THE ATTITUDES OF FACULTY MEMBERS TOWARDS ICT: A CASE STUDY IN A GREEK UNIVERSITY

Maya Satratzemi, Stelios Xinogalos, Kostas Zafiropoulos,
Tania Karga, Ioanna Dagdileli

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Aim of the study

- Investigate faculty members' attitudes and perceptions of a Greek University regarding the use of Information and Communication Technologies (ICT) in teaching.
- The study was conducted in the University of Macedonia at the beginning of the academic year 2022-2023.
- The survey instrument was based on relevant literature and included 43 5-point Likert scale questions.
- The survey was filled in by 76 in-service faculty members from the four Schools:
  - Business Administration
  - Economic and Regional Studies
  - Information Sciences
  - Social Sciences, Humanities and Arts

Examined factors

Factors	Studies that proposed the scales
1. Attitudes towards ICT	Scale proposed by Hernández-Ramos et al. (2014)
2. Self-efficacy in using ICT	Scale used for mobile self-efficacy in Chao (2019)
3. Institutional support	Scale used in the study of Aburagaga et al. (2020)
4. Barriers to the use of ICT	We used the questions that Mynaříková & Novotný (2020) examined in their study
5. Obligation to use ICT	These questions were inspired by the work of Saleem et al. (2016)
6. Performance expectancy	Items in the scale proposed by (Venkatesh et al. 2003) for the construct performance expectancy in the UTAUT model
7. Facilitating conditions	We adopted the questions that Saleem et al. (2016) used to explore the facilitating conditions on the faculty's behavioral intention to use Moodle
8. Behavioral intention to use ICT	Scale proposed by (Venkatesh et al. 2003) for the construct Behavioral intention in UTAUT model

Related work

Attitudes towards ICT: Hernández-Ramos et al. (2014) developed a tool with adequate psychometric properties that gave added pedagogical value to the introduction of ICT in higher education teaching.

Self-efficacy in using ICT: Chao (2019) developed and empirically tested a model to predict the factors affecting students' behavioral intentions toward using mobile learning (m-learning).

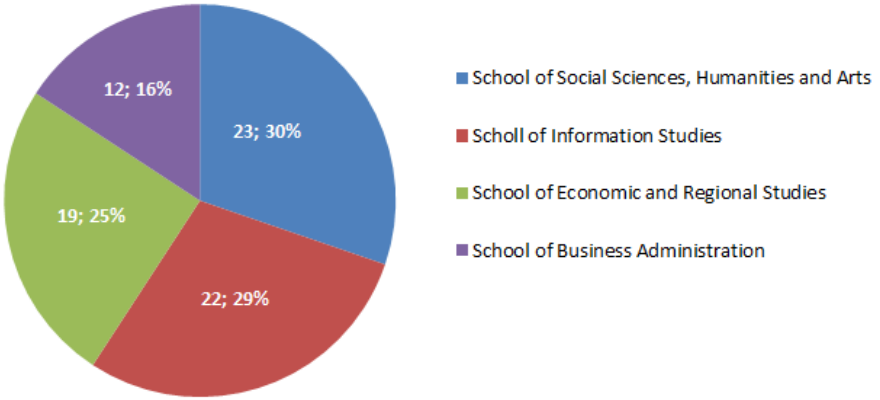
Institutional support: Aburagaga et al (2020) adapted the Technology Acceptance Model (TAM) to determine and analyse the factors and variants affecting faculty and educational stakeholders' acceptance of the adoption of social networks as an educational delivery platform

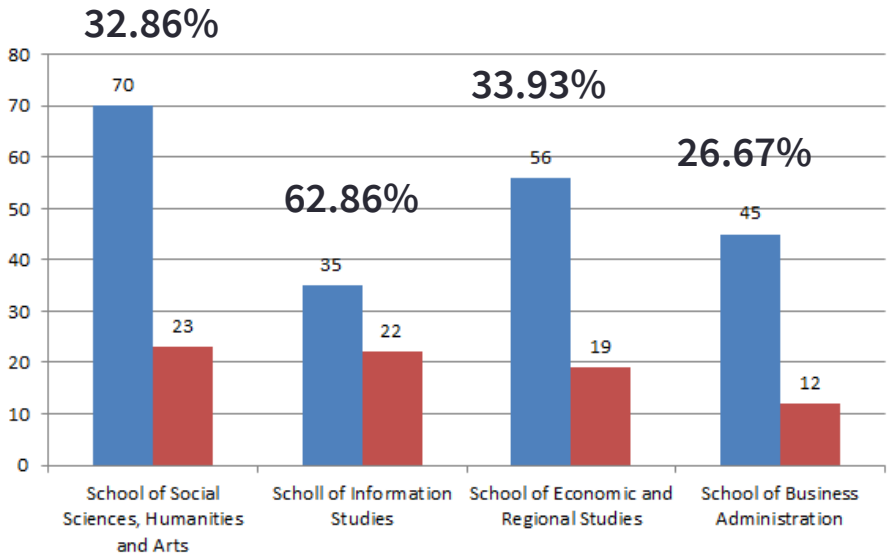
Barriers to the use of ICT: Mynaříková & Novotný (2020) examined barriers of Czech secondary school teachers to the use of ICT in teaching and in further education in ICT.

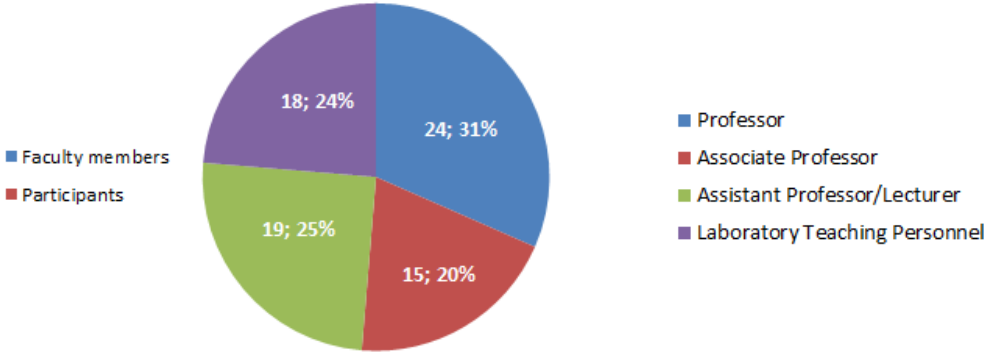
Obligation to use ICT & Facilitating conditions: Saleem et al. (2016) applied the UTAUT model to explore the acceptance of Moodle as a teaching and learning tool by the faculty of a Department of Information Studies

Performance expectancy & Behavioral intention to use ICT: The Unified Theory of Acceptance and Use of Technology (UTAUT) examines the acceptance of technology, determined by the effects of performance expectancy, effort expectancy, social influence and facilitating conditions (Venkatesh et al., 2003).

Participants (76)







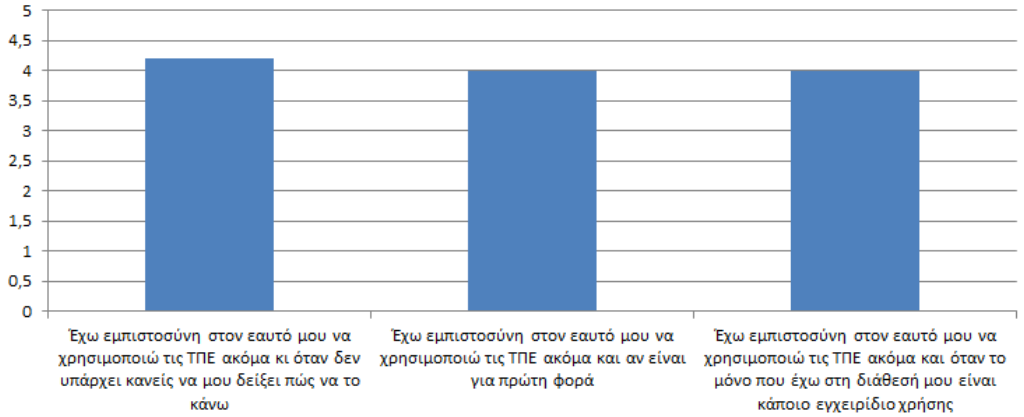
Attitudes towards ICT (scale in Hernández-Ramos et al., 2014)

Code	Statement	Mean	Std. dev.
T2.1	ICT facilitate University teacher research	4.62	0.673
T2.2	ICT improve and facilitate teacher–student communication	4.51	0.856
T2.3	The use of ICT in University teaching implies the development of new student competences	4.42	0.698
T2.4	The use of technology in the classroom facilitates teaching for University teachers	4.38	0.799
T2.5	New methodological possibilities arise in my classes due to the incorporation of ICT	4.33	0.773
T2.6	Adequate use of ICT in teaching implies professional ongoing training for teachers	4.22	0.842
T2.7	Using ICT for the administration tasks involved in my subject (class lists, evaluation. etc.) has been a significant improvement	4.21	0.884
T2.8	Due to the incorporation of ICT in my teaching, my students are more motivated to work at my subject	4.14	0.919
T2.9	Using technology in my classes improves student evaluation	4.14	0.962
T2.10	More work is carried out in my classes due to the use of ICT	4.13	0.914
T2.11	ICT result in a higher education with a greater degree of interdisciplinarity	4.05	0.878
T2.12	ICT save the teacher repeating work	4.05	1.13
T2.13	The possibilities opened up to the teacher by certain ICT compensates for the large amount of time spent in training	3.88	0.966
T2.14	Students evaluate my teaching more positively if I use ICT	3.87	0.869
T2.15	University teachers have training opportunities for the integration of ICT in their teaching	3.43	1.075

Attitudes towards ICT

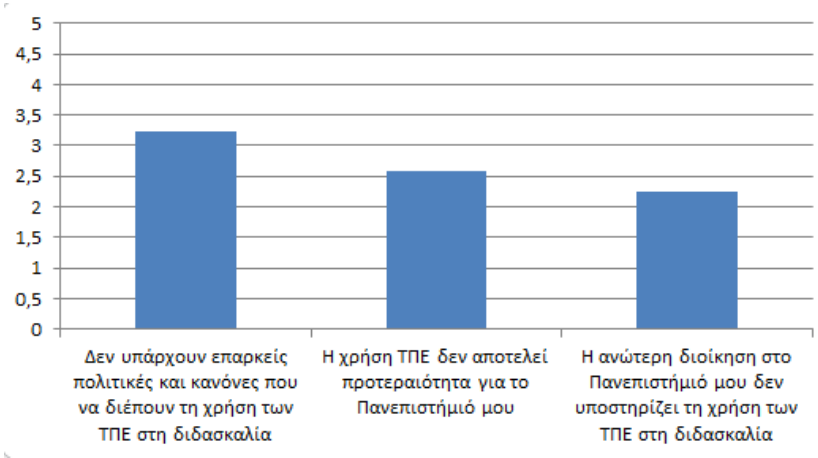
Self-efficacy (scale in Chao, 2019)

Code	Statement	Mean	Std. dev.
T3.1	I am confident of using ICT even if there is no one around to show me how to do it	4.2	0.817
T3.2	I am confident of using ICT even if I have never used such a system before	4	0.98
T3.3	I am confident of using ICT even if I have only the software manuals for reference	3.99	0.986



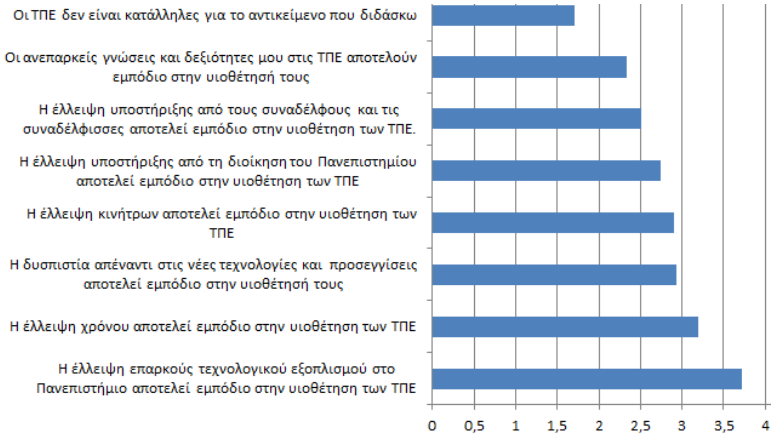
Institutional support (scale in Aburagaga et al., 2020)

Code	Statement	Mean	Std. dev.
T4.1	There is a lack of policies and rules governing the use of ICT in teaching	3.24	0.892
T4.2	The use of ICT is not a priority for my University	2.59	0.941
T4.3	There is no support from top management to use ICT in teaching	2.26	0.87



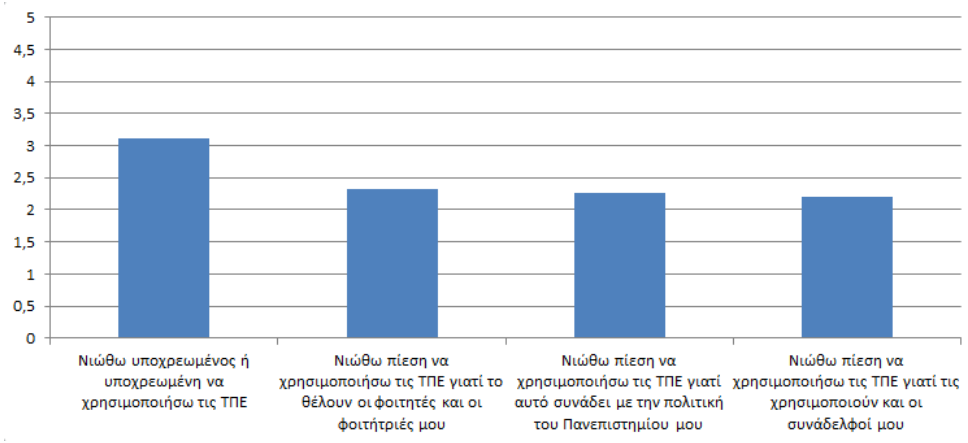
Barriers to the use of ICT (questions in Mynaříková & Novotný, 2020)

Code	Statement	Mean	Std. dev.
T5.1	Lack of sufficient technology in school	3.72	1.103
T5.2	Lack of time	3.2	1.2
T5.3	Distrust in new technologies and approaches	2.93	1.32
T5.4	Lack of motivation	2.91	1.073
T5.5	Lack of University management support	2.74	1.1
T5.6	Lack of colleagues' support	2.51	1.026
T5.7	Insufficient knowledge and skills in ICT	2.34	1.138
T5.8	ICT not suitable for the taught subject	1.71	1.03



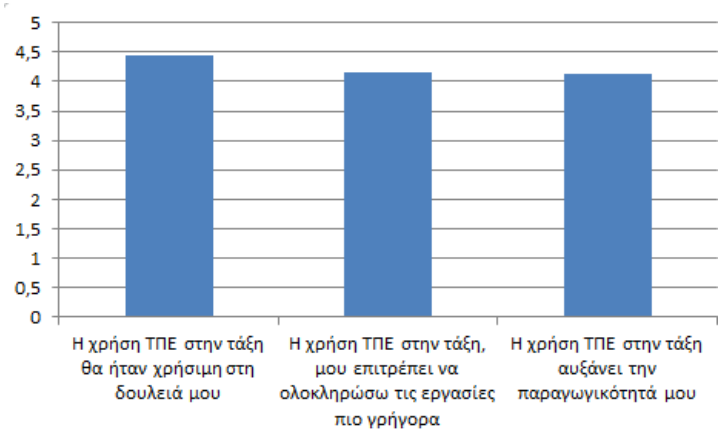
Obligation to use ICT (questions in Saleem et al., 2016)

Code	Statement	Mean	Std. dev.
T6.1	I feel obliged in using ICT	3.11	1.217
T6.2	I feel pressure in using ICT because my students want it	2.32	0.969
T6.3	I feel pressure in using ICT because it is in line with my University's policy	2.26	0.985
T6.4	I feel pressure in using ICT because my colleagues are using ICT to	2.21	0.957



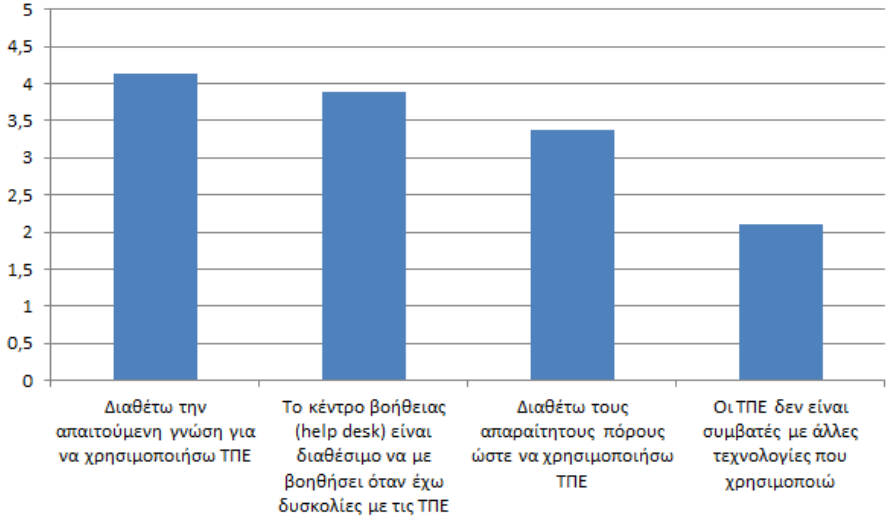
Performance expectancy (UTAUT model)

Code	Statement	Mean	Std. dev.
T7.1	I would find using ICT in the classroom useful in my job.	4.45	0.807
T7.2	Using ICT in the classroom enables me to accomplish tasks more quickly	4.17	0.958
T7.3	Using ICT in the classroom increases my productivity.	4.14	0.962



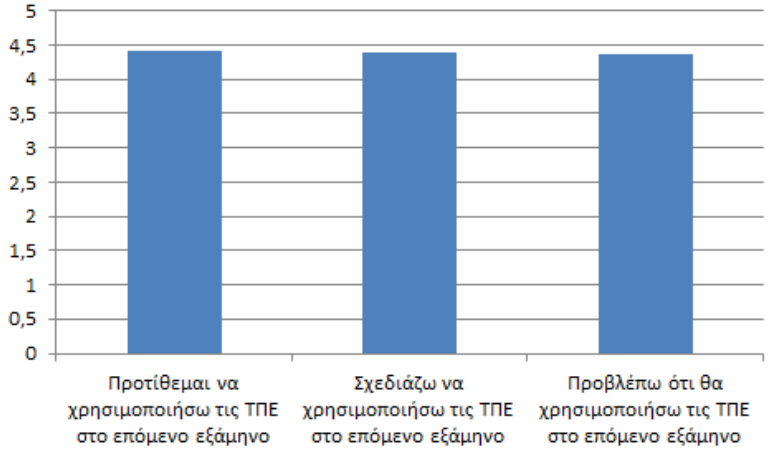
Facilitating conditions (questions in Saleem et al., 2016)

Code	Statement	Mean	Std. dev.
T8.1	I have the knowledge necessary to use ICT	4.13	0.806
T8.2	A specific person (or group) is available for assistance with ICT difficulties	3.88	0.864
T8.3	I have the resources necessary to use ICT	3.37	1.094
T8.4	ICT are not compatible with other technologies I use	2.11	0.96



Behavioral intention to use ICT (UTAUT model)

Code	Statement	Mean	Std. dev.
T9.1	I intend to use ICT in the next semester	4.41	0.786
T9.2	I plan to use ICT in the next semester	4.39	0.834
T9.3	I predict I would use ICT in the next semester	4.38	0.832



Conclusion

- Positive attitude towards the use of ICT and they consider that it has a positive impact on teaching, class administration, communication and research, while it provides possibilities for interdisciplinarity.
- The successful adoption of ICT in teaching requires ongoing professional training, but such opportunities are not so common
- The most prominent barrier to adopting ICT is the lack of adequate technological equipment at the University, followed by lack of time at a lesser degree.
- Faculty members do not feel pressure in using ICT because their students, colleagues or the institution wants it.
- The Performance expectancy of ICT and the behavioral intention to use ICT in the next semester were rather high.

Future research

- Is there any difference in the views of faculty members' towards the use of ICT/Self-efficacy in using ICT/Institutional support/Barriers to the use of ICT/Obligation to use ICT/Performance expectancy/Facilitating conditions/Behavioral intention to use ICT in teaching depending on their academic rank?

Future research

- Is there any difference in the views of faculty members' towards the use of ICT/Self-efficacy in using ICT/Institutional support/Barriers to the use of ICT/Obligation to use ICT/Performance expectancy/Facilitating conditions/Behavioral intention to use ICT in teaching depending on the School they belong to?

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