

## IMPACT OF THE DIGITAL SKILLS CONCEPT IN SOCIETY 5.0 ON PHARMACY STUDENTS READING COMPREHENSION

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### Abstract

*The purpose of this study was to document the impact of the Digital Skills Concept on society 5.0 for pharmacy students who use, manage, and learn digital skills in the reading classroom. In the era of society 5.0 which focuses on users of digital innovation, we really hope that people in this era will become people who are good at mastering digital technology. For pharmacy students, the process of designing, implementing, and writing a culminating project is an important part of using digital technology for learning. These projects typically require students to direct their own learning and to manage setbacks, obstacles, and challenges that arise. During the COVID-19 pandemic, pharmacy students must undergo a learning experience that prioritizes the use of digital technology. For three weeks, pharmacy students from the Indonesian language course completed an experimental project from the lecturer with another research project and in the third week they completed an online questionnaire consisting of demographic questions and three open-ended questions about their experiences using digital technology during reading while learning. The analysis involved several Likert scales with a score of 1 to 5 which resulted in categories and themes. At each stage, the researcher analyzed to produce categories and themes that emerged through several class discussions. Our survey respondents described the impact of their peak project progress in five main categories: LMS proficiency increased 5% , browsing proficiency increased 15%, presentation proficiency increased 8%, video conferencing proficiency increased 7%, and brainstorming proficiency increased 5%.The five categories of impacts that emerged from our participant responses may be useful for pharmacy program managers to consider in reviewing their program's response to the use of digital technology in the era of society 5.0 and making future plans to provide academic continuity in crisis situations as well as re-evaluating priorities and structures and support pharmacy students who are learning Indonesian as a whole moving forward.*

**Keywords:** *Digital Skills Concept, Pharmacy Student, Reading Comprehension*

### INTRODUCTION

The measures needed to curb the spread of the virus—such as campus closures, lockdowns, and mandatory quarantine periods—suddenly changed student lives. The purpose of this study was to document the impact of the Digital Skills Concept on society 5.0 for

pharmacy students who use, manage, and learn digital skills in the reading classroom. In the era of society 5.0 which focuses on users of digital innovation, we really hope that people in this era will become people who are good at mastering digital technology.

We were curious about how students described the impact of the pandemic on their progress in learning reading comprehension. We also wanted to see how this impact hindered or helped them in learning reading comprehension. By seeking barriers and help, we wanted to see how barriers are changing students' lives during the global crisis and how such assistance can fill gaps in completing peak projects in normal working conditions prior to COVID-19.

## **LITERATURE REVIEW**

We present the review of literature in three sections. The implementation of reading comprehension learning by applying the digital skills concept. The learning achievement at the fifth meeting was that students were able to develop critical, systematic, and creative thinking through learning to read. Mastering the theoretical concepts of language and its application in integrative reading (Gui & Argentin, 2011)(Van Deursen & Van Dijk, 2014).

There are three main ways to improve the quantity and quality of their understanding of reading material, namely (1) reading material with broad and varied themes, (2) discussion, and (3) test. First, one can improve it by reading reading material with broad and varied themes. In this case diversity is much more important than quantity. Second, someone can improve it through discussion. In discussion, one's understanding is directly approved or rejected. If other people agree with someone's opinion and clearly understand what is read, this can increase the impression of the reading material and help to remember it later (Andriansyah & Johar, 2012)(Regehr dkk., 2017).

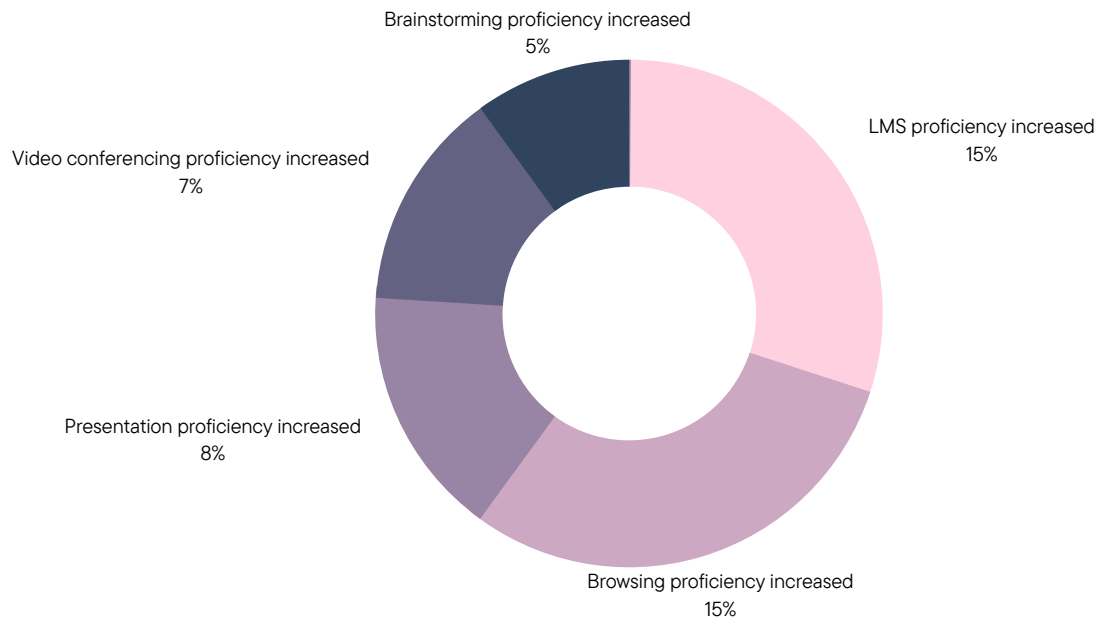
## **METHOD**

For three weeks, pharmacy students from the Indonesian language course completed an experimental project from the lecturer with another research project and in the third week they completed an online questionnaire consisting of demographic questions and three open-ended questions about their experiences using digital technology during reading while learning.

The analysis involved several Likert scales with a score of 1 to 5 which resulted in categories and themes. At each stage, the researcher analyzed to produce categories and themes that emerged through several class discussions.

## **FINDING**

Our survey respondents described the impact of their peak project progress in five main categories.



In terms of knowing digital skills learning, the results achieved a mean score of 3.42 (SD=0.72). Based on the data in table, all perceptions are at the high level. The lowest mean score fall in the "I am always interested in following the development of the extraction of natural ingredients that are used as medicine" which garnered 0.69 (SD=3.15). Overall, the results show a positive influence on the students' about digital skills learning.

No	Term	SD	Mean
<b>Digital Skills in Distance Learning</b>			
1.	I can operate the Learning Management System (LMS) Google Class Room and Edmodo	0.72	3.42
2.	I can Browse the Internet	2.69	1.03
3.	I can operate Video Conferencing via Zoom and Google Meet	3.11	1.12
4.	I can brainstorm after class via Google Jamboard	3.23	0.92
5.	I can do task archiving using Google Drive, One Drive, Microsoft One Note	2.88	0.86
<b>Pharmacognosy Insights</b>			
6.	I often read Pharmacology books, especially the pharmacognosy section	3.04	1.00
7.	I learned a lot about the benefits of natural ingredients as medicine	3.46	0.80
8.	I am always interested in following the development of the extraction of natural ingredients that are used as medicine	3.15	0.69
9.	I get a lot of information about pharmacognosy	3.23	0.76
10.	I can study pharmacognosy well if I increase my literacy on pharmacognosy	3.20	1.12

In their responses to our three open-ended questions, survey participants frequently mentioned time. *Time* emerged as an umbrella category for the outcome of specific changes brought about by the pandemic. Some changes resulted in students devoting either more or less time each day to their work on their culminating projects compared to the time they were devoting before the pandemic. Changes also lengthened or, occasionally, shortened the overall timeline of project completion. Details of our participants' responses allowed us to probe further into the types of changes they experienced. Importantly, we saw that *change* was often coupled with *uncertainty*: for example, an observable change for many was working at home rather than outside of the home. Uncertainty was attached to this change because no one knew when working outside of the home might become an option again. Both observable change and an inner experience of uncertainty were part of various impacts of the pandemic on doctoral writers. These changes and the sense of uncertainty created either benefits or challenges for the doctoral writers. In this section we illustrate the positive or negative impacts in five categories reported by our participants: research design, access to resources, workload, mental health, and finances. Those who lost all their income wrote even more heartbreaking comments: "My husband has been let off from work so we're struggling financially" (South Asian, Female, Pakistan, Physical Sciences) or "Prior to covid, I had to get a job in another lab as a lab tech since I am no longer supported by a GA-ship. That job stopped when campus closed, so I had to file for unemployment" (White, Female, Maryland,

Agriculture). Others wrote, "Losing my job and income was incredibly stressful and caused a lot of anxiety" (White, Female, Colorado, Education) and "Lost my only part-time job. No flow of income and no savings. No financial empowerment" (POC, Male, Texas, Education). This comment painted the saddest picture: "We had to limit our meal times to manage our money better. We couldn't find online jobs so we were severely financially challenged" (South Asian, Female, Paki- stan, Physical Sciences).

Other participants lost income and were forced to find jobs or work more, which then interfered with their dissertation progress. One wrote, "My partner is unable to return to work and we are struggling financially. I have had to undertake extra contract/sessional work so we can survive. This has hindered the progress of my PhD" (White, Female, Australia, Social Sciences). Another explained, "Due to loss of income via self-employment of spouse impacted during COVID, I have had to find any form of work that takes time away from PhD work" (White, Female, California, Interdis- ciplinary). These comments indicate how financial impacts resulted in less time to spend on culmi- nating project work.

## **DISCUSSION**

This study yielded five categories of COVID-19's impact on the participants progress: research design, access, workload, mental health. Separating these impacts into challenges and benefits, we see that some of these challenges existed for students before the pandemic, and were either exacerbated or assuaged depending on how other stakeholders managed the pandemic. In this section, we note the through lines across the five impact categories. First, we discuss doctoral students' relationships with their supervisors and how the pandemic compounded existing relational issues. Next, although the stress that comes with reading is nothing new, the pandemic created sudden and unpredictable fluctuations in workload from different aspects of the students' lives. Moving from the personal to the institutional, the pandemic revealed the ine- quality of a system built somewhat on the backs of students as knowledge workers. Lastly, we complicate the idea of progress in how the pandemic may have helped our par- ticipants define what is meaningful to them.

## **ACKNOWLEDGMENT**

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## **CONCLUSION**

The five categories of impacts that emerged from our participant responses may be useful for pharmacy program managers to consider in reviewing their program's response to the use of digital technology in the era of society 5.0. Making future plans to provide academic continuity in crisis situations as well as re-evaluating priorities and structures and support pharmacy students who are learning Indonesian as a whole moving forward.

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