



The Influence of Quarantine on Thai Highschool Students' Productivity

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ABSTRACT: Due to the current pandemic of COVID-19 which rendered many public and crowded places closed for safety measures and preventing further spreading of the mentioned disease. One of the places closed as a safety precaution is schools. And because of this, many high school students' education is put on pause as they are encouraged to stay at home. Moreover, citizens other than students are obliged to stay at home and engage in minimal contact with the outside world. From this, we are introduced to the word quarantine which is an official term describing the act of imposing isolation on individuals or a group of individuals; consequently, most adults and parents fear that this will affect their children's productivity especially that they are in high school and very close to transitioning to universities and adulthood. As Thai highschoolers, we wanted to put this belief to the test by conducting this research which focuses mainly on assessing the effects of quarantine on Thai high school students' productivity in terms of self care, education, and contribution to others. Our goal is to disprove the assumption held by many that quarantine would lead to decrement of high school students' productivity. Interestingly, our thesis was proven true and our thought processes and procedures will be further elaborated in this research paper.

KEYWORDS: Pandemic, Quarantine, Isolation, Productivity, Thai Highschool Students, Self Care, Education

INTRODUCTION

By the end of 2019, there came a new and deadly virus known as Coronavirus (SARS-CoV-2 or severe acute respiratory syndrome-related coronavirus 2) that caused a pandemic and in turn led to governments attempting to prevent further spreading of the Coronavirus disease 2019 (COVID-19) via methods such as mandatory social distancing, travel restrictions, closure of schools and nonessential businesses, curfews, and quarantine. Quarantine is the term describing the act of self-isolation of individuals by working at home or engaging at the least possible with the outsiders.^{1,2} This included students' education abruptly being put on pause and obligatorily switched to online learning instead of on-site learning. Due to these changes, many argue that this has made a global impact on quarantined citizens in terms of productivity, especially on adolescents.

Many studies have been conducted to compare the productivity of people quarantined with those not quarantined. The results showed that after a period of quarantine ended, subjects displayed signs of poor concentration and indecisiveness, deteriorating work performance and reluctance to work.³ Some of the research conducted on this topic focused primarily on highschool students and had them express their thoughts regarding their own levels of productivity and distractedness brought about by working and learning at home.

One of those researches, conducted by Fremd high school, summarized that the majority of students believed that there has not been a substantial change in their productivity levels while only 7.6% of the students felt that working at home caused an increment in their levels of productivity; however, 10.2% held an opposing viewpoint, claiming that they have been the least productive when working at home.⁴

As high school students living through the pandemic in Thailand, we've decided to take it upon ourselves to research whether or not quarantine has affected highschool students in Thailand in terms of productivity and how it has been affected. We hypothesized that due to having more freedom and staying in a more relaxing environment, there will be an increase in productivity levels of Thai high school students in the aspects of education, self care and commitment to others. The purpose of this research is to determine if quarantining has made any impact in terms of productivity for highschool students and use this information to improve our lifestyle and increase productivity in the future when we are out of quarantine.



METHODS

Participants

In order to gather information and data regarding our topic of interest which is assessing thai high school students' productivity levels, we have decided to conduct a questionnaire by means of an online google form which suits the current situation in which we cannot directly ask them face-to-face due to governmental measures of social distancing. We utilized an online platform which are google forms and social media and asked our grade 12 friends and acquaintances from a similar age group which are grade 10 and 11 students to provide responses to our questions. Not only did we ask them to respond to our questionnaire but also to help us distribute it to other thai high school students as well. As a consequence, we acquired a larger scale of information so greater accuracy can be obtained.

Questionnaire

We divided the questions into three main sections based on different categories of productivity which include self-care, education and commitment to others.

1. Self-care : The section regarding self-care included questions to help us determine the frequency of participants exercising , their sleeping schedules, and time spent on improving their mental health before and after quarantine so we can compare and contrast them later.
2. Education : This section featured questions regarding time spent on studying, learning new useful skills , and self-reflection on the topic of universities.
3. Contribution to others : This section consisted of questions regarding whether or not the participants contributed their time and efforts to helping people they quarantine with.

DATA ANALYSIS

Section 1 : Self care

Exercising

Percentage of time spent exercising per week	Before quarantine	During quarantine
1-2 Days	23.4	28.6
3-4 Days	28.3	35.2
Everyday	12.7	20.4
Never	35.6	15.8
Total	100	100

Based on the responses, we've calculated that most high school students in Thailand have overall increased their frequency in time spent on exercising during quarantine compared to the time they spent on exercising before quarantine.

During the period of pre-quarantine, results show that the majority of the participants did not exercise at all with the percentage being 35.6; however, this amount decreased significantly to 15.8 percent during quarantine. While in quarantine, most of the thai high school students in this survey exercised approximately three to four days per week. This is 6.9 percent greater than time spent on this duration during the pre-quarantine period. The percentage of highschoolers who exercise everyday before quarantine, surprisingly, almost doubled that during quarantine, going from 12.7 percent to 20.4 percent. Turning to the participants who exercised one to two days during pre-quarantine, the results suggest that there is an increment in this quantity during quarantine, with 23.4 percent throughout the period before quarantine and 28.6 percent during quarantine.



From this data, we can assume that quarantine has made a positive impact by increasing the amount of time highschoolers in Thailand spend on exercising per week. Furthermore, the results of another survey⁵ conducted on the topic of quarantine’s effects on physical activities suggested that there has also been an increase in exercising among adults during quarantine as well.

Mental health

Mental health status from a 1 to 5 scale (1feeling depressed and 5 feeling mentally healthy)	Before quarantine	During quarantine
1	3.1	10.4
2	10.4	21.7
3	28.2	24.6
4	39.6	19.4
5	18.7	23.9
Total	100	100

Percentage of participants who tried to improve their mental health during quarantine	
Yes	50.7
No	49.3
Total	100

We had our participants rate their mental health status based on a scale from 1 to 5 with 1 being that they’re feeling depressed and 5 feeling mentally healthy. We also asked them whether or not they tried to improve their mental health in any ways possible. Based on the results obtained, it can be assumed that the mental health of highschool students seem to become more extreme during quarantine, with some having their happiness amplified due to their change in environment and isolation while some seem to have their negative emotions amplified by the same cause which is understandable given that adolescence (high school students) is an age where emotions can become extreme and change drastically depending on change in environment and situation, as we can refer to the study done on this topic.⁶

Improving one’s mental health is part of productivity and based on our results we can summarize that approximately half of the participants have taken effort into improving their mental health during quarantine.

Sleeping scheduels

Percentage of participants on each average amount of sleep	Before quarantine	During quarantine
Less than 6 hours	39.7	14.2
6-8 hours	41.2	46.3



More than 8 hours	19.1	39.5
Total	100	100

Based on our summary of the responses, it is clear that due to quarantine, the majority of high school students' sleeping schedules have improved, as approximately 41.2 percent of the participants slept on average 6-8 hours during the period of pre-quarantine. This amount increased to 46.3 percent of individuals who slept 6-8 hours per day during quarantine. While roughly 39 percent of highschool students did not acquire enough hours of sleep in order to maintain a healthy lifestyle and maximized productivity before quarantine, on the other hand, the percentage of highschool students getting less than 6 hours of sleep decreased significantly during quarantine to 14.2 percent. Furthermore, the amount of participants with the relaxation time that exceeded 8 hours daily have doubled in the percentage during quarantine when compared to pre-quarantine period with the amount of 39.5 and 19.1 percent, respectively. Referring to external sources, ⁷ highschool students (ages 13 to 18) need approximately 8 to 10 hours of sleep in order to stay healthy and not encounter any long term health consequences. Based on our results and external research we can assume that quarantine has led to an improvement in many highschool students' sleeping schedules.

Section 2 : Education

Self studying and putting effort into studying during freetime

Percentage of participants on different time spent studying per week on their free time	Before quarantine	During quarantine
Never	21.8	7.5
2-4 Hours	37.5	27.6
5-8 Hours	18.9	34.3
9-12 Hours	11.5	14.2
13 Hours or more	10.3	16.4
Total	100	100

Based on the table, it can be observed that the amount of highschoolers taking their time to study for 5 to 8 hours per week has increased during quarantine, from 18.9 percent before quarantine to 34.3 percent during quarantine. Surprisingly, the amount of participants who never studied in their free time before quarantine has plummeted from 21.8 to 7.5 percent during quarantine. In addition, there is an increase in the percentage of high school students who studied for 13 hours or more during quarantine with the initial amount of approximately 10.3 percent during pre-quarantine and 16.4 percent during quarantine. This is due to the fact that before quarantine, many highschoolers spent most of their time already studying in school; therefore, it is reasonable that the time spent on self studying would increase for many individuals given that most schools have closed, resulting in more free time and more time and opportunity for self studying. And due to the closing of schools, many students feel the responsibility to study on their own. This results in an increase in productivity on studying for many highschoolers during self isolation. On the other hand, it is also reasonable to say that many see quarantine as an opportunity to rest, due to the fact that education in highschool can be overwhelming at times and taking up much of the students time to rest, leading to many deciding to use the quarantine as time to take a break from over all studying which results in a decrease in productivity in terms of studying in some students, although much less than the percentage increase of the students who choose to study.



Preparing for university admissions

Percentage of participants who started contemplating about their university application plans	Before quarantine	During quarantine
Yes	34.4	68.7
No	65.6	31.3
Total	100	100

From our responses, we can observe that the majority of Thai highschoolers did not contemplate or think about planning ahead for their universities before quarantine. But, during quarantine, this substantially changed as approximately 68.7 percent participants have started arranging their university application plan. This amount is roughly double that of the amount before quarantine. On the other hand, the amount of participants who have not started planning their university application decreased significantly to 31.3 percent during the period of quarantine.

We believe that the sudden increase in students organizing their university plan during quarantine is due to the fact that, because of the free time they are given, boredom led many to start rethinking their life choices. Along with highschool being the time period in which many make life changing decisions, the addition of quarantine made many start to realize how quick university admissions are approaching and take responsibility to start envisioning a plan for the future.

Developing new skills or hobbies

Percentage of participants who learnt or didn't learn new useful skills	Before quarantine	During quarantine
Yes	34.3	76.9
No	65.7	23.1
Total	100	100

We asked our participants whether or not they've developed any new useful skills during quarantine such as learning a new language or playing sports. The results showed that roughly three-fourths of the participants responded that they have acquired new useful skills during the lockdown period. Furthermore, we asked our participants who answered that they developed a new skill whether or not they would've picked up said skills or hobbies if they were not in quarantine. And, surprisingly, the majority picked out that they would not have developed said skills if it weren't because of quarantine. We can assume that due to self isolation, many teenagers decided to pursue new skills due to boredom. As our participants are mainly highschool students, this claim can be supported as many research shows that many adolescents are easily bored,⁸ along with another article⁹ about a relationship between boredom and creativity that suggests boredom often leads to creativity and "thinking out of the box" thoughts, we can infer that due to quarantine and self isolation, many highschoolers have been led to developing new useful skills that may come in handy in the future.

This means that quarantine most likely made a positive impact in terms of productivity and developing skills for many teenagers.



Section 3 : Contribution to others

Percentage of participants who are being helpful to their family members	Before quarantine	During quarantine
Yes	51.2	84.3
No	48.8	15.7
Total	100	100

According to the results, it is evident that the proportion of the participants who have been of help to their family members or people that they live with increased significantly while in quarantine when compared to before quarantine with the percentage of 51.2 helpful highschoolers before lockdown and 84.3 during lockdown. We can assume this is due to quarantine making many do self reflection and decide to contribute more to society but they cannot help outsiders yet, so they start with doing some easy house chores or acting responsibly towards others and themselves. In the case of highschoolers, having no school means more time spent with their families and more time to lend a hand in house chores or charitable acts whether out of sympathy, a way to connect with their family, or boredom, it is clear that quarantine has made an impact in highschoolers' productivity in terms of charitability. Based on an article regarding this topic,¹⁰ it is reported that during lockdown, parents experienced positive interactions with their children, including having more quality time, feeling closeness and showing love and affection to their children. Another research¹¹ suggested that while there are negative consequences of the COVID-19 pandemic for children and parents, some families reported increased emotional closeness and more time for free play and creativity in parent-child relationships.

SUMMARY

From the data we collected, the additional research articles we've acquired and assumptions we've made based on logic and data analysis. We've come to the conclusion that quarantine has, over all, made a positive impact in terms of productivity in thai highschoolers from physical and mental selfcare, to education and charitability. The rationales behind the increment of thai high school students' productivity might be the result of the combination of having not much to do, boredom, school closure, more leisure and detachment from the outside world during quarantine. This shows that even in times of distress brought about by the deadly pandemic COVID-19, there are some benefits which are improving individuals' productivity and change of lifestyles that can cause them to discover their interests and activities that they truly enjoy. Further research can be conducted in the future; one example is to discover other advantages or disadvantages brought about by the deadly pandemic and ways to make the best out of the situation.

REFERENCES

1. Bedford J. COVID-19: towards controlling of a pandemic. 2020. Available at : <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7270596/>. Accessed 19 May 2021.
2. Gostin L, Wiley L. Governmental Public Health Powers During the COVID-19 Pandemic. 2020. Available at : <https://jamanetwork.com/journals/jama/fullarticle/2764283>. Accessed 15 May 2021.
3. Brooks S, Webster R, Smith L, et al. The Psychological impact of quarantine and how to reduce it: rapid review of the evidence. 2020. Available at : [https://www.thelancet.com/article/S0140-6736\(20\)30460-8/fulltext#seccestitle40](https://www.thelancet.com/article/S0140-6736(20)30460-8/fulltext#seccestitle40). Accessed 19 May 2021.
4. Wang K. Fremd student productivity during quarantine and remote learning. 2020. Available at : <https://vikinglogue.com/7440/features/fremd-student-productivity-during-quarantine-and-remote-learning/>. Accessed 19 May 2021.



5. Goethals L, Barth N, Guyot J, et al. Impact of Home Quarantine on Physical Activity Among Older Adults Living at Home During the COVID-19 Pandemic: Qualitative Interview Study. 2020. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7207013/>. Accessed 20 May 2021.
6. Basu S, Banerjee B. Impact of environmental factors on mental health of children and adolescents: A systematic review. 2020. Available at: https://www.sciencedirect.com/science/article/abs/pii/S0190740920311518?dgcid=rss_sd_all#. Accessed 20 May 2021.
7. Cherny K. What's the Best Time to Sleep and Wake Up?. 2019. Available at : <https://www.healthline.com/health/best-time-to-sleep#how-much-to-sleep>. Accessed 22 May 2021.
8. Pickhardt C. Aspects of Adolescent Boredom. 2012. Available at : <https://www.psychologytoday.com/us/blog/surviving-your-childs-adolescence/201208/aspects-adolescent-boredom>. Accessed 15 May 2021.
9. Cooper B. The Benefits of Boredom on Creativity, Productivity, and Focus. 2019. Available at : <https://blog.rescuetime.com/boredom/>. Accessed 17 May 2021.
10. Gadermann A, Thomson K, Richardson C, et al. Examining the impacts of the COVID-19 pandemic on family mental health in Canada: findings from a national cross-sectional study. 2021. Available at : <https://bmjopen.bmj.com/content/11/1/e042871.info>. Accessed 17 May 2021.
11. Gambin M, Woźniak-Prus M, Sękowski M, et al. Factors related to positive experiences in parent-child relationships during the COVID-19 lockdown. The role of empathy, emotion regulation, parenting self-efficacy and social support. 2020. Available at : https://www.researchgate.net/publication/343509849_Factors_related_to_positive_experiences_in_parent-child_relationship_during_the_COVID-19_lockdown_The_role_of_empathy_emotion_regulation_parenting_self-efficacy_and_social_support. Accessed 22 May 2021.

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