

# PhD Students' Perceptions on the relevance of Computer Technologies in Doctoral Research

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# AIM of this Paper

To explore the *relevance* of  
computer technologies for students  
undertaking doctoral research

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# Rationale-1

It would be fair to say that PhD students understand the importance of producing quality work and that they engage in every effort to **achieve.**

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# Rationale-2

It would be fair to say that the predominant message regarding computer technologies is that the more we use it, the more likely we will see benefits in terms of **productivity, efficiency and quality.**

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**If so .....**

**Then it would be fair to assume that most doctoral students will be avid users of computer technologies.**

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The following are comments from PhD students involved in a study on the use of computer devices and applications in doctoral research .....

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**Some reflect their practices .....**



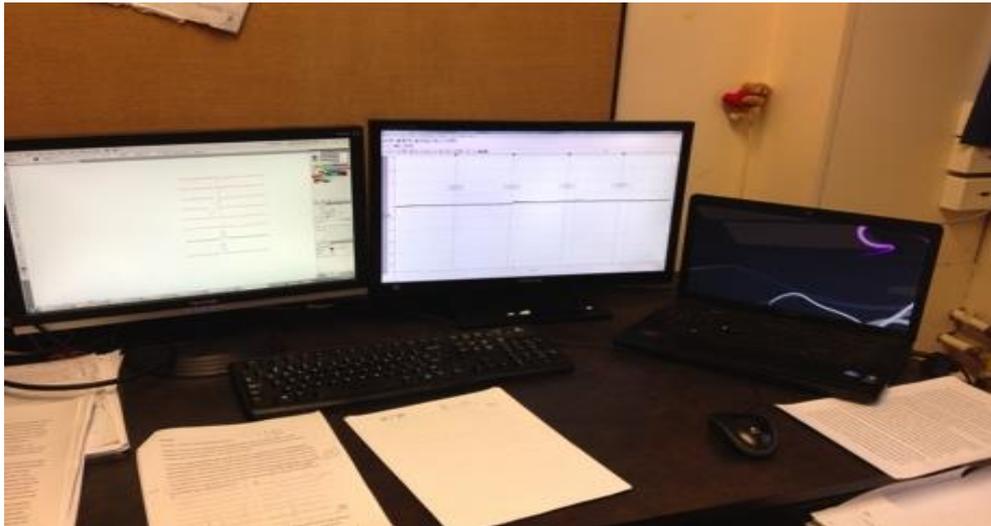


The files on my desktop are those that still need to print - so I don't lose track of which ones I haven't printed; once printed they are deleted from the desktop.

These [*Rich Site Summary, Twitter, Research Gate, Linked In and Academia*] are only sitting there [...] but I feel good having them.

I didn't want to know the password. [...] and this will stop me from being distracted.

[Music playing] is a form of 'active distraction' which helped me concentrate on writing my thesis.



I am a routine person and so I need to start my day by checking my email, followed by browsing my Facebook page and Forums before I begin doing my research work.

I'm not even using paper/lab books anymore. I take all my notes for seminars/experimental notes on a laptop now

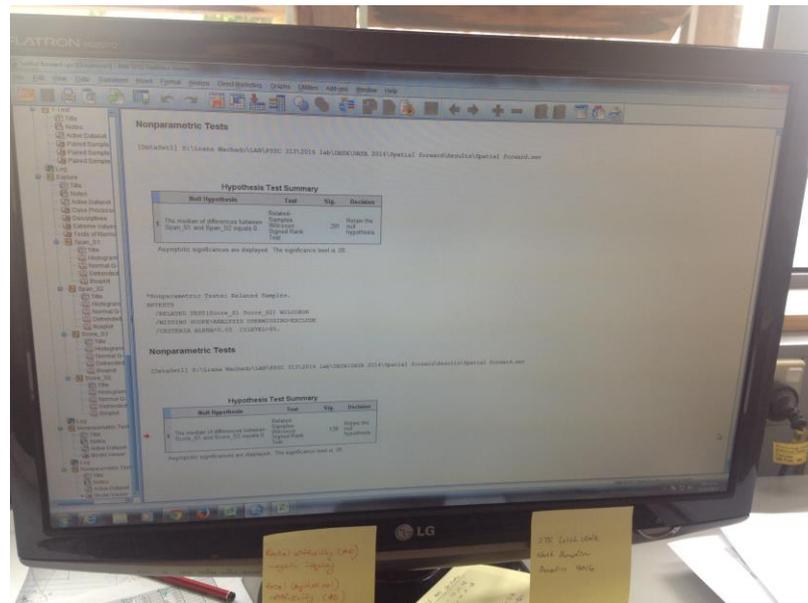


**Some indicate their needs .....**



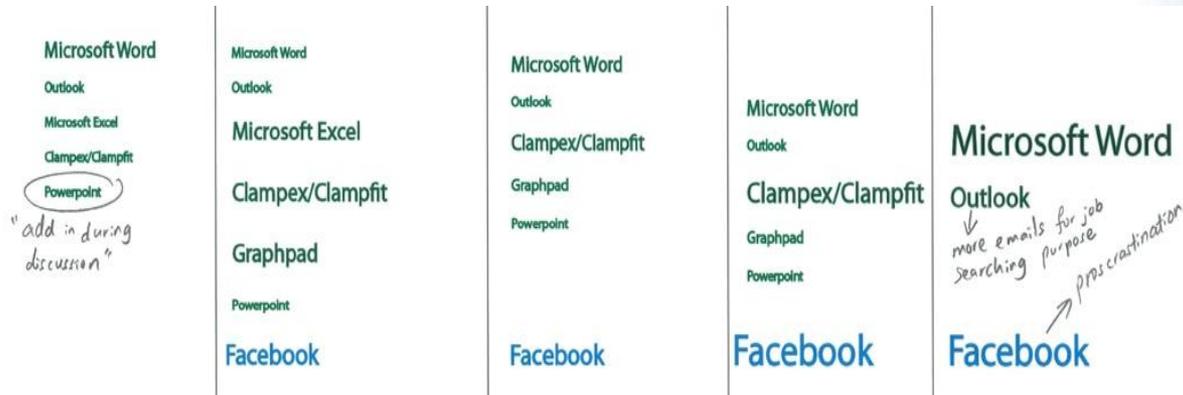
Endnote is the thing I need to get on to (.....) I've never been exposed to this kind of thing before.

I need to use SPSS for sure (when I do my data analysis). But there are times I like calendars rather than Google calendar, which are more visualised.



I am not sure what I need to use at the start, for example, I thought I only needed to use Python but then later I found out that it is not enough, so I have to use Matlab and R.

“(…) even the emails play an important part in my journey, from the communication with my supervisor to more communication with my prospective employers, it changes.



**Some demonstrate their apology .....**



I am aware of the consequences of not using [the academic or research related applications].

We just have to practice (using the computer devices), trial and error [...] to get what you want.

I am not reaching out to learn new technologies when we need to



I like books (...) I write letters (...) although [computer technologies] are crucial.

[It is more important to know] how can technology help me instead of what I should do with this piece of technology.



**And mostly are negative .....**



I only use what I think is more reliable.

I am afraid of learning new things, especially technology.

There are always problems with ICT, such as the computer is slow, the computer 'hanged' or the computer is getting old.

[Computer devices] are just management tools for me. The [paper] filing system is the more important one.

We evolve from the old fashioned styles (paper based approaches) (...) I am still computer illiterate.

Why do I need to use all these [academic or research related applications]?

My model looks equally good as his (my supervisor) so I cant see why I need to learn a new software programme. Why should I waste my time to do so?

I can do a PhD study but I don't know how to create a folder.

I am 'IN' as an ICT user but I am 'OUT' as an active computer user.

I don't believe in ICT. I know what works well for me.

We rely too much on the computer [...] we should manipulate it instead (to achieve what we want).

I don't do anything [like using Endnote] to change anything [in a word processed document] because I don't want to screw things up.

My Endnote always crashes and that makes me lose my references.

# Ongoing thoughts...

1. It is interesting to find so many different perspectives on the use/role of computer technologies within doctoral research.
2. What do these outcomes mean in terms of how we understand and view PhD students' capability and willingness to use computer technologies to support their doctoral research?

# The reality...

Computer literacy isn't taught at university, it is assumed students will already have the necessary skills.

This was not the case for the students in our study. Computer use was primarily *Google* and *Word*.

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All but one felt uneasy about using **more** technologies for their doctoral research



# In Summary.....

Students have very diverse views and experiences in the use of computer technologies within academia.

For one that had a level of mastery, there were benefits of **quality, efficiency** and **productivity**.

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For those apprehensive, the result was a reluctance to explore/adopt computer technologies into their academic practice.

“I just don’t have time to learn to use it.”

“My focus is on my PhD not learning new software.”

# Q & A

Thank you very much for your presence and attention.

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