# Insights Extraction

Main Questions

1. What is the trend? What can we tell from it?
2. Why did the trend occur? Is it possible to infer from data? – where relevant

## N-gram Analysis

* Borrowing the histogram illustrating *frequency of post against time*, the number of relevant posts in mid-covid is significantly larger than pre-covid period. It is thus no surprise that the values on axes of bar graphs representing mid-covid timeframe are of greater order.
* Pre and mid covid *1-grams* are similar. That said, some addition to the list of discussed during the pandemic includes “covid”, “school”, “work” and “student”, suggesting that the working adults and students might have experienced most disruption. Moreover, *4-gram* for mid-covid period is mostly about examinations which is a stark contrast to that of pre-covid. It insinuates that covid might have significantly added anxiousness on exam-taking learners.
* Interestingly, comparison between *2-grams* in the 2 time periods show that covid catalyzed more interest in topics relating to socialization, for example, “make friend” and “share experience”. This is understandable since social activities is highly inhibited with covid-19.
* Requests for help is a common occurrence as seen from the use of “need help” and “please help” regardless of timeframe. However, these terms ranked lower during covid in *2-gram*. This can be either a worrying sign because people are less inclined to request help, or that people’s mental state have improved (this is possibly supported by plots in *Sentiment Across Time*).
* In *3-gram*, apart from terms contextualized to covid such as “covid case community” and “circuit breaker measure”, “part time job” became a new subject of discussion with covid. It hints lowering job security, thus the need for alternative income.

## Word Cloud: Main topics in word cloud

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| **School related subreddits** | **Precovid keywords** | **Midcovid keywords** |
| NTU | Vibration, course, work, result, health, scheme | Student, time, hall, year, anyone, help |
| NUS | Engineering, student, wondering, study, experience | Student, time, year, module, people, friend, help, anyone, zoom |
| SingaporePoly | Help, ask, nobody, plea, please | Student, course, poly, year, take, point |
| SMU\_Singapore | Not representative, only one remaining post after cleaning. | |
| SGExams | Level, time, year, school, paper, people, course, student | School, time, year, level, student, friend, study, course |
| **General subreddits** | **Precovid keywords** | **Midcovid keywords** |
| Singapore | People, time, think, life, year, help, want | Covid, people, time, case |
| Singaporefi | Rolling, return, year, analysis, period | Fee, year, fund, option, stock, market, account |
| SingaporeRaw | Death, abuse, case, car, fight | People, day, time, case, covid |
| askSingapore | Year, time, work, owner, day, job | Time, people, year, help, work, job |
| NationalServiceS | Time, year, day, account, help, bank, anxiety | Time, day, help, month, year, unit |
| MentalHealthSG |  | Help, time, year, health, think, anyone |