and emotional balance are more burdensome.

The analysis of responses regarding the benefits of partially replacing direct communication with other forms of contact, such as phone calls or online meetings, reveals interesting insights into the changing communication landscape among Polish and Vietnamese students. In both groups, there is a high appreciation for benefits such as convenience and time-saving, indicating a global trend towards seeking efficiency and flexibility in communication methods.

For Polish students, the greatest benefit is time-saving (67.7%), reflecting a desire to maximize time use in a fast-paced life. Convenience (63.5%) is also highly valued, emphasizing the pursuit of comfort and easy access in communication. Less stress as a benefit is also significant (46.4%), suggesting that alternative forms of contact may help reduce tension associated with direct interactions.

Vietnamese students similarly value time-saving (69.2%) and convenience (68.1%), highlighting a universal trend towards more flexible communication forms. However, compared to Polish students, Vietnamese respondents appreciate benefits such as reducing certain communication barriers (44%) and improving conversation quality (27.5%) to a greater extent.

This may indicate a perception that remote communication offers new opportunities to overcome physical and cultural limitations and allows deeper reflection on the message content. Interestingly, a smaller percentage of Vietnamese students feel that there are no benefits to changing communication forms (4.4%), suggesting a generally more positive attitude towards remote forms of interaction. This may be related to adaptation to the rapidly changing digital world, where new technologies offer increasing opportunities to build and maintain relationships at a distance.

The responses of students from Poland and Vietnam reveal that despite cultural differences, there are common trends in recognizing the benefits of alternative communication forms. Adaptation to new technologies and the search for more efficient, less stressful forms of contact appear to be key in the context of global socio-communication changes.

Figure 3. *Communication barriers according to respondents [%]*
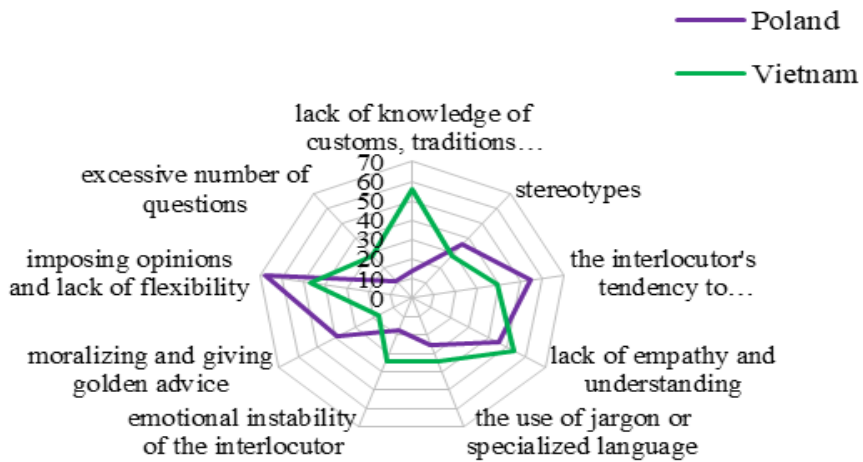
Source: Own elaboration.

Figure 4. *Communication challenges according to respondents [%]*
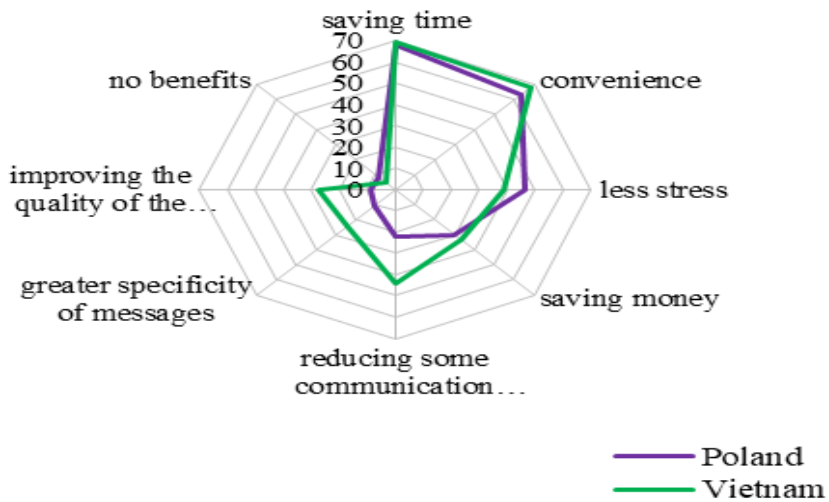
Source: Own elaboration.

### Dimension III: Communication Adaptation in the Context of the Pandemic:

Responses from Polish students indicate a divided opinion on how the pandemic affected information transmission. Improvement is noted by 31.3% of respondents, suggesting that for part of the population, the pandemic was a catalyst for introducing new, more effective communication forms, possibly due to increased use of digital technologies.

Nearly an identical percentage of respondents (31.5%) believe that the situation remained unchanged, indicating that the changes introduced during the pandemic did not significantly impact the overall quality of communication. However, the largest group (37.2%) believes that information transmission has deteriorated, which may indicate challenges related to information overload, misinformation, or difficulties in accessing reliable sources.

Vietnamese students perceive a much greater improvement in information transmission (65.9%). This may reflect effective communication strategies adopted in Vietnam during the pandemic or greater trust in information provided by the media and authorities. The low value of responses indicating a worsening situation (6.6%) suggests that in Vietnam, the pandemic may have contributed to increased effectiveness and reliability in communication. The perception that the situation remained unchanged is noted by 27.5% of respondents, indicating the stability of the communication system in the face of the crisis.

Differences in the perception of the pandemic's impact on information transmission between Polish and Vietnamese students may result from various crisis management strategies, access to technology, and social trust in information sources.

Figure 5. *Assessment of the impact of the COVID-19 pandemic on information dissemination/society according to respondents [%]*

| For communication	For society
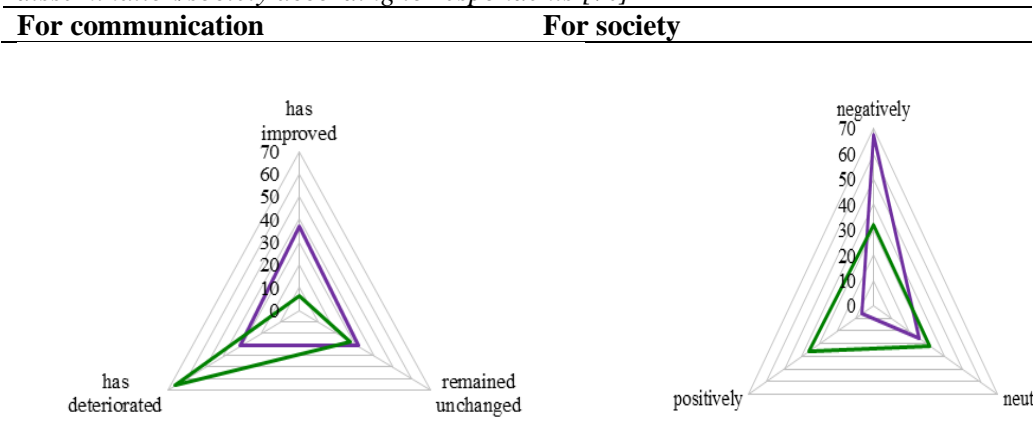
Source: *Own elaboration.*

Analyzing the consequences of limiting direct communication during the pandemic among Polish and Vietnamese students reveals the crucial role personal interactions play in building and maintaining healthy social relationships and emotional balance. In Poland, the most severe impacts were the deterioration or breakdown of interpersonal relationships (47.1%) and boredom (46.6%). This underscores the importance of direct contacts in maintaining social dynamics and fulfilling the need for stimulation. A significant problem was also the feeling of loneliness (43.8%), indicating difficulties in adapting to social contact restrictions and their impact on individual well-being.

In Vietnam, the feeling of loneliness was even more pronounced (52.7%), which may reflect the profound impact of the pandemic on social cohesion and individual experiences of isolation. Interestingly, Vietnamese respondents experienced a greater loosening of social solidarity (37.4%) than Polish respondents, reflecting specific challenges in maintaining community bonds in the context of extensive social restrictions. Increased emotional distance (40.7%) was also more noticeable in Vietnam, highlighting the impact of limited direct communication on the depth and quality of interpersonal relationships.

The limitation of direct communication also had consequences in the dimension of non-verbal communication, as evidenced by responses regarding the inability to observe non-verbal cues. This barrier was noticed by 28.9% of Polish students and 25.3% of Vietnamese students, indicating a universal need to read the emotions and intentions of the interlocutor, which is more difficult or impossible in remote communication (Figure 6).

Figure 6. *Consequences of limiting direct communication by respondents' country of origin [%]*
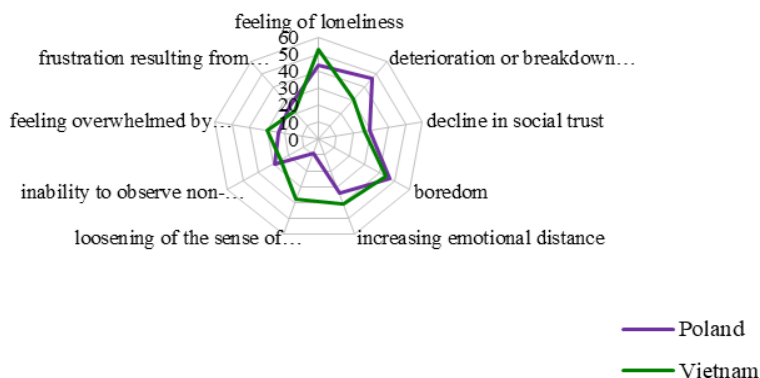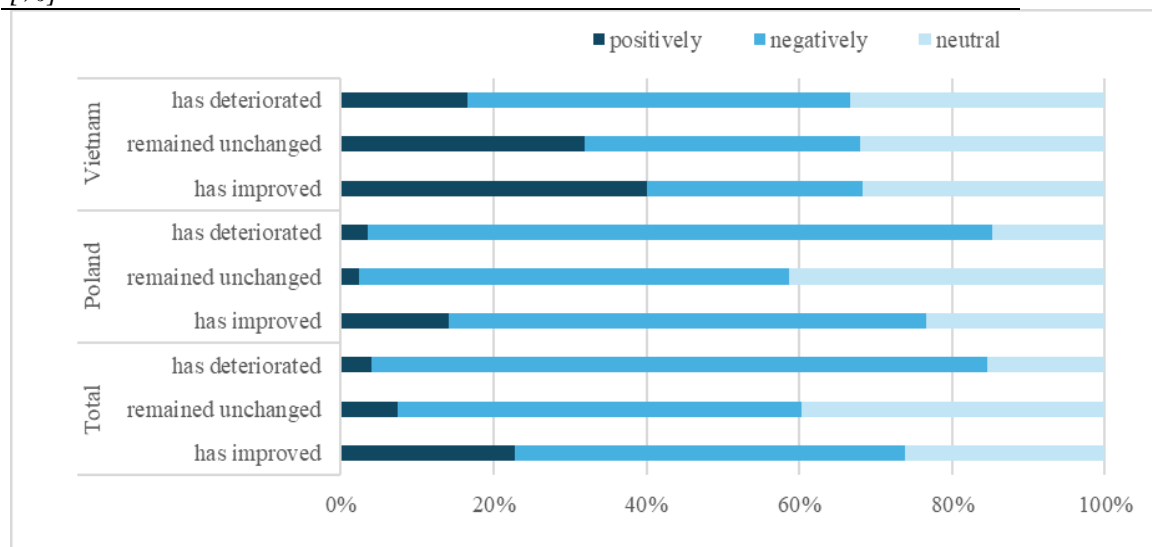

Source: Own elaboration.

The assessments of the impact of the COVID-19 pandemic on Polish and Vietnamese societies reveal varied perceptions of this global crisis's effects. The Polish group predominantly views the pandemic negatively (67.4%), citing deepened social coldness, the breakdown of many relationships, and increased distance in interpersonal contacts. Only a small percentage of respondents (6.5%) note positive changes, such as increased solidarity and empathy among people. A neutral stance, suggesting no significant changes in society, is held by 25.8% of respondents, indicating diverse individual experiences in the face of the pandemic.

The Vietnamese society appears more divided in its assessment of the pandemic's impact, which may reflect a diversity of experiences in the country. A larger percentage than in Poland (36.3%) views the pandemic positively, seeing it as an opportunity to strengthen bonds and increase social empathy.

However, a significant portion of Vietnamese respondents also notes negative consequences (31.9%), similar to those observed in Poland. A neutral perspective, assuming no significant changes caused by the pandemic, is represented by an identical percentage of respondents (31.9%), suggesting that for part of the Vietnamese society, the pandemic did not have a clear impact on daily social life.

Differences in the perception of the pandemic's impact between Polish and Vietnamese respondents may be related to various factors, including the effectiveness of government actions, healthcare system, social norms for responding to the crisis, and individual coping strategies with isolation and restrictions (Fig. 7.

Figure 7. *Opinions on pandemic's impact on society by information transmission [%]*

Source: Own elaboration.

The stronger dependence for the impact on society suggests that the countries differ more in terms of the social effects of the pandemic than in the changes in information transmission.

The analysis of the dependence between the assessment of the impact on information transmission and on society shows that overall, there is a moderate dependence. However, detailed data for Poland indicate a weaker dependence, and for Vietnam, no significant dependence.

Table 4. *Chi-Square Test of Independence results for the country of origin and pandemic impact assessment*

Specification	Pearson's Chi-Square	p value	Cramér's V
Assessment of the impact on information transmission and the country of students' origin	45,770	0,00	0,310
Assessment of the impact on society and the country of students' origin	69,878	0,00	0,384
Assessment of the impact on information transmission and on society:			
Total	57,345	0,00	0,246
Poland	41,316	0,73	0,104
Vietnam	1,985		-

Source: *Own elaboration.*

Countries differ significantly in assessing the impact of the pandemic both on information transmission and on society, with a greater emphasis on social consequences. In Poland, there is a moderate dependence between assessments of the pandemic's impact on various aspects, while in Vietnam, these assessments are less correlated.

Dimension IV: Socio-Cultural Consequences of the Pandemic (9, 10, 11, 12, 13, 14):
Analyzing the quality-of-life assessment by Polish and Vietnamese students in the post-COVID-19 pandemic context highlights the adaptive aspects of young people to the changed living conditions after the global health crisis.

Results indicate generally positive perceptions of their own life situation in both countries, which may reflect the ability to rebuild and recover after a period of uncertainty and challenges. In Poland, most respondents (56.8%) rate their quality of life as good, with an additional 15.1% rating it as very good, indicating a strong tendency towards a positive perception of their current life situation.

Only a marginal portion of respondents (1.8%) rate their quality of life negatively, suggesting that for most Polish students, the post-pandemic period is a time of stabilization and potential growth.

In Vietnam, positive assessments of quality of life also prevail, with 49.5% of respondents rating it as good and 11% as very good. The higher percentage of people rating their quality of life as average (35.2%) compared to Poland may indicate slightly more varied experiences among Vietnamese students in the post-pandemic period, potentially related to differences in the socio-economic impacts of the pandemic.

These results highlight that despite the challenges associated with COVID-19, young people in Poland and Vietnam generally perceive their life situation positively, which may reflect both psychological resilience and the effectiveness of adaptive measures taken.

The analysis of responses regarding the impact of the COVID-19 pandemic on the mental health of Polish and Vietnamese students reveals varied experiences in both groups, with a noticeable percentage of individuals experiencing negative effects. In Poland, responses are evenly distributed, with a slight majority indicating negative consequences of the pandemic on mental health (a total of 43.5% of "yes" and "rather yes" responses).

At the same time, a significant percentage of respondents (23.4%) have difficulty unequivocally determining the impact of the pandemic on their well-being, which may indicate the complexity and multidimensionality of the experienced emotions. Those who did not feel the negative impact of the pandemic on their mental health ("rather not" and "no") constitute a total of 33.1%, showing that a significant part of society managed to maintain emotional balance.

In Vietnam, a larger percentage indicates negative effects of the pandemic on mental health (a total of 53.9% of "yes" and "rather yes" responses), suggesting a deeper impact of the pandemic on the emotional well-being of Vietnamese students. Similarly to Poland, a significant portion of respondents (26.4%) is unable to unequivocally assess the impact of the pandemic. The percentage of those who did not experience the negative impact of the pandemic on their mental health is lower than in Poland (19.8%).

The analysis of responses regarding the intensity of stress, discomfort, or tension during direct social interactions after the lockdown indicates varied experiences among Polish respondents. There is noticeable uncertainty and mixed feelings about returning to social interactions after the period of isolation. In Poland, the total percentage of those who experienced increased stress, discomfort, or tension during direct social interactions ("yes" and "rather yes") is 41.2%.

This indicates that for a significant part of society, the return to face-to-face interactions may be a source of additional stress, possibly related to health concerns, changes in social norms, or simply readjusting to direct contact. On the other hand, a similar number of respondents indicated that they did not experience increased stress

or discomfort ("rather not" and "no") in social interactions after the lockdown, totaling 42.5%. This may suggest that for this part of the population, returning to normality was relatively easy or that coping strategies effectively alleviated potential concerns related to social interactions.

Interestingly, 16.4% of respondents had difficulty unequivocally determining the impact of the pandemic on their feelings in the context of social interactions ("hard to say"). This may reflect the complexity of emotions and experiences related to the pandemic and the challenges in adapting to the changing social reality.

Figure 8. *Structure of opinions on registered increased tension during communication with others in the last 6-12 months and place of residence [%]*
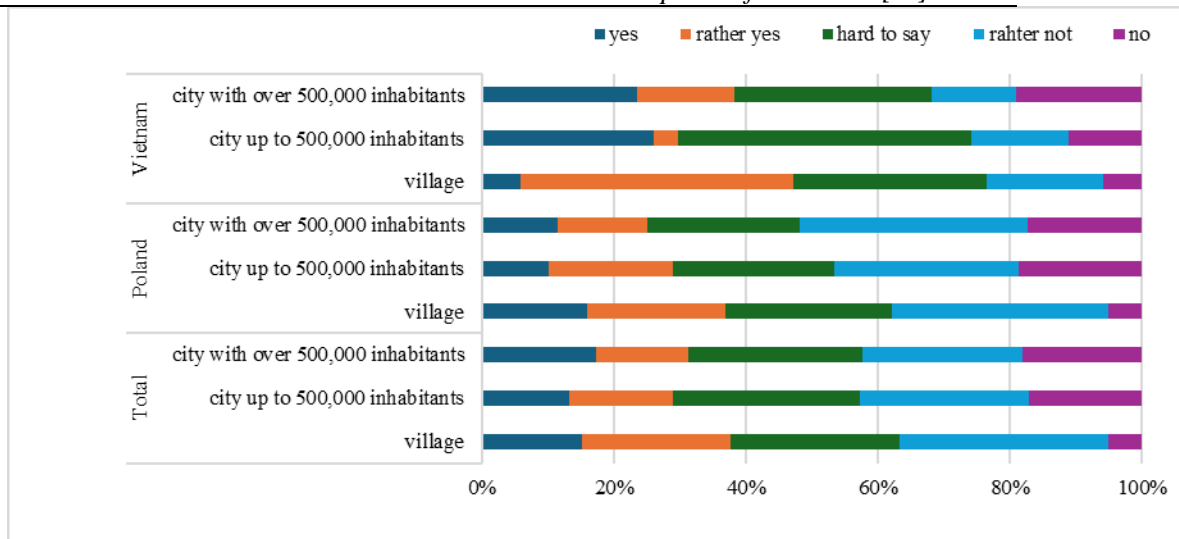
Source: *Own elaboration.*

The most frequently indicated causes of discomfort among Polish respondents are:

- Becoming unaccustomed to direct contact with other people (58.4%).
- Decreased self-confidence after the lockdown period (52.5%).
- Increased shyness in interpersonal interactions (50.2%).

These responses suggest a significant impact of prolonged isolation on comfort and self-confidence in direct social relationships. It is possible that limited opportunities for meetings and interactions during the pandemic contributed to increased uncertainty and fears towards direct contact.

In Vietnam, similar tendencies can be observed, but with a slightly different distribution of responses. A shift in preference towards telecommunication forms of interaction (47.4%) is significantly higher than in Poland, suggesting that Vietnamese respondents may have adapted more to digital communication as the

primary form of interaction. Additionally, Vietnamese respondents more frequently point to decreased trust in others (35.5%) and decreased self-confidence after the lockdown period (40.8%) as causes of discomfort in direct social contacts.

Comparing responses from both countries, it can be noted that while the causes of discomfort are similar, there are differences in their intensity. Becoming unaccustomed to direct contacts is more felt in Poland, whereas in Vietnam, the shift in preference towards digital communication has a stronger influence.

Figure 9. *Causes of intensified feelings of discomfort during direct social contacts after the pandemic [%]*
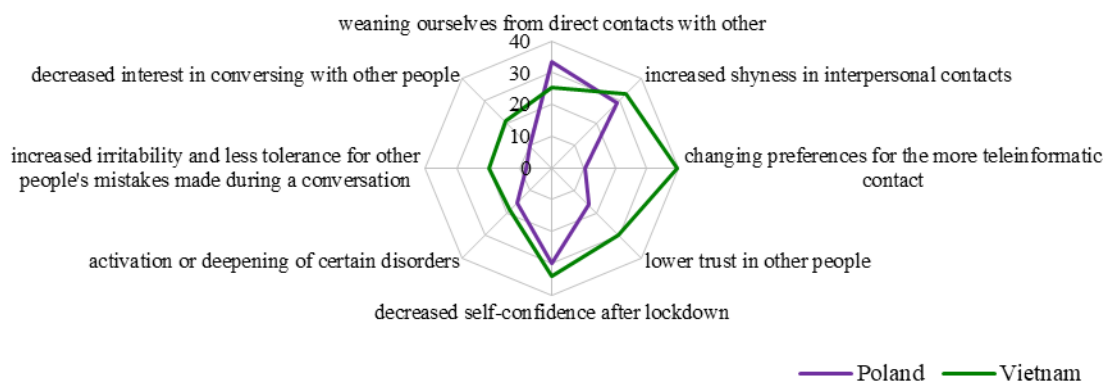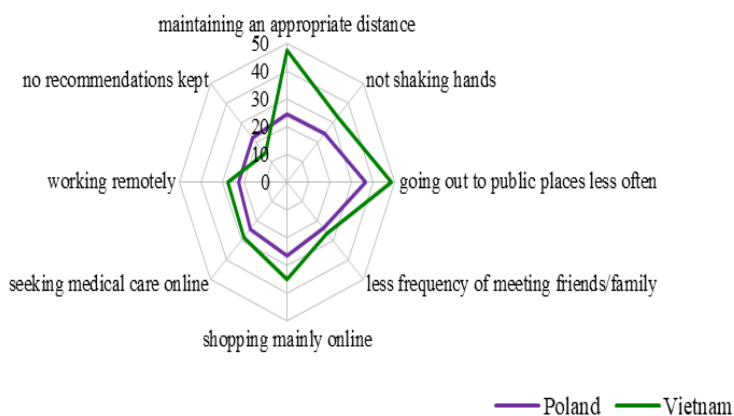

Source: Own elaboration.

In Poland, the most frequently maintained recommendation is going out to public places less often (36.5%), which may indicate a long-term change in behavior to minimize the risk of infection. Similar percentages of respondents indicate maintaining appropriate distance from the interlocutor (24.2%) and not shaking hands for greeting or farewell (24.5%) as sustained practices. Interestingly, 22.4% of respondents stated that they did not maintain any of the recommendations, which may indicate a return to pre-pandemic habits for some of the population.

In Vietnam, there is a significantly greater tendency to adhere to pandemic recommendations. Maintaining appropriate distance from the interlocutor (47.3%) and going out to public places less often (48.4%) are much more frequently indicated than in Poland. This suggests a deeper entrenchment of precautionary measures in the daily lives of Vietnamese people. Additionally, shopping mainly online (35.2%) and working remotely (27.5%) are more popular than in Poland, which may reflect differences in the availability and acceptance of these solutions in both countries.

Comparing responses, Vietnamese society seems more inclined to maintain the precautionary measures introduced during the pandemic in the long term.

Figure 10. *Recommendations on social contacts introduced during the pandemic deemed worth maintaining according to respondents [%]*

Source: Own elaboration.

The Cramér's V coefficients indicate a moderate strength of these dependencies, meaning that the student's country of origin influences the feeling of tension and stress in the context of communication and direct social interactions, although these are not very strong dependencies.

However, the lack of significant dependencies for the assessment of quality of life and negative effects on mental health suggests that these aspects are similarly perceived by students from Poland and Vietnam, regardless of their country of origin.

Table 5. *Results of the Chi-square independence test between selected social elements and the student's country of origin*

Specification	Pearson's Chi-Square	*p* value	Cramér's V
Assessment of life quality	5,749	0,125	-
Assessment of negative effects on mental health	8,127	0,087	-
Increased tension during communication with other people	13,816	0,008	0,171
Increased levels of stress, discomfort, or tension during direct social contacts	11,663	0,020	0,157

Source: Own elaboration.

Chi-square test results for the entire group indicate a significant dependence between place of residence and perceived tension in recent months. This suggests that place of residence affects the level of perceived tension, although the strength of this dependency is moderate. Similar results were obtained for Poland, where a significant dependence was also found.

This means that in Poland, the place of residence has a moderate influence on the level of perceived tension. For Vietnam, no significant dependence was found, suggesting that place of residence does not have a significant impact on the level of tension perceived by Vietnamese students. In Poland, the place of residence has a moderate influence on perceived tension, while in Vietnam, this influence is not statistically significant. Across the entire studied group, there is also a moderate dependence between place of residence and the level of tension.

Table 6. *Results of the Chi-square independence test between tension over the past few months and place of residence*

Specification	Pearson's Chi-Square	p value	Cramér's V
~~Total~~	22,171	0,001	0,153
Poland	19,013	0,015	0,157
Vietnam	14,579	0,068	-

Source: *Own elaboration.*

5. Discussion

The analysis of the impact of the COVID-19 pandemic on communication processes among Polish and Vietnamese students provided insights into the differences and similarities in the experiences of these two groups. The study highlights significant cultural and adaptive differences that influence how these students cope with communication and emotional challenges during the global health crisis.

In studies by Aristovnik *et al.* (2020), participants often reported experiencing negative emotions such as anxiety, frustration, anger, hopelessness, and shame, which is reflected in the results of this study. Students surveyed from Poland and Vietnam also reported similar emotional experiences, particularly in the context of communication and social restrictions caused by the pandemic.

The analysis indicates that the place of residence has a moderate impact on the feeling of tension and stress during communication and direct social contacts, especially in Poland, where a significant dependence between the place of residence and the level of perceived tension was found. In the case of Vietnam, such a

dependence was not statistically significant, suggesting that Vietnamese students have better adapted to the changes caused by the pandemic compared to their Polish peers.

Similar observations were made in studies by Racine *et al.* (2020), which showed that the pandemic had a profound impact on the mental health of youth worldwide. These findings align with the current study, where a significant percentage of respondents reported negative effects of the pandemic on mental health and an increase in stress levels during direct communication.

In the context of communication adaptation, the study shows that Vietnamese students more often pointed to positive changes in information transmission during the pandemic, which may suggest the effectiveness of adopted communication strategies. In Poland, however, the dominant feeling was a deterioration in the quality of information transmission.

Comparing the results with other studies, such as those by Smith and Reeves (2020), it can be noted that the transition to digital communication, although necessary, intensified problems related to misinformation and information overload. Respondents often indicated difficulties in finding reliable sources of information amidst a flood of conflicting reports.

Other studies, such as those conducted by Jones and Brown (2021), also emphasize the impact of the pandemic on increasing stress and tension levels among students, which is consistent with the findings of this study. Research by Carlson and Peters (2021) points out differences in adaptation to remote learning between students from different countries, which aligns with observations regarding Polish and Vietnamese students.

Additionally, the works of Martinez and Lee (2022) highlight the importance of social support and adapting communication strategies to students' needs during health crises, which was also confirmed in the analyzed results. These studies collectively underline the complex impact of the COVID-19 pandemic on communication, mental health, and social practices among young adults, emphasizing the need for targeted support and effective communication strategies to address these challenges.

6. Conclusions

Based on the obtained results and a review of the literature, it was decided to partially confirm Hypothesis 1. The results showed that the pandemic increased the level of tension and stress during direct communication both in Poland and Vietnam, although this effect was more noticeable in Poland. The increase in tension was moderately related to the place of residence, suggesting that local factors may have influenced the perceived tension.

The second hypothesis was positively verified because the analysis of preferred communication channels and active listening methods revealed significant differences between Polish and Vietnamese students. Polish students preferred direct face-to-face communication, whereas Vietnamese students more often used electronic forms of communication.

Additionally, the methods of active listening and elements of effective communication differed between the countries, reflecting cultural differences in communication approaches. The third hypothesis was also partially confirmed, as the results showed that Vietnamese students reported a deeper impact of the pandemic on mental health than Polish students. The impact of the pandemic on the quality of life was more varied in Vietnam, which may be related to different socio-economic contexts and crisis management strategies.

In both countries, the pandemic brought significant changes to daily social practices, with clear differences in the degree of adherence to the recommendations and guidelines introduced during the pandemic. In Vietnam, there is a greater tendency to maintain precautionary measures in the long term, which may reflect a deeper belief in their effectiveness and a greater willingness to adapt to new behaviors to protect public health.

In Poland, although part of the society also maintained some recommendations, a significant percentage of people returned to pre-pandemic habits. Combining these observations, we can see that the pandemic not only forced changes in direct social interactions but also impacted mental health, communication preferences, and overall attitudes toward health recommendations.

The socio-cultural consequences of the pandemic, such as changes in habits and adaptation to new forms of contact, reflect both challenges and opportunities for social and individual development in the post-pandemic period.

References:

American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders (DSM-5); American Psychiatric Association:Arlington, VA, USA, 2013.

Arnett, J.J. 2000. Emerging adulthood: A theory of development from the late teens through the twenties. American Psychologist, 55(5), 469-480.

Barile, N., Bovalino, G.N. 2020. Media empatici, emozioni e gamification: Dalla quarta rivoluzione indusriale alla societàpostpandem-ica. H-Ermes J. Commun, 16, 7-26.

Barnlund, D.C. 1970. A Transactional Model of Communication. In: K.K. Sereno i C.D. Mortensen (red.), Foundations of Communication Theory (strony 83-92). New York: Harper and Row.

Bastani, P., Bahrami, M.A. 2021. COVID-19 Related Misinformation on Social Media: A Qualitative Study from Iran. Journal of Medical Internet Research.

Bayer, J.B., Ellison, N.B., Schoenebeck, S.Y., Falk, E.B. 2016. Sharing the small moments: ephemeral social interaction on Snapchat. Information, Communication and Society, 19(7), 956-977.

Berlo, D.K. 1960. The Process of Communication. New York: Holt, Rinehart and Winston.

Boyd, D. 2014. It's complicated: The social lives of networked teens. Yale University Press.

Brennen, J.S., Simon, F., Howard, P.N., Nielsen, R.K. 2021. Types, sources, and claims of COVID-19 misinformation. Reuters Institute, 7, 3-13.

Chen, Q., Min, C., Zhang, W., Wang, G., Ma, X., Evans, R. 2020. Unpacking the black box: How to promote citizen engagement through government social media during the COVID-19 crisis. Computers in Human Behavior, 110, 106380.

Cherry, C. 1966. On Human Communication: A Review, a Survey, and a Criticism. Cambridge, MA: MIT Press

Chou, W.Y.S., Oh, A., Klein, W.M.P. 2018. Addressing Health-Related Misinformation on Social Media. JAMA, 320, 2417-2418.

Craig, R.T. 1999. Communication Theory as a Field. Communication Theory, 9(2), 119-161.

Dix, C.F., Brennan, L., McCaffrey, T.A., Reid, M., Molenaar, A., Barklamb, A., Chin, S., Truby, H. 2022. Communicating Health to YoungAdults Using Social Media: How, Where, and When? Nutrients,14, 2967.

Erikson, E.H. 1968. Identity: Youth and Crisis. Norton and Co.

Fiske, J. 1990. Introduction to Communication Studies, 2nd ed. London: Routledge.

Gómez-Galán, J., Martínez-López, J.A., Lázaro-Pérez, C., Sarasola Sánchez-Serrano, J.L. 2020. Social networks consumption and addiction in college students during the COVID-19 pandemic: Educational approach to responsible use. Sustainability, 12, 7737.

Gomez, R., Ramkissoon, H. 2020. COVID-19: The barrier to travel for persons with disabilities. Journal of Travel Research, 0047287520946688.

Greenwood, S., Wattal, S. 2020. Social media and loneliness: Why an Instagram picture may be worth more than a thousand Twitter words. Computers in Human Behavior, 62, 155-167.

Grima, S., Dalli Gonzi, R., Thalassinos, E.I. 2020. The Impact of COVID-19 on Malta and its Economy and Sustainable Strategies. Available at SSRN 3644833.

Gupta, L., Abdelmaksoud, A. 2021. Challenges and opportunities of preprint in the era of COVID-19. Science Communication, 43(2), 258-271.

Hargittai, E., Fullerton, L., Menchen-Trevino, E., Thomas, K.Y. 2010. Trust online: Young adults' evaluation of web content. International Journal of Communication, 4, 468-494.

Hoffman, B.L., Hawkins, J.B. 2020. Social media and the COVID-19 pandemic: Spreading information not infection. Public Health Reports, 135(3), 323-325.

Johnson, T.J., Kaye, B.K. 2020. Believing in "fake news": The role of source credibility and preexisting support. Journalism Practice, 14(9), 1148-1167.

Junco, R. 2012. The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. Computers and Education, 58(1), 162-171.

Khan, S., Raza Rabbani, M., Thalassinos, E.I., Atif, M. 2020. Corona virus pandemic paving ways to next generation of learning and teaching: futuristic cloud based educational model. Available at SSRN 3669832.

Kumar, A., Nayar, K.R. 2020. COVID-19 and its mental health consequences. Journal of Mental Health, 29(1), 1-2.

Lasswell, H.D. 1948. Structure and function of communication in society. In: L. Bryson (Ed.), The Communication of Ideas. Institute for Religious and Social Studies.

Lenhart, A., Purcell, K., Smith, A., Zickuhr, K. 2010. Social media and mobile internet use among teens and young adults. Pew Internet and American Life Project.

McQuail, D. 2010. McQuail's Mass Communication Theory (6th ed.). Sage.

McQuail, D., Windahl, S. 1993. Communication Models for the Study of Mass Communications (2nd ed.). Longman.

Miller, V. 2021. Understanding digital culture in the age of COVID-19. Media Culture and Society, 43(2), 298-304.

Piaget, J. 1972. The Psychology of the Child. Basic Books.

Prensky, M. 2001. Digital natives, digital immigrants. On the Horizon, 9(5), 1-6.

Rogers, C. 1961. On Becoming a Person: A Therapist's View of Psychotherapy. Houghton Mifflin.

Selwyn, N. 2016. Digital downsides: Exploring university students' negative engagements with digital technology. Teaching in Higher Education, 21(8), 1006-1021.

Severin, W.J., Tankard, J.W. 2001. Communication Theories: Origins, Methods, and Uses in the Mass Media (5th ed.). Longman.

Shannon, C.E., Weaver, W. 1949. The Mathematical Theory of Communication. University of Illinois Press.

Shehata, W., Abdeldaim, D. 2021. Internet addiction among medical and non-medical students during COVID-19 pandemic, Tanta University, Egypt. Environmental Science and Pollution Research, 28, 59945-59952.

Smith, A., Duggan, M. 2020. Online dating has become the most popular way for U.S. couples to meet and has replaced more traditional ways of finding love, new research shows. Social Media Today, 21(1), 1-2.

Smith, A., Duggan, M. 2013. Online dating and relationships. Pew Research Center's Internet and American Life Project.

Smith, J.A., Reeves, S. 2020. Community and connection: Social isolation and the COVID-19 pandemic. Journal of Clinical Nursing, 29(21-22), 4215-4217.

Thompson, N., Wan, W. 2020. The impact of COVID-19 pandemic on corporate social responsibility and marketing philosophy. Journal of Business Research, 116, 176-182.

Van Dijk, J. 2020. Digital divide: Impact of access. In: The International Encyclopedia of Media Psychology. John Wiley & Sons, Ltd.

Walther, J.B. 2020. Theories of computer-mediated communication and interpersonal relations. In: M.L. Knapp, D.J. Daly, J.G. Oetzel (Eds.), The SAGE Handbook of Interpersonal Communication (4th ed.). SAGE Publications.

West, R., Turner, L.H. 2020. Introducing Communication Theory: Analysis and Application. McGraw-Hill Education.

Zarocostas, J. 2020. How to fight an infodemic. The Lancet, 395(10225), 676.