

# Research Competencies of Social Work Students during Remote Learning

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**Abstract:** Context: Acquiring research competencies by students is becoming more and more relevant in an evidence-based social work approach. Moving from traditional face-to-face pedagogical approach to a fully remote educational paradigm has greatly impacted universities in developing appropriate solutions for teaching and learning. Research skills and knowledge have been considered an important competence in social work training as best practice requires using available research data and best research requires understanding the context of practice. Method: Using a quantitative approach the current paper analyses how perception of remote learning and type and level of digital skills influence the development of research skills for social work students. 242 Romanian students enrolled in bachelor program filled in a questionnaire in June 2021. Results: The experience of a fully remote learning of research method did not have any significant impact on research competencies. However, the high level of operational skills influences students' competency in research inquiry and quantitative/qualitative methodology, information-navigation skills positively influence dissemination of research and creative skills influences their level in quantitative/qualitative process, ethics and dissemination. Conclusion: In an evidence-based social work approach, research competences need to remain an important component of learning plans. However, considering the digitalisation trend higher education, it is expected that the content and format of research classes to adapt in order to assure the transferability of skills into the field of practice.

**Keywords:** *higher education, social work, research competencies, remote education.*

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## 1. Introduction

Lack of appropriate research skills is of great concern for training professionals in their field (Ávalos et al., 2019). Research competency is one of the academic competencies necessary for a successful degree completion (Mah & Ifenthaler, 2017) defined as specific knowledge and skills in the areas of communication, information seeking, problem solving, methodology, and data analysis (Meerah, et al., 2012). Even if the problem of acquiring research competencies is the main focus primarily at graduate level, students enrolled in undergraduate programs are consumers of published research (Sundt, 2010) and need to understand literature reviews and previous research data, combined with the ability to gather and interpret their own data (Mah & Ifenthaler, 2018).

Social work education aims to develop competences that further allows prospective social workers to evaluate and intervene in helping vulnerable persons (Selwyn & Mettilda, 2021). Among other specific knowledge, values and behaviors, research skills have been considered an important competence as best practice with clients requires the use of research data and best applied research requires understanding the context of practice (Steinberg & Vinjamuri, 2014). It is considered that research competencies contribute to the professional development of future specialists (MacIntyre & Paul, 2012; Prosekov, Morozova, & Filatova, 2020) enabling them to ground their professional decisions on existing research evidence (Siddiqui & Wardle, 2020).

The *Global standards for the education and training of the social work profession* clearly mentions that social work programs should be informed by “current, valid and reliable evidence”, provide “opportunities for students to critically appraise research findings and acquire research skills”, and “involve students in research activities” (IASSW & IFSW, 2020, p. 14). Throughout the world, professional regulating bodies have included research competence in their guidelines. In U.S.A., *Educational Policy and Accreditation Standards for baccalaureate and master’s social work programs* issued by Council for Social Work Education (CSWE) in 2015, lists “engage in practice-informed research and research-informed practice” as one core competency (CSWE, 2015, p. 8). Social workers must demonstrate knowledge and skills regarding the use of qualitative and quantitative research methods, data analysis and interpretation and are able translate research findings into practice with clients at different levels. In Europe, different research courses have been integrated into social work study programs as well (Labonté-Roset, 2005) and Romania, where the

program was reinstated in early 90s, is no exception. The National Qualification Authority (2011), defined a set of professional and transversal competencies that in social work programs includes “identification, collecting, documentation, evaluation and recording data, analyze, assessment and specialized interventions for reducing the social risk at individual, family, group, community and macro level” as one professional competency (Hatos, 2015). Therefore, through the specific accreditation standards Bachelor of Social Work (BSW) students must successfully complete at least one compulsory research course (ARACIS, 2020).

However, previous research at international level shows that social work students have a complicated relationship with research classes characterized by fear and increased statistical and computer anxiety (Gredig & Bartelsen-Raemy, 2018). Students identifying the usefulness of research are better engaged in research classes (Bolin et al., 2012) and display lower levels of anxiety (Secret et al., 2003); however, some studies showed that understanding the usefulness of research classes for their future career makes students act more anxious when exposed to research topics (Papanastasiou & Zembylas, 2008). But compared to psychology students, Green et al. (2001) concluded that social work graduate students believed research is less important in their field. This attributed lesser importance is associated to little confidence in the skills and knowledge acquired and therefore, upon graduation, social workers tend not to employ acquired research skills in their daily practice (Morgenshterna et al., 2015).

Using research knowledge and skills in the professional context creates the necessary premises to deliver high-quality services, to improve policies and practices, and to evaluate own practice (Holden et al., 2002). Therefore, the negative attitude toward research has implications on social work education and ultimately on the development of the profession itself. Compared to other helping disciplines, in general, social work practitioners have a lower contribution in the development of a scientific knowledge base (Brekke, 2012). Furthermore, when such scientific contributions in the field are made, these are mainly published by social work faculty rather than social work practitioners, thus supporting their career trajectory within academia. As a result, research outputs tend to have a minimal influence on practice, thus widening the gap between research and practice (Teater, 2017).

Additionally, the measures imposed at national level due to the coronavirus outbreak have had a strong impact on higher education (UNESCO et al., 2020). On March 16<sup>th</sup> 2020, the state of emergency was first declared in Romania. After two months this was changed into the state of alert, that is still in place today. At first, all face-to-face activities were

suspended by universities, initial for two weeks (March 11-22, 2020), but due to the increasing number of registered COVID-19 cases they decided to extend the suspension until the Easter holiday and in the end, until the next academic year (Roman & Plopeanu, 2021). Around 543,3 thousand students in total, out of which approx. 75,5 thousand from health and social work domain were affected by these decisions. Holotescu et al (2020) showed that most universities continued to deliver their programs using their learning platforms while the Government tried to assure the continuity of educational process through a series of norms (Molea & Năstasă, 2020).

Previous research addressing traditional/in-person vs. online/remote teaching in relation to research methods courses/contents delivered to social work students has yield mixed results. Earlier studies showed no differences between remote and face-to-face approach in the performance level (Brown & Park, 2015; Petracchi & Patchner, 2001). However, when comparing usage of learning techniques, the level of satisfaction toward research courses is higher for students exposed to innovative approaches such as web-based learning techniques compared to traditional approaches (Faul, Frey, & Barber, 2004). Other studies show that there are similar levels of satisfaction regarding research courses taught exclusively face-to-face versus those taught entirely online (Westhuis et al., 2006). Furthermore, when analyzing the hybrid teaching format, face-to-face versus hybrid led to no significant differences, but it seems that using both online and traditional learning techniques has higher benefits for students (Pelfrey & Bubolz, 2013).

## **2. Methods**

### ***2.1. Aim***

Considering all these aspects mentioned in previous section, we were hence interested in understanding how different research competencies develop during a fully remote teaching program. Our interest also laid in the future developing of the social work program in a remote/hybrid system and how can we maximize the benefits of such a system. Two research questions were framed: (1) what are the digital skills and research competencies identified for undergraduate social work students? and (2) can research competencies be predicted by remote learning and level of digital skills?

### ***2.2. Participants***

Our study employed a convenience sample of 242 BSW students enrolled at 5 Romanian universities. More than half of our respondents (60.8%) were enrolled at Babeş-Bolyai Cluj-Napoca, while the rest were

recruited from other higher education institutions offering a social work bachelor program. The majority of the respondents (58.7%) were freshmen, while sophomore and senior students were almost equally distributed. Reflecting gender distribution of social work students, 9:10 respondents were females (Table 1).

**Table 1.** Descriptive sample ( $N = 242$ )

<b>Variable</b>	<b>N(%)</b>
<i>University</i>	
“Babeş-Bolyai” University Cluj-Napoca (UBB)	146 (60.3)
University of Craiova (UC)	28 (11.6)
“Lucian Blaga” University of Sibiu (ULBS)	23 (9.5)
“Ştefan cel Mare” University of Suceava (USV)	27 (11.2)
University of Oradea (UO)	15 (6.2)
“Aurel Vlaicu” University of Arad (UAV)	3 (1.2)
<i>Year of study</i>	
Year 1	142 (58.7)
Year 2	48 (19.8)
Year 3	52 (21.5)
<i>Gender</i>	
Male	20 (8.3)
Female	222 (91.7)

Source: author’s own design

### **2.3. Measurements**

*Perception of remote learning* ( $M = 3.20$ ,  $SD = 0.92$ ) was measured using a 6-item scale focusing on the degree students rated their remote learning experience in the area of facilitating learning, associated burden, and level of additional tasks. By summing up the responses a total score was generated, with higher scores representing a negative perception about the learning process in remote format. The internal reliability of the measure was good (Cronbach’s  $\alpha = 0.85$ ).

*Digital skills* ( $M = 4.17$ ,  $SD = 0.50$ ) were measured using 16 items from Internet Skills Scale (van Deursen, Helsper, & Eynon, 2016). The items evaluated students’ level of agreement in relation to four types of behaviors: (a) operational – technical skills when using the internet (7 items), (b) information-navigation – finding, choosing, and evaluating information found on the internet (2 items), (c) social – online communication and interactions skills (3 items), and (d) creative – creating content that is shared or published online (4 items). By summing up the responses a total score for the digital skills was generated as well as for each subscale, with higher

scores indicating more proficiency into performing specific tasks online. The Cronbach's  $\alpha$  coefficient for the Digital skills scale was 0.89, while  $\alpha$  reliability coefficient for the subscales ranged from 0.71 (navigation skills) to 0.88 (operational skills).

*Research competencies* ( $M = 3.39$ ,  $SD = 0.73$ ) were measured using a pool of 32 items taken from Research competencies scale (Swank & Lambie, 2016). They measured a set of specific behaviors associated to research tasks and the self-perceived level of competencies in performing specific research tasks corresponding to five domains: (a) research inquiry and literature review (5 items), (b) qualitative research methodology and processes (8 items), (c) quantitative research methodology and process (10 items), (d) research ethics (3 items), and (f) dissemination of research and scholarly writing (6 items). By scoring each item on a 5-point Likert scale (1 = not competent to 5 = very competent) and upon summing up the scores, a total score for the research competencies was generated, and also a distinct score for each subscale, where higher scores indicated a higher competency in that specific area. The Cronbach's  $\alpha$  value for the Research competency scale was 0.97, while  $\alpha$  coefficients for the subscales ranged from 0.82 (research ethics) to 0.94 (qualitative and quantitative research processes).

*Demographics* included gender (male/female) and year of study (1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>).

#### **2.4. Procedure**

Because of the fully remote academic activities carried in Romanian during the data collection period, we opted for collecting data online using a Google form<sup>1</sup>. The link was active until the end of June, when academic activities end at most universities. One single reminder was sent two-weeks before the closure of the form. An approval from the lead university committee was obtained before the data collection. The link to the questionnaire was sent to program's Facebook pages and email addresses. A cover letter accompanied the message and offered detailed instructions for filling in the questionnaire and explained the ethical issues involved. Subjects were asked to fill in the entire questionnaire in a private setting, if possible. When data collection ended a data base in SPSS was created and used in analysis.

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<sup>1</sup> <https://forms.gle/4yV49NyV2VXqxPLC6>

## 2.5. Data analysis

SPSS 18 for Windows was employed for data analysis. Descriptive results are displayed in tabular format. Before running the regression analysis, some categories were collapsed or recoded.

## 3. Results

### 3.1. Perception of the process of remote learning

Students reported quite moderate views about the remote learning process with no significant differences on gender [ $t(240) = .064, p = .949$ ] and year of study [ $F(2;239) = 1.994, p = .138$ ]. However, we noticed the high percentage (71%) of those reporting that even if it is appreciated as a good solution for a crisis situation such as this pandemic, training should fully return to in-person when possible. We also noticed that almost half of the respondents reported that this remote learning process they were exposed to, created higher workload (44.2%), alienation from the study (45.1%), and hindered the entire study process (45.9%) (see Table 2).

These data are similar to recent findings on Romanian context showing that even if students displayed favorable attitudes towards switching to online education (Buzatu et al., 2020), due to the number of tasks they received and the less free time they had, they prefer a traditional face-to-face teaching-learning process (Coman et al., 2020), or a hybrid system (Ionescu et al., 2020).

**Table 2.** Perception regarding remote learning ( $N = 242$ )

	Strong dis- agreement	Disagreement	Partial agree- ment	Agreement	Strong agree- ment
The study process organised in this way facilitates learning	17 (7.0)	47 (19.4)	85 (35.1)	62 (25.6)	31 (12.8)
It creates a higher workload	29 (12.0)	45 (18.6)	61 (25.2)	69 (28.5)	38 (15.7)
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 (5.0)	20 (8.3)	38 (15.7)	63 (26.0)	109 (45.0)
It creates alienation from the	31	48	54	74	35 (14.5)

study process	(12.8)	(19.8)	(22.3)	(30.6)	
It creates emotional burden	40	51	60	64	27 (11.2)
It hinders to see the whole	(16.5)	(21.1)	(24.8)	(26.4)	
study process	27	53	51	76	35 (14.5)
	(11.2)	(21.9)	(21.1)	(31.4)	

Source: author's own design

### 3.2. Digital skills of social work students

In general, we noticed a high level of operational ( $M = 4.50$ ), information navigation ( $M = 4.51$ ) and social skills ( $M = 4.35$ ) and a moderate level for creative skills ( $M = 3.30$ ), whereas there were no significant differences for these skills according to gender or year of study. However, we noticed a slight increase in the self-reported level of skills when looking at the year of study. Examining students' digital skills in detail it looks like the majority consider themselves knowledgeable in operating different computer functions, navigating online pages/platforms, and quite knowledgeable in managing social interactions online and creating online materials. The high level of operational skills was expected as during the remote learning period, Romanian universities have moved their entire academic activity on institutional existing online platforms or on available free platforms (Holotescu et al., 2020; Molea & Năstasă, 2020). In a recent study, Lazăr and Roman (2021) also showed that students consider themselves as having better skills in the areas of online navigation, sharing digital content and using communication and collaborative platforms. The lowest level of agreement was found in the area of creative skills such as making an infographic and a website, but these tasks were not required in the learning process.

**Table 3.** Level of digital skills' self-evaluation ( $N = 241$ )

	Strong disa- greement	Disagreement	Partial agree- ment	Agreement	Strong agree- ment	M (SD)
<b>OP1.</b> I know how to man- age online files (download, save, upload)	2 (0.8)	1 (0.4)	12 (5.0)	73 (30.3)	153 (63.5)	4.50 (0.50)
<b>OP2.</b> I know how to use shortcut keys	2 (0.8)	16 (6.6)	57 (23.7)	81 (33.6)	85 (35.3)	

<b>OP3.</b> I know how to open a new tab in my browser	3 (1.2)	1 (0.4)	13 (5.4)	45 (18.7)	179 (74.3)	
<b>OP4.</b> I know how to complete online forms	1 (0.4)	1 (0.4)	7 (2.9)	48 (19.9)	184 (76.3)	
<b>OP5.</b> I know how to adjust privacy settings	8 (3.3)	12 (5.0)	40 (16.6)	87 (36.1)	94 (39.0)	
<b>OP6.</b> I know how to connect to a WIFI network	1 (0.4)	-	9 (3.7)	36 (14.9)	195 (80.9)	
<b>OP7.</b> I know how to connect to an online platform (Zoom, MsTeams, Google classroom etc)	1 (0.4)	1 (0.4)	3 (1.2)	44 (18.3)	192 (79.7)	
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<b>IN1.</b> I can easily find the information I need on a website	1 (0.4)	3 (1.2)	15 (6.2)	64 (26.6)	158 (65.6)	
<b>IN2.</b> I can easily navigate through the tools included in different online platforms (Zoom, MsTeams, Google classroom etc)	-	4 (1.7)	9 (3.7)	97 (40.2)	131 (54.4)	4.51 (0.60)
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<b>SS1.</b> I know which information I should and shouldn't share online	1 (0.4)	6 (2.5)	28 (11.6)	92 (38.2)	114 (47.3)	
<b>SS2.</b> I know when I should and shouldn't share information online	2 (0.8)	5 (2.1)	28 (11.6)	87 (36.1)	119 (49.4)	4.35 (0.69)
<b>SS3.</b> I am careful about my comments and behaviours while I am online	1 (0.4)	3 (1.2)	11 (4.6)	78 (32.4)	148 (61.4)	
<hr/>						
<b>CS1.</b> I know how to create a video	9 (3.7)	18 (7.5)	42 (17.4)	73 (30.3)	99 (41.1)	
<b>CS2.</b> I know how to create a infographic	36 (14.9)	68 (28.2)	71 (29.5)	44 (18.3)	22 (9.1)	
<b>CS3.</b> know how to design a website	55 (22.8)	70 (29.0)	73 (30.3)	29 (12.0)	14 (5.8)	3.30 (0.86)
<b>CS4.</b> I feel confident posting content I have created online	5 (2.1)	22 (9.1)	40 (16.6)	70 (29.0)	104 (43.2)	

Note: OP – operational skills; IN – information navigation skills; SS – social skills; CS – creative skills

Source: author's own design

### 3.3. Self-evaluation level of research competencies

Students rated themselves as moderately competent in all the areas, with a mean ranging between 3.37 and 3.43 and with no significant differences according to gender. However, we noticed significant differences according to year of study for the total level of research competencies [ $F(2;234) = 3.97, p = .02$ ]. Regarding research inquiry, qualitative research processes, research ethics, and dissemination, the level of self-assessed competences is higher for senior students compared to junior and freshmen students. Nearly two thirds rated themselves as competent and highly competent in constructing quantitative research questions (65.8%) and in using an appropriate reference system (65.4%). Even if the total percentage is in general below 10%, for constructing a rationale of a study, understanding the epistemological assumptions, using appropriate statistical techniques, and writing an article/report using own research, they considered themselves as not competent at all. These results are similar to previous research showing that in online environment, social work students feel less confident in choosing an appropriate research design, implementing the best data analysis strategy and in effectively presenting study results (Brown & Park, 2015).

**Table 4.** Level of research competencies' self-evaluation ( $N = 237$ )

	Not competent	Little competent	Somewhat competent	Competent	Highly competent	M (SD)
<b>RI1.</b> Identify relevant theories in literature	7 (2.9)	19 (8.0)	76 (32.1)	111 (46.8)	24 (10.1)	
<b>RI2.</b> Recognize gaps in knowledge about the researched topic	13 (5.5)	33 (13.9)	89 (37.6)	85 (35.9)	17 (7.2)	3.42
<b>RI3.</b> Generate meaningful research inquiry areas	7 (3.0)	13 (5.5)	77 (32.5)	113 (47.7)	27 (11.4)	(0.75)
<b>RI4.</b> Identify frameworks from a published article	8 (3.4)	16 (6.8)	65 (27.4)	123 (51.9)	25 (10.5)	
<b>RI5.</b> Construct a rationale of a study	18 (7.6)	40 (16.9)	89 (37.6)	69 (29.1)	21 (8.9)	
<b>QUANT1.</b> Construct quantitative research question	11 (4.6)	18 (7.6)	52 (21.9)	125 (52.7)	31 (13.1)	3.38 (0.83)

<b>QUANT2.</b> Grounding quantitative question in theory	13 (5.5)	24 (10.1)	70 (29.5)	103 (43.5)	27 (11.4)	
<b>QUANT3.</b> Understand epistemological assumptions	21 (8.9)	43 (18.1)	76 (32.1)	79 (33.3)	18 (7.6)	
<b>QUANT4.</b> Identify appropriate quantitative data collection procedures	6 (2.5)	24 (10.1)	75 (31.6)	108 (45.6)	24 (10.1)	
<b>QUANT5.</b> Implement quantitative data collection procedures	8 (3.4)	30 (12.7)	57 (24.1)	116 (48.9)	26 (11.0)	
<b>QUANT6.</b> Operationally defining variables	15 (6.3)	36 (15.2)	73 (30.8)	91 (38.4)	22 (9.3)	
<b>QUANT7.</b> Select data collection instruments	14 (5.9)	24 (10.1)	55 (23.2)	114 (48.1)	30 (12.7)	
<b>QUANT8.</b> Identify threats to validity in quantitative study	14 (5.9)	31 (13.1)	90 (38.0)	79 (33.3)	23 (9.7)	
<b>QUANT9.</b> Use appropriate statistical techniques	20 (8.4)	33 (13.9)	80 (33.8)	80 (33.8)	24 (10.1)	
<b>QUANT10.</b> Interpret quantitative results	14 (5.9)	25 (10.5)	80 (33.8)	90 (38.0)	28 (11.8)	
<b>QUALIT1.</b> Construct qualitative research question	10 (4.2)	21 (8.9)	58 (24.5)	113 (47.7)	35 (14.8)	
<b>QUALIT2.</b> Ground research question in the literature	10 (4.2)	28 (11.8)	89 (37.6)	90 (38.0)	20 (8.4)	
<b>QUALIT3.</b> Understand paradigmatic assumptions and research goals	14 (5.9)	36 (15.2)	98 (41.4)	79 (33.3)	10 (4.2)	
<b>QUALIT4.</b> Identify qualitative data collection procedures	9 (3.8)	28 (11.8)	88 (37.1)	90 (38.0)	22 (9.3)	3.37 (0.84)
<b>QUALIT5.</b> Implement qualitative data collection procedures	15 (6.3)	26 (11.0)	65 (27.4)	109 (46.0)	22 (9.3)	
<b>QUALIT6.</b> Address threats to trustworthiness	14 (5.9)	28 (11.8)	77 (32.5)	93 (39.2)	25 (10.5)	
<b>QUALIT7.</b> Use appropriate analytical tools	13 (5.5)	36 (15.2)	72 (30.4)	94 (39.7)	22 (9.3)	
<b>QUALIT8.</b> Interpret qualitative results	12 (5.1)	32 (13.5)	74 (31.2)	95 (40.1)	24 (10.1)	
<b>RE1.</b> Know research ethics	14 (5.9)	28 (11.8)	53 (22.4)	103 (43.5)	39 (16.5)	
<b>RE2.</b> Implement research ethics	14 (5.9)	21 (8.9)	62 (26.2)	106 (44.7)	34 (14.3)	3.43 (0.89)
<b>RE3.</b> Know authorship processes	12 (5.1)	40 (16.9)	80 (37.1)	75 (31.6)	22 (9.3)	

<b>DISS1.</b> Describe implications of the results	13 (5.5)	28 (11.8)	66 (27.8)	104 (43.9)	26 (11.0)	
<b>DISS2.</b> Write an article/report based on my research	30 (12.7)	34 (14.3)	74 (31.2)	82 (34.6)	17 (7.2)	
<b>DISS3.</b> Use appropriate reference style	11 (4.6)	17 (7.2)	54 (22.8)	112 (47.3)	43 (18.1)	3.39
<b>DISS4.</b> Present results (oral presentation)	16 (6.8)	29 (12.2)	71 (30.0)	91 (38.4)	30 (12.7)	(0.87)
<b>DISS5.</b> Compare findings with literature	21 (8.9)	31 (13.1)	78 (32.9)	86 (36.3)	21 (8.9)	
<b>DISS6.</b> Identify limits of own results	15 (6.3)	18 (7.6)	60 (25.3)	116 (48.9)	28 (11.8)	

*Note:* RI – research inquiry/literature review; QUANT – quantitative research processes; QUALIT – qualitative research processes, RE – research ethics; DISS – dissemination of research

Source: author's own design

### ***3.4. Relationship between research competencies, remote learning and digital skills for social work students***

In order to investigate the best predictors for each research competency, a simultaneous multiple regression was run. When the combination of variables to predict research inquiry included perception of remote learning and digital skills (e.g. operational, information-navigation, social, and creative), we concluded that high operational skills predicted research inquiry competence [ $F(5,231) = 9.65, p < .001$ ]. With an adjusted R value of .155, only 15.5% of the variance in research inquiry could be attributed to the model.

Prediction of quantitative research competencies generated a model where  $F(5,231) = 8.20, p < .001$ , explaining 13.2% of the total variance. In this case, high creative and operational skills were the significant predictor variables.

A similar analysis procedure was carried out to investigate whether the predictor variables could significantly explain qualitative research competencies as well. The model was significant [ $F(5,231) = 7.91, p < .001$ ] and explained 12.8% of the variance. The variables that contributed significantly to the model were operational skills ( $\beta = .20, p < .05$ ) and creative skills ( $\beta = .21, p < .01$ ).

As for the model for research ethics, when including all the predictors produced  $R^2 = .147, F(5, 231) = 45.67, p < .001$ . Table 5 shows that only creative skills had a significant positive regression weight,

indicating that students with high creative skills also displayed more confidence in research ethics behaviors.

As for the dissemination of research, the significant predictor variables were information-navigation skills ( $p < 0.5$ ) and creative skills ( $p < .001$ ) indicating that students with high information-navigation and creative skills have more confidence in their ability to distribute the results in a scholarly format. The four predictor model accounted for 17.3% of the variance in dissemination,  $F(5, 231) = 10.85, p < .001$ .

**Table 5.** Simultaneous multiple regression analysis for perception of remote learning process and digital skills on predicting research competencies

	RI	QUANT	QUALIT	RE	DISS
	$b(\beta)$	$b(\beta)$	$b(\beta)$	$b(\beta)$	$b(\beta)$
Remote learning	-0.35 (-			-0.01 (-	.06 (.07)
Operational	0.04)	-0.01 (-01)	.03 (.03)	.01)	-01 (-03)
skills	.36 (.06)**	.26 (.17)*	.31 (.20)*	.20 (.12)	.27 (.18)*
Inform-navig	.08 (.07)	.13 (09)	.11 (.08)	.17 (.11)	.05 (.04)
skills	0.7 (0.6)	-0.06 (-0.5)	-0.08 (-.07)	.08 (.06)	.31
Social skills	.11 (.12)	.25 (.25)***	.23 (.23)***	.23	(.30)***
Creative skills				(.21)**	
R <sup>2</sup>	.155	.132	.128	.147	.173
F	9.65***	8.20***	7.91***	9.12***	10.85*
					**
df	5, 231	5, 231	5, 231	5, 231	5, 231

Note: \*p<.05, \*\* p<.01, \*\*\* p<.001

Source: author's own design

#### 4. Conclusions and Recommendations

The COVID-19 pandemic accelerated the modification of teaching pedagogy through the usage of innovative technological means (United Nations, 2020). This paper looked at the available information on research competencies of social work students and aimed to explain how these are constructed in a remote learning format. The learning plan in social work program includes a large palette of disciplines centered on research

methodology and data analysis<sup>2</sup>. In spite of this diversity of courses (both compulsory and elective) students rated themselves as moderately competent in research. In an evidence-based social work approach, research needs to remain an important component. Moreover, considering the digitalisation expectation of (higher) education, there needs to be a sustained effort ensuring that provision of learning tasks and curriculum content focus on the development and sustenance of research skills. This requires substantial changes in framing how the research classes are delivered:

1) *Exposure to complete research process through specific research classes/modules/contents*

Selection of topics for discussion and specific learning tasks for students must be grounded in their prior knowledge and experiences. Both teachers and students should acknowledge that in understanding the relationships existing in the social environment there is more than just one explanation. Therefore, research classes/modules/contents should encourage looking for alternative explanations, results, models, or research designs. Furthermore, such learning interactions are an opportunity to transfer their acquired research interpretations to other classes, and later, upon their graduation, in their field of practice.

2) *Sustain motivation for research through carefully selection of social phenomena and proposing relevant learning tasks*

Students' initial expectations about social work field may serve as a trigger factor in understanding the usefulness of research, especially if research classes are in their first year of study. By acknowledging the diversity of students' experiences and positioning research questions in a context relevant for students' lives, research classes/modules/contents may support, increase or sustain their motivation and engagement for scientifically understanding the social problems.

3) *Employing innovative pedagogies through usage of various online tools, supports acquiring research knowledge and skills, but this must be tailored to access and usability*

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<sup>2</sup> As an example, for the universities included in the study, the learning plan at UBB includes Research Methods and Techniques, and Social Statistics and Computer Analysis of Data (1<sup>st</sup> year), Social Database Design and Analysis (3<sup>rd</sup> year); at UC includes Methods and Techniques for Social Research (1<sup>st</sup> year); at ULBS includes Research Methods in Social Sciences, Social Research Methods, and Laboratory on Computer-Assisted Data Analysis (1<sup>st</sup> year), Research methods: qualitative approach (2<sup>nd</sup> year); at USV includes Research Methods in Social Sciences (1<sup>st</sup> year); at UO includes The Methodology of Social Research, Applied Statistics in Social Sciences, and Computer Analysis of Social Data (1<sup>st</sup> year); at UAV includes Research Methods in Social Sciences (1<sup>st</sup> and 2<sup>nd</sup> year).

Innovative pedagogies through the use of new technologies in teaching have to potential to better contextualize social research. Such innovative methods can sustain active participation in classes, but only if structural barriers related to connectivity and access to technology are removed.

*4) Designing research classes in a manner that stresses the reflective learning*

This type of learning requires teachers to engage into a continuous process of assessing what students are able and are no able yet to do and identify areas where they need additional support in understanding the research concepts and procedures. Embedded assessment in instruction allows both teachers and students to use evaluation not as a goal, but as an instrument to reflect on the research process and to improve the general learning.

*5) Addressing existing disparities between schools and programs in terms of exposure to research topics and focus on research competencies in the curriculum*

There are differences among different schools in terms of available human and material resources, research opportunities they offer students through their bachelor programs. In general, social work programs serve students with low socioeconomic background which have less resources. Then, social work schools have different research-focused programs. Also, not all teachers have the qualifications and/or relevant research experiences to include in their classes. Teachers need both knowledge of the topic taught and relevant and recent research experience to ground his/her claims in relevant scientific data. Therefore, in programs where faculty does not have appropriate research experiences, research classes are seen as less necessary for the general profile of the graduate, and the transferability of knowledge and skills between classes is lower. As a result, even if in the end they will receive the same qualification, students will lack understanding of the importance of using research when entering the field of practice.

#### ***4.1. Limitations and future directions***

Our study raises significant points for social work education, but we must also consider the limitations of our interpretations. First, our study uses one-time measurements so interpretation is correlational in nature, excluding any causality explanation. Additionally, the study sample is not representative due to the sampling procedure employed. However, given the exploratory nature of our study we believe that this issue does not interfere with the potential use of our results in guiding educational policies. Second, we used only self-reported measures, so any significant relationship reported might have been subject to some interpretative errors. Future studies should include

other informants such as teachers and/or alternative research methodologies. In the same line with the instrumentalization, first validating a research competences scale for social work students would help better understanding the context of teaching/learning research contents. Omitting items about specific research tasks required in social work research classes can result in an inaccurate picture of research experience for social work students. Third, the online procedure for data collection yielded quite a low response rate and our final sample was relatively homogeneous, thus limiting the generalization of our analyses to the social work student population. It is advisable that future studies collect data from a larger sample and employing a sampling procedure and engage into a comprehensive longitudinal design that can shed light on the real mechanisms and factors that contribute to the development of research skills.

However, we conclude that, even with these limitations, our survey managed to capture an accurate one-point picture reflecting students experiences during the remote learning. If not used for advocating for structural changes at institutional level, these data can at least be used to start a debate about the future of teaching in higher education.

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