Integrating Wellness in Digital Interaction:

Case Studies on Digital Talents and Youth Gamers

Presenter

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NextTech Experts Panel I
Cyber Protection: Are we Correctly Metering and Accurately Processing Salient Data?
(critical cyber systems, useless huge data, patterns in big data, data quality and cyber-relevance, obsolete or fake data, multi-facets dataset puzzle, risk analysis, process standardization, lessons learned. etc.)

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2021

Panellist Position

Integrating Wellness in Digital Interaction: Case Studies on Digital Talents and Youth Gamers

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- **Digital interaction for health and wellness**

- **Domains of eHealth**

- **Digital talents & youth gamers**

- **Work from home**

- **Digital games**

→ Digital interactions for work, play and socialize have been heavily affecting the lives of digital talents and youth gamers during COVID-19 pandemic

→ Integrating wellness concept in digital interaction is a crucial move for heavy user groups

→ Theory of acceptance and health belief model for adopting eHealth during COVID-19 pandemic

→ Some guides for better management of Work or Play From Home through self-management, moderation in usages, and collective wellness.

NextTech Experts Panel |
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IARIA

- Dr Koo Ah-Choo is an Associate Professor at Faculty of Creative Multimedia (FCM), Multimedia University (MMU). She received her B.Sc. (Hons) from the Technology University of Malaysia (UTM) and her PhD from Multimedia University (MMU).

- Her research specialization is mainly on technology enhanced learning and quality of life. She is active in the research of media usage, design and creation, media methods especially in the promotion of education, wellness, communication, collaboration and lifelong learning.

- She is currently served as the Deputy Director for Industrial Collaborations and Engagement Centre (ICEC), under the Office of Research, Industrial Collaboration and Engagement (RICE) at Multimedia University.

Research Interest & Workgroup

- **Research Interest**: Interactive multimedia, media contents & usage; creation & methods especially in the promotion of education, communication, collaboration and life-long learning.

- **Research Centre:** Currently she is a member of Research Centre for Interactive Media in the Faculty of Creative Multimedia (url: creative.mmu.edu.my).

- She is currently the project leader for a *Fundamental Research Grant Scheme* (FRGS) by the *Ministry of Higher Education*, entitled, "*eHealth Modality for Mental Wellness among Digital Talents*". She also involved in research and creative projects funded by various agencies:- 1) *Affective Roles of Ubiquitous Learning in a 'Patient Centred Health Care Model'* for Malaysian Hospitals; 2) ProbMobile: An interactive mobile learning framework for Probability; 3) UNHCR's Health Media Production project; 4) Digital Future Research Programme; 5) Designing Mobile Services for Ageing Women in Malaysia. Website: https://mmuexpert.mmu.edu.my/ackoo & google scholar.

Images taken from FCM's website

Position of the current research:
>> Background & Issue

- Pandemic issue affecting health, wellness, work and study.

- Health = **"The ability to adapt and self-managed in the face of social, physical, and emotional challenges"** (Huber, et at., 2011)

- Wellness = **"An active process where people become aware of, and make choice toward, a more successful existence"** (National Wellness Institute, 2013);
  - It is multi-dimensional that include our lifestyle, mental health or mental wellness and spiritual well-being (Stoewen, 2015).

- Covid-19 pandemic, movement control order and restriction – workers and students are all working / Interacting from home (WFH) through digital means.

Digital Interaction for health, work & play – has become an **emerging topic** for research.

Digital Interaction for Health (eHealth / digital health)
>> Interaction for Health

One of the underlined three domains of eHealth by Shaw et al. (2017).

Three Domains of eHealth (after Shaw et al., 2017)

- Monitor, track, and inform health status
- Access and control of own health and fitness
- Mindfulness/Motivational mobile apps
- Wearable device such as smartwatch that can track stress level

Health in our hand

Data enabling health

Interacting for health

- Collect, store and communicate health related data
- Precise diagnostics for effective health services
- Collateral history, thought recorder that can help with mental health diagnostic/management.

- Real time consultation
- Social disclosure/storytelling
- Community support
- Remote mentoring
- Self-help e-therapy / tele-therapy

Digital Interaction for Health

>> Interaction for Health

Malaysia Covid-19 Application, MySejahtera

MySejahtera

The app helps users in **contact tracing**, manage and review their health, assist in **vaccination management** and certification, provide **accurate information**, and **locate nearest** hospitals and clinics.
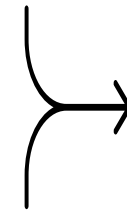
24.5 million users with up to 30,000 daily downloads despite misconceptions on the app (Malay Mail, Dec 2020)
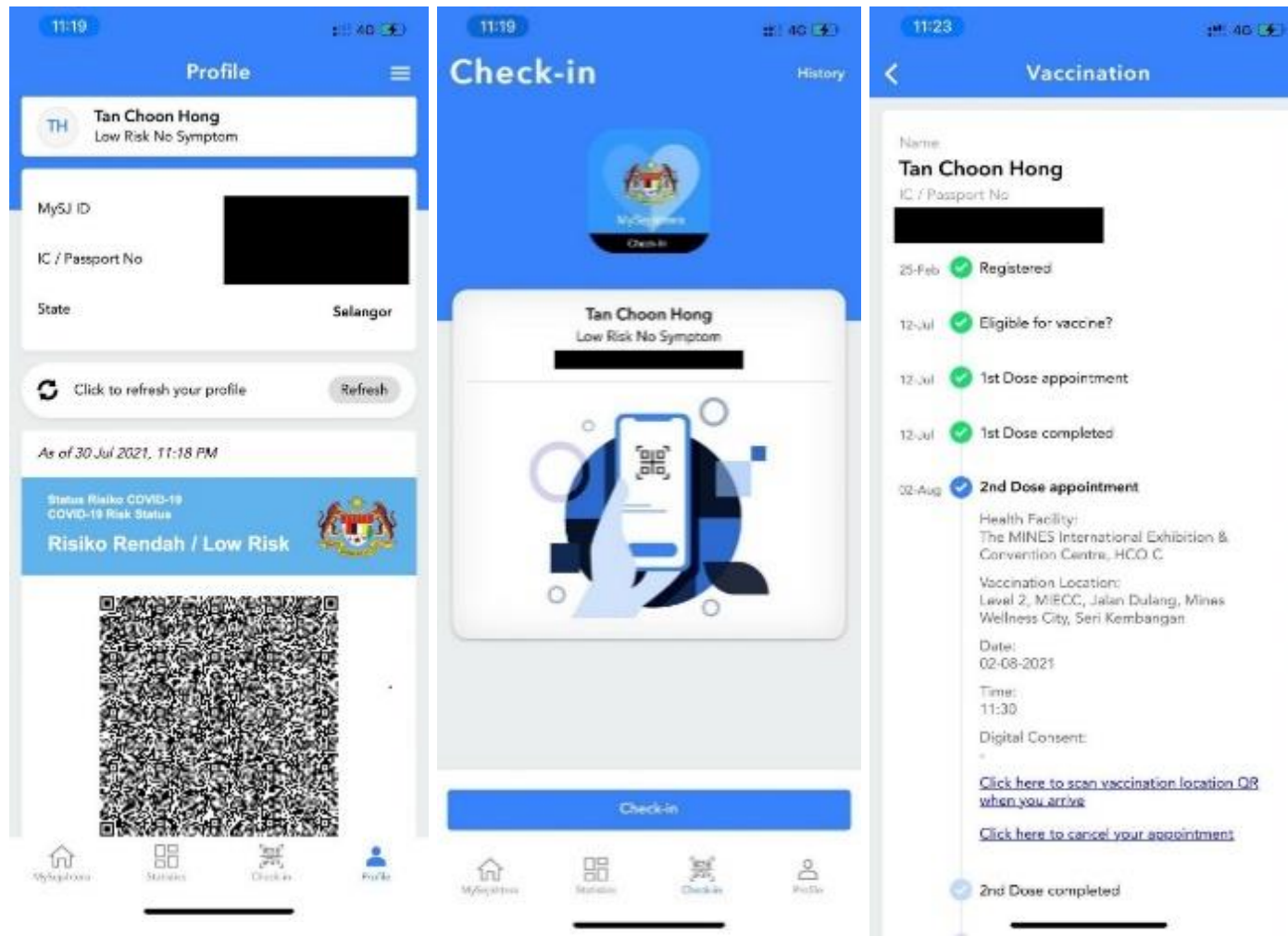
>>Explaining eHealth adoption

1) UTAUT (Unified Theory of Acceptance and Use of Technology)

- *Beliefs about CAPABILITY*
  - *Perceived usefulness (performance expectancy); perceived ease of use (effort expectancy)*

- *Social influence*
  - *degree of which important the important others believe one should use or not use.*

- *Facilitating conditions with support from organizations and their infrastructure*
  - *Environmental context and resources*

2) Beliefs on the CONSEQUENCES ->Health Belief Model
  - *Perceived vulnerability to a negative health condition; perceived severity / hazards; perceived advantages and perceived barriers.*

Influence on the behavior to adopt eHealth

Ref:
H. Sari, M. Othman, and A. M. Al-Ghaili (2019); T. Koivumäki (2017); Cane, J., O'Connor, D., & Michie, S. (2012).

Methodology: [Scoping] Review

- Two user groups / case study

    1) Digital Talents (DT)

    2) Youth Gamers (YG)

- Scoped reviews existing documents reported in **the literature which include media reports** to explore how these two groups experience digital interactions during Work / Study from Home settings.

**For DT group, keywords used for searching the reports were digital talents, digital industry, or digital workers.

**For the second user group, the keyword searched were gamers, youth, young gamers.

+ All these keywords were concurrently searched with the main keywords, i.e., COVID-19 or pandemic, work, or study from home.

- The articles were reviewed by extracting the survey findings and key observations.

*Digital Interaction for **Work***
>> Case Study 1, Digital Talents (DT)
RQ: To what extent do DT perform their work-life balance while working from home?

High demand on DT in digital industry; they are the 'frontliners' in Digital Industry
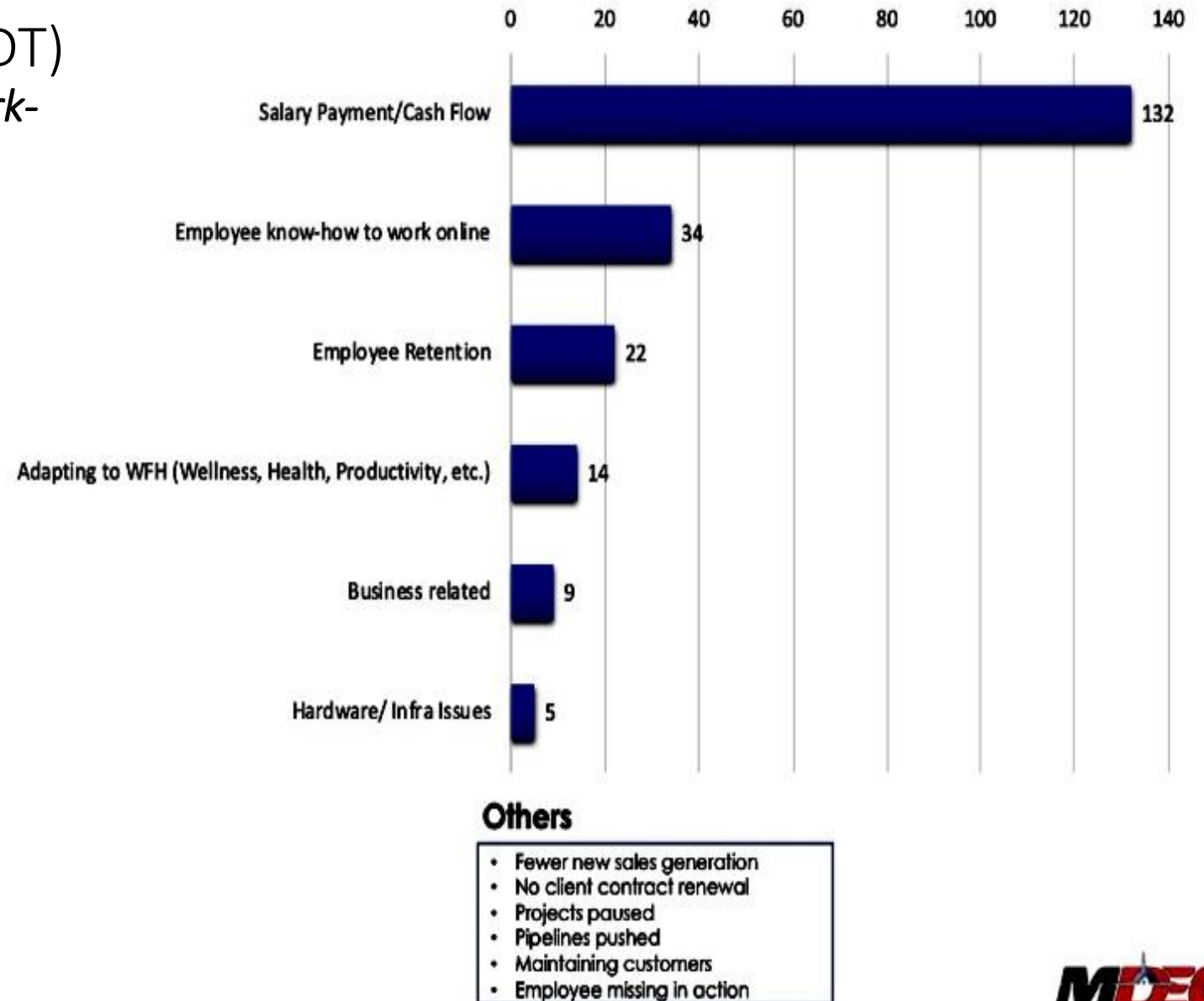- Technical skills
- Soft skills

Digital Interaction for *Work*
>> Case Study 1, Digital Talents (DT)

RQ: To what extent do DT perform their work-life balance while working from home?

- WFH – flexible

- MDEC study (2020) on Companies (mainly from digital industry) concern more on:-
  - Salary payment / cash flow ($).
  - How to work online from home / WFH; with the elements of wellness, health and productivity too.

- At global level:
  - 55% workers prefer combination of f2f and remote / virtual working

    (ref: PwC, 2020, 2021)

	Value
Salary Payment/Cash Flow	132
Employee know-how to work online	34
Employee Retention	22
Adapting to WFH (Wellness, Health, Productivity, etc.)	14
Business related	9
Hardware/Infra Issues	5

Others
- Fewer new sales generation
- No client contract renewal
- Projects paused
- Pipelines pushed
- Maintaining customers
- Employee missing in action

MDEC

*Digital Interaction for **Work***
>> Case Study 1, Digital Talents (DT)
RQ: To what extent do DT perform their work-life balance while working from home?

How Stressed and Pressured are you while working from home during Covid19?
104 responses
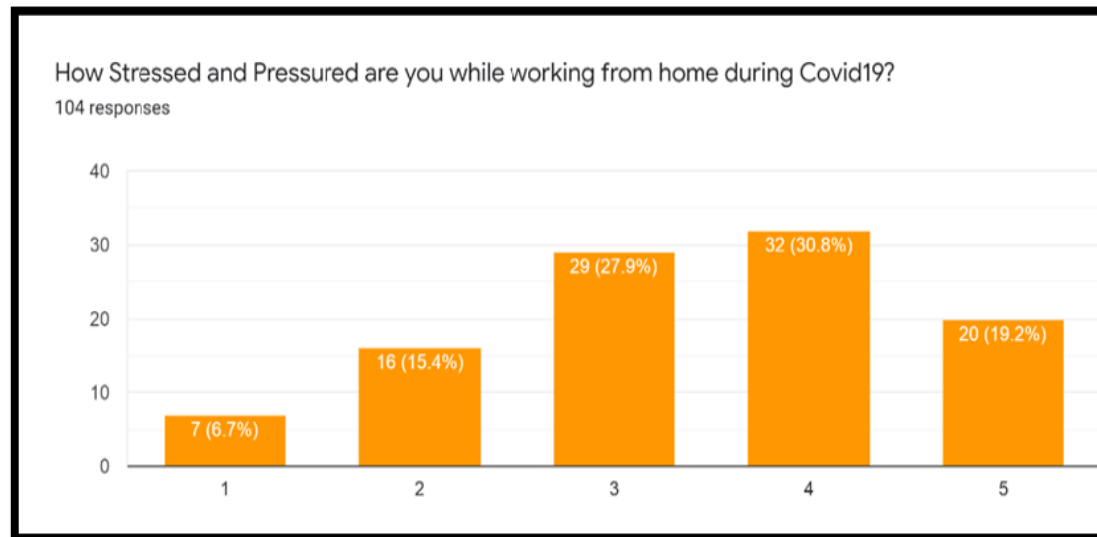
Study by Marimuthu and Vasudevan (2020): How stressed and pressured while WFH? (early locked down period in April 2020)
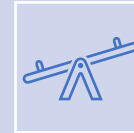
Imbalance hours of Working & Home; unclear boundary between the two environments; unable to disconnect; "**always-on**"

Overwork (PwC, 2021): Only 28% of employees can detach from work outside of working hours; Only 22% says they are encouraged to take brief breaks during workdays; 25% believes their boss helps them manage stress and focus on mental and emotional well-being.

Burnout & Pandemic Burnout – being exhausted, cynical and discouraged – workplace burnout is due to relationship with the workplace (Leiter, and J. Wintle, 2021).

Strategies for **health promoting WFH** should be prioritized.

*Digital Interaction for **Play***
>> Case Study 2, Youth Gamers (YG)

To what extent do YG perform their work-life balance while studying from home?

- **Balance** between study and play.

- Parents believe gaming during lockdown is the **primary method of socializing with friends** (13 - 18 years old) (Eandt.theiet.org, 2021)

- Barr and Capeland-Steward (2021) conducted an online survey (N = 781), with 16 years of age and older.
  - They found that **71% of respondents had increased the amount of time spent playing games**, while **58% of respondents reported that playing games had positively impacted their well-being** by providing **cognitive stimulation** and opportunities to **socialize**, along with reducing anxiety and stress, escape (pandemic stress) into an alternate reality

>> Case Study 2, Youth Gamers (YG)

To what extent do YG perform their work-life balance while studying from home?

- The **rise of online gaming** during locked down
    - Time spent on video gaming as a form of entertainment by 39% globally.

- The case of **Roblox game**

The first quarter or 2021- is one of the highest played games in the world due to pandemic. On average 42.1 mil daily active users of Roblox games worldwide. Clement, 2021)

Increase in time spent video gaming during the COVID-19 pandemic worldwide as of June 2020, by region:
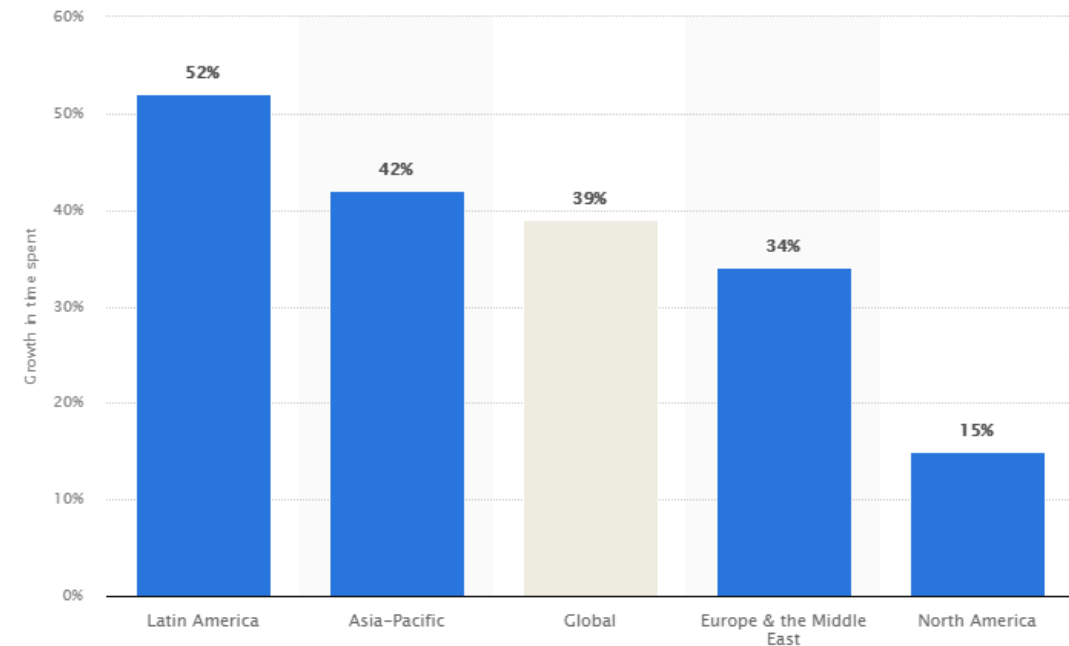
(Clement, 2020 from Statisca.com)

*Digital Interaction for **Play***
>> Case Study 2, Youth Gamers (YG)
To what extent do YG perform their work-life balance while studying from home?

- **Is Internet gaming interaction influence on addiction or wellness?**

  Addiction:

  WHO (2018) has included gaming disorder in the 11th Revision of the International Classification of Diseases (ICD).

  - Criteria: Sufficient severity to result in significant **impairment in personal, family, social, educational, occupational** or other important areas of functioning. & would have been evident for **at least 12 months** (WHO, 2018)

  - Some countries like South Korea and China has been recognized it as a disorder – with treatment programme.

  Insufficient Evidence of Addiction:

  - American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disordered (DSM-5) took the position that there was **insufficient evidence** to determine if internet gaming is a disorder but did recommend further research (Starcevic, 2017).

*Digital Interaction for **Play***

>> Case Study 2, Youth Gamers (YG)

To what extent do YG perform their work-life balance while studying from home?

Advantages of online games (explanation from <u>psychology</u> viewpoint)

- **Flow** (improve mood & anxiety, cognitive stimulation – can combat boredom) (Csikszentmihalyi, 1991)
- **Agency** (to be able to control – while playing relaxing type of game, can de-stress)
- **Normalization and socialization** – to keep in touch with others

Influence on [Academic] Performance

- A study in China, found that students who spent more than an hour each day on these activities during the school week scored **significantly lower grades** (M. Gideon, 2021)
  - This finding suggests that incorporating **time limits on youth's usage of interactive technology** is necessary to maintain a **balance** between online and offline worlds, such as on their studies or learning activities.

Photo by Samuel Regan-Asante on Unsplash

Discussions & Conclusion:

>>Integrating wellness into digital interactions

- For DT users
  - Integration of **wellness** in the virtual and physical workplace (should be prioritized)
  - Reminder of the principle of **Balance** – work and personal life
  - How:- stress on "**Collective Well-being**" – promote positive mindset, EQ and improved communications.

- For YG users
  - Awareness of the principle of **moderation** in spending time on online games
  - Guides for online games (privacy, safety, respect etc)

Future Work

Increase of **opportunities (and challenges) of eHealth Interaction** Research

- Acceptance and use of eHealth Interaction
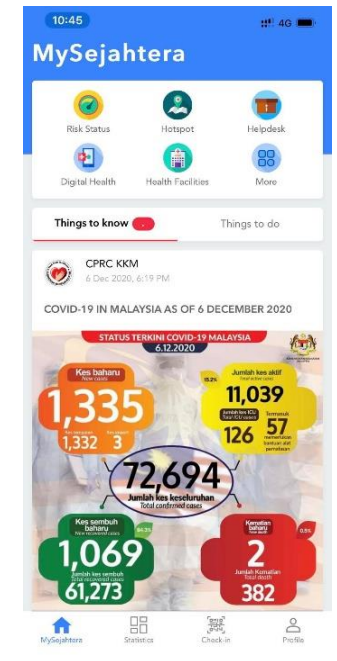- Various eHealth application, methods and services
- Advanced technologies

Specific research on DT and YG on **their experiences while working or studying at home**.

- Issue and challenges faced by them;
- Factors that motivate or deter them from using certain technology or applied methods for the well-being.

Virtual E-BeeRUN by MMU

https://www.mmu.edu.my/ebeerun/

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