

Covid-19 Pandemic exposes that anytime, anywhere online distance learning is a myth

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Once upon a time, about three years ago, in China.....



According to Uncle GOOGLE, bats are prepared in a variety of ways, including grilled, barbecued, deep-fried, cooked in stews and stir-fried dishes.

The rest is history

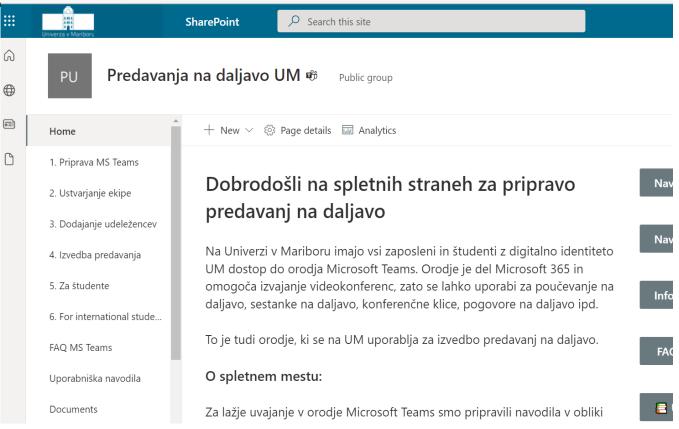




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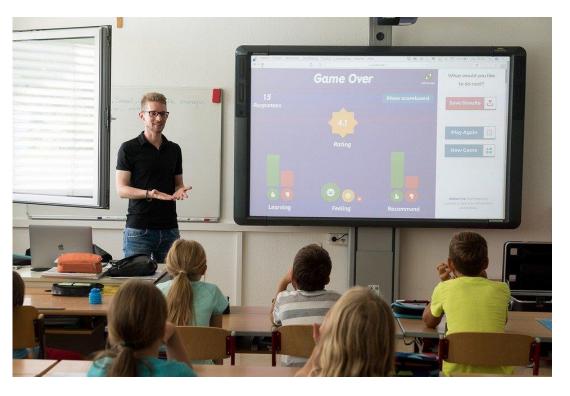
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University of Maribor reacted practically in moment (emergent and forced online education)



All students have their digital identity. Only MS-Teams and Moodle were allowed. Before the pandemic, there were some digital myths that said computers and the internet could help teachers reach educational heaven.





https://pixabay.com/photos/school-teacher-education-asia-1782427/

https://pixabay.com/photos/teacher-property-plant-and-teaching-3765909/



Anyhow

Howbeit

- Meanwhile
- Yet



- At any rate
- In any case

All the same

On the contrary

But

Alternatively

Nonetheless

Then again

- Conversely
- Without regard to
- Notwithstanding
- Though

Despite

Albeit

- On the other hand
- Whatever

- Despite that
- Although

- Nevertheless
- In spite of

Even so

- By way of contrast
- Otherwise

Whatsoever

- For all that
- In contrast

Per contra

Still

- On the flip side
- In whatever way
- Regardless

Whereas

Having said that With

Still and all

For each medicine there is a list of possible side effects



During the closure, it became clear early on that teachers are most likely not villains who destroy students' souls



Mom's hilarious prayer for heavenly help in homeschooling amid COVID-19 is every parent right now

404 tis. ogledov • pred 3 leti



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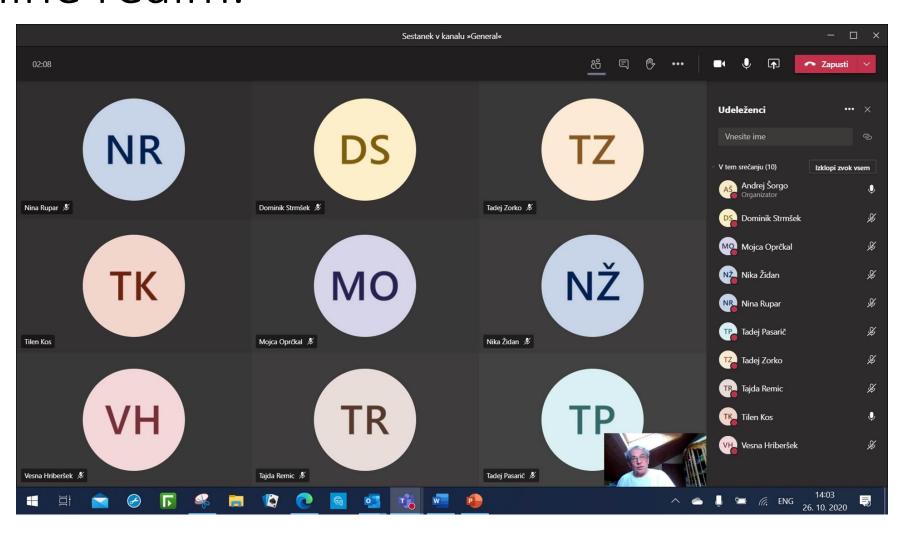
This angry mom's rant about homeschooling children while in quarantine goes viral 393 tis. ogledov • pred 3 leti



COURTESY: SHIRI KENIGSBERG LEVI How hard is homeschooling? Listen to this angry mother share her frustration as she tries ..

https://www.youtube.com/results?search_query=coronavirus+funny+hoemschooling

Mortals, willing or not, were pushed to enter on-line realm.



We recognised early on that university closures and forced online distance learning have led to serious problems expressed as **satisfaction toward**



Dopamine

The rewarding chemical

- Completing a task
- Doing self-care activities
- · Eating food
- Celebrating little wins

Oxytocin

The love hormone

- · Hugging your loved ones
- · Playing with a dog
- · Playing with a baby
- · Holding hands

Serotonin

The mood stabilizer

- Sun exposure (be sun safe)
- Meditating
- Running
- Being in nature

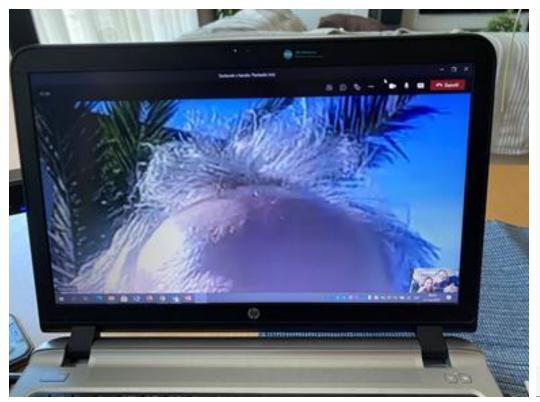


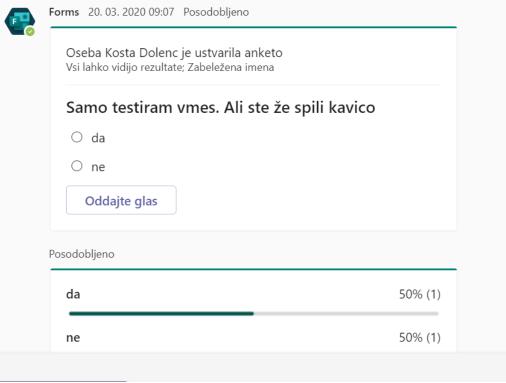
The pain killer

- Laughing
- Excercising
- · Dark chocolate
- · Essential oils



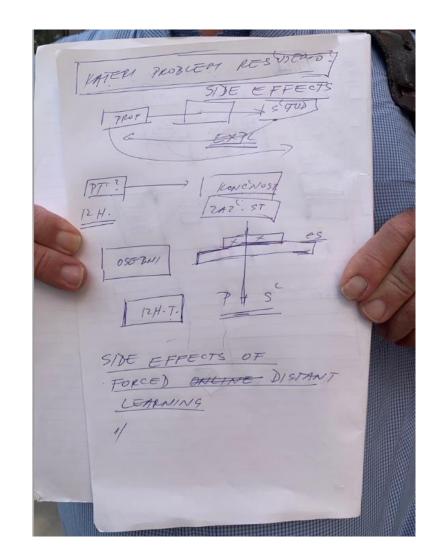
Early performances





A self-initiated group of three university teachers from the UM (Mateja Ploj Virtič. Kosta Dolenc, Andrej Šorgo) has begun research into the impact of distance education on higher

education





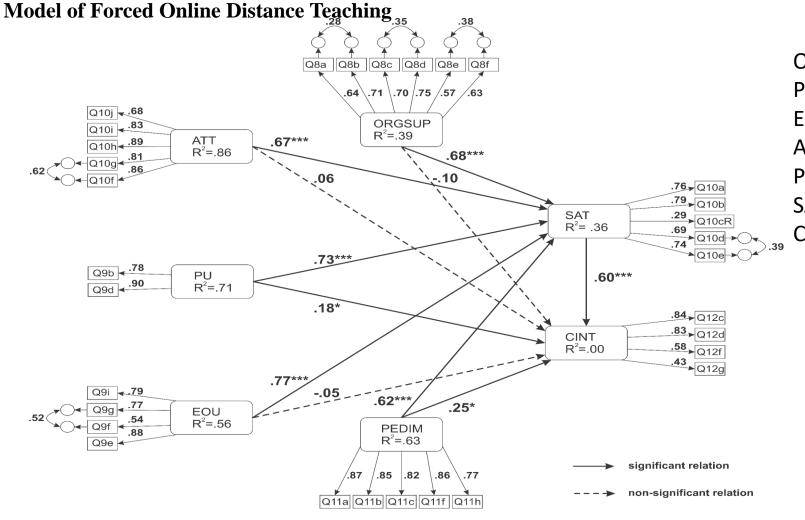


Published works

- DOLENC, Kosta, ŠORGO, Andrej, PLOJ VIRTIČ, Mateja. The diference in views of educators and students on forced online distance education can lead to unintentional side efects. *Education and information technologies*. Nov. 2021, vol. 26, iss. 6, str. 7079-7105.
- DOLENC, Kosta, ŠORGO, Andrej, PLOJ VIRTIČ, Mateja. Perspectives on lessons from the COVID-19 outbreak for post-pandemic higher education: continuance intention model of forced online distance teaching. *European* journal of educational research. 2022, vol. 11, no. 1, str. 163-177.
- PLOJ VIRTIČ, Mateja, DOLENC, Kosta, ŠORGO, Andrej. Changes in online distance learning behaviour of university students during the coronavirus disease 2019 outbreak, and development of the model of forced distance online learning preferences. *European journal of educational research*. 2021, vol. 10, no. 1, str. 393-411.
- ŠORGO, Andrej, PLOJ VIRTIČ, Mateja, DOLENC, Kosta. Differences in personal innovativeness in the domain of information technology among university students and teachers. *Journal of information and organizational sciences*. [Print ed.]. 2021, vol. 45, no. 2, str. 553-565.
- DOLENC, Kosta, PLOJ VIRTIČ, Mateja, ŠORGO, Andrej. The views and perceived experiences of prospective primary and subject teachers on forced remote education during the second COVID-19 lockdown. V: LIPOVEC, Alenka (ur.), TEKAVC, Janja (ur.). Perspectives on teacher education and development. 1st ed. Maribor: University of Maribor, University Press, 2023. Str. 449-464.
- In press: The Idea that Digital Remote Learning can happen Anytime, Anywhere in Forced Online Teacher
- Education is a Myth. Technology, Knowledge and Learning (in press)

Study 1 (first wave): 290 university educators from UM

Perspectives on Lessons from the CoVID-19 Outbreak for Post-pandemic Higher Education: Continuance Intention



ORGSUP = support

PU = perceived usability

EOU = ease of use

ATT = attitudes

PEDIM = pedagogical impact

SAT = satisfaction

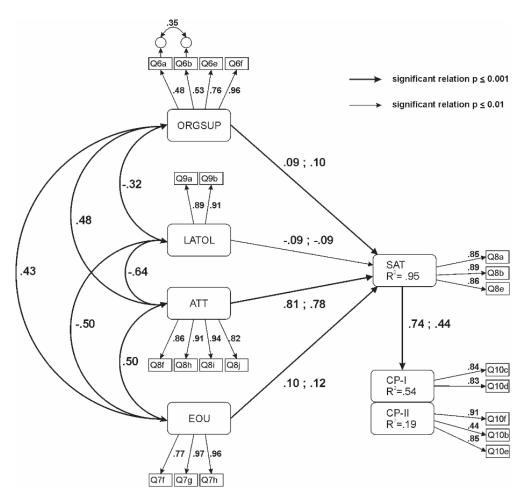
CINT = continuous intentions

 $\chi^2/df = 1.88$, IFI = .92, CFI

= .92, RMSEA = .06,

SRMR = .06

Study 2: Students of UM (N = 448)



ORGSUP – organizational support LATOL – learning attitudes toward online learning

ATT – attitues

EOU – ease of use

SAT – satisfaction

CP-I – continuance attitudes

(synchronous)

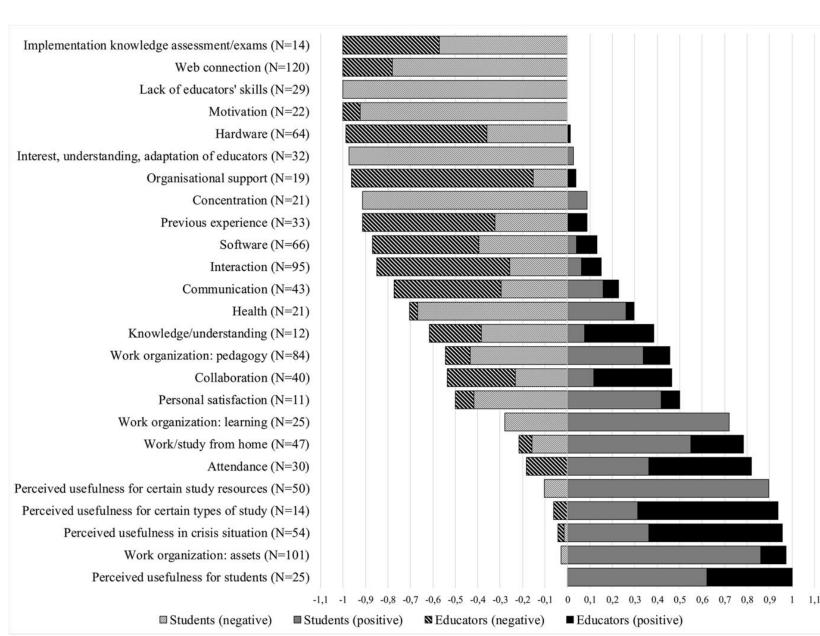
CP-II - continuance attitudes

(asynchronous)

RQ: Is there a conflict of views between students and educators?



Dolenc, K., Šorgo, A., Ploj Virtič, M. (2021). The diference in views of educators and students on forced online distance education can lead to unintentional side efects. Education and information technologies, 26(6), 7079-7105.



Differences between students and educators (Dolenc et al., 2021)

- Negative views of FODE prevail in both groups;
- Teachers have a more negative view of FODE than students:
- The most negative are the views on the technology used in FODE;
- Views on the perceived usefulness of FODE are most positive;
- Positive views belonged to the quality of life category and not to the quality of study.

SPLETNI ŠTUDIJ

Pogrešajo prakso in osebni stik

Ko se študentje učijo anatomijo preko spleta, slikajo na manjša platna, gledališka igra pa postaja filmska

tno 'popolnoma v nenormalni situaciji, saj se slikarstva ne more celovito
doživljati in ga študirati na daljavo'.
Med drugim namreč temelji na živi
izkušnji z modelom, te pa zdaj ni.
Sedaj študentom posreduje nalogo,
na primer veduto, ki jo narišejo ali
naslikajo, izberejo torej tisto tehniko, ki jim najbolj leži, nato pa izdelek fotografirajo in mu ga pošljejo.
Nakar vsa njihova dela, v tem primeru fotografije, arhivira in jih primerja, nato pa študentom poda povratno

lira-

oče-

informacijo. V njej jih običajno spodbuja. Opozarja tudi na pogoje dela študentov, ki so na akademiji za vse enaki, medtem pa zdaj nekateri razpolagajo z domačim, prostornim ateljejem, drugi pa študirajo v tesnih sobicah, po možnosti še s kakšnim sorojencem. Študentka drugega letnika magistrskega programa slikarstva izpostavi, da so bili študentje zaradi onemogočenega dostopa do ateljejev in materialov praktični del študija prisiljeni prilagoditi tako, da "Odvzeta je energija, ki jo o oziroma sprejemamo in ki n Igra preko zooma oziroma s more imeti enakega učinka v živo," pravi študentka dram na AGRFT. Foto: igor

so slikali na manjša platna, n atelje, ali so praktično delo p

Medicina: prej na kadavru sedaj preko izvlečkov

Student prvega letnik ne Marcel Primožič je sično študentsko življe dva tedna. Kot pravi, ir sedem ur predavanj in ? dan. Prav vaje so najt tične, zlasti iz anato sto da bi asistentka v secirnici na kaday denimo, kako so kosti, razlaga sny kov v program namesto da celico pod r va preko ostaja o fakul zno

The findings were communicated to the professional and lay public and did not trigger a response.

Študentje potrebujejo boljšo opremo

Profesorji Šorgo, Ploj Virtičeva in Dolenc pozivajo vlado in vse odgovorne, da zagotovijo sredstva, ki bi omogočila vsakemu študentu, bodočemu učitelju, dostop do hitre širokopasovne povezave tudi izven fakultet, in izposojo ali subvencioniranje nakupa dovolj zmogljivega mobilnegoračunalnika, ki bi jim omogočal študij ter pripravo gradiv in učil. Še

The experiences from UM studies were included in a study by the National Institute of Public Health (Gabrovec, B.; Cerar, K.; Crnkovič, N.; Selak, Š., Šorgo A.)







RAZISKAVA O DOŽIVLJANJU EPIDEMIJE COVID-19 MED ŠTUDENTI

POROČILO O OPRAVLJENI RAZISKAVI

Innitial position:

- Solving problems related to student health and mental health cannot be left to the health system alone
- Universities and faculties should take their share of responsibility.

Data Collection (N = 5999 full-time tertiary students)

- Data collection took place through a self-reported survey as part of a large cross-sectional study to determine the mental health status and factors that may influence postsecondary students in Slovenia (Gabrovec et al., 2021). The study was conducted between February 9 and March 8, 2021, across the entire territory of Slovenia.
- Participants were recruited online through a web-based survey platform
 (https://www.1ka.si/). Participants were informed about the study's aspects, including their right to voluntary participation and withdrawal. Ethical approval to conduct the study was obtained from the National Medical Ethics Committee of the Republic of Slovenia (NMEC), Ministry of Health (No. 0120-48/2021/3).

Already published

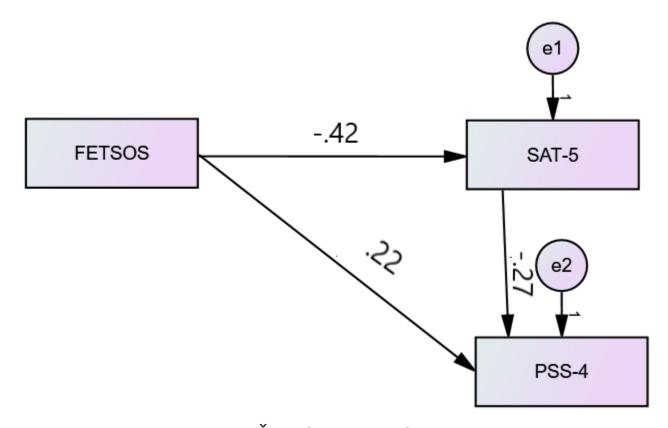
- ŠORGO, Andrej, CRNKOVIČ, Nuša, GABROVEC, Branko, CESAR, Katarina, SELAK, Špela. Influence of forced online distance education during the COVID-19 pandemic on the perceived stress of post-secondary students: cross-sectional study. *Journal of medical internet research*. 2022, vol. 24, iss. 3 (art. 30778), str. 1-18,
- ŠORGO, Andrej, CRNKOVIČ, Nuša, CESAR, Katarina, SELAK, Špela, VRDELJA, Mitja, GABROVEC, Branko. The infuence of anxiety and fear of COVID-19 on vaccination hesitancy among postsecondary students. Scientific reports. 2022, vol. 12, str. 1-10.
- GABROVEC, Branko, SELAK, Špela, CRNKOVIČ, Nuša, CESAR, Katarina, ŠORGO, Andrej. Perceived satisfaction with online study during COVID-19 lockdown correlates positively with resilience and negatively with anxiety, depression, and stress among Slovenian postsecondary students. *International journal of environmental research and public health*. [Online ed.]. 2022, vol. 19, iss. 12, str. 1-11,
- ŽMAVC, Mark, ŠORGO, Andrej, GABROVEC, Branko, CRNKOVIČ, Nuša, CESAR, Katarina, SELAK, Špela. The protective role of resilience in the development of social media addiction in tertiary students and psychometric properties of the Slovenian Bergen Social Media Addiction Scale (BSMAS). *International journal of environmental research and public health*. [Online ed.]. 2022, vol. 19, article 13178, str. 1-15. ISSN
- GABROVEC, Branko, SELAK, Špela, CRNKOVIČ, Nuša, ŠORGO, Andrej, CESAR, Katarina, FAFANGEL, Mario, VRDELJA, Mitja, SKAZA, Alenka. Compliance with preventive measures and COVID-19 vaccination intention among medical and other healthcare students. *International journal of environmental research and public health*. [Online ed.]. 2022, vol. 19, 11656., str. 1-9.

SAT-5. After undergoing distance learning I can describe the experience as (N = 5423). (Note. The scale range was from 1 (completely disagree) to 7 (completely agree).

SAT5	N	Mean	SD	Median	Mode
comprehensible.	5409	4.21	1.86	4	5
successful.	5417	4.04	1.95	4	5
instructive.	5414	3.91	1.92	4	5
entertaining.	5417	3.07	1.98	2	1
easy.	5416	2.69	1.78	2	1
Sum	5405	17.91	7.84	18	5

FETSOS	N	Mean	SD	Median	Mode
Decrease in motivation to study.	5412	5.36	1.86	6	7
The quality of internet and mobile data connection.	5415	5.32	1.76	6	7
Presence of attention-disruptors in the study space	F 407	4.00	4.04	F	7
(e.g. presence of other people).	5407	4.98	1.81	5	7
Adequateness of the study space.	5414	4.93	1.78	5	6
Uncertainty relating to regulations and the process of					
completing the study obligations that cannot be done	5411	4.76	1.95	5	7
via distance learning.					
The quality of computer and communication	Г 4 4 7	474	1 0 4	F	F
equipment.	5417	4.74	1.84	5	5
Access to study resources (e.g. library).	5414	4.63	1.81	5	7
Increased study demands by teachers.	5410	4.55	1.76	5	4
Household chores and other housework.	5412	4.28	1.77	4	4
Obtaining income to make a living.	5410	3.94	2.12	4	1
Health issues directly related to distance learning.	5406	3.32	2.01	3	1
Health issues not directly related to distance learning.	5398	2.98	1.88	3	1

Influence of satisfaction (SAT-5) and feelings toward study obligations (FETSOS) on perceived stress (PSS-4)



Šorgo A, Crnkovič N, Gabrovec B, Cesar K, Selak Š. Influence of Forced Online Distance Education During the COVID-19 Pandemic on the Perceived Stress of Postsecondary Students: Cross-sectional Study. J Med Internet Res 2022;24(3):e30778. doi: 10.2196/30778

Major findings from the study of Gabrovec et al. 2022.

Table 1. Means, standard deviations, and correlations between constructs. Spearman's rho is reported (N = 4661; N_L = 1678; N_L = 1730).

X

	ANX	DEP	STR	RES	SAT	Mean	SD
ANX						10.39	6.53
DEP	0.816					11.29	7.23
STR	0.675	0.707				7.96	3.31
RES	-0.468	-0.483	-0.603			23.63	7.37
SAT	-0.443	-0.439	-0.357	0.254		17.91	7.77

Note: All correlations are significant at 0.001 level (2-tailed).

Gabrovec, B., Selak, Š., Crnkovič, N., Cesar, K., & Šorgo, A. (2022). Perceived satisfaction with online study during COVID-19 lockdown correlates positively with resilience and negatively with anxiety, depression, and stress among Slovenian postsecondary students. *International Journal of Environmental Research and Public Health*, 19(12), 7024.

Major findings from Šorgo et al. 2021 (N = 4455)

- More than half of all respondents reported high levels of stress.
- Major stressors:
 - a decline in the motivation to study,
 - the quality of internet and mobile connections,
 - and the presence of distracting factors
- Higher the satisfaction, the lower the stress.
- The more positive feelings connected with the timeliness, performance, and quality of the study obligations that the students felt, the more satisfaction they reported with online study and, thus indirectly, lower stress.

Over the last 2 weeks, how often have you been bothered by any of the following problems?

Thoughts that you would be better off dead or of hurting yourself in some way

Item 9		Counts	% of Total	Cumulative %
0	not at all	3975	73.3 %	73.3 %
1	several days	900	16.6 %	89.9 %
2	more than half the days	278	5.1 %	95.0 %
3	nearly every day	270	5.0 %	100.0 %

Findigs: About 5% of variance of suicidal thoughts can be explained by SAT and FETSOS

About 10% of variance of suicidal thoughts in the most vulnerable population can be explained by SAT and FETSOS

General conclusions

- Solving problems related to student health and mental health cannot be left to the health system alone.
- Universities and faculties should take their share of responsibility, not only for educational outcomes, but also for student health, mental health, and wellbeing.
- We need well-designed studies on what works in online distance education.
- The side effects of introducing any technology should be worked out.

