IJITCE

ISSN 2347- 3657

International Journal of Information Technology & Computer Engineering

Email : ijitce.editor@gmail.com or editor@ijitce.com

International Journal of Information Technology & Computer Engineering

ISSN 2347–3657

Volume 9, Issue 1, 2021

Influence of ICT Devices on the Work Life Balance of Teachers in Arts and Science Colleges

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Abstract
While ICT gadgets have become a common feature of our daily lives, their value as a tool for enhancing the performance of human resources in enterprises is being examined. This study examines the impact of technology on the work-life balance of professors in liberal arts and science universities. To classify ICT gadgets into communication devices that can be used to continue academic and office applications outside of work spaces and devices that cannot be used to work on data related to their regular academic and office activities, this research with a limited scope seeks to determine their comparative outcome on the five major factors affecting an individual's work-life balance. As time goes on, researchers will look for more explanations for the discrepancies in prior findings. After determining that there were significant differences in work life characteristics caused by ICT devices, relevant questions were addressed to discover the disparities caused by different types of ICT devices. The results were evaluated using the t-test. In order to compare the causes for working outside of normal business hours, a second rank correlation was performed using the Garrett Ranking technique. It turns out that employees who use smartphones with office apps have better work-life balance and better job performance as a result of their increased job performance, according to the study's findings.
Keywords: Information and Communication Technology (ICT) tools can help workers achieve a better work-life balance, as well as boost their productivity.

AN OVERVIEW OF ICT

An ICT product is defined as anything that can store, retrieve, alter or transfer data electronically in a digital form, such as a personal computer; a laptop computer; a smart phone; or a mobile phone. There are many ways in which technological media are described by Morreale, Spitzberg and Barge (2001)1 as those technologies that magnify, translate or otherwise alter the information in natural media.
Individuals in the workforce of every company, including educational institutions, have become increasingly reliant on the use of information and communication technology (ICT) gadgets.

ICT IN TEACHING

As an educational technology subfield, ICT falls within the umbrella. In higher education, ICTs are used for a variety of purposes, including creating and distributing course materials, delivering and sharing content, communicating with students, teachers, and the outside world, conducting academic research, providing administrative support, and enrolling new students.

Digital libraries, made possible by ICT, allow students, teachers, and other professionals to access course materials and research materials from virtually anywhere at any time (Bhattacharya and Sharma, 2007)

ISSN 2347–3657
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2. Such services enable academics and researchers to connect and share their work, thereby promoting the advancement of knowledge.

Teachers bear the brunt of the burden of instruction in the absence of modern technological aids. Students can take on more responsibility, though, thanks to advances in information and communication technology. Other obvious advantages of using ICTs in education include expanding the number of places where work can be done. Technology that allows college professors to work whenever they choose is one strategy that firms can use to reduce time waste by allowing employees to be active in more places and at more times. "third spaces" between the home and the workplace are becoming acceptable locations of employment, further reducing boundaries between the two (Brown, 2002) These previously unoccupied areas were only invaded because of technology that allows for greater mobility in the workplace (Gant and Kiesler, 2002)

IMPACT OF ICT ON THE WORK LIFE BALANCE OF TEACHERS

Reward

A better work-life balance can be achieved through the usage of ICT gadgets referred to as work extending technology. In his article "An interactive study of Wireless Technology Use," Schlosser (2002)5 mentions that "mobile work extending technologies assist workers to achieve greater balance between work and non-work situations.

Teachers now have a plethora of options for staying connected in and out of the classroom thanks to technological advancements. As a result, teachers are given greater control over their schedules and locations, allowing them to micro-coordinate their time, tasks, and locations.

andschedules.Thisoptionallowstheteachersincollegestotakebetteradvantageoftheirtime, thus allowing them to mesh personal life and work life in a more harmonious way.

Penalty

Some teachers may not be able to take full advantage of the flexibility offered by information technology gadgets. People who are "always on" and don't know how to "switch off" spend more time at home, on vacation, weekends, and weeknights using ICT gadgets to support their job from home. The blurred line between work and family life is made even more blurry by these technologies.

between the two. There is a significant amount of additional labor that was not previously present in the teaching profession, at least in the early stages, due to the introduction of new technology.

STATEMENT OF THE PROBLEM

However, because of the aforementioned drawbacks, mobile device users face an especially difficult situation. However, the question of whether the instructors would be able to take advantage of flexibility and improve their work-life balance or would it be harder for them to handle the thinner border between personal and work time induced by being 'always connected' remains unanswered.

OBJECTIVES OF THE STUDY

 The primary goal of this study is to examine the impact of ICT devices on faculty work-life balance in Kanyakumari District's arts and science colleges. The attainment of the following objectives enables the achievement of this main goal:

An investigation into instructors' work-life balance at arts and science colleges is the goal of this study.

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Estimate disparities in work-life balance produced by ICT gadgets that facilitate regular academic activities and those that do not facilitate regular academic activities.
Analyze the causes of work-life conflict or balance

RESEARCH METHODOLOGY

Among the professors of Kanyakumari District's arts and science colleges, a diagnostic investigation was undertaken. Personal computers, laptop computers, Smart Phones, and Mobile Phones accessibility were all covered in this study. Primary data was gathered by administering questionnaires to the participants, while secondary data was gleaned from published journals. Samples were selected using quota sampling, a form of purposive sampling. The type of college (assisted vs. self-funded) and the location of the institution were determined to be the most relevant control factors that not only improved the sample's representativeness but also its validity. The questionnaire included multiple-choice questions about respondents' devices of choice, as well as a five-point Likert's Scale for replies about work-life balance and ICT-interrupted work qualities.

Survey respondents were asked to rank the reasons that motivate them to work past their regular college contact hours in order to see if there are any differences between those who have communication devices that allow them to continue with their academic and office applications and those who do not. By utilizing SPSS, we were able to determine how device type and work-life balance aspects, as well as device type and ICT-intervening work qualities, influenced each other's relevance. The Garratt Ranking Technique was used to combine the respondents' rankings in an MS Excel Spreadsheet. In SPSS, the Spearmans Rank Correlation was used to further compare the rankings.

ASSOCIATION BETWEEN ICT SUPPORED WORK AND WORK LIFE BALANCE

The sort of devices used by teachers in this study should be the first and most important part of this investigation into the relationship between the use of ICT and work-life balance. As a first step toward this goal, college teachers were divided into two groups: those who had communication devices that could be used to continue their work on data related to their regular academic and office activities and those who did not, and the significant differences that were caused by this accomplishment.
So to confirm past findings, a correlation was made between this feature of communications devices and the relevant ICT-interrupted work factors, such as the impact of devices with or without office apps on work-life balance.

Communication devices with or without office applications versus work life balance

Independent-samples t-test was used to determine if devices with and without office apps have significant variations in the five ICT aspects impacting work-life balance among those who use them, in order to determine the impact of device type on teachers' work-life balance.

Table 1: Group Statistics – Type of Devices Influencing Work Life Balance Factors

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Factors	ICT Devices with or without OfficeApplication	N	Mean	Std. Deviation
Balancing Personal and WorkTime	Devices without Office Application	37	2.7342	.66022
	Devices with Office Application	161	3.0010	.69709
Leisure and Relaxation	Devices without Office Application	37	2.3784	.51593
	Devices with Office Application	161	2.7155	.76832
Time Management	Devices without Office Application	37	3.6378	.76425
	Devices with Office Application	161	3.7764	.65436
Work Life Boundary	Devices without Office Application	37	2.3784	.97827
	Devices with Office Application	161	2.2888	.82612
Enriching Personal Life	Devices without Office Application	37	4.0595	.55350
	Devices with Office Application	161	4.2199	.58532
Overall Work Life Balance	Devices without Office Application	37	3.0519	.27225
	Devices with Office Application	161	3.2288	.36006

Table 2: Independent Samples Test – Type of Devices and Work Life Balance Factors

Factors	Levene's Test forEquality ofVariances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
Balancing Personal andWork Time	.007	.935	-2.119	196	.035*
Leisure and Relaxation	8.049	.005	-3.235	196	.002*
Time Management	1.204	.274	-1.124	196	.262
Work Life Boundary	1.331	.250	.574	196	.567
Enriching Personal Life	1.067	.303	-1.518	196	.131
Overall WLI	4.993	.027	-3.339	196	.001*

*Significant at α = .05

It can be seen from the table No. 2 that three t-values are higher than the critical value of 1.96 with significance values less than.05, indicating that the ability of balancing personal and work time and the possibility of getting enough relaxation differ significantly between those teachers with devices without office applications and those with office applications. Instructors who use devices without office apps report a considerably worse overall work-life balance than teachers who use devices with office applications.

According to the group statistics, teachers who use devices with office applications appear to be able to better balance their personal and professional lives and have more time for leisure and relaxation, while overall work-life balance is also higher among employees who use devices with office applications.

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There is no evidence that the type of ICT devices used has a significant impact on the ability of college teachers at Arts and Science Colleges to manage their time, keep a work-life balance, or enrich their personal lives. The t-values for all other factors are lower than the critical value of 1.96.

ICT Intervened Work Attributes versus Work Life Balance

Work-life balance differences are alleged to be caused by the following ICT-interrupted features of the teachers in question, according to relevant literature reviews. The impact of ICT use on job performance, the compatibility of tasks for ICT devices, the amount of off-site work done by the employees, and the level of ICT use for personal purposes during office hours are all factors that are examined in this study. These are the findings of the t-test used to investigate the association between the types of ICT devices and the above-mentioned ICT-involved work qualities.

Table 3: Group Statistics – Type of Devise Influencing ICT Intervened Work Attributes

Factors	ICT Devices with orwithout OfficeApplication	N	Mean	Std.Deviation
ICT Usage on Job Performance	Without Office Application	37	2.2703	.43497
	With Office Application	161	2.9840	.61503
SuitabilityofTaskforICTEnabledWork	Without Office Application	37	3.5574	.55792
	With Office Application	161	3.7477	.49676
Quantity of Offsite Work	Without Office Application	37	2.7883	.67317
	With Office Application	161	2.8986	.55752
ExtendofICTUsageforPersonalPurposes during Office hours	Without Office Application	37	3.9797	.55160
	With Office Application	161	4.0295	.60894

Table 4: Independent Samples Test – Type of Devices and ICT Intervened WorkAttributes

Factors	Levene's Test forEqualityofVariances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
ICT Usage on JobPerformance	7.271	.008	-6.679	196	.000*
Suitability of Task for ICT Enabled Work	2.262	.134	-2.052	196	.042*
Quantity of Offsite Work	.914	.340	-1.042	196	.299
Extend of ICT Usage forPersonal Purposes duringOffice hours	.180	.672	-.456	196	.649

*Significant at α = .05

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According to the tables above, two components have a t value greater than the critical value, but their significance value is below. According to the findings of this study, teachers of Arts and Science Colleges who are involved in teaching, research and other related activities differ greatly in their use of ICT and the suitability of a task for ICT-enabled work. A further analysis of the group data shows that teachers who use communication devices with office applications do significantly better than those who use devices without office applications, and that their tasks are more fit for ICT-enabled work. The type of ICT devices has no effect on any of the other aspects of ICT intervention work.

Reasons Inducing Work beyond Office Hours based on Type of Devices

According to the tables above, two components have a t value greater than the critical value, but their significance value is below. According to the findings of this study, teachers of Arts and Science Colleges who are involved in teaching, research and other related activities differ greatly in their use of ICT and the suitability of a task for ICT-enabled work. A further analysis of the group data shows that teachers who use communication devices with office applications do significantly better than those who use devices without office applications, and that their tasks are more fit for ICT-enabled work. The type of ICT devices has no effect on any of the other aspects of ICT intervention work..

Table 5: Comparative Ranking of Reasons inducing work Beyond Office Hours

Reasons Inducing People To Work Beyond OfficeHours	ICT DevicesWith OfficeApplications		ICT DevicesWithout OfficeApplications	
	Garrett Mean Score	Rank	Garrett Mean Score	Rank
Findinghardtofinishworkwithinnormalworkinghours	44.255	8	40.083	9
Preventleavewhilerecoveringfromillnessorother reasons	33.399	10	38.125	10
To finish job within the targeted time frame	65.966	1	58.063	2
Because of Work Pressure	51.981	4	46.688	7
Because of the nature of work	65.673	2	60.958	1
Expectation of institution and superiors	49.063	6	55.75	4
All other work more hours than employeesstipulated time	38.519	9	42.042	8
To support thestudents	52.317	3	50.896	5
To earn more remuneration	47.41	7	50.833	6
Because of the liking towards the job	51.346	5	56.563	3

In order to establish if there are significant differences between the two sets of ranks, the Spearman's rank correlation was used to compare the ranking of reasons for instructors to work beyond their typical office hours based on the type of ICT devices used.

Table 6: Spearman's Rank Correlation of Reasons Inducing work Beyond Office Hours

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			Devices withOfficeApplications	Deviceswithout OfficeApplications
Spearman's rho	Devices with OfficeApplications	Correlation Coefficient	1.000	.842**
		Sig. (2-tailed)	.	.002
		N	10	10
	Devices withoutOfficeApplications	Correlation Coefficient	.842**	1.000
		Sig. (2-tailed)	.002	.
		N	10	10

****. Correlation is significant at the 0.01 level (2-tailed).**

The Spearman's Rank Above the intersection of 'Devices with office applications' and 'Devices without office apps', the correlation is.842 and the two-tailed significance value is 0.02. It is clear from the correlation coefficient, which has a significance value less than.01, that the reasons for extending work hours outside of normal business hours are unrelated to the technology used.

FINDINGS

FINDINGS

The results of this study, based on relevant analysis, reveal that ICT devices with and without office applications have substantial effects on two aspects of work-life balance that affect the balance between teachers' personal work time and the amount of leisure and relaxation they have access to. In addition, this trait has a considerable impact on how well the affected population's work and personal lives are integrated. Educators who have access to office software and ICT devices have a better work-life balance than their non-technological peers.

Teachers' performance is improved as a result of the devices' office apps, according to the research undertaken to find out why. ICT-related work is also useful for teachers who use devices with office apps. Since these two ICT-related work attributes have improved teachers' performance, it can be concluded that they have allowed them to spend more time with their families as well as more time with their work.

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