



Local response to online teaching

Latvia

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Contents

Acknowledgements	2
Executive Summary	4
1. Introduction	5
1.1. Project background.....	5
1.2. Objectives.....	5
2. Methodology	5
2.1. Research Questions.....	5
2.2. Instruments.....	5
2.3. Sample.....	6
2.4. Data Collection.....	8
2.5. Data Analysis.....	8
2.6. Limitations.....	8
3. Results	8
3.1. General perception regarding remote learning.....	8
3.2. Digital skills.....	16
3.3. Formal research classes/modules.....	29
3.4. Informal research classes/modules.....	28
3.5. Research competencies.....	30
4. Discussion and Recommendations	37
5. References	38
6. Appendix	39

Executive Summary

Background

This country report aims to provide lessons learned from the remote learning mode created due to the unrepresented crisis for higher education institutions and lay out positive examples from the results of a small-scale survey utilized by all partner universities.

Methodology

The data for this study were gathered from a sample of 125 students enrolled in the Faculty of Education, Psychology and Art, University of Latvia. An online survey was distributed to the students via Google forms in mid-September, and students were asked to fill it in until mid-October 2021. Data were analyzed from mid-October till early November 2021.

Key Findings

- Even though the students' responses for their self-assessment of their digital skills were high, they sought to acquire more digital skills during the remote learning mode.
- Even though the students take formal research classes/modules, they require more training and an in-depth understanding of research methodologies.
- The students dedicate less time to research methodologies outside the formal research training.

Key Recommendations

- Students' methodology skills should be improved, mainly by providing informal research training, lessons.
- Students should form informal research groups where they discuss their issues with their research methodologies.
- More research-related materials and activities should be created for students to support their research competencies.

1 Introduction

1.1 Background

The country report is part of the intellectual output 2 (IO2), “Strategies and practices regarding online teaching at the local level” aiming to provide comparable evidence-based local data from partner universities on different challenges faced during online teaching. The challenges were posed by COVID-19, when it was necessary to ensure a fully remote learning process, created during an unprecedented crisis. The decisions made during the pandemic on the provision of the study process were affected by it. To learn from this crisis and to find out how to overcome such situations more successfully in the future. It is necessary both draw the lessons from the crisis and be aware of the positive examples provided by solutions employed.

1.2 Objectives

The objectives of the research are:

- **O1:** to identify the challenges students faced during remote learning
- **O2:** to map the digital skills students from social field have
- **O3:** to evaluate how research classes/specific learning modules help students understand and engage into the research process
- **O4:** to identify what specific research behaviors students already master and in what areas they need additional help

2 Methodology

2.1 Research Questions

The research questions to be answered by this research report are:

1. How do the students relate to the remote learning process that they were exposed to during the last academic year?
2. What is the level of digital skills bachelor students report having?
3. How did exposure to formal and informal research classes/modules contributed to their knowledge and attitudes toward research process?
4. What specific research behaviors students feel competent engaging in?

2.2 Instruments

The final instrument used was generated using the previous experience of partner universities, but also previous measurements used for assessing research competencies (Swank & Lambie, 2016; Visser-Wijnveen, van der Rijst, & van Driel, 2016). The questionnaire was originally written in English, amended by partners and then translated into local languages for better use by partner countries (see Appendix 1). The dimensions that were included in the final version focused on:

- **General perception regarding remote learning (14 items)** – general students' perception regarding remote learning. Sample items included evaluation of specific activities during remote

learning compared to in-person learning and evaluation of remote learning process (e.g. The study process organised in this way facilitates learning; It creates a higher workload)

- Self-evaluation of digital skills (16 items) – student’s self-evaluation of their digital skills in the area of computer usage, using a five point Likert scale (1 – strongly disagree, 5 – strongly agree)
- Formal research classes/modules (26 items) – identifying of any specific research class/research module included in their learning plan and rating the learning experience during that class/module.
- Informal research class/module (4 items) – identifying any other individual learning activity, outside the learning plan at home university (e.g. webinars, presentations, (intensive) summer/winter schools) that they took during the academic year
- Level of research competencies (32 item) – self-evaluation of their confidence in performing specific research behaviors in the area of Qualitative/Quantitative Research Processes, Research Ethics, Dissemination of Research/Scholarly Writing, and Research Inquiry/Literature Review
- Experience of last-year students (6 items) – starting from the assumption that the last- year students are more involved in research though their bachelor thesis we evaluated their particular experience in relation to carrying a research in their field
- Demographics included gender, year of study, university and field of study

2.3 Sample

A descriptive survey design with convenience sampling was used. The sample group in the study consisted of 125 students studying at the Faculty of Education, Psychology and Art in the University of Latvia. All 125 students’ study location was based in Riga. Of the students that responded to the questionnaire, 115 female (92%), 9 male (7.2%), and 1 prefers not to say (0.8%), whose mean age was 28.7 within the range of 19-55. Students’ field of study were education (n=107,85.6%), psychology (n=5,4%), art (n=5, 4%), and sports (n=8,6.4%).

Among students, whose study field was education enrolled in the following study programs: primary school teacher (n=40, 32%), pre-school teacher (n=38,30.4%), Latvian language and literature teacher (n=5,4%), special education teacher (n=4, 3.2%), teacher training (n=3, 2.4%), design and technology teacher (n=3,2.4%), math teacher (n=3,2.4%),computer teacher (n=2,1.6%),English and Latvian language teacher (n=2, 1.6%),Russian language and literature teacher (n=2,1.6%), English language and computer teacher (n=1,0.8),German and English language teacher (n=1, 0.8%), Latvian language teacher (n=1,0.8%), science teacher (n=1, 0.8%) and sports teacher (=1, 0.8%).Among students, whose study field was psychology enrolled in the following study program: social pedagogue (n=3,2.4%) and history and social sciences (n=2, 1.6%).Among students, whose study field was art enrolled in the following study program: graphic design (n=5,4%), Among students, whose study field was sports enrolled in the following study programs: Sports technology and public health (n=6, 4.8%), sport coach (n=2,1.6%).

Students’ study field were vocational education (n=36,27.8%), and bachelor’s degree (or equivalent) (n=89, 72.2%). Students course levels were 1st course (n=49, 39.2%), 2nd course (n=34,27.2%), 3rd course (n=26, 20.8%) and 4th course (n=16,12.8%). Table 1 below illustrates the overview of students’ demographics.

Table 1. Overview of Students’ Demographics

Demographics	Item	Numbers	%
(1) Gender	Male	9	92%
	Female	115	7.2.%
	Prefer not to answer	1	0.25%
(2) Age	19 yrs. old-55 yrs. old	125	28.7%
(3) Mode of Study	Full time	55	44%
	Part time	70	56%

(4) Place of Study	Riga	125	100%
(5) Field of Study	Education	107	85.6%
	Psychology	5	4%
	Art	5	4%
	Sports	8	6.4%
(6) Study Program	Primary school teacher	40	32%
	Pre-school teacher	38	30.4%
	Sports technology and public health	6	4.8%
	Graphics design	5	4%
	Latvian Language & Literature teacher	5	4%
	Special education teacher	4	3.2%
	Teacher	3	2.4%
	Design and technology teacher	3	2.4%
	Math teacher	3	2.4%
	Social pedagogue	3	2.4%
	computer teacher	2	1.6%
	Sports coach	2	1.6%
	English & Latvian language teacher	2	1.6%
	Russian language and literature teacher	2	1.6%
	History & Social Science	2	0.8%
	English language & Computer teacher	1	0.8%
	German & English language teacher	1	0.8%
	Latvian language teacher	1	0.8%
	Science teacher	1	0.8%
	Sports teacher	1	0.8%
(7) Study Level	Vocational education	36	27.8 %
	Bachelor's degree (or equivalent)	89	72.2%
(8) Study Course	1.Course	49	39.2%
	2. Course	34	27.2%
	3. Course	25	20%
	4.Course	17	13.6%

Source: generated by the authors

2.4 Data Collection

The research team decided to use the online survey platform called Google forms. The lead researcher sent the link of the survey to all students at the Faculty of Education, Psychology and Art via e-mail. One reminder was sent to all students at early-October.

2.5 Data Analysis

IBM SPSS Statistics 25.0 software was used to analyze the data. Results are presented in tabular and graph format. The upper bound of margin of error in the analysis is set as.05.

2.6 Limitations

- As there were small number of respondents from one faculty in a university in Latvia in the survey, the results cannot be generalisable and does not represent the remote learning situation in Latvia. However, the results provided insightful information about how students coped with their studies during the remote learning process and how they dealt with their formal/informal research class/modules.
- The translated items caused misunderstandings among students and therefore, it affected some of the results of the survey.

3 Results

3.1 General perception regarding remote learning

The students were asked to indicate their agreement (1-strongly disagree, 5-strongly agree) to the statements related to their general perception of the remote learning process during the last academic year (2020-2021). Table 2 illustrates the results of students' perception of their remote learning experience as percentages. In Table 3, the results are presented as means with standard deviations. The results from Table 2 and 3 were compared with the six sociodemographic characteristics of the students (see Table 4, gender; Table 5, age; Table 6, study mode; Table 7, study field; Table 8, study level; Table 9, study course).

Table 2. The distribution of students' general perception of remote learning (N=125) (percentages)

Item	Strongly disagree	Disagree	Partially agree	Agree	Strongly agree
The study process organised in this way facilitates learning	4%	13.6 %	25%	27.2%	29.6%
It creates a higher workload	16,8%	31.2%	27.2%	19.2%	5.6%
It is a good solution in a crisis situation, but training should fully return to face-to face after the end of the pandemic	12%	20%	33.6%	18.4%	16%
It creates alienation from the study process	19.2%	24%	25.6%	20.8%	10.4%
It creates emotional burden	24%	29,6%	20.8%	14.4%	11.2%
It hinders to see the whole study process	18.4%	39.2%	23.2%	12%	7.2%

Source: generated by the authors

Table 3. The distribution of students' general perception of remote learning (N=125) (means)

Item	N	Mean	Std. Deviation
The study process organised in this way facilitates learning	125	3,6480	1,15881
It creates a higher workload	125	2,6560	1,13666
It is a good solution in a crisis situation, but training should fully return to face-to face after the end of the pandemic	125	3,0640	1,22963
It creates alienation from the study process	125	2,7920	1,26552
It creates emotional burden	125	2,5920	1,30196
It hinders to see the whole study process	125	2,5040	1,14035

Source: generated by the authors

Students' average responses to all statements in Table 3 was 'partially agree' (mean=2.87, S.D.=,70). In response to the statement, "the study process organized in remote learning facilitates learning", students' average answer was 'agree' (mean =3.64, S.D.=1.1). Students' average answer to the statement, "the study process organized in remote learning creates a higher workload" was "partially agree" (mean=2.65, S.D.= 1.1). Concerning the students' average answer to the statement "the study process organized in remote learning is a good solution in a crisis situation, but training should fully return to face-to-face after the end of the pandemic" was 'partially agree' (mean=3.06, S.D.=1.2). In response to the statement, "the study process organized in remote learning creates alienation from the study process", students' average answer was 'partially agree' (mean=2.79, S.D.=1.2). The following statement's average answer was 'partially agree' (mean=2.59, S.D.=1.3), "the study process organized in remote learning creates emotional burden". As to students' average answer to the statement, "the study process organized in remote learning hinders to see the whole study process" was 'partially agree' (mean=2.50, S.D.=1.1).

Table 4. The distribution of students' general perception of remote learning (N=125) by gender

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
Male	9	2,8519	,80985	Between groups	,215	2	,107	,213	,809
Female	115	2,8739	,70351	Within groups	61,669	122	,505		
Prefer not to say	1	3,3333		Total	61,884	124			
Total	125	2,8760	,70644						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' general perception of remote learning with their gender. As a result of the variance analysis, it was concluded that there is no significant difference between students' general perception of remote learning and their gender. It was determined that the students' gender does not show any effect on their general perceptions of remote learning.

Table 5. The distribution of students' general perception of remote learning (N =125) by age

Age Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
19-28 yrs.	71	2,9202	,73239	Between groups	,745	3	,248	,491	,689
29-37 yrs.	32	2,8698	,68879		Within groups	61,139	121	,505	
38-46 yrs.	12	2,6528	,78964	Total	61,884	124			
47-55 yrs.	10	2,8500	,47434						
Total	125	2,8760	,70644						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' general perception of remote learning with their age. As a result of the variance analysis, it was concluded that there is no significant difference between students' general perception of remote learning and their age. It was determined that the students' age does not show any effect on their general perceptions of remote learning.

Table 6. The distribution of students' general perception of remote learning (N =125) by study mode

Group	N	M	S.D.	t	df	p
Full Time Attendance	55	2,3192	,29246	2,084	123	,039
Part Time Attendance	70	2,2127	,27656	2,070	112,917	,041
Total	125					

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, t: T-test, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors

T-test analysis was conducted to compare the students' general perception of remote learning with their study mode. As a result of the T-test analysis, it was concluded that there is no significant difference between students' general perception of remote learning and their study mode. It was determined that the students' study mode does not show any effect on their general perceptions of remote learning.

Table 7. The distribution of students' general perception of remote learning (N =125) by study field

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
Education	107	2,8551	,71524	Between groups	1,166	3	,389	,774	,511
Psychology	5	2,9667	,84492		Within groups	60,718	121	,502	
Art	5	3,3333	,47140	Total	61,884	124			
Sport	8	2,8125	,62639						
Total	125	2,8760	,70644						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' general perception of remote learning with their study field. As a result of the variance analysis, it was concluded that there is no significant difference between students' general perception of remote learning and their study field. It was determined that the students' study field does not affect their general perceptions of remote learning.

Table 8. The distribution of students' general perception of remote learning (N =125) by study level

Group	N	M	S.D.	t	df	p
Bachelor's Degree (or equivalent)	89	2,8483	,65455	-,687	123	,493
Vocational Education	36	2,9444	,82712	-,623	53,610	,536
Total	125					

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, t: T-test, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors

T-test analysis was conducted to compare the students' general perception of remote learning with their study level. As a result of the T-test analysis, it was concluded that there is no significant difference between students' general perception of remote learning and their study level. It was determined that the students' study level does not show any effect on their general perceptions of remote learning.

Table 9. The distribution of students' general perception of remote learning (N =125) by study course

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
1. course	49	3,1156	,73614	Between groups	5,741	3	1,914	4,124	,008
2. course	34	2,7353	,66555	Within groups	56,143	121	,464		
3. course	26	2,5833	,62937	Total	61,884	124			
4. course	16	2,9167	,61162						
Total	125	2,8760	,70644						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level. Source: generated by the authors, Source: generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' general perception of remote learning with their study level. As a result of the variance analysis, it was concluded that there is a significant difference between variances. As the variances have a homogeneous distribution, Tukey's test for Post-Hoc analysis was used to determine the direction of significance.

Table 9.1 Tukey's Test for Post-Hoc Analysis

course	course	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1. course	2. course	,38035	,15204	,065	-,0157	,7764
	3. course	,53231*	,16527	,009	,1018	,9629
	4. course	,19898	,19613	,741	-,3120	,7099
	1. course	-,38035	,15204	,065	-,7764	,0157

2. course	3. course	,15196	,17746	,827	-,3103	,6143
	4. course	-,18137	,20651	,816	-,7193	,3566
3. course	1. course	-,53231*	,16527	,009	-,9629	-,1018
	2. course	-,15196	,17746	,827	-,6143	,3103
	4. course	-,33333	,21644	,417	-,8972	,2305
4. course	1. course	-,19898	,19613	,741	-,7099	,3120
	2. course	,18137	,20651	,816	-,3566	,7193
	3. course	,33333	,21644	,417	-,2305	,8972

Source: generated by the authors

As shown in Table 9, when the students' general perception of remote learning was compared according to study courses, it was found that 1st course group has the highest score ($X=3,1156$). It was concluded that the students at the 1st course group have higher general perception to remote learning than the 3rd course group.

Students were asked to respond (1=less than before, 2=just like it was before, 3=more than before) to what extent the activities mentioned in Table 9 are necessary during the remote learning process compared to in-person learning. Table 10 illustrates the results as percentages and Table 11 presents the results as means with standard deviations. Results from Table 10 and 11 were compared with the six sociodemographic characteristics of the students (see Table 12, gender; Table 13, age; Table 14, study mode; Table 15, study field; Table 16, study level; Table 17, study course).

Table 10. The comparison of students' remote learning with their in-person learning (N=125) (percentages)

Item	Less than before	Just like it was before the start of the remote study process	More than before
Read the materials send by teacher	3.2%	64%	32.8%
Look for various additional information (different from what the teacher recommended)	2.4%	67.2%	30.4%
Prepare independent works in the form of reports, essays, or other written work	3.2%	76.8%	20%
Prepare group works in the form of reports, essays, or other written work	3.2%	74.4%	22.4%
Acquire digital competencies	3.2%	42.4%	54.4%
Prepare presentations	1.6 %	70.4%	28%
Develop practical work	4.8%	72%	23.3%
Communicate with other group members	7.2%	64%	28.8%
Contact Lectures	4%	69.6%	24.4%

Source: generated by the authors

Table 11. The comparison of students' remote learning with their in-person learning (N=125)

Item	N	Mean	Std. Deviation
Read the materials send by teacher	125	2,2960	,52400
Look for various additional information (different from what the teacher recommended)	125	2,2800	,50161
Prepare independent works in the form of reports, essays, or other written work	125	2,1680	,45323
Prepare group works in the form of reports, essays, or other written work	125	2,1920	,47000
Acquire digital competencies	125	2,5120	,56248
Prepare presentations	125	2,2640	,47763
Develop practical work	125	2,1840	,49813
Communicate with other group members	125	2,2160	,56202
Contact lecturers	125	2,2240	,50584

Source: generated by the authors

Students' average responses to all statements in Table 11 was 'just like it was before the start of the remote learning process' (mean=2.25, S.D.=,28). In response to the statement, "read the materials sent by teacher", students' average answer is 'just like it was before the start of the remote learning process' (mean =2,29 S.D.=,52). Students' average response to the statement, "look for various additional information (different from what the teacher recommended)" was 'just like it was before the start of the remote learning process' (mean=2.28, S.D.=,50). Concerning the students' average answer to the statement "prepare independent works in the form of reports, essays, or other written work" was 'just like it was before the start of the remote learning process' (mean=2.16, S.D.=,45). In response to the statement, "prepare group works in the form of reports, essays, or other written work", students' average answer was 'just like it was before the start of the remote learning process' (mean=2.19, S.D.=,47). The following statement's average answer was 'more than before the start of the remote learning process' (mean=2.51, S.D.=,56), "acquire digital competencies". As to students' average answer to the statement, "Prepare presentations" was 'just like it was before the start of the remote learning process' (mean=2.26, S.D.=,47). Students' average answer to the following statements, develop practical work' (mean=2.18, S.D.=49), "communicate with other group members" (mean=2.21, S.D.=,56), and "contact lecturers" (mean=2.22, S.D.=,50) were 'just like it was before the start of the remote learning process'.

Table 12. The comparison of students' remote learning with their in-person learning (N=125) by gender

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
Male	9	2,1111	,35573	Between groups	,295	2	,148	1,811	,168
Female	115	2,2686	,28000	Within groups	9,950	122	,082		
Prefer not to say	1	2,5556	.	Total	10,246	124			
Total	125	2,2596	,28745						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level. Source: generated by the authors

The homogeneity of variances is 95% One-way analysis of variance was conducted to compare the students' perception of their remote learning experience with their in-person learning by gender. As a result of the variance analysis, it was concluded that there is no significant difference between students'

perceptions of their remote learning process and their gender. It was determined that the students' gender does not show any effect on their perceptions.

Table 13. The comparison of students' remote learning with their in-person learning (N=125) by age

Age Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
19-28 yrs.	71	2,2754	,28100	Between groups	,210	3	,070	,845	,472
29-37 yrs.	32	2,2049	,30930						
38-46 yrs.	12	2,3426	,32639	Total	10,246	124			
47-55 yrs.	10	2,2222	,20286						
Total	125	2,2596	,28745						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level. Source: generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' perception of their remote learning experience with their in-person learning by age. As a result of the variance analysis, it was concluded that there is no significant difference between students' perceptions of their remote learning process and their age. It was determined that the students' age does not show any effect on their perceptions.

Table 14. The comparison of students' remote learning with their in-person learning (N=125) by study mode

Group	N	M	S.D.	t	df	p
Full Time Attendance	55	2,3192	,29246	2,084	123	,039
Part Time Attendance	70	2,2127	,27656	2,070	112,917	,041
Total	125					

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, t: T-test, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level. Source: generated by the authors

T-test analysis was conducted to compare the students' perception of their remote learning experience with their in-person learning by study mode. As a result of the T-test analysis, it was concluded that there is a significant difference between students' perceptions of their remote learning process and their study mode. It was determined that full-time students consider that study activities organised during the remote learning process are more necessary when compared with the part-time students.

Table 15. The comparison of students' remote learning with their in-person learning (N=125) by study field

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
Education	107	2,2513	,28729	Between groups	,172	3	,057	,689	,560
Psychology	5	2,1778	,23040						
Art	5	2,3778	,35660	Total	10,246	124			
Sport	8	2,3472	,29360						
Total	125	2,2596	,28745						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level. Source: generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' perception of their remote learning experience with their in-person learning by study field. As a result of the variance analysis, it was concluded that there is no significant difference between students' perceptions of their remote learning process and their study field. It was determined that the students' study does not show any effect on their perceptions.

Table 16. The comparison of students' remote learning with their in-person learning (N=125) by study level

Group	N	M	S.D.	t	df	p
Bachelor's Degree (or equivalent)	89	2,3096	,28842	3,171	123	,002
Vocational Education	36	2,1358	,24790	3,382	74,890	,001
Total	125					

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, t: T-test, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level. Source: generated by the authors

T-test analysis is conducted to compare the students' general perception of the remote learning experience with their in-person learning by study level. As a result of the T-test analysis, it was concluded that there is a significant difference between variances. It was determined that the bachelor's students reckon that study activities organised during the remote learning process are more necessary than the face-to-face learning process compared with the vocational education students.

Table 17. The comparison of students' remote learning with their in-person learning (N=125) by study course

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
1. Course	49	2,2880	,33250	Between groups	,550	3	,183	2,286	,082
2. Course	34	2,1993	,23495	Within groups	9,696	121	,080		
3. Course	26	2,2009	,24549	Total	10,246	124			
4. Course	16	2,3958	,26595						
Total	125	2,2596	,28745						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level. Source: generated by the authors

One-way analysis of variance was conducted to compare the students' perception of their remote learning experience with their in-person learning by study course. As a result of the variance analysis, it was concluded that there is no significant difference between students' perceptions of their remote learning process and their study course. It was determined that the students' study does not show any effect on their perceptions.

3.2 Digital skills

The students were asked to indicate their agreement (1-strongly disagree, 5-strongly agree) to the statements related to their self-assessment of digital skills. Table 18 below, illustrates the distribution of students' self-assessment of their digital skills as percentages and in Table 19, the results are presented as means with standard deviations. The results from Table 18 and 19 were compared with the six sociodemographic characteristics of the students (see Table 20, gender; Table 21, age; Table 22, study mode; Table 23, study field; Table 24, study level; Table 25, study course).

Table 18. The Distribution of students' self-assessment of their digital skills (N=125) (percentages)

Item	Strongly disagree	Disagree	Partially agree	agree	Strongly agree
I know how to manage online files (download, save, upload)	0.8%	3.2%	9.6%	34.4%	52%
I know how to use shortcut keys	3.2%	13.6%	26.4%	31.2%	25%
I know how to open a new tab in my browser	1.6%	2.4%	8%	32.5%	52.8%
I know how to complete online forms	1.6%	2.4%	13.6%	34.4%	48%
I know how to adjust privacy settings	1.6%	10.4%	29.6%	28%	30.4%
I know how to connect to a WIFI network	0	2.4%	5.6%	32%	60%
I know how to connect to an online platform (Zoom, MsTeams, Google classroom etc)	0	4%	11.2%	34.4%	50.4%
I can easily find the information I need on a website	0.8%	4.8%	21.6%	38.4%	34.4%
I can easily navigate through the tools included in different online platforms (Zoom, MsTeams, Google classroom etc)	0.8%	8%	20%	36.8%	34.4%
I know which information I should and shouldn't share online	0	6.4%	14.4%	36.8%	42.4%
I know when I should and shouldn't share information online	1.6%	2.4%	16.8%	35.2%	44%
I am careful about my comments and behaviours while I am online	1.6%	0.8%	13.6%	32%	52%
I know how to create a video	5.6%	10.4%	22.4%	25.6%	36%
I know how to create a infographic	14.4%	19.2%	32%	17.6%	16.8%
I know how to design a website	13.6%	18.4%	32%	20.8%	15.2%
I feel confident putting content I have created online	3.2%	12%	27.2%	34.4%	23.2%

Source: generated by the authors

Table 19. The Distribution of students' self-assessment of their digital skills (N=125) (means)

Item	N	Mean	Std. Deviation
I know how to manage online files (download, save, upload)	125	4,3360	,84189
I know how to use shortcut keys	125	3,6240	1,10471
I know how to open a new tab in my browser	125	4,3520	,85436
I know how to complete online forms	125	4,2480	,89493
I know how to adjust privacy settings	125	3,7520	1,05231
I know how to connect to a WIFI network	125	4,4960	,71419
I know how to connect to an online platform (Zoom, MsTeams, Google classroom etc)	125	4,3120	,82712
I can easily find the information I need on a website	125	4,0080	,91136
I can easily navigate through the tools included in different online platforms (Zoom, MsTeams, Google)	125	3,9600	,97053
I know which information I should and shouldn't share online	125	4,1520	,89853
I know when I should and shouldn't share information online	125	4,1760	,90753
I am careful about my comments and behaviours while I am online	125	4,3200	,85760
I know how to create a video	125	3,7600	1,20750
I know how to create an infographic	125	3,0320	1,27593
I know how to design a website	125	3,0560	1,24631
I feel confident putting content I have created online	125	3,6240	1,06759

Source: generated by the authors

Students' average responses to all statements in Table 19 is 'agree' (mean=3.95, S.D.=,72). 52% of the students responded that they are careful about their comments and behaviours while they are online.

Table 20. The Distribution of students' self-assessment of their digital skills (N=125) by gender

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
Male	9	4,0972	,84843	Between groups	,683	2	,342	,640	,529
Female	115	3,9332	,72186	Within groups	65,163	122	,534		
Prefer not to say	1	4,6250	.	Total	65,846	124			
Total	125	3,9505	,72871						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level. Source: generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' self-assessment of their digital skills with experience with their gender. As a result of the variance analysis, it was concluded that there is no significant difference between students' self-assessed digital skills with their gender. It was determined that students' gender does not show any effect on their self-assessed digital skills.

Table 21. The Distribution of students' self-assessment of their digital skills (N=125) by age

Age Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
19-28 yrs.	71	4,1391	,57440	Between groups	6,330	3	2,110	4,290	,006
29-37 yrs.	32	3,7793	,82152	Within groups	59,516	121	,492		
38-46 yrs.	12	3,6198	,96253	Total	65,846	124			
47-55 yrs.	10	3,5563	,76798						
Total	125	3,9505	,72871						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level. **Source:** generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' self-assessment of their digital skills with experience with their age. As a result of the variance analysis, it was concluded that there is a significant difference between students' self-assessed digital skills with their age. As the variances have homogeneous distribution, Tukey's test, one of the Post-Hoc tests, has been used to determine the direction of significance.

Table 21.1: Tukey test analysis

Age	Age	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
19-28 yrs.	29-37	,35979	,14933	,081	-,0292	,7488
	38-46	,51929	,21890	,088	-,0510	1,0895
	47-55	,58283	,23689	,071	-,0343	1,1999
29-37 yrs.	19-28	-,35979	,14933	,081	-,7488	,0292
	38-46	,15951	,23740	,908	-,4590	,7780
	47-55	,22305	,25408	,816	-,4389	,8850
38-46 yrs.	19-28	-,51929	,21890	,088	-1,0895	,0510
	29-37	-,15951	,23740	,908	-,7780	,4590
	47-55	,06354	,30029	,997	-,7188	,8458
47-55 yrs.	19-28	-,58283	,23689	,071	-1,1999	,0343
	29-37	-,22305	,25408	,816	-,8850	,4389
	38-46	-,06354	,30029	,997	-,8458	,7188

Source: generated by the authors

As shown in Table 21, students in 18-28 years old age group have the highest self-assessed digital skills (X= 4,1391) than other age groups.

Table 22. The Distribution of students' self-assessment of their digital skills (N=125) by study mode

Group	N	M	S.D.	t	df	p
Full Time Attendance	55	2,9619	,89127	,284	123	,777
Part Time Attendance	70	2,9138	,97491	,287	120,151	,774
Total	125					

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, t: T-test, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level. **Source:** generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' self-assessment of their digital skills with experience with their study mode. As a result of the T-test analysis, it was concluded that there is no significant difference between students' self-assessed digital skills with their study mode. It was determined that the students' study mode does not show any effect on their self-assessed digital skills.

Table 23. The Distribution of students' self-assessment of their digital skills (N=125) by study field

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
Education	107	3,9474	,72345	Between groups	,970	3	,323	,603	,614
Psychology	5	3,7375	1,08559	Within groups	64,876	121	,536		
Art	5	3,7875	,72967	Total	65,846	124			
Sport	8	4,2266	,60406						
Total	125	3,9505	,72871						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, **Source:** generated by the authors, **Source:** generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' self-assessment of their digital skills with experience with their study field. As a result of the variance analysis, it was concluded that there is no significant difference between students' self-assessed digital skills with their study field. It was determined that the students' study does not show any effect on their self-assessed digital skills.

Table 24. Students' self-assessment of their digital skills (N=125) by study level

Group	N	M	S.D.	t	df	p
Bachelor's Degree (or equivalent)	89	4,0358	,65163	2,086	123	,039
Vocational Education	36	3,7396	,86570	1,852	51,799	,070
Total	125					

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, t: T-test, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, **Source:** generated by the authors

T-test analysis was conducted to compare the students' self-assessment of their digital skills with experience with their study level. As a result of the T-test analysis, it was concluded that there is a significant difference between students' self-assessed digital skills with their study level. It was determined that the bachelor students have higher self-assessed digital skills than vocational education students.

Table 25. Students' self-assessment of their digital skills (N=125) by study course

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
1. Course	49	3,7602	,77690	Between groups	6,012	3	2,004	4,053	,009
2. Course	34	4,0478	,73260		59,834	121	,494		
3. Course	26	4,3053	,42180	Total	65,846	124			
4. Course	16	3,7500	,76171						
Total	125	3,9505	,72871						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' self-assessment of their digital skills with their study. As a result of the variance analysis, it was concluded that there is a significant difference between variances. As the variances do not have a homogeneous distribution ($p < 0.05$), Tamhane's T2 test, one of the Post-Hoc tests, was used to determine the direction of significance.

Table 25.1 Tamhane's T2 Test Analysis

Study Course	Study Course	Mean	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1. Course	2. Course	-,28759	,16764	,434	-,7408	,1656
	3. Course	-,54508*	,13842	,001	-,9194	-,1707
	4. Course	,01020	,22041	1,000	-,6172	,6377
2. Course	1. Course	,28759	,16764	,434	-,1656	,7408
	3. Course	-,25749	,15043	,442	-,6682	,1532
	4. Course	,29779	,22814	,742	-,3471	,9427
3. Course	1. Course	,54508*	,13842	,001	,1707	,9194
	2. Course	,25749	,15043	,442	-,1532	,6682
	4. Course	,55529	,20762	,083	-,0481	1,1587
4. Course	1. Course	-,01020	,22041	1,000	-,6377	,6172
	2. Course	-,29779	,22814	,742	-,9427	,3471
	3. Course	-,55529	,20762	,083	-1,1587	,0481

Source: generated by the authors

As shown in Table 25, when the students' self-assessment of their digital skills is compared with their study course, it is seen that 3rd course group has the highest score ($X=4.3053$). This is followed by the students in the 2nd course group ($X=4,0478$), the 1st course group ($X=3,7602$) and the 4th course group ($X=3,7500$). Tamhane's T2 Test, one of the Post-Hoc tests, is used to test the source of the difference, since the variances of the groups are heterogeneously distributed with 95% confidence. The direction of the difference is found as (1st course) -(3rd course). It is concluded that the students in the 3rd course group have higher digital skills than the students in the 1st course group.

3.3 Formal research class/modules

The students were asked to respond a specific research class they have taken during the last academic year (2020-2021) or about any specific research content/module covered in any other class in the previous academic year, when studying online. The answers of students are illustrated in Figure 1. Next, the students were asked to indicate whether they have completed such a class/module in the previous academic year. The responses of students are presented in Figure 2.

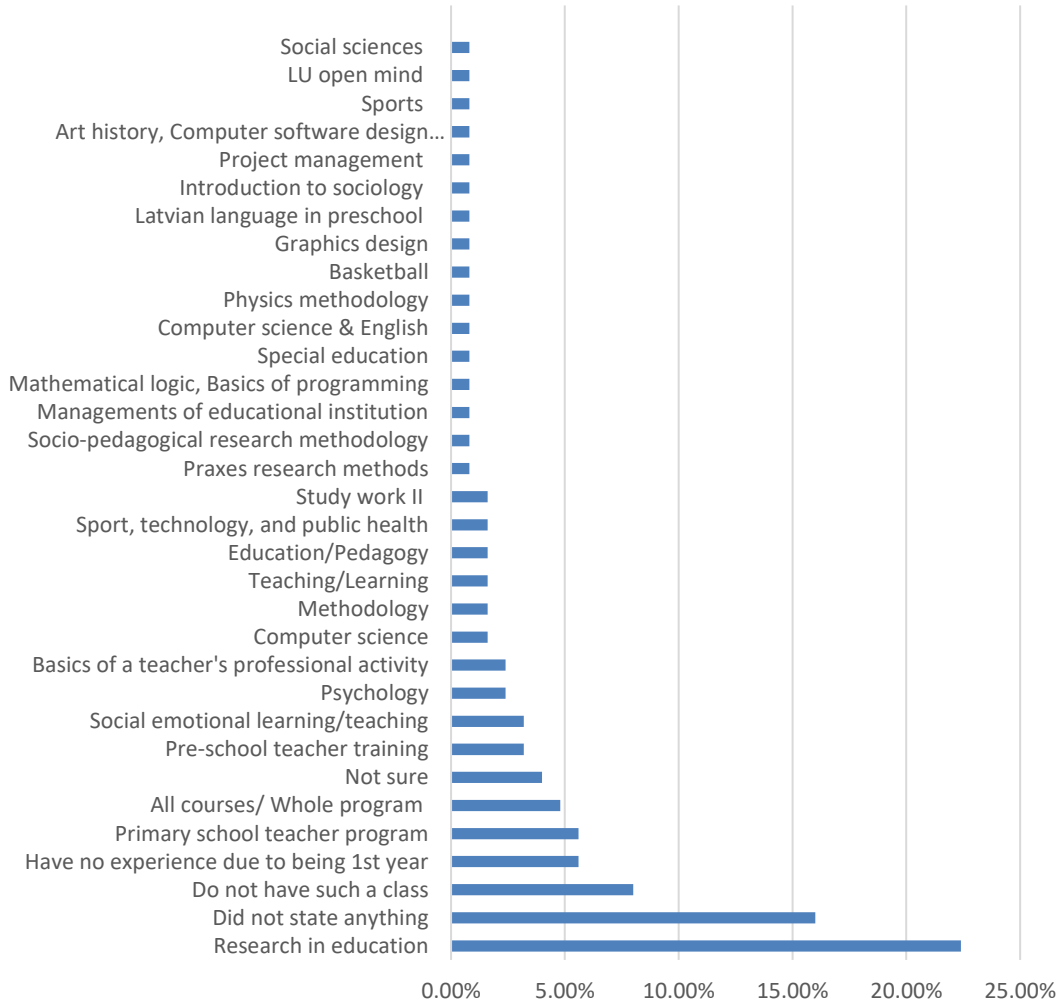


Figure 1. The Distribution to students' Answers on Formal Research Class/Modules

22.4% of the student responded that they have attended research in education.

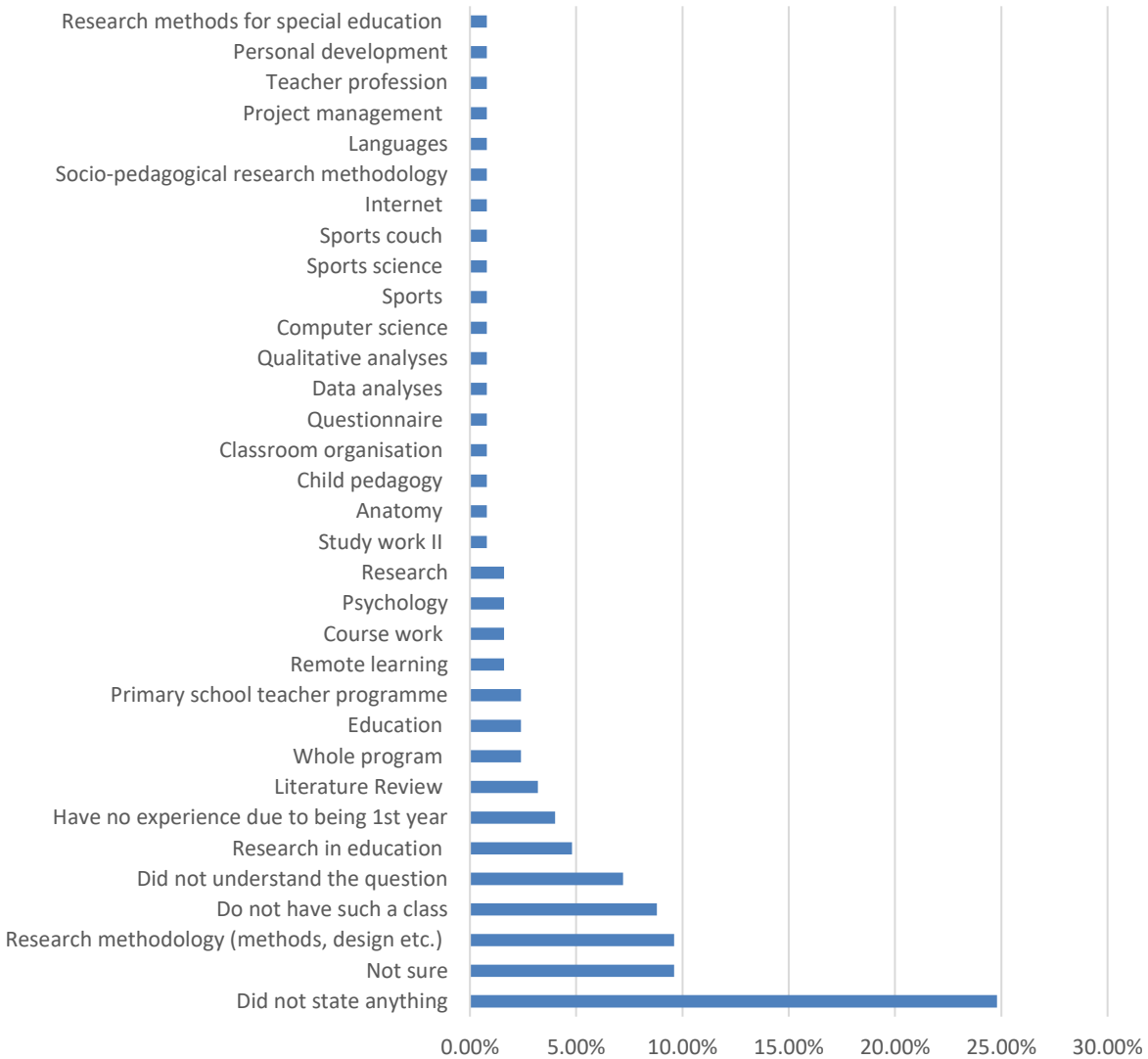


Figure 2. The Distribution to Students' Answers on Formal Research Modules/Contents

Only 9% of the students responded that they studied research methodology (methods, design etc.) in their formal research class/modules.

Table 23 below, illustrates students' perception of their formal research class/modules. Results from Table 23 were compared with the six sociodemographic characteristics of the students (see Table 24, gender; Table 25, age; Table 26, study mode; Table 27, study field; Table 28, study level; Table 29, study course).

Table 26. Students' perception of their formal research class/modules (percentages)

During the class/module...	Strongly disagree	Disagree	Partially agree	Agree	Strongly agree
My understanding of the most important concepts used in social science research area has increased	7.2%	7.2%	40.8%	38.4%	6.4%
My understanding about the steps of the research process has increased	6.4%	8%	36%	39.2%	10.4%
My understanding about research methods has increased	7.2%	8%	35.2%	40%	9.6%
I feel that I am confident in using specific techniques for data analysis (eg. specific software or computer applications) regardless of the grades I received	8.8%	20.8%	46.4%	25.6%	6.4%
I became more interested about research in general	8.8%	20.8%	43.2%	20%	7.2%
There were sufficient opportunities to talk with researchers about their scientific research	20.8 %	32%	29.6%	12.8%	4.8%
I got the opportunity to hear about current recent developments in the field	13.6%	30.4%	33.6%	15.2%	7.2%
I was introduced to the research carried out by my teacher	16%	20.8%	36%	17.6%	9.6%
I was introduced to the research carried out by the institution/university	10.4%	24.8%	34.4%	20%	10.4%
My teacher encouraged me to look for alternative explanations for the research results	9.6%	21.6%	37.6%	20.8%	10.4%
Through research class (content), I became more enthusiastic about my field of study	12.8%	17.6%	41.6%	18.4%	9.6%
Examples between research and practice were given	9.6%	20%	35.2%	25.6%	9.6%
I learned what type of studies have been carried out in my field of study	12%	11.2%	36.8%	28%	12%
I learned how research can be used in my field of study	10.4%	12.8%	32.8%	31.2%	17.8%
I think that what I learnt will be useful in other classes as well	10.4%	8.8%	32%	35.2%	13.6%
I think that what I learnt will be useful in my career, upon graduation	9.6%	12%	31.2%	31.2%	16%
I think that no social worker/sociologist/teacher...will need all these information for being a good professionist in the field	23.2%	26.4%	35.2%	9.6%	5.6%
My teacher encouraged me to carry on my own research	12%	21.6%	37.6%	19.2%	9.6%
The teacher has provided course assignments (e.g., readings, homework, quizzes) on a regular basis	8.8%	15.2%	36.8%	23.2%	16%
The teacher has given me individual feedback on my performance on assignments	12%	21.6%	33.6%	22.4%	10.4%
The teacher has informed me on what exams will look like in this situation	8%	13.6%	24.8%	35.2%	18.4%

Examinations online were more difficult for me	23.2%	22.4%	32%	13.6%	8.8%
Overall, the teachers carried out their instruction adequately	7.2%	11.2%	30.4%	34.4%	16.8%
In general, I am satisfied with the research classes/modules taken remotely	7.2%	12.8%	33.6%	32%	14.4%

Table 27. Students' perception of their formal research class/modules(means)

Item	N	Mean	Std. Deviation
During the class/module...			
My understanding of the most important concepts used in social science research area has increased	125	3,2960	,95903
My understanding about the steps of the research process has increased	125	3,3920	,99916
My understanding about research methods has increased	125	3,3680	1,01231
I feel that I am confident in using specific techniques for data analysis (e.g., specific software or computer applications) regardless of the grades I received	125	3,0800	,99677
I became more interested about research in general	125	2,9680	1,03125
There were sufficient opportunities to talk with researchers about their scientific research	125	2,5040	1,11170
I got the opportunity to hear about current recent developments	125	2,7360	1,10821
I was introduced to the research carried out by the institution/university	125	2,8640	1,17325
I was introduced to the research carried out by my teacher	125	2,9760	1,12497
My teacher encouraged me to look for alternative explanations for the research results	125	3,0240	1,11054
Through research class (content), I became more enthusiastic about my field of study	125	2,9600	1,12451
Examples between research and practice were given	125	3,0800	1,09692
I learned what type of studies have been carried out in my field of study	125	3,1920	1,14085
I learned how research can be used in my field of study	125	3,2560	1,13524
I think that what I learnt will be useful in other classes as well	125	3,3520	1,12347
I think that what I learnt will be useful in my career, upon graduation	125	3,3440	1,15076
I think that no social worker/sociologist/teacher...will need all these information for being a good	125	2,4800	1,11876
My teacher encouraged me to carry on my own research	125	2,9440	1,13097
The teacher has provided course assignments (e.g., readings, homework, quizzes) on a regular basis	125	3,2480	1,14057
The teacher has given me individual feedback on my performance on assignments	125	3,0000	1,15004
The teacher has informed me on what exams will look like in this situation	125	3,4480	1,15323
Examinations online were more difficult for me	125	2,6320	1,23482
Overall, the teachers carried out their instruction adequately	125	3,2800	,97219

In general, I am satisfied with the research classes/modules taken remotely	125	3,3440	1,10062
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Source: generated by the authors

Students' average responses to all statements in Table 27 is 'partially agree' (mean=3.07, S.D.=,80).

Table 28. Students' perceptions of their formal research class/modules by gender

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
Male	9	3,0324	1,09048	Between groups	4,367	2	2,184	3,465	,034
Female	115	3,0949	,76882	Within groups	76,897	122	,630		
Prefer not to say	1	1,0000	.	Total	81,264	124			
Total	125	3,0737	,80954						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors,

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' perceptions of their formal research class/modules with their gender. As a result of the variance analysis, it was concluded that there is a significant difference between students' perceptions of their formal research class/modules with their gender ($p < 0,05$). However, Post-Hoc tests cannot be applied for this analysis because at least one group has less than two data entries.

Table 29. Students' perception of their formal research class/modules by age

Age Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
19-28 yrs.	71	3,1714	,77144	Between groups	1,723	3	,574	,874	,457
29-37 yrs.	32	2,9674	,74804	Within groups	79,541	121	,657		
38-46 yrs.	12	2,9792	1,18045	Total	81,264	124			
47-55 yrs.	10	2,8333	,76073						
Total	125	3,0737	,80954						

N: Number of Respondents, \bar{x} : Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors,

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' perceptions of their formal research class/modules with their age. As a result of the variance analysis, it was concluded that there is no significant difference between students' perceptions of their formal research class/modules with their age ($p < 0,05$).

Table 30. Students' perception of their formal research class/modules by study mode

Group	N	M	S.D.	t	df	p
Full Time Attendance	55	3,0856	,82001	,146	123	,884
Part Time Attendance	70	3,0643	,80703	,145	115,235	,885
Total	125					

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, t: T-test, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level.

T-test analysis was conducted to compare the students' perceptions of their formal research class/modules with their study mode. As a result of the T-test analysis, it was concluded that there is no significant difference between students' perceptions of their formal research class/modules with their study mode. It was determined that the students' study mode does not show any effect on their perceptions.

Table 31. Students' perception of their formal research class/modules by study field

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
Education	107	3,0693	,82221	Between groups	,655	3	,218	,328	,805
Psychology	5	3,3917	,96087	Within groups	80,609	121	,666		
Art	5	2,9083	,87668	Total	81,264	124			
Sport	8	3,0365	,55832						
Total	125	3,0737	,80954						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' perceptions of their formal research class/modules with their study field. As a result of the variance analysis, it was concluded that there is no significant difference between students' perceptions of their formal research class/modules with their study field. It was determined that the students' study field does not show any effect on their perceptions.

Table 32. Students' perception of their formal research class/modules by study level

Group	N	M	S.D.	t	df	p
Bachelor's Degree (or equivalent)	89	3,0482	,80699	-,551	123	,583
Vocational Education	36	3,1366	,82385	-,546	63,628	,587
Total	125					

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, t: T-test, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors

T-test analysis was conducted to compare the students' perceptions of their formal research class/modules with their study level. As a result of the T-test analysis, it was concluded that there is no significant difference between students' perceptions of their formal research class/modules with their study level. It was determined that the students' study level does not show any effect on their perceptions.

Table 33. Students' perception of their formal research class/modules by study course

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
1. Course	49	2,7398	,86060	Between groups	11,493	3	3,831	6,644	,000
2. Course	34	3,4240	,78613	Within groups	69,771	121	,577		
3. Course	26	3,3221	,57754	Total	81,264	124			
4. Course	16	2,9479	,60486						
Total	125	3,0737	,80954						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' perceptions of their formal research class/modules with their study course. As a result of the variance analysis, it was concluded that there is a significant difference between students' perceptions of their formal research class/modules with their study course. As the variances have a homogeneous distribution, Tukey's test for Post-Hoc analysis was used to determine the direction of significance.

Table 33.1. Tukey's Test for Post-Hoc Analysis

Study course	Study course	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1 st Course	2 nd Course	-,68422*	,16949	,001	-1,1258	-,2427
	3 rd Course	-,58232*	,18424	,011	-1,0623	-,1023
	4 th Course	-,20812	,21865	,777	-,7777	,3615
2 nd Course	1 st Course	,68422*	,16949	,001	,2427	1,1258
	3 rd Course	,10190	,19783	,955	-,4135	,6173
	4 th Course	,47610	,23021	,170	-,1236	1,0758
3 rd Course	1 st Course	,58232*	,18424	,011	,1023	1,0623
	2 nd Course	-,10190	,19783	,955	-,6173	,4135
	4 th Course	,37420	,24128	,411	-,2544	1,0028
4 th Course	1 st Course	,20812	,21865	,777	-,3615	,7777
	2 nd Course	-,47610	,23021	,170	-1,0758	,1236
	3 rd Course	-,37420	,24128	,411	-1,0028	,2544

Source: generated by the authors

As shown in Table 33, when the students' perceptions of their formal research class/modules with their study course, it is seen that 2nd course group has the highest score (X=3,4240). This is followed by the students in the 3rd course group (X=3,3221), the 4th course group (X=2,9479) and the 1st course group (X=2,7398). Tukey's Test for Post-Hoc Analysis is used to test source of the difference, since the variances of the groups were heterogeneous with 95% confidence. The direction of the difference is found as 1st course group. It is concluded that the participants in the 2nd course group and the 3rd course group have a higher effect of perceptions of the formal research class/modules compared with the participants in the 1st course group.

3.4 Informal research class/modules

The students were asked if they have taken an informal research class/module during their last academic year and 14% of the students responded to the question as 'yes'.

Have you taken such a research class/module during the last academic year?

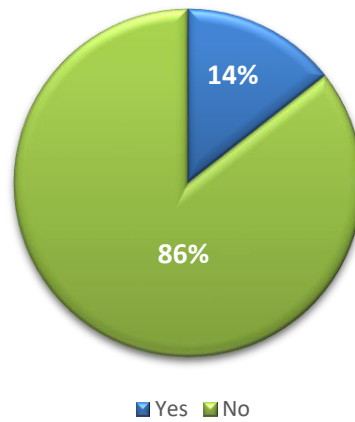


Figure 3. Students' attendance to research class/module during the last academic year (N=125)

What was the name of the class/module/lesson?

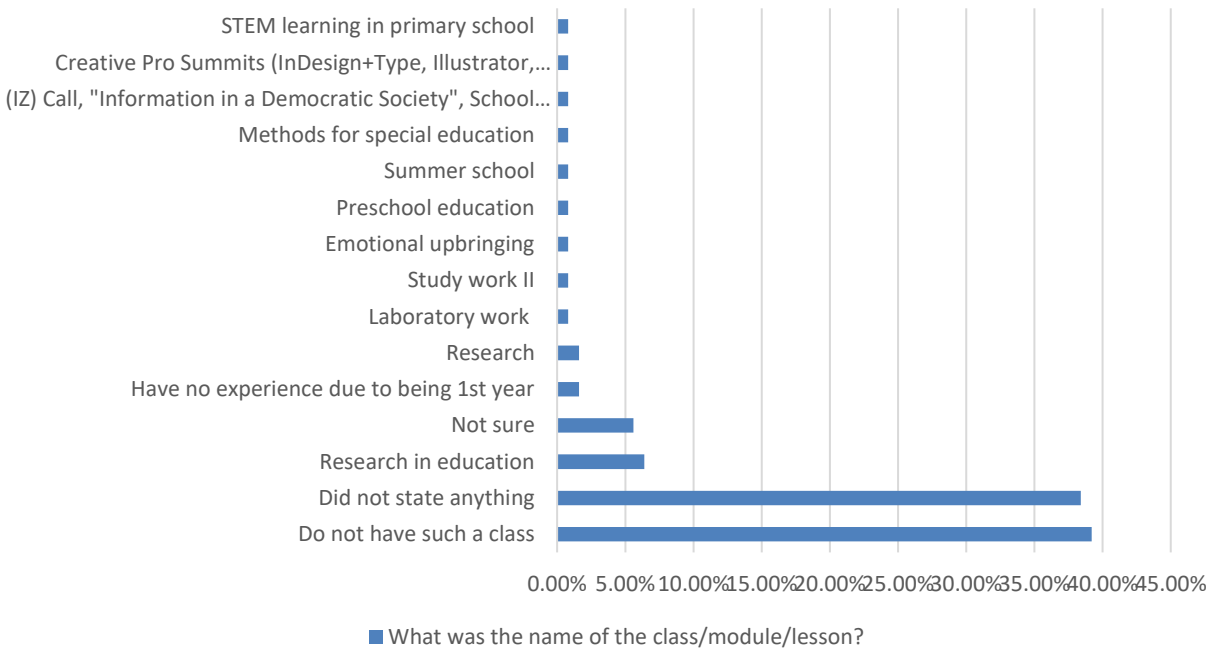


Figure 4. Name of the research class/module/lesson (N=125)

The students were asked to name the informal research class/module/lesson, 6.4% of the students indicated that they have taken an informal research lesson on research in education.

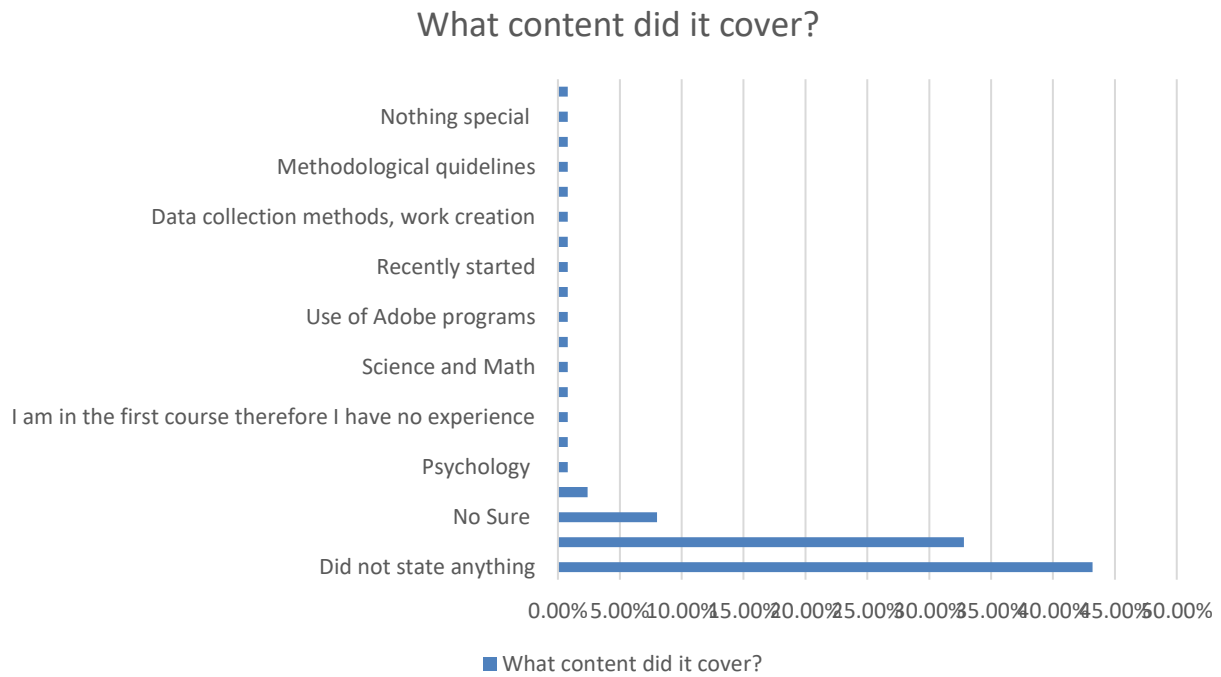


Figure 5. Content of the research class/module/lesson (N=125)

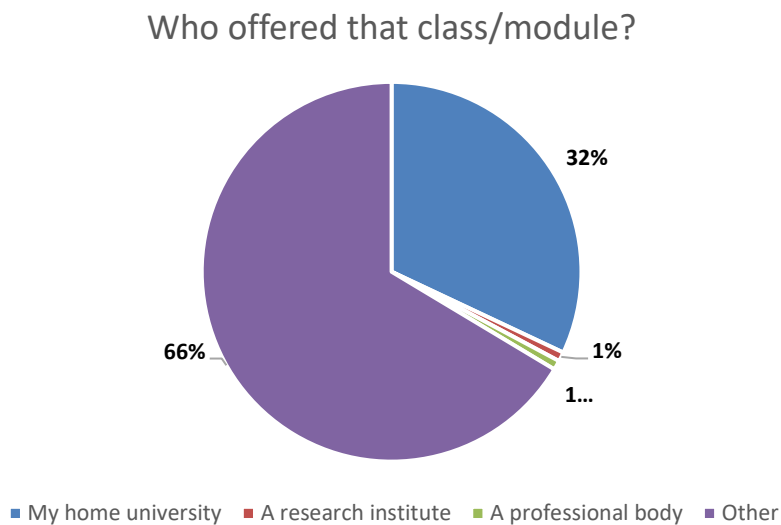


Figure 6. Institution that provided the research class/module (N=125)

3.5 Research competencies

The students were asked to rate their agreement research competencies (1-not competent, 5-highly competent. Table 34 illustrates the results as percentages and Table 35 presents the results as means with standard deviations. The results from Table 34 and 35 were compared with the six sociodemographic characteristics of the students (see Table 36, gender; Table 37, age; Table 38, study mode; Table 39, study field; Table 40, study level; Table 41, study course).

Table 34. Students' Self-assessment of their Research Competencies (percentages)

Item	Not competent	Somewhat competent	Neutral	Competent	Highly competent
Identify relevant theories in literature	9.6%	12%	47.2%	23.2%	8%
Recognize gaps in knowledge about the researched topic	9.6%	13.6%	39.2%	32%	5.6%
Generate meaningful research inquiry areas	8.8%	18.4%	44%	22.4%	6.4%
Identify frameworks from a published article	14.4%	18.4%	36.8%	25.6%	4.8%
Construct a rationale of a study	10.4%	13.6%	43.2%	25.6%	7.2%
Construct quantitative research question	15.2%	14.4%	42.4%	24%	4%
Grounding quantitative question in theory	12.8%	12.8%	44.8%	23.2%	6.4%
Understand epistemological assumptions	20.8%	16.8%	43.2%	17.6%	1.6%
Identify appropriate quantitative data collection procedures	13.6%	16.8%	37.6%	25.6%	6.4%
Implement quantitative data collection procedures	12.8	16.8%	39.2%	24.8%	6.4%
Operationally defining variables	16.8%	16.8%	42.4%	20%	4%
Select data collect instruments	16%	13.6%	46.4%	19.2%	4.8%
Identify threats to validity in quantitative study	15.2%	17.6%	44.8%	18.4%	4%
Use appropriate statistical techniques	18.4%	17.6%	44%	16.8%	3.2%
Interpret quantitative results	14.4%	20.8%	41.6%	20%	3.2%
Construct qualitative research question	13.6%	16.8%	42.4%	22.4%	4.8%
Ground research question in the literature	14.4%	12.8	40%	29.6%	3.2%
Paradigmatic assumptions and research goals	10.4%	12%	39.2%	28.8%	9.6%
Identify qualitative data collection procedures	16.8%	13.6%	42.4%	22.4	4.8%
Implement qualitative data collection procedures	16%	14.4%	43.2%	20%	6.4%
Address threats to trustworthiness	17.6%	17.6%	38.4%	23.2%	3.2%
Use appropriate analytical tools	17.6%	14.4%	44%	19.2%	4.8%
Interpret qualitative results	17.6%	12.8%	40.8%	22.4	6.4%
Know research ethics	11.2%	16.8%	35.2%	24.8%	12%
Implement research ethics	12%	21.6%	39.2%	23.2%	12%
Know authorship processes	13.6%	14.4%	37.6%	25.6%	8.8%
Describe implications of the results	11.2%	12%	43.2%	25.6%	8%
Write an article/report based on my research	12.8	14.4%	44%	19.2%	9.6%
Use appropriate reference style	9.6%	16%	42.4%	21.6%	10.4%
Present results (oral presentation)	12%	9.6%	39.2%	28.8%	10.4%
Compare findings with literature	10.4%	11.2%	41.6%	29.6%	7.2%
Identify limits of own results	14.4%	15.2%	46.4%	18.4%	5.6%

Table 35. Students' Self-assessment of their Research Competencies

Item	N	Mean	Std. Deviation
Identify relevant theories in literature	125	3,0800	1,02862
Recognize gaps in knowledge about the researched topic	125	3,1040	1,03038
Generate meaningful research inquiry areas	125	2,9920	1,01199
Identify frameworks from a published article	125	2,8800	1,09692
Construct a rationale of a study	125	3,0560	1,04961
Construct quantitative research question	125	2,8720	1,06994
Grounding quantitative question in theory	125	2,9760	1,06608
Understand epistemological assumptions	125	2,6240	1,05237
Identify appropriate quantitative data collection procedures	125	2,9440	1,10937
Implement quantitative data collection procedures	125	2,9520	1,09143
Operationally defining variables	125	2,7760	1,07661
Select data collect instruments	125	2,8320	1,06813
Identify threats to validity in quantitative study	125	2,7840	1,04406
Use appropriate statistical techniques	125	2,6880	1,05812
Interpret quantitative results	125	2,7680	1,03282
Construct qualitative research question	125	2,8800	1,05952
Ground research question in the literature	125	2,9440	1,06486
Paradigmatic assumptions and research goals	125	3,1520	1,09291
Identify qualitative data collection procedures	125	2,8480	1,10026
Implement qualitative data collection procedures	125	2,8640	1,10966
Address threats to trustworthiness	125	2,7680	1,09350
Use appropriate analytical tools	125	2,7920	1,09468
Interpret qualitative results	125	2,8720	1,14283
Know research ethics	125	3,0960	1,15998
Implement research ethics	125	3,0960	1,15300
Know authorship processes	125	3,0160	1,14289
Describe implications of the results	125	3,0720	1,07145
Write an article/report based on my research	125	2,9840	1,11431
Use appropriate reference style	125	3,0720	1,08640
Present results (oral presentation)	125	3,1600	1,12451
Compare findings with literature	125	3,1200	1,05188
Identify limits of own results	125	2,8560	1,06031

Source: generated by the authors

Students' average responses to all statements in Table 35 was 'neutral' (mean=2,93, S.D.=,93).

It can be conceded that students' self-assessed most of the statements of research competencies as they are neither competent nor weakly competent in research.

Table 36. Students' self-assessment of their research competencies by gender

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
Male	9	2,6111	1,19428	Between groups	2,988	2	1,494	1,727	,182
Female	115	2,9723	,90878	Within groups	105,560	122	,865		
Prefer not to say	1	1,5625	.	Total	108,548	124			
Total	125	2,9350	,93562						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' self-assessment of their research competencies with their gender. As a result of the variance analysis, it was concluded that there is no significant difference between students' self-assessment of their research competencies with their gender. It was determined that the students' gender does not show any effect on their self-assessed research competencies.

Table 37. Students' self-assessment of their research competencies by age

Age Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
19-28 yrs.	71	2,9982	,88363	Between groups	2,729	3	,910	1,040	,377
29-37 yrs.	32	2,6904	1,01772	Within groups	105,819	121	,875		
38-46 yrs.	12	3,1172	,96339	Total	108,548	124			
47-55 yrs.	10	3,0500	,99141						
Total	125	2,9350	,93562						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors,

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' self-assessment of their research competencies with their age. As a result of the variance analysis, it was concluded that there is no significant difference between students' self-assessment of their research competencies with their age. It was determined that the students' age does not show any effect on their self-assessed research competencies.

Table 38. Students' self-assessment of their research competencies by study mode

Group	N	M	S.D.	t	df	p
Full Time Attendance	55	2,9619	,89127	,284	123	,777
Part Time Attendance	70	2,9138	,97491	,287	120,151	,774
Total	125					

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, t: T-test, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors

T-test analysis was conducted to compare the students' self-assessment of their research competencies with their study mode. As a result of the T-test analysis, it was concluded that there is no significant difference between students' self-assessment of their research competencies with their study mode. It was determined that the students' study mode does not show any effect on their self-assessed research competencies.

Table 39. Students' self-assessment of their research competencies by study field

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
Education	107	2,9851	,91874	Between groups	3,775	3	1,258	1,453	,231
Psychology	5	2,9063	1,15244						
Art	5	2,9500	1,19541	Within groups	104,773	121	,866		
Sport	8	2,2734	,78112	Total	108,548	124			
Total	125	2,9350	,93562						

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, S.O.V.: Source of Variance, SS.: Sum of Square, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors

The homogeneity of variances is 95%. One-way analysis of variance was conducted to compare the students' self-assessment of their research competencies with their study field. As a result of the variance analysis, it was concluded that there is no significant difference between students' self-assessment of their research competencies with their study field. It was determined that the students' study field does not show any effect on their self-assessed research competencies.

Table 40. Students' self-assessment of their research competencies by study level

Group	N	M	S.D.	t	df	p
Bachelor's Degree (or equivalent)	89	3,0482	,80699	-,551	123	,583
Vocational Education	36	3,1366	,82385	-,546	63,628	,587
Total	125					

N: Number of Respondents, M: Mean, S.D.: Standard Deviation, t: T-test, df: Degree of Freedom, MS.: Mean Square, F: Frequency, p: Significance Level, Source: generated by the authors

T-test analysis was conducted to compare the students' self-assessment of their research competencies with their study level. As a result of the T-test analysis, it was concluded that there is no significant difference between students' self-assessment of their research competencies with their study level. It was determined that the students' study level does not show any effect on their self-assessed research competencies.

Table 41. Students' self-assessment of their research competencies by study course

Group	N	M	S.D.	S.O.V.	SS	df	MS	F	p
1. Course	49	2,7679	,91794	Between groups	3,321	3	1,107	1,273	,287
2. Course	34	2,9972	,87609		105,227	121	,870		
3. Course	26	3,1971	,95859	Total	108,548	124			
4. Course	16	2,8887	1,04819						
Total	125	2,9350	,93562						

N: Number of Respondents, **M:** Mean, **S.D.:** Standard Deviation, **S.O.V.:** Source of Variance, **SS.:** Sum of Square, **df:** Degree of Freedom, **MS.:** Mean Square, **F:** Frequency, **p:** Significance Level, **Source:** generated by the authors

One-way analysis of variance was conducted to compare the students' self-assessment of their research competencies with their study course. As a result of the variance analysis, it was concluded that there is no significant difference between students' self-assessment of their research competencies with their study course. It was determined that the students' study course does not show any effect on their self-assessed research competencies.

Students in their last year of study who have to write and submit/defend a bachelor thesis as part of their final graduation exam. Of 125 students, 7 of them responded that they are final year students.

Are you a final year student?

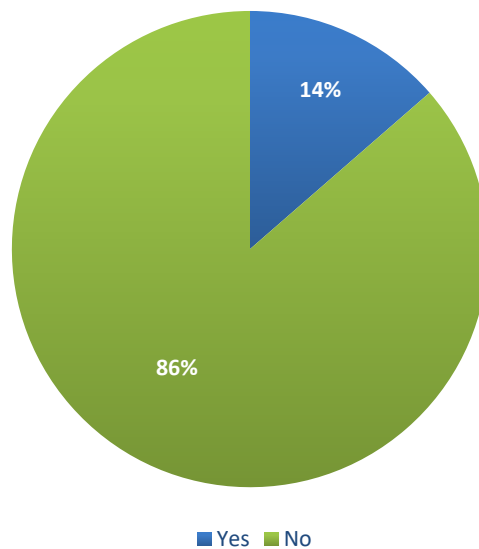


Figure 7. Percentage of Final Year Students

What was the methodology you employed?

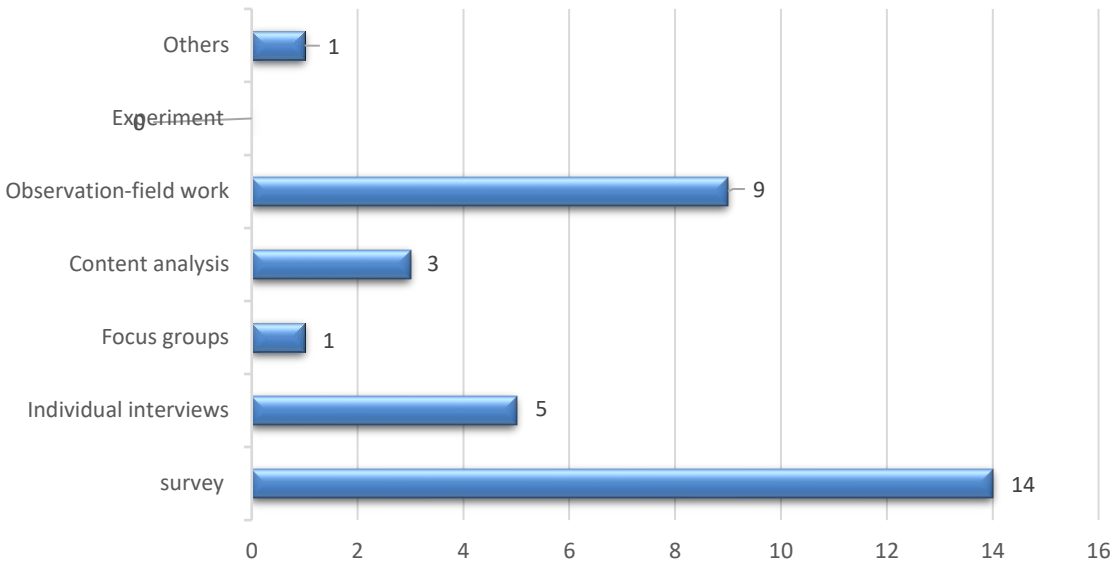


Figure 8. Name of the data collection methods and the number of students (N=17)

The students were asked to indicate what methodology they had employed in their theses. The most frequency responses from the students were survey, observation-field work, individual interviews and content analysis.

How confident were you in pursuing this methodology?

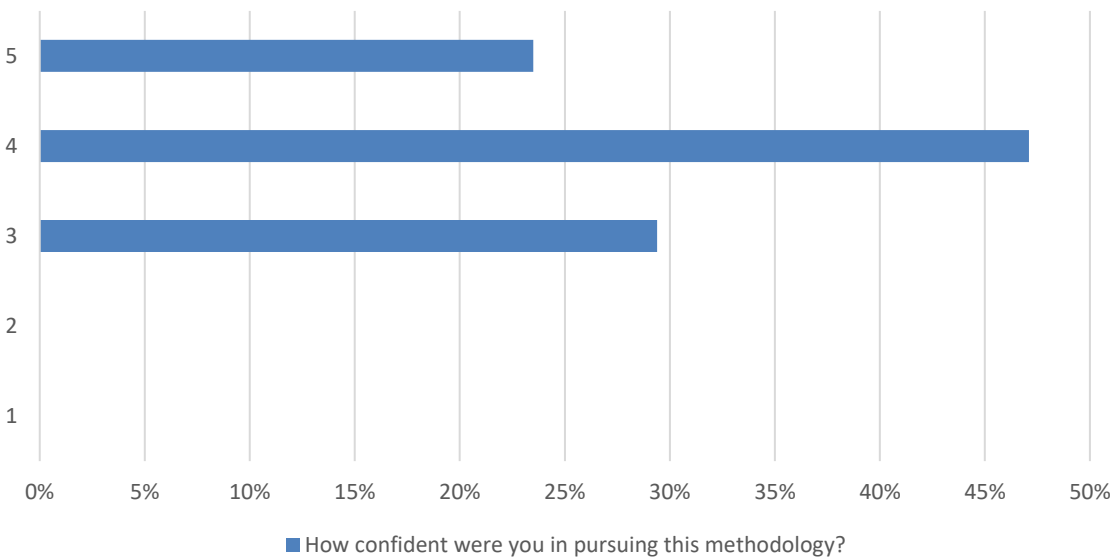


Figure 9. Students' confidence in pursuing methodology

The respondents were asked to rate their level of confidence (1-not confident at all, 5-highly confident). Most students' self-confidence level at pursuing methodology is at 4 level but four students indicated that their self-confidence level is at 5 level.

How did you carry the empirical research?

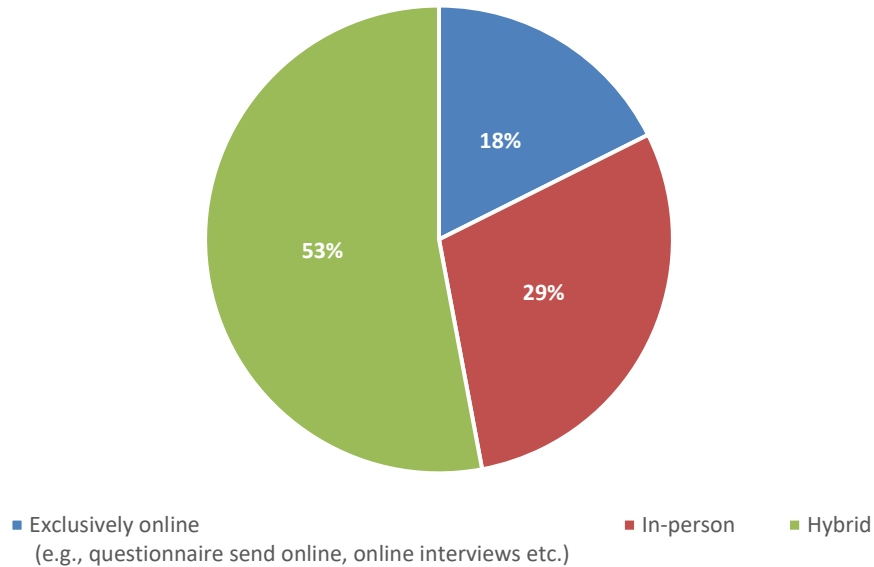


Figure 10. carrying out empirical research

Of 17 students, 53% carried out their empirical research in a hybrid mode. 29% in-person and 18% exclusively online.

How much support did you get from your supervisor?

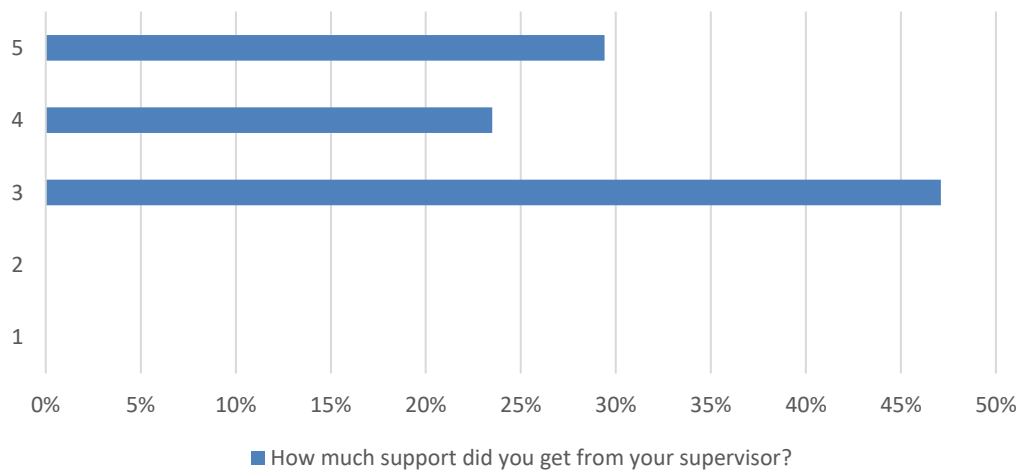


Figure 11. Support received by students' supervisors

Students were asked to indicate how much support they received from their supervisors (1-not at all-5 a lot). The results displayed in Figure 11 show that most students seem to have received moderate support and that is followed by a lot of support and satisfactory support.

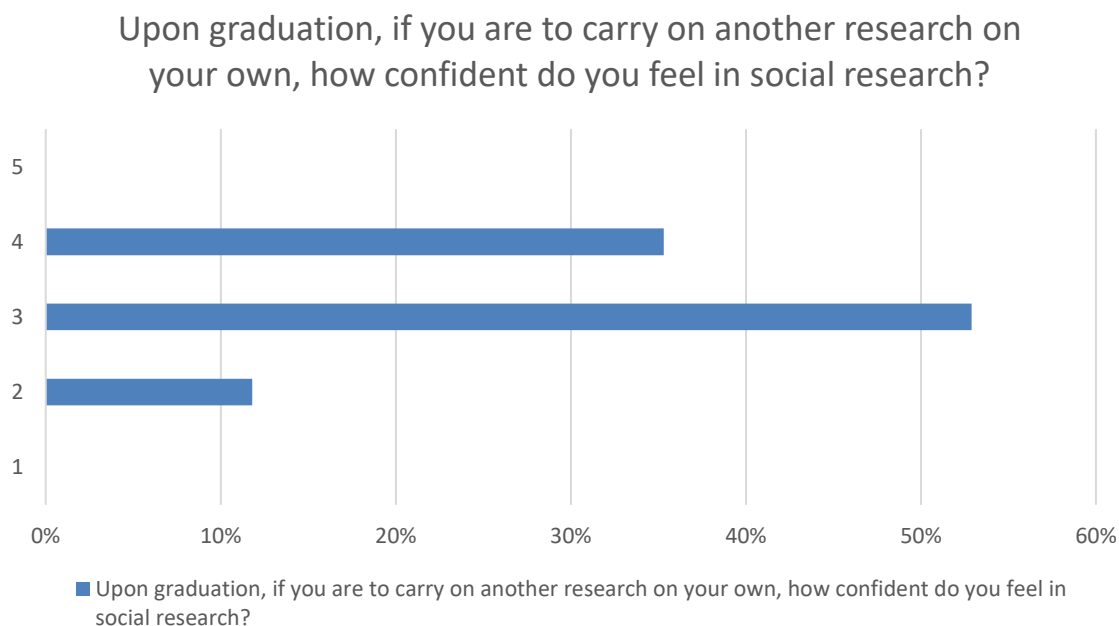


Figure 12. Students' confidence in carrying out another research by their own.

The respondents were asked to rate their level of self-confidence in social research in case they will have to carry research on their own after graduation (1-not confident at all to 5-highly confident). The results demonstrate that most of the students are not fully confident in carrying out an independent research study after graduation.

4 Discussion and Recommendations

Concerning students' general perceptions of the remote learning process during the last academic year (2020-2021), most students seem content with the remote learning mode. For example, 31% of the students indicated that the remote learning process did not create a higher workload. In a similar vein, 30% of the students responded that such a learning process did not create any emotional burden for them. Overall, 39% of the students think that such a learning process did not hinder seeing the whole study process.

In connection with the students' general perceptions of remote learning, students found the activities organized during the remote learning as just as it was before the start of the remote learning process.

The students' self-assessed digital skills are high ($M=3,95$, $S.D.=,72$). It can be concluded that most students are digitally literate and have higher digital competencies. Students in the 19-28 years old age group self-assessed the highest than the other three age groups (29-37,38-46, and 47-55).

The students have taken some formal research classes/modules such as research methodology (e.g., methods, research design, literature review etc.). However, as inferred from the students' responses, their

engagement with informal research activities, including class/module/lesson, is not conclusive and generalizable. Most students consider their research competencies as neither competent nor weakly competent. Students who had to conduct and write their diploma theses during the remote learning process seem to have enough self-confidence to undertake independent research study with their supervisors' facilitation and tend to employ qualitative and quantitative methods.

Based on the results from the research the following recommendations are made:

- Students' methodology skills should be improved, mainly by providing informal research training, lessons.
- Students should form informal research groups where they discuss their issues with their research methodologies.
- More research-related materials and activities should be created for students to support their research competencies.

5 References

Swank, J. M., & Lambie, G. W., (2016). Development of the Research Competencies Scale. *Measurement and Evaluation in Counseling and Development, 49*(2), 91-108.

Visser-Wijnveen, G. J., van der Rijst, R. M., & van Driel, J. H. (2016). A questionnaire to capture students' perceptions of research integration in their courses. *Higher Education, 71*, 473- 488.

6 Appendices

6.1 Questionnaire

Anketa - Izpratne par pētniecību

Mīļie, studenti!

Šī anketa ir daļa no Erasmus projekta Navigating Social Worlds: Toolbox for Social Enquiry (2020-1-PL0 KA226-HE-096356), kurā iesaistīti partneri no piecām valstīm (Polijas, Rumānijas, Latvijas, Igaunijas un Lietuvas), tāpēc atbildēs arī jūsu kolēģi no šīm valstīm. Anketa ir anonīma, un rezultāti tiks izmantoti tik apkopotā veidā analīzes nolūkos, izmantojot ziņojumus, zinātniskus rakstus un / vai konferences prezentācijas. Dalība šajā pētījumā ir brīvprātīga, jūs varat izlaist visus jautājumus, uz kuriem nevēlaties atbildēt. Tomēr mēs būtu ļoti pateicīgi, ja veltītu laiku visu jautājumu aizpildīšanai. Iegūtie dati mums palīdzēs uzzināt vairāk un meklēt risinājumus studiju procesa uzlabošanai.
Termiņš: 10.10.2021

Jau iepriekš pateicos par dalību šajā pētījumā!

* Required

1. Dzimums *

Mark only one oval.

- Vīrietis
 Sieviete
 Nevēlos norādīt

2. Vecums (ielieciet skaitli, piemēram, 22) *

3. Studiju forma *

*Lūgums norādīt studiju formu, kādā studējat

Mark only one oval.

- Pilna laika klātie
 Nepilna laika klātie

4. Studiju vieta *

Lūgums norādīt studiju vietu, kur esat reģistrēts studijām. Ja Jūsu gadījumā studijas tiek organizētas, kombinējot lekciju norises vietas, tad atzīmējiet atbilstošāko variantu

Mark only one oval.

- Rīga
- Alūksne
- Bauska
- Cēsis
- Jēkabpils
- Kuldīga
- Madona
- Tukums
- Daļa lekciju Rīgā un daļa filiālē
- Daļa lekciju vienā filiālē, bet daļa lekciju citā filiālē

5. Studiju virziens *

Lūgums norādīt studiju virzienu, kurā šobrīd studējat Pedagoģijas, psiholoģijas un mākslas fakultātē

Mark only one oval.

- Izglītība
- Psiholoģija
- Māksla
- Sports

6. Lūgums norādīt studiju programmu, kurā studējat *

7. Studiju līmenis *

Lūgums norādīt studiju līmeni, kurā šobrīd studējat Pedagoģijas, psiholoģijas un mākslas fakultātē

Mark only one oval.

- līmeņa profesionālā izglītība
- Bakalaura līmenis (vai līdzvērtīgs)
- Maģistra līmenis
- Doktorantūra

8. Studiju kurss *

Mark only one oval.

- 1. kurss
- 2. kurss
- 3. kurss
- 4.kurss

Vispārēja uztvere par attālinātu mācību procesu

9. 1.Padomājiet par attālinātu procesu pēdējā studiju gadā (2020.-2021.). Lūdzu, novērtējiet savu piekrišanas līmeni ar šādiem apgalvojumiem. *

Mark only one oval per row.

	Noteikti nepiekrītu	Nepiekrītu	Daļēji piekrītu	Piekrītu	Pilnībā piekrītu
Šādi organizēts studiju process atvieglo mācīšanos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tas rada lielāku slodzi	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tas ir labs risinājums krīzes situācijā, taču pēc pandēmijas beigām mācībām vajadzētu pilnībā atgriezties klātienē	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tas rada atsvešinātību no studiju procesa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tas rada emocionālu slogu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tas kavē pārredzēt visu studiju procesu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. 2. Cik lielā mērā attālinātā procesā ir nepieciešamas šādas darbības, salīdzinot ar mācīšanos klātienē *

Mark only one oval per row.

	Mazāk nekā iepriekš	Tāpat kā tas bija pirms attālināta procesa sākuma	Vairāk nekā iepriekš
Izlasīt docētāja nosūtītos materiālus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meklējot dažādu papildu informāciju (atšķirīgu no tā, ko ieteica docētājs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sagatavojot patstāvīgo darbu ziņojumu, eseju vai citu rakstisku darbu veidā	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sagatavojot grupu darbu ziņojumu, eseju vai citu rakstisku darbu veidā	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Apgūt digitālās kompetences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sagatavojot prezentācijas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attīstīt praktisko darbu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sazināties ar citiem grupas locekļiem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sazināties ar pasniedzējiem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Digitālo prasmju pašnovērtējuma līmenis

11. 3. Kā jūs vērtējat sevi, veicot šādas darbības? *

Mark only one oval per row.

	Noteikti nepiekrītu	Nepiekrītu	Daļēji piekrītu	Piekrītu	Pilnībā piekrītu
Es zinu, kā pārvaldīt tiešsaistes failus (lejupielādēt, saglabāt, augšupielādēt)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es zinu, kā izmantot īsinājumaustiņus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Es zinu, kā pārlūkprogrammā atvērt jaunu cilni	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es zinu, kā aizpildīt tiešsaistes veidlapas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es zinu, kā pielāgot privātuma iestatījumus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es zinu, kā izveidot savienojumu ar WIFI tīklu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es zinu, kā izveidot savienojumu ar tiešsaistes platformu (Zoom, MsTeams, Google klase utt.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es viegli varu atrast nepieciešamo informāciju tiešsaistē	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es viegli varu pārvietoties pa rīkiem, kas iekļauti dažādās tiešsaistes platformās (Zoom, MsTeams, Google klases telpa utt.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es zinu, kuru informāciju man vajadzētu un ko nevajadzētu dalīties tiešsaistē	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es zinu, kad man vajadzētu un nevajadzētu kopīgot informāciju tiešsaistē	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es esmu piesardzīgs attiecībā uz saviem komentāriem un uzvedību, kamēr esmu tiešsaistē	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es zinu, kā izveidot tiešsaistes video	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es zinu, kā izveidot infografiku	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es zinu, kā veidot tiešsaistes vietni	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es jūtos pārliecināts, tiešsaistē ievieojot savu izveidoto saturu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Oficiālās
pētījumu
klases /
moduļi**

Dažas universitātes piedāvā īpašas nodarbības, kas noteiktas studijas programmās (piem., Pētniecības metodes sociālajās zinātnēs, Kvantitatīvā analīze, Kvalitatīvā analīze), vai arī specifisku pētījumu un metodikas saturu citās klasēs. Padomājiet par konkrētu pētniecisko nodarbību, kas norādīta jūsu studiju plānā, kuru esat apguvis iepriekšējā akadēmiskajā gadā (2020. – 2021. gads), vai par jebkuru īpašu pētījumu saturu / moduli, kas iepriekšējā akadēmiskā gada laikā tika piedāvāts jebkurā citā nodarbībā, studējot tiešsaistē. Ja iepriekšējā gadā apmeklējāt vairāk nodarbību vai bija vairāk moduļu, kur bija iekļauta pētniecība, padomājiet par nesenāko (piemēram, pagājušo semestri).

12. 4. Kāds ir tā kursa (u) nosaukums, uz kuru (-iem) jūs atsaucaties? *

13. 5. Uz kādiem moduļiem / saturu jūs atsaucaties? *

14. 6.Lūdzu, novērtējiet savu piekrišanu šādiem apgalvojumiem, domājot par kursu / moduļiem, kas noteikti 4. vai 5. jautājumā *

Nodarbības / moduļa laikā...

Mark only one oval per row.

	Noteikti nepiekrītu	Nepiekrītu	Daļēji piekrītu	Piekrītu	Pilnībā piekrīt
Mana izpratne par svarīgākajiem jēdzieniem, kas tiek izmantoti sociālo zinātņu pētniecības jomā, ir palielinājusies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mana izpratne par izpētes procesa soļiem ir palielinājusies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mana izpratne par pētījumu metodēm ir palielinājusies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Es uzskatu, ka man ir laba izpratne par izmantojamām par datu analīzes metodēm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mani kopumā vairāk sāk interesēt pētījumi	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ir bijusi pietiekama iespēja runāt ar pētniekiem par viņu zinātniskajiem pētījumiem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es saņēmu informāciju par jaunākajām atziņām pētniecībā	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mūs iepazīstināja ar docētāja veikto pētījumu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mūs iepazīstināja ar universitātes veikto pētījumu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mūsu docētāji mudināja mūs meklēt alternatīvus pētījumu rezultātu skaidrojumus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Šajās pētnieciskajā nodarbībās es kļūstu entuziastiskāks par savu studiju jomu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tika sniegti piemēri starp pētniecību un praksi	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es uzzināju, kāda veida pētījumi ir veikti manā studiju jomā	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es uzzināju, kā pētījumus var izmantot manā studiju jomā	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es domāju, ka uzzinātais noderēs arī citās klasēs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es domāju, ka tas, ko uzzināju, būs noderīgs manā karjerā, beidzot studijas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Es domāju, ka nevienam skolotājam/psihologam/māksliniekam/sport istam visa šī informācija nebūs vajadzīga, lai būtu labs profesionālis savā jomā	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mans docētājs mudināja mani turpināt veikt savus pētījumus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pētnieciskā kursa docētājs regulāri					

nodrošina kursa uzdevumus (piemēram, lasījumus, mājas darbus, viktorīnas)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Docētājs man ir sniedzis individuālas atsauksmes par manu sniegumu uzdevumos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Docētājs mani informēja par to, kāds būs eksāmens šajā kursā	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pārbaudes darbi tiešsaistē man bija grūtāk izpildāmi	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kopumā pētniecisko kursu docētāji vadīja nodarbības atbilstoši	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kopumā esmu apmierināts ar lekcijām par pētniecību	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Neformālās pētniecības nodarbības

Daži studenti bez tā, kas tiek piedāvāts studiju programmās, iesaistās individuālās mācībās, apmeklējot dažādus tīmekļa seminārus, prezentācijas ((intensīvas) vasaras / ziemas skolas.

15. 7. Vai pēdējā mācību gada laikā esat apmeklējis augstākminēto pētniecisko nodarbību? *

Mark only one oval.

- Jā
 Nē *Skip to question 19*

16. 8. Kāds bija šīs nodarbības nosaukums? *

17. 9. Kāds saturs tur tika piedāvāts? *

18. 10. Kas piedāvāja klasi / moduli? *

Mark only one oval.

- Mana universitāte
- Cita universitāte
- Pētniecības institūts
- Profesionāla organizācija
- Cits

Kompetenču līmenis

19. 11. Padomājiet par savu kompetences līmeni, veicot katru norādīto pētniecisko aktivitāti, un izvēlaties atbilstošo vērtējumu skalā no 1-5 (1- neesmu kompetents; 5 - man ir augsta kompetence) *

Mark only one oval per row.

	1	2	3	4	5
Identificēt atbilstošās teorijas literatūrā	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Atpazīt nepilnības zināšanās par izpētīto tēmu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ģenerēt jēgpilnas izpētes jomas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identificēt pētniecisko ietvarus publicētā rakstā	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Definēt pētījuma pamatojumu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Definēt kvantitatīvo pētījuma jautājumu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Atrast teorētisku pamatojumu kvantitatīvam pētījumam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Izprot epistemoloģisko pamatojumu pētījumam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Izvēlēties atbilstošas kvantitatīvās datu vākšanas metodes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Īstenot kvantitatīvās datu vākšanas procedūras	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Definēt mainīgos rādītājus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Atlast datu ieguves instrumentus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identificējiet riskus datu ticamības nodrošināšanā kvantitatīvā pētniecībā	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Izmantot atbilstošus statistikas analīzes paņēmienus kvantitatīvā pētniecībā	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spēju interpretēt kvantitatīvos datus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spēju konstruēt kvalitatīva pētījuma jautājumu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Atrast teorētisku pamatojumu kvalitatīvam pētījumam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Izvirzīt pētījuma hipotēzi un mērķi	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Definēt kvalitatīvas datu vākšanas procedūras	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Īstenot kvalitatīvas datu vākšanas procedūras	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identificējiet riskus datu ticamības nodrošināšanā kvalitatīvā pētniecībā	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Izmantot atbilstošus datu analīzes paņēmienus kvalitatīvā pētniecībā	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interpretēt kvalitatīvā pētījuma rezultātus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pārzināt pētījumu ētiku	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ievērot pētījumu ētiku	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pārzināt autorības procesus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aprakstīt un interpretēt iegūtos rezultātus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uzrakstīt rakstu / ziņojumu, pamatojoties uz maniem pētījuma rezultātiem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Izmantot atbilstošu atsauces stilu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spēt prezentēt pētnieciskos rezultātus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Salīdzināt iegūtos rezultātus ar citiem pētnieciskajiem rezultātiem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nosteikt pētījuma robežas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pēdējais kurss

20. Vai esat pēdējā kursa students? *

Mark only one oval.

Jā

Nē

Diplomdarbs

Studentiem pēdējā studiju gadā ir jāuzraksta un jāiesniedz / jāaizstāv kvalifikācijas/ bakalaura darbs/diplomdarbs kā daļa no gala beigšanas eksāmena. Ja atrodaties šajā situācijā, lūdzu, atbildiet uz šādiem jautājumiem

21. 12.Kāda ir jūsu izmantotā pētnieciskā metodika? (atzīmējiet visus piemērotos) *

Check all that apply.

- Aptaujas
- Individuālas intervijas
- Fokusa grupas
- Saturu analīze
- Novērošana / lauka darbs
- Eksperimenti
- Cits

22. 13. Cik labi pārzināt šo metodiku? (1- vispār neesmu pārliecināts, 5 - ļoti pārliecināts) *

Mark only one oval.

- 1
- 2
- 3
- 4
- 5

23. 14. Kā jūs veicat empīrisko pētījumu? *

Mark only one oval.

- Tikai tiešsaistē (piemēram, anketas nosūtīšana tiešsaistē, tiešsaistes intervijas utt.)
- Klātienē
- hibrīds

24. 15. Cik lielu atbalstu saņēmat no sava darba vadītāja? (1 nemaz -5 daudz) *

Mark only one oval.

1

2

3

4

5

25. 16. Cik lielu atbalstu saņēmat no vienaudžiem / kolēģiem? (1 nemaz -5 daudz) *

Mark only one oval.

1

2

3

4

5

26. 17. Ja jums pēc absolvēšanas būtu jāveic patstāvīgs pētījums, cik pārliecināts esat par savām prasmēm veikt sociālo pētījumu? (1 nemaz -5 daudz) *

Mark only one oval.

1

2

3

4

5