

The Factors Influencing the Coping Experience of Students in Remote Learning During the COVID-19 Pandemic in a Health Science College in the Philippines

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Presenter



Background

- COVID19 pandemic on March 11, 2020 caused great impact on health systems, government policies, economics, and social interaction on all levels
 - **closure** of **schools** and offices
- **1.57 billion learners** in more than **190 countries** affected by these policies globally¹
- Philippines: cancellation of academic year affecting 28 million learners

¹UNESCO. *Global monitoring of school closures caused by COVID-19*. Retrieved 12 May 2020 from <https://en.unesco.org/covid19/educationresponse>.

Student Learning During Crises

- schools, colleges, and universities used alternative modes of learning
 - *Remote Learning*

CORONAVIRUS

SCHOOL
CLOSED





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Research Objectives

General objective:

- To determine the factors influencing students in coping with remote learning in the health science college during the COVID-19 pandemic.

Specific objectives:

- To describe the factors that influence in coping with remote learning of students
 - human
 - technological
 - psychosocial



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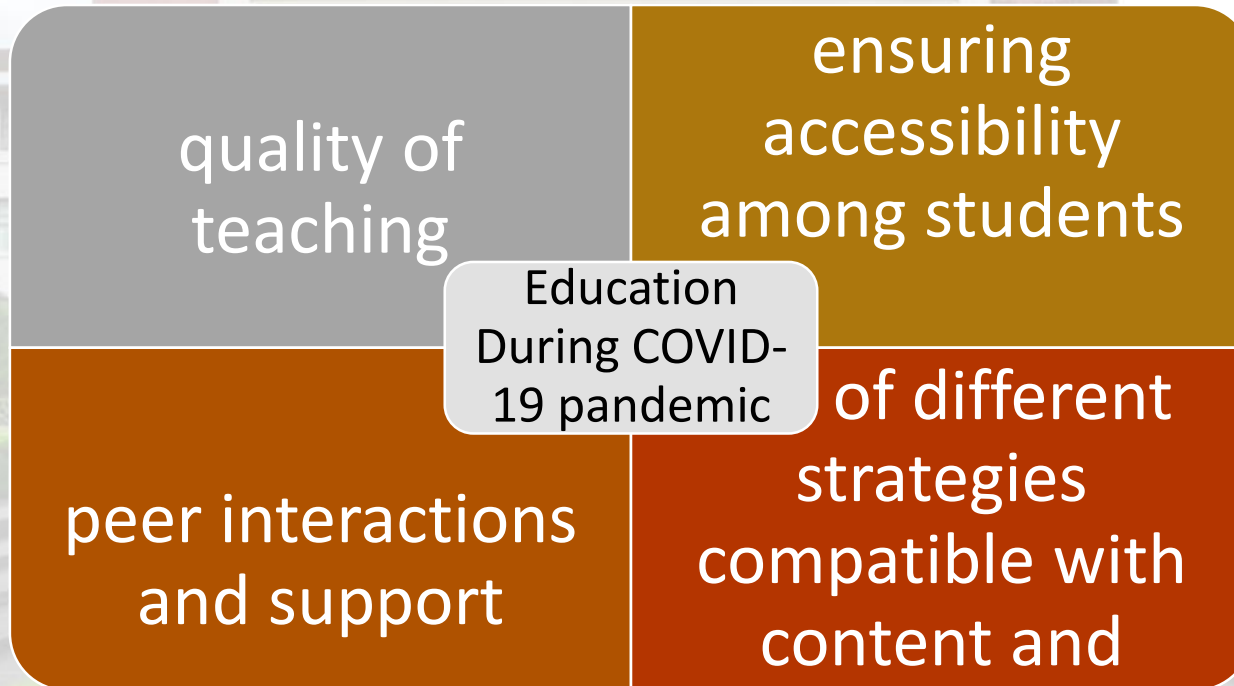
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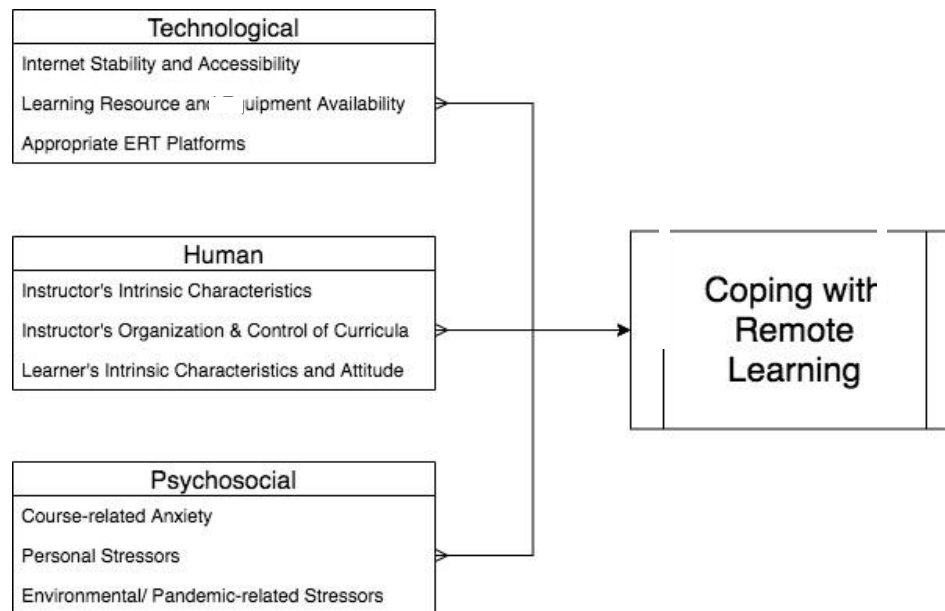
Key Aspects in the Implementation of Education during COVID19 pandemic



¹⁵Zafari 2020. Distance Education for Rohingya Children during COVID19 Emergency: Bangladesh Rohingya Response Perspectives

¹⁶Schwartz et al. 2020. Opportunities and challenges in using online learning to maintain continuity of instruction in K-12 Schools in Emergencies.

Conceptual Framework



Relationship of factors in coping with the conduct of remote learning

Methodology

Descriptive,
quantitative, cross-
sectional study design

Study Population:
undergraduate
students from a health
science college

Data Collection:
pre-test, consent,
administration,
(ONLINE)

Data Processing and
Analysis



Results

- Socio-demographic Characteristics of Respondents
 - Age: 18 – 22 years old (mean: **19.6**)
 - Gender: **Females** (65.3%) > males (34.7%)
 - Place of Residence: **Province** (61.7%) > City (38.3%)
 - Living arrangement: most living with their **parents** and **siblings**(91%)
 - Most had a steady family income

Result: Technological Factors

- Type of Gadget Used
 - Personal Mobile Phone
 - Personal Laptops

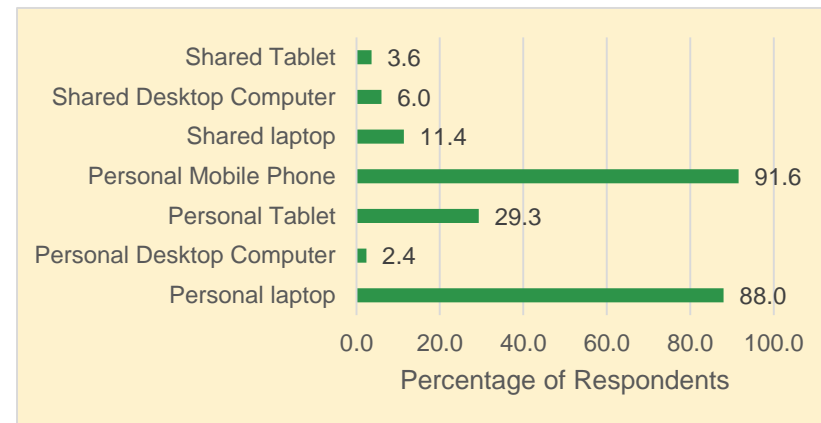


Figure 1. Distribution of respondents according to the type of gadget being used for remote learning during the COVID-19 pandemic (n=167)

Results: Technological Factors

- Duration of Reliable Internet
 - majority had a reliable internet connection for more than **4 hours**

- Source of Internet access
 - subscription unlimited plans
 - **fiber** > DSL
 - cellular network data
 - prepaid > postpaid

- Internet quality
 - **3 – 4 / 5**

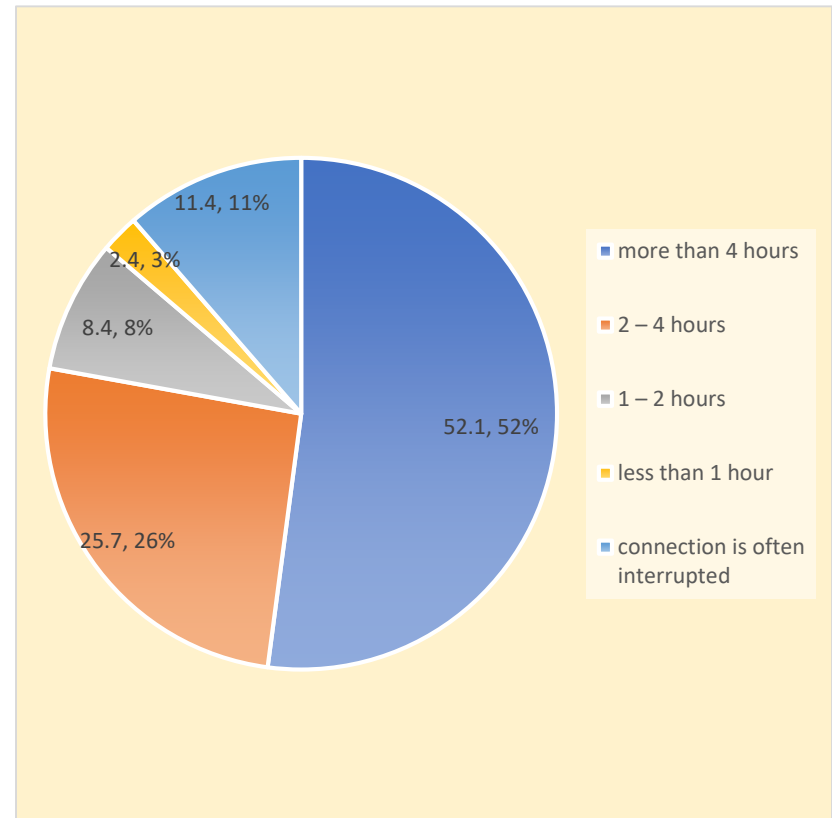


Figure 2. Internet Reliability During the COVID-19 Pandemic (n=167)

Results: Technological Factors

- Mode of Delivery used by teachers
 - Zoom (99.45%)
 - Canvas (82.6%)
 - Google classroom (62.3%)

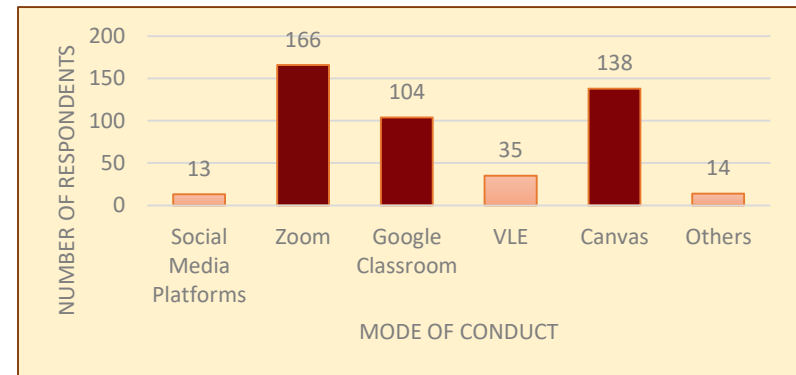


Figure 3. Distribution of respondents according to the type of learning management system being used for remote learning during the COVID-19 pandemic (n=167).

Results: Technological Factors

- Platform used by teachers to make announcements
 - Canvas: most common
 - **social media** platforms
 - google classroom

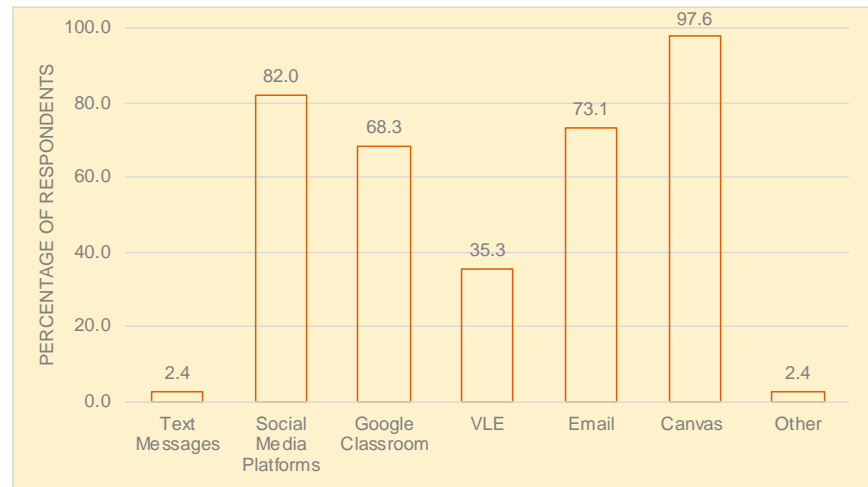


Figure 4. Platform used by teachers to make announcements During Remote Learning(n=167)

Results: Technological Factors

- Assistance provided to students
 - majority **did not** receive any assistance
 - some were beneficiaries of:
 - free internet
 - home delivery of course packs

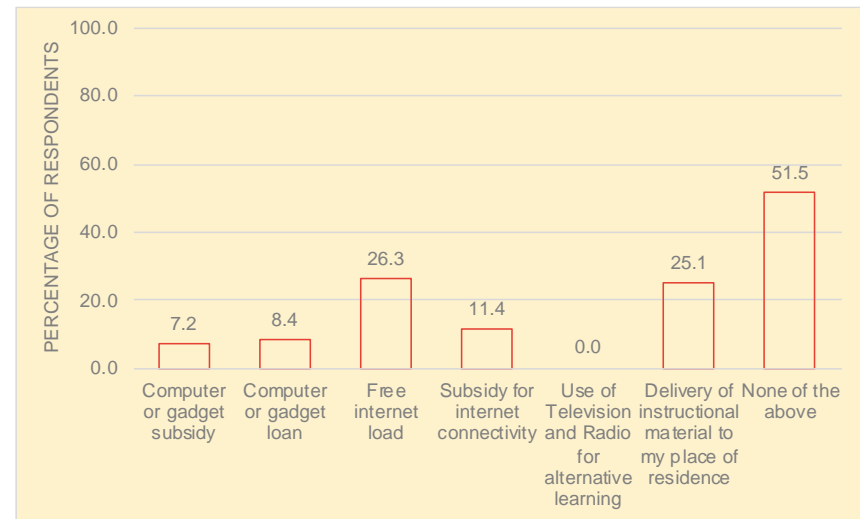


Figure 5. Distribution of respondents according to the assistance for remote learning that they received from the university during the COVID-19 pandemic (n=167).

Results: Human Factors

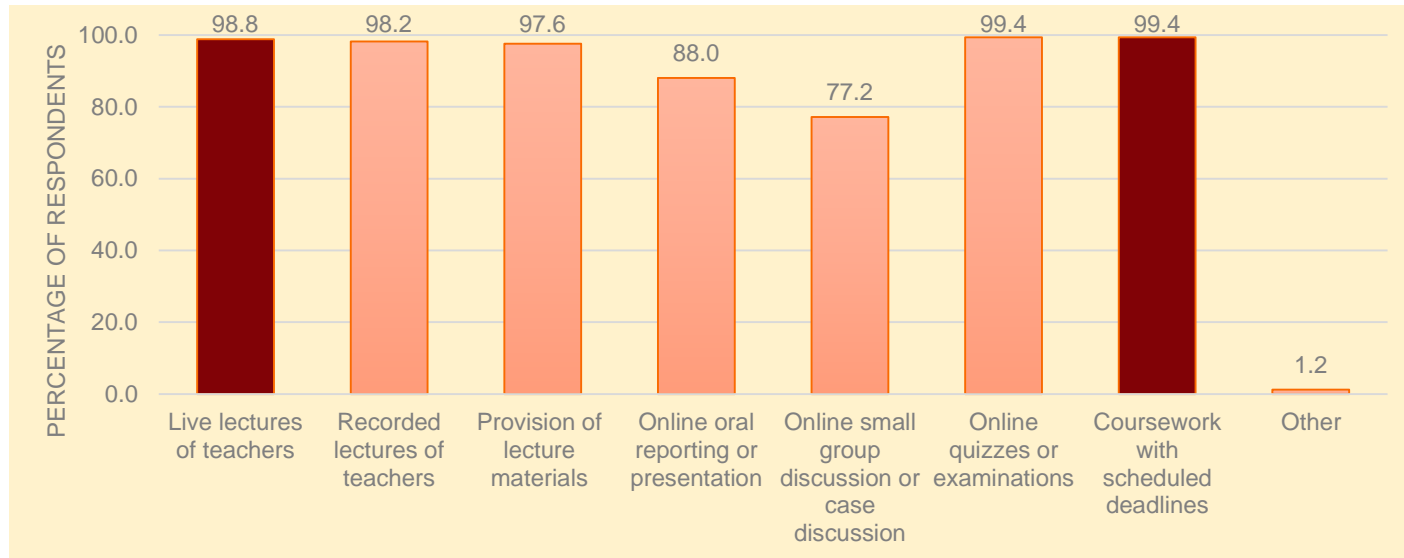


Figure 6. Distribution of respondents according to the teaching methods that were used by their teachers in their remote learning experience during the COVID-19 pandemic (n=167).

- Various teaching method were used
- **LECTURES** and **COURE WORKS** were most successful to meet the learning objectives

Results: Human Factors

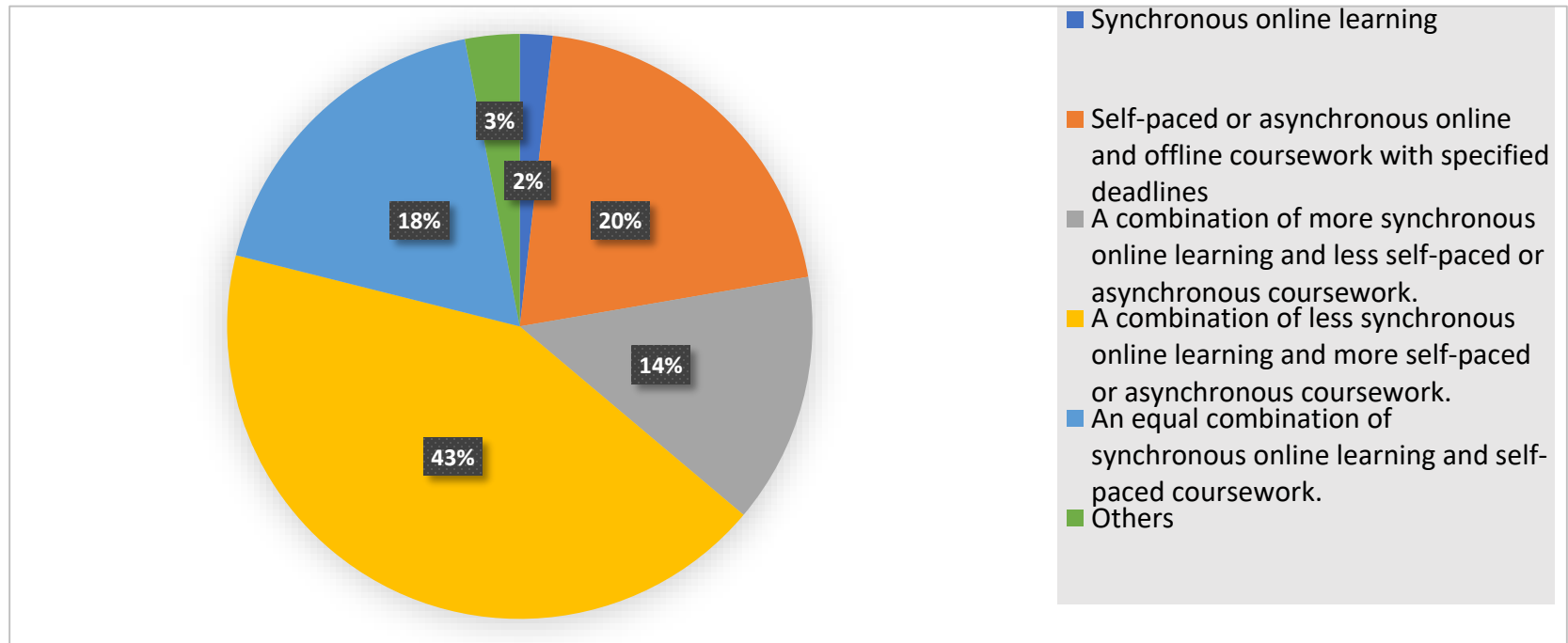


Figure 7. Distribution of respondents according to their perception on the effective mode of delivery of remote learning (n=167)

- Mode of Delivery in Remote Learning

- **asynchronous coursework** > synchronous online learning combination

Results: Human Factors

- Learning platforms used for remote learning
 - Majority agreed:
 - effectively communicate with their instructors and classmates

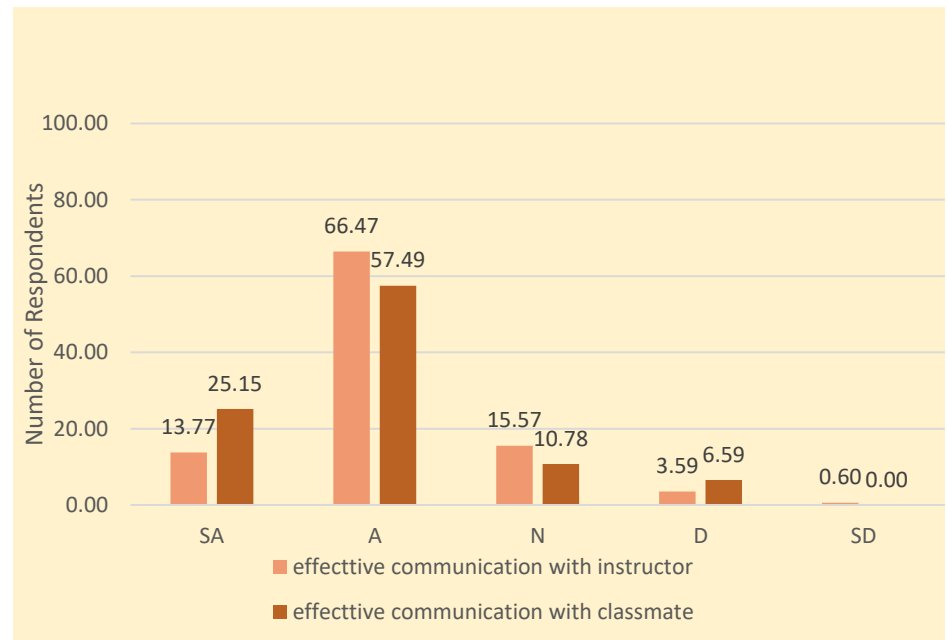


Figure 8. Distribution of respondents according to their perceived effectiveness of learning platform in their communication with their instructor and classmates (n=167).

Results: Human Factors

On Teaching Methods and Course Handling

AGREE

- course packs are **useful** (64.6)
- **appropriate** content and **appealing** presentation (49.7%)
- instructions on coursework are **easily understood** (40.1%)
- promote **class participation** and **ample interaction** with him/her (44.9%)
- **provided** other appropriate means of assessment (69.5%)

DISAGREE

- ample amount of time to **accomplish** academic tasks (44.3%)
- effective **transition** of laboratory activities (55.1%)
- **improved** learning efficiency (74.3%)
- **facilitated** critical thinking (40.1%)
- remote learning is **beneficial** (62.9%)

Results: Human Factors

On Student Habits and Attitude

AGREE

- **regularly check** email or LMS for announcements (90%)
- **accomplish** the assigned task before the deadline (80%)
- spend **more time studying my lessons** and doing coursework as compared in the past (81%)
- follow a **work schedule** or **routine** for my courses (55%)

DISAGREE

- continue to have the courses delivered through alternative mode of flexible learning, after the COVID-19 pandemic (59.6%)



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Results: Human Factors

Benefits of remote learning

- Cost savings (64.7%)
- Flexibility (52%)
- Self-paced learning (50%)
- Structured own schedule (47%)

Drawbacks of remote learning

- Harder to pay attention / stay on task (94.6%)
- Less hands-on experience (94.6%)
- Harder to be motivated (91.57%)
- Less social interaction with classmates (91%)
- Increased distractions (88%)
- Requires internet access (80.1%)
- Harder to retain information (78.35)
- Difficulty to communicate with instructor (74.7%)
- Lack of technical resources (57.85)

Results: Psychosocial Factors

Potential stressors in the implementation of remote learning

AGREE

- coping with the expected learning outcomes (49%)
- scared to return to school (52%)
- **pandemic to end soon so that they can return to F2F classes (94%)**

DISAGREE

- improved study habits (50%)
- **preferred remote learning over F2F learning after the pandemic (75%)**

Results: Psychosocial Factors

Sources of Anxiety

AGREE

- personal and family's **health** (81.9%, 86.7%)
- **need to do other things** aside from schoolwork (86.7%)
- **not meeting the deadline** for requirements (93.4%)
- getting **delayed** academically (80.1%)

DISAGREE

- lack of resources to access and perform tasks (49.4%)



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Discussion

Remote Learning and the COVID19 pandemic

- Remote Learning

- not a new concept
- need to be adopted during COVID19 pandemic
- flexible and lacked physical in-person contact

... ensure the health and safety among students, teachers, and staff

Technological Factors

- involves the availability of the internet, computers or similar gadgets, and learning management platforms

- need for good technological infrastructure for effective delivery of online learning

Ali, 2020

Tauson and Stannard, 2018

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 - A list of the best short stories of 2011
 - A book of greatest news photos
 - A website containing text, photos, and graphics
 - An academic journal containing articles on a particular topic





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It's not the learners
**it's the
barriers!**

https://www.efrontlearning.com/blog/wpcontent/uploads/2018/07/barriers_learning_workplace.jpg

Technological Barriers in online learning

- lack of stable and reliable internet connection
Priebe et al. 2020 and Sahu 2020
- lack of accessibility, availability, usability, and website service quality
Almaiah, Al-Khasawneh, & Althunibat, 2020
- minimal resources (i.e gadgets)

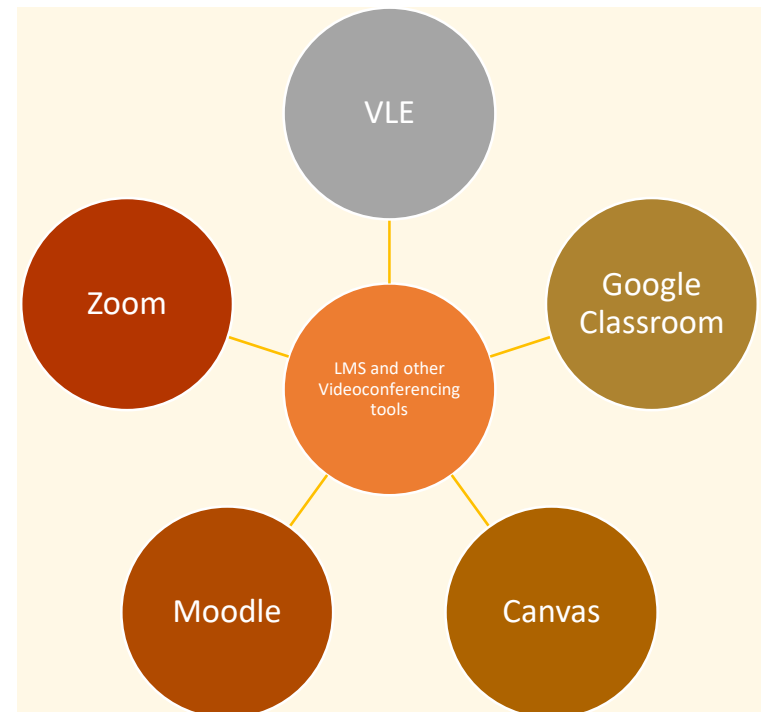
Morgan 2020

Technological Factors

- **Learning Management System**

- engagement and collaborative tools for **personalized learning**
- **overcomes** physical boundaries
- helps teachers and students **stay connected**
- provides a centralized location to course materials with **easy accessibility**

Clotilda 2020
UNESCO, 2020





Technological Factors

- Social media and Email
 - used for educational interactions among teachers and students

Mishra, Gupta, and Shree 2020

The availability of various **educational applications, platforms, and resources** will help parents, teachers, schools and school administrators ensure student learning and provide social care and interaction during periods of school closure.

UNESCO 2020

Human Factors

Human Factors complement Technology in Remote Learning

- strategies that are most accommodating and student friendly
- transform learning into a meaningful experience
- use of appropriate online platforms and resources



<https://interaksyon.philstar.com/trends-spotlights/2020/10/05/178084/on-world-teachers-day-education-advocates-give-spotlight-to-gaps-in-the-countrys-teaching-environment/>

Ali 2020

Teacher's Handling of Courses

- Variety of teaching strategies facilitate effecting learning
 - live or recorded lectures, oral reporting, small group discussions, quizzes
 - convey enthusiasm; provide motivation, self-efficacy and enjoyment



<https://interaksyon.philstar.com/hobbies-interests/2020/11/03/179298/how-creative-use-of-technology-may-have-helped-save-schooling-during-the-pandemic/>

Dhawan, 2020
Organisation for Economic Co-operation and Development (OECD), 2020

Challenge of laboratory activities in remote learning

- difficulty in developing materials to simulate laboratory activities
 - may become all theoretical
 - restricts the actual practice
 - hampers effective learning

Mishra et al 2020



Teacher Evaluation and Feedback

- use of adequate tools for the assessment of students to achieve learning outcomes
 - innovative
- provide adequate and timely feedback
 - student improvement
 - validate the invested time and effort of students



Instructor characteristics and teaching style matters

- role of the instructor is essential in providing a conducive environment for students to adapt
 - different characteristics and teaching styles of teachers
 - diversity of students



The learner's characteristics and attitudes are important considerations in remote learning.

- diversity of students
 - characteristic and attitudes
 - adaptation to the increased workload
- improved study habits

Rahiem, 2020
Parkes, 2014

Gonzalez, MA, & Hincz, 2020



Psychosocial Factors



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Mental health issues are brought by a combination of personal and academic stressors

- variable sources of anxiety and stress during remote learning
 - personal and family health
 - other responsibilities aside from schoolwork
 - meeting the deadlines
 - academic delays
 - lack of stable and fast internet access
 - feeling of being isolated

Mishra, Gupta, & Shree, 2020;
Morgan, 2020; Dhawan, 2020;
Lischer & Safi, 2021

Psychosocial Factors affecting Remote learning

- rise of mental health concerns affected the acceptability of remote learning
 - negative attitude
 - return to F2F

Lischer et al. 2021

In remote learning, ensuring a **balance** between these **academic** requirements and the **mental health** of students is more than studying their lessons, completing course works, and achieving learning outcomes.





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CONCLUSION and RECOMMENDATION

Conclusion

The success of remote learning among students relies on **technological, human, and psychosocial** factors.

The availability of **adequate technological resources** and **infrastructure** are essential components in an effective remote learning.

The **different design** and **approaches** used by the teachers may affect the full appreciation of remote learning among the students

The **experience of students** with remote learning during the COVID19 pandemic provides **valuable data** to determine their way of coping with a new educational system.

Recommendation



- university administrators and educators
 - effective **policy intervention**
 - **adequate preparation**
- **support systems and counselling**
- consolidate the technological, human and psychosocial factors to aid in the development of a **well-planned** and **coordinated** alternative or flexible learning program

**In the midst of chaos, there
is also opportunity.**

—Sun Tsu

