



# Final Report

## APQN Survey Research on the COVID-19 Impact in Higher Education Institutions (HEIs)

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## ABSTRACT

2020 is an unusual year. The pandemic of Corona Virus Disease 2019 (COVID-19) relentlessly spread all over the world! The pandemic of COVID-19 in the globe has had profound impacts on education by closing campus almost everywhere on the planet, in the largest simultaneous shock to all education systems in our lifetimes, which has greatly d on our learning, work, and life. Like other social organizations, higher education institutions (HEIs) face unprecedented challenges.

During March and May, the Asia-Pacific Quality Network (APQN) conducted Survey on the COVID-19 Impact in HEIs as well as deep-interview to APQN Board Directors as well as the respondents from the globe. The survey was made up of five parts with 31 questions: 1)basic information; 2) individuals' psychological status and behavior; 3) HEIs' actions to fight against COVID-19; 4)recommendations for HEIs; 5) open question.

By analyzing 1570 survey respondents from 47 countries/territories around the world, APQN got the following founding:

**1. The impact of Individual Psychological and Behavioral Responses during the pandemic is wide and enormous.** First, the mental state of individuals has dramatic changes: 1) "fear" is the first reaction to most people; 2) the respondents have crisis awareness and care about others' safety; 3) the mentality of half respondents is in a normal state; 4) 30% of the respondents are still unable to focus on learning/work and life due to stress. Second, the individuals' behavioral patterns are home quarantine: 1) most respondents choose to stay where they are; 2) most respondents are learning at home; 3) learning/work at home negatively affects most respondents; 4) the pandemic impact on the respondents' daily lives in the U.S. is particularly obvious. Third, the respondents' life attitude it to cherish life more: 1) facing the pandemic people cherish life more; 2) they care for the confirmed patients; 3) they have insufficient awareness of labeling/stigmatization.

**2. HEIs' responses and actions to the pandemic are active and supported.** First, HEIs' crisis interventions are in full action: 1) HEIs actively collect extensive health data and information; 2) great support to HEIs' preventions for the pandemic; 3) HEIs need further improvements in comprehensive control. Second, HEIs' teaching guarantee is online teaching: 1) online teaching ensures HEIs' basic functions; 2) blending teaching (online +offline) is most popular; 3) overall satisfaction with online teaching is not high. Third, To fight the pandemic HEIs are united as one:1) stopping face-to-face teaching is the most supportive initiative;2) quarantine at home is the most effective anti-pandemic measure.

**3. HEIs' action in the post-pandemic era is sustainable development.** First, the risk control is cautious: 1) COVID-19 carriers are considered the greatest risk factor; 2) half respondents cannot accept the returners from high-risk countries/territories.

Second, the recovery function is guarding against the unexpected: 1) it is necessary to provide PTSD counseling; 2) the combination of continuous pandemic prevention and offline education is widely recognized. Third, looking into the future is on a difficult and long journey: 1) internationalization of education faces new challenges and opportunities; 2) HEIs' timely responses to preventing public health crisis is critical; 3) higher education plays an important role in responding to public health crises.

The COVID-19 pandemic pressed the “pause button” to suspend our learning/work and daily life and at the same time also open the window of reflections. We have seen the advantages, disadvantages and potentiality of HEIs in dealing with public health emergencies. In the future, we must deeply reflect on what HEIs and individuals acted and will act before and after COVID-19, keeping an open and inclusive mind, effectively play the special role of higher education, and make contributions to the sustainable development of higher education:

1. To make future plan to improve educational governance capacity in the “Post-Crisis Era”, and make modern system of educational governance to cope with the public social crisis.

2. HEIs must cultivate talents with “macro-education concept” from the perspective of the whole society.

3. Higher education must further strengthen “education community of shared future for mankind”.

Let's call for responsibility and solidarity, let's fight against COVID-19 for a better tomorrow!

**Keywords:** higher education institutions (HEIs); Corona Virus Disease 2019 (COVID-19); public health emergencies

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## APQN Survey Research on the COVID-19 Impact in HEIs

The pandemic of Corona Virus Disease 2019 (COVID-19) relentlessly spread all over the world! The COVID-19 pandemic in the globe has had profound impacts on education by closing campus almost everywhere on the planet, in the largest simultaneous shock to all education systems in our lifetimes, which has greatly influenced our learning, work, and life. Like other social organizations, higher education institutions (HEIs) face unprecedented challenges. *“The pandemic has already had profound impacts on education by closing schools almost everywhere on the planet, in the largest simultaneous shock to all education systems in our lifetimes.”*

①

At this crucial moment, it is particularly important to examine the impact of the pandemic outbreak on each individual and each university. In March 2020, the Asia-Pacific Quality Network (APQN) set up a special research project group led by APQN President. The research group conducted the global survey on the COVID-19 Impact to the students, teachers, and administrators at HEIs, in order to analyze the psychological and behavioral responses of each “Insider” on-site, and try to find solutions for higher education in the post-pandemic era.

### 1. Research background

The COVID-19 pandemic (hereinafter referred to as “the pandemic”, if not emphasized) has had an unprecedented impact on all countries/territories of the world. As of 1 April 2020, over 1.5 billion students are affected by campus closures in over 190 countries. This represents 90% of the world’s student population and is an unprecedented situation in the history of education.<sup>②</sup> As of June 16, more than 7 million confirmed patients worldwide.

Thomas L. Friedman believes that the COVID-19 pandemic will become “our new historical divide: B.C. and A.C. – the world before corona and the world after”<sup>③</sup>, just like “B.C.(before Christ) and A.C.(after Christ)”. As for higher education, the pandemic is also a very important historical node, with the common implementation of online teaching, the traditional teaching model of teachers and students was

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① World Bank. 2020. The COVID-19 Pandemic : Shocks to Education and Policy Responses. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/33696> License: CC BY 3.0 IGO.”

② UNESCO. COVID-19 Impact on Education. 2020-4-15  
<https://en.unesco.org/covid19/educationresponse/>

③ FRIEDMAN, T. L. Our New Historical Divide: B.C. and A.C.- the World Before Corona and the World After [EB/OL].(2020-03-17)[2020-03-20].  
<https://www.nytimes.com/2020/03/17/opinion/coronavirus-trends.html>

completely broken, the mental health of students in public health emergencies caused by common anxiety. HEIs’ functions have become more diversified, in addition to students training, scientific research, and social services, they also become an important social organization to fight against the epidemic.

This research surveyed the COVID-19 Impact on students, teachers and administrators in HEIs around the world, analyzes the psychological and behavioral changes brought about by the pandemic, as well as the measures are taken by HEIs in the fight against the pandemic, reflects on the changes and great impact of the pandemic on higher education, and provides a strong reference for HEIs to pursuit welfare of teachers and students and try to find solutions for the sustainable development of higher education the future public health emergencies in the post-pandemic era.

### 1.1 Survey Design: from Individual to Organization

The research group conducted three consultations with the scholars and experts anonymously, confirmed the survey framework and questions through 3 cycles of repeated consultation. Due to the fact that the survey was aimed at students and teachers in various countries/territories around the world, and in order to ensure the cultural competence and sensibility, the research group consulted experts from different parts of the world in the legal and social work to ensure that the survey was accurate and objective in terms of wording and presentation.

The survey consists of 31 questions in five parts. The first part is the respondents’ basic information, a total of 7 questions (no.1-7). The second part is the psychological status and behavior of the respondents during the COVID-19 pandemic, a total of 11 questions (no. 8-18). The third part is the HEIs' actions to fight against COVID-19, a total of 6 questions (no.18-24). The fourth part is the recommendations for HEIs, a total of 6 questions (no. 25-30). And the fifth part is the feedback of the respondents’ ideas and thinking with 1 question (Table 1).

Table 1 Survey dimensions on the COVID-19 Impact in HEIs

Main dimension	Items	#
I. Basics	1) sex; 2) age; 3) field/subject category; 4) identity; 5)location (continent and country); 6) HEIs’ type; 7) HEIs’ location.	1-7
II. Mental state and behavior	1)first psychological response; 2) attitudes towards those from high-risk areas; 3) attitudes towards that infected COVID-19; 4) stay or leave the high-risk areas; 5)attitude to the value of life; 6)attitude toward labeling/stigmatization; 7)methods to effectively prevent the infection; 8)activities during quarantine/stay indoors; 9)efficiency of teaching/learning/research/work; 10)campus lockdown; 11)crucial issues for HEIs.	8-18



<b>III. HEIs' action</b>	1) frequency of information releasing; 2) HEIs' Responses to COVID-19; 3) HEIs' actions; 4) "Campus lockdown without stopping learning"; 5) effectiveness of online courses; 6) comprehensive evaluation.	19-24
<b>IV. Recommendations for institutional responses</b>	1) students return to HEIs in a high-risk area; 2) impact the internationalization of higher education; 3) HEIs' actions taken; 4) teaching method taken; 5) HEIs' measures to the students with PTSD; 6) HEIs' prevention and control of public emergencies.	25-30
<b>V. Open question</b>	What do you want to say facing public health emergencies such as COVID-19?	31

The survey was distributed on "Survey Star", a professional online survey, assessing and voting platform in China (<https://www.wjx.cn>), from March 31 to May 20, 2020, a total of 50 days. By adopting snowball sampling, the group collected 1570 valid respondents using social self-media such as "WeChat" and e-mail promotion.

In order to further explore the understanding of the respondents, the research group also carried out a qualitative study on 6 Directors of APQN Board and other relevant scholars as well as respondents by closed and open questions in in-depth interviews (Table 2)

Table 2 List of in-depth interviewers

Name	APQN position	Country	organization
Jianxin Zhang;	President	China	Yunnan Higher Education Evaluation Center (YHEEC)
Galina Motova	Deputy Director	Russia	National Centre for Public Accreditation
Deepthi Bandar	Board Director	Sri Lanka	University of Peradeniya, Sri Lanka
Farida Nurmanbetova	Board Director (Elected)	Kazakhstan	Eurasian Centre for Accreditation and Quality Assurance in Higher Education and Health Care (ECAQA)
Jung Grace Lu	Board Director	Taiwan/Chinese Taipei	Higher Education Evaluation Accreditation Council of Taiwan
Jagannath Patil	APQN Board Director	India	NIAD QE
Syun Tutilya	APQN Project Leader	Japan	NIAD QE

Note: Those who reply to open questions and also were interviewed are not included here.

## 1.2 Sample Information: Full Coverage Worldwide

The survey covered the respondents from 47 countries/territories around the

world, 90.38% were from Asia. More than 30 respondents are from 7 countries/territories: China mainland, Russia, Sri Lanka, Kazakhstan, Bangladesh, United States and Chinese Taipei, which are in a statistical consequence. This is partly because the survey tool and delivery channels of APQN’s survey are mainly from Asia and the Pacific Region, especially from China.

From the perspective of 7 continents, 6.31% of the respondents are from Europe, 1.72% from North America, 0.7% from Oceania, 0.32% from Africa, 0.32% from Antarctica, and 0.25% from South America (Fig. 1). Most of them are from the same location (87.52%) while 12.48% of them are in different HEIs from their own location countries. It can be inferred that more than 1% of the respondents are international students or teachers or visiting scholars in other countries.

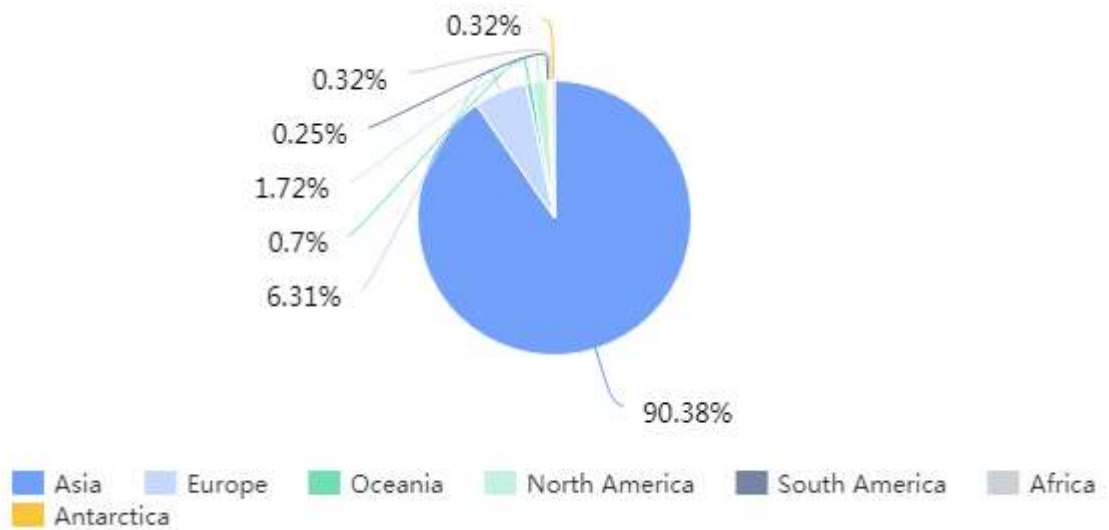


Fig. 1 Percentage of the respondents from 7 continents

In terms of sex ratio, 24.46% (384) are male while 75.22% (1181) is female and the others were 0.32% (Fig. 2). Due to the large sex differences, by disaggregated statistics and cross-analysis, the research group considered that sex did not affect the validity and reliability of the research. In addition, as sex and other options cannot form an effective correlation, sex will not be used as an influencing factor in subsequent analysis.

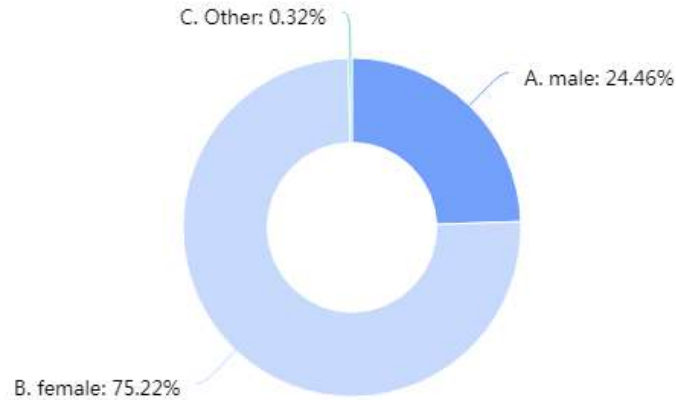


Fig. 2 Sex ratio of the respondents

In terms of age, 57.45% (902) of the respondents are under 30 years old, 26.82% (421) aged 31-45 years old, 12.29% (193) aged 46-60 years old and 3.44 % (54) over 60 (Fig. 3).

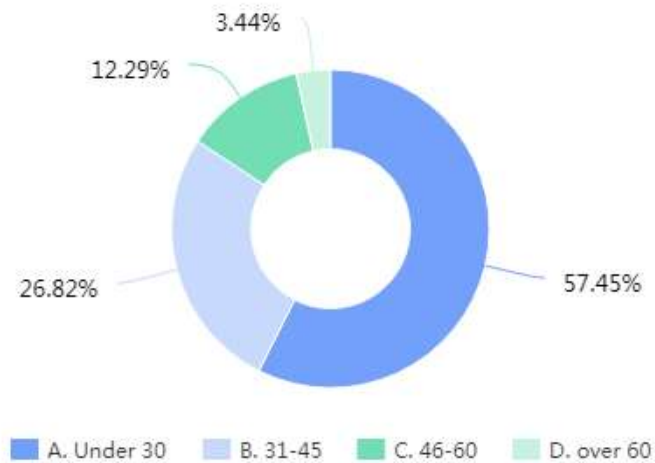


Fig. 3 Age ratio of the respondents

In terms of identity, the largest proportion is students (60.82%), second in teachers (30.96%) rank in the second place, and administrators (8.22%) cover the smallest proportion. <sup>④</sup> The students from higher vocational institutions cover 23.82%, undergraduates cover 19.55%, and graduates and doctoral students cover 17.45%. However, the difference among the three is small.

<sup>④</sup> In the follow-up analysis of the respondents, if identity is not emphasized, then the current research includes teachers, students and administrators, referred them by respondents.

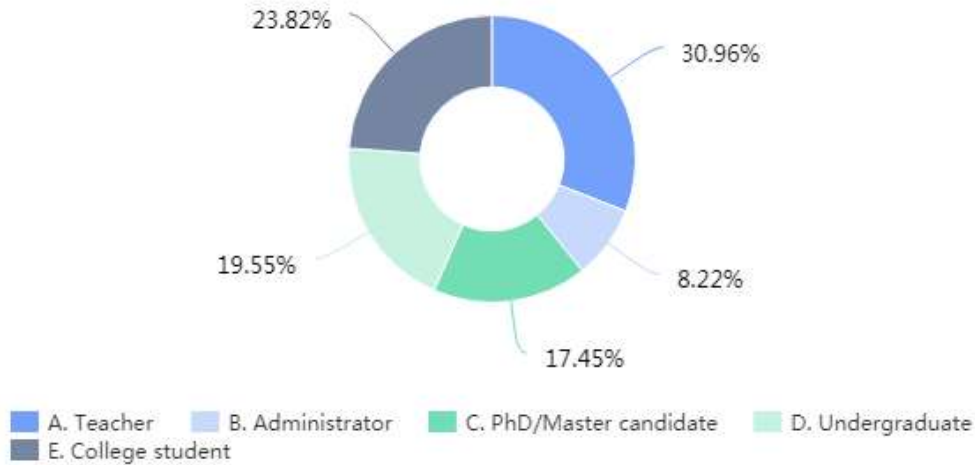


Fig. 4 The proportion of the respondents

In terms of field/subject categories, except for military science, other subject categories have respondents. The largest proportion is education (43.95%), which is also closely related to the distribution channels of the survey. Because of the snowball distribution method, APQN, as a network of quality assurance in higher education, the majority of the respondents are relevant students or practitioners in the domain of education. The research group received a lot of answers to the open question (no.31), they gave many choices and measures on how higher education plays an important role in the post-pandemic era. The second rank is literature (20%), then followed by art (4.65%), management (4.39%), and medicine (3.12%). 12.93% of the respondents choose others (Fig. 5).

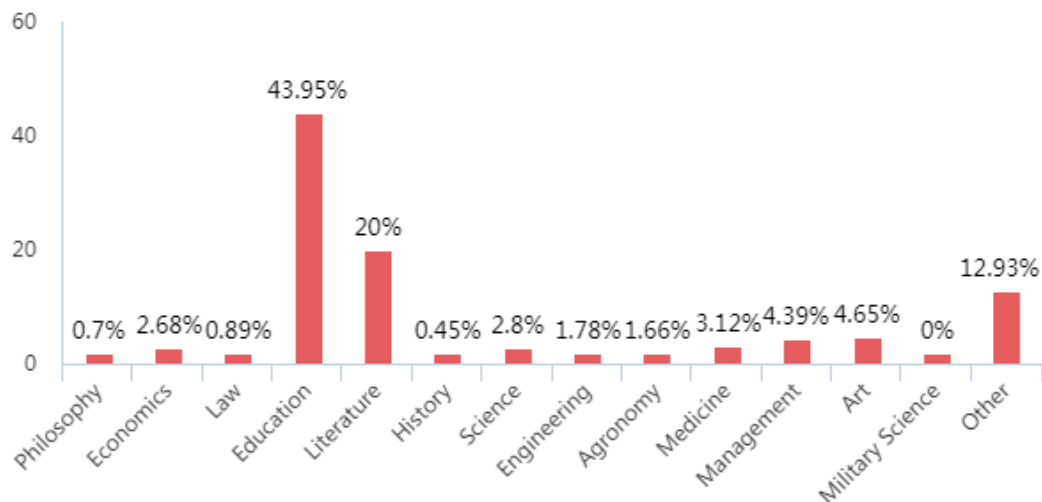


Fig. 5 Percentage of the respondents' field/subject categories

The above sample analysis shows the following three characteristics: 1) the survey coverage is wide, the respondents from 47 countries/territories around the world; 2) the respondents are relatively young, more than 60% are students; 3) the subject categories are basically complete.

## 2. Individual Psychological and Behavioral Responses during the pandemic

The COVID-19 pandemic drew the attention of everyone, each is under some kind of stress. During this special period, many people’s learning/work and life have been disrupted, so do the people’s psychological state has also gone through various changes.

### 2.1 Mental State: Dramatic Changes

In the face of the public health crisis, people have different psychological and behavioral responses, which are highly correlated with the socio-cultural environment, physiological and psychological conditions, and past experiences of individuals.<sup>5</sup> As a public health crisis affecting the world, the pandemic has had a profound impact on people in different countries/territories.

#### 2.1.1 “Fear” is the First Reaction to Most People

When they learned of the pandemic outbreak, the first reaction of 41.95% of respondents was “fear”, and 34.59% were nervous. In addition, 4.97% and 1.66% were depressed and angry, 4.46% felt they didn’t care, and 12.74% choose “others” (Fig. 6).

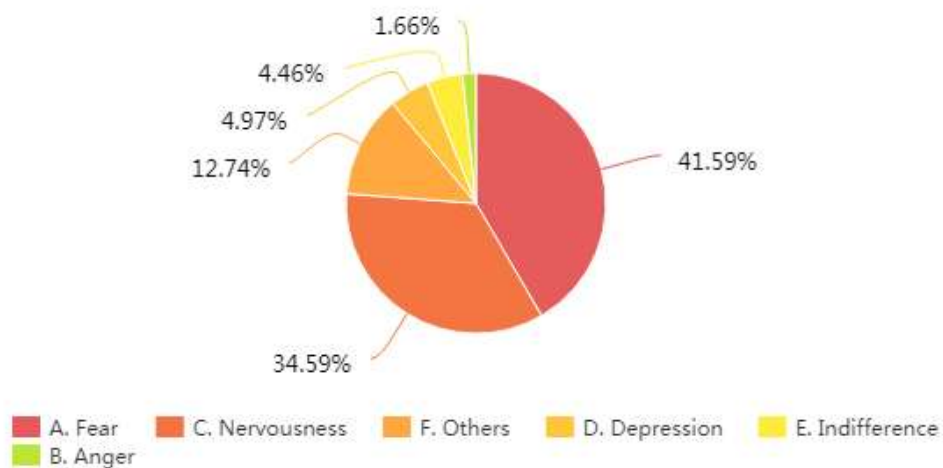


Fig. 6 First response of the respondents to the pandemic

<sup>5</sup> Benedek, David M., Carol Fullerton, and Robert J. Ursano. "First responders: mental health consequences of natural and human-made disasters for public health and public safety workers." *Annu. Rev. Public Health* 28 (2007): 55-68.

## 2.1.2 Respondents Have Crisis Awareness and Care about Others'

### Safety

For question 10, “your psychological reaction if your relatives, colleagues, classmates or friends are unfortunately infected with COVID-19”, 49.68% of the respondents say “concerned”, 20.7% say “fear” and 20.57% responded, “nervousness” (Fig. 7). It indicates that the respondents are crisis-conscious and have concerns about those around them. When asked about the reasons for “fear and nervousness”, more answers are focused on the fact that they think the latent period of COVID-19 is longer and they might be in danger if they are exposed to the confirmed patients.

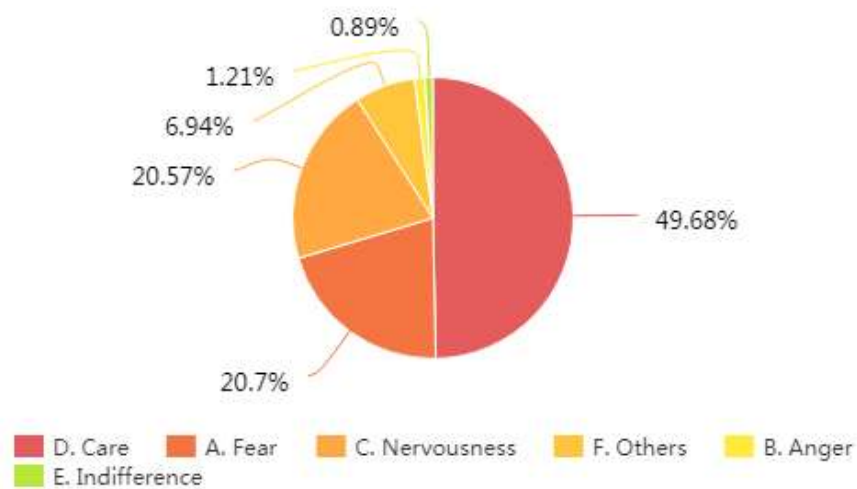


Fig. 7 Attitudes of the respondents to those who have recently been a high-risk country/region

## 2.1.3 The Mentality of Half Respondents is in Normal state

Trauma events such as public crisis will make the vast majority of people experience continuous stress or depression, which will lead them to fear, worries, anger, sadness, bring some sleep difficulties or increase the use of tobacco, alcohol and entertainment products. People with this kind of reaction can return to normal life after a period of time. The results of the follow-up behavioral survey also indirectly verified this point.<sup>®</sup> Luckily, 58.85% of the respondents say they were able to ensure the efficiency of learning/work and life.

<sup>®</sup> Hoff, Lee Ann. *People in crisis: Clinical and public health perspectives*. Jossey-Bass, 2001.

### 2.1.4 30% of the Respondents are still unable to Focus on Learning/Work and Life due to Stress

Negative emotions such as fear and stress caused by the public health crisis can affect the state of many people’s daily learning/work and life, which results in their inability to concentrate. 34.27% of the respondents say they were “unable to focus” (Fig. 8).<sup>7</sup> Being Unable to focus, means that their daily activities such as learning and work, are seriously affected by persistent anxiety, sleep disorders, which enormously affect the effectiveness of dealing with daily affairs. Certain psychological guidance, psychological education and other auxiliary treatments can effectively alleviate problem severity and help their recovery.

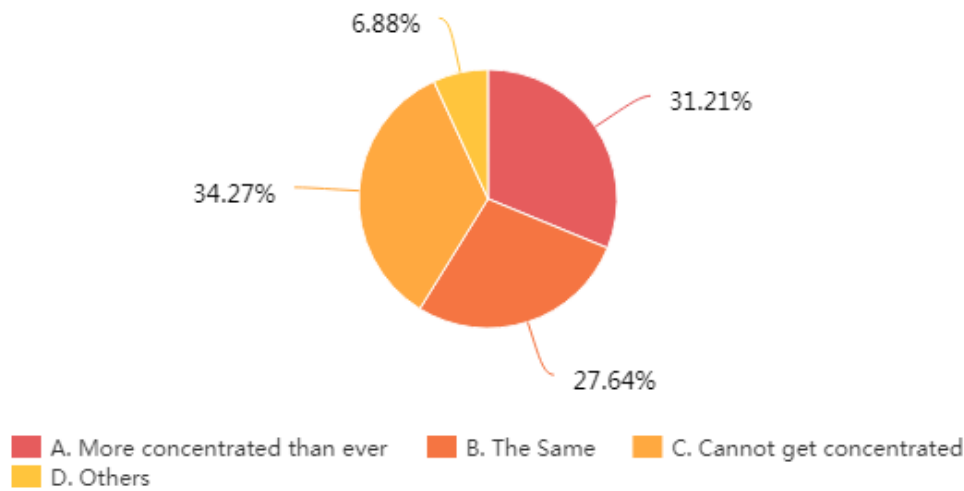


Fig. 8 The respondents’ concentration on learning/work and life during the pandemic

## 2.2 Behavioral Patterns: Home Quarantine

The pandemic has broken down the existing way of peoples’ life and behavior and caused an enormously psychological impact on people. Due to the breakoff of the previous life pace, people need to quickly adapt to independent learning/working and traditionally collective life from an early age, the extension of vacations and home-based learning make them feel isolated, lack timely feedback, face-to-face communication and collaboration among teachers and students themselves. At the same time, for many teachers who are accustomed to classroom teaching, they not only need to learn new network tools for teaching but also online teaching further blurs the boundaries between scientific research, teaching and life.

<sup>7</sup> Weathers, Frank W., et al. "The PTSD checklist for dsm-5 (pcl-5)." *Scale available from the National Center for PTSD at www.ptsd.va.gov* 10 (2013).

And many face the challenge of reconciling and adapting their own life.

### 2.2.1 Most Respondents Choose to Stay where they are

In response to Question 11, “If you are in a serious epidemic country/region and you have a chance to go to a safer country/region will you leave?” 38.85% say they would not choose to leave, while 33.12% were unsure and 24.71% choose to leave (Fig. 9). When being asked about their concerns, most of the responses were to be concerned about the risks of being infected on the road.

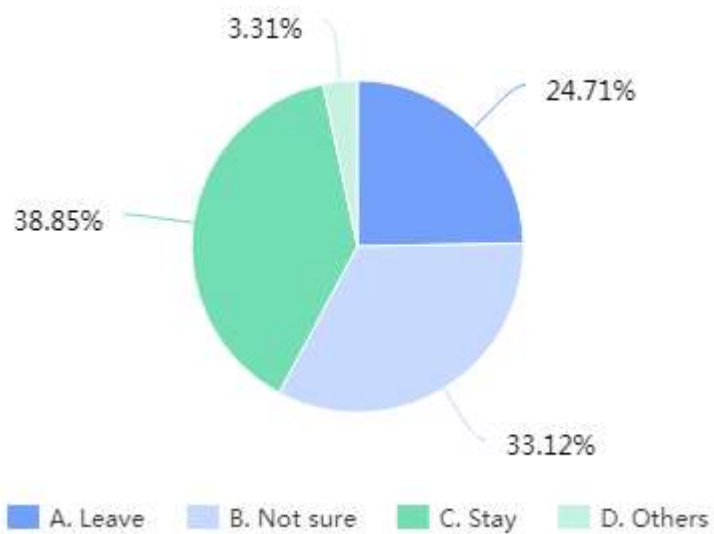


Fig. 9 Attitudes of leaving a serious epidemic country/region with a chance to go to a safer country/region

### 2.2.2 Most Respondents are Learning at Home

During quarantine at home, the top home activities were: learning (1013), reading (970), watching TV plays/films (821), cooking (628), communicating with the lover and close friends (546), reading online news (495 times) (Fig. 10), Unlike the researchers’ hypothesis, the number of the respondents who played games were less than expected. “Although I had been depressed before, I still managed to complete all my homework, and the progress of online courses has not been slowed down” (from a Chinese student studying in South Korea)





Fig. 10 Activities during quarantine at home (persons; %)

### 2.2.3 Learning/Work at Home negatively Affects most Respondents

As for home learning/work caused by the pandemic, 36.9% of respondents say it had a serious impact on their learning/work and life. 49.62% say it had a slight impact on them while only 8.15% say it did not affect them (Fig. 11). This can be attributed to the above psychological state: 56.88% of the respondents who answered “unable to focus” in the psychological part thought that their learning/work and life had been seriously affected. It shows that “attention deficit disorder” caused by anxiety and other emotions, directly affects their learning/work and life. On the other hand, it can be attributed to the change of learning methods: different from the face-to-face teaching, home-based learning also puts forward higher requirements for both teachers and students, such as increasing the cost, adapting to the new way, etc. In the follow-up question related to online teaching, 60.78% of the respondents who consider online teaching is “ineffective”, believed that the epidemic had a serious negative impact on learning/work and life. *“The network teaching is very complicated. In order to use Zoom software, I spent a lot of effort to study, but I still made a fool of myself in class”* (a Japanese teacher).

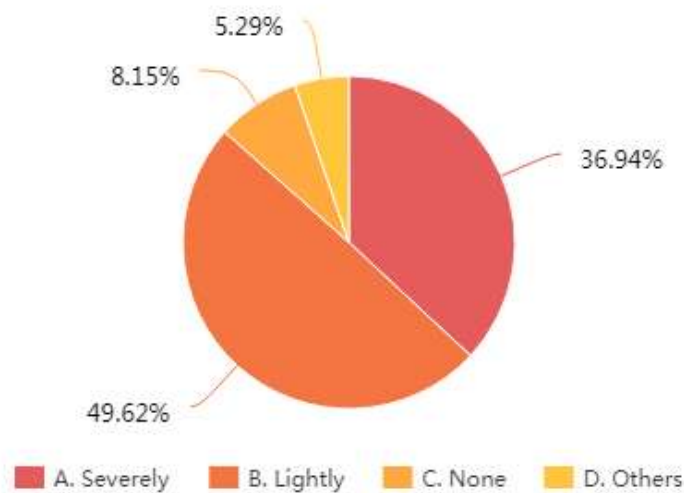


Fig. 11 The impact of the pandemic on the respondents' learning/work and life

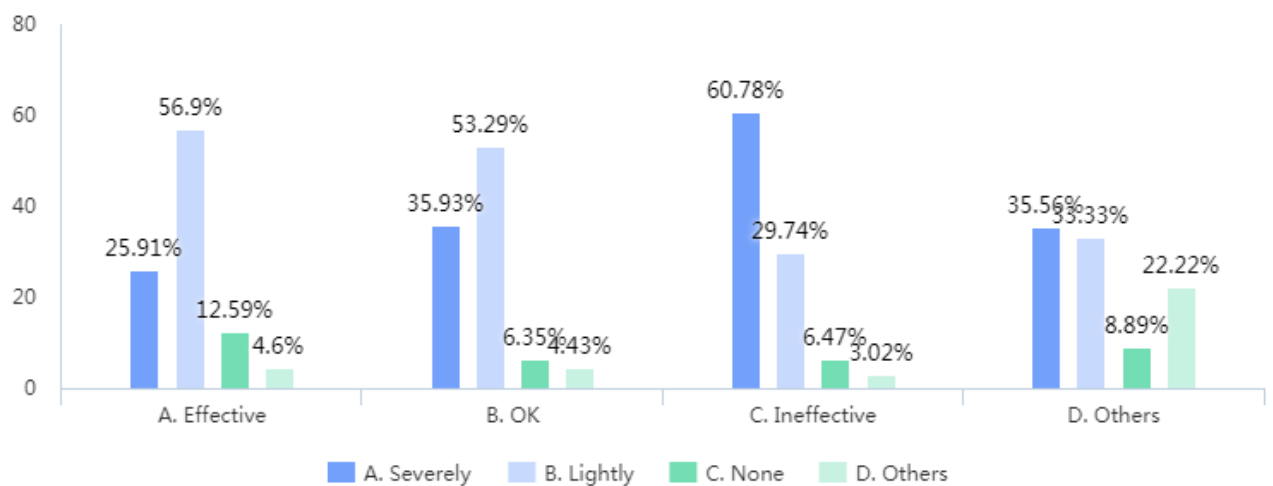


Fig. 12 Cross analysis on the effect evaluation of online teaching and the impact of the pandemic on learning/work

## 2.2.4 The Impact on Daily Lives in the US is Particularly Obvious

It is worth noting that 72.73% of respondents in the United States (US) say the pandemic has a serious negative impact on their learning/work and life, well above the average (Fig. 13). As of June 14, 2020, more than 2 million people had been diagnosed with COVID-19 in the US and more than 115,000 people died.<sup>®</sup> The serious situation in the US, the Trump administration's questionable responses, the emerging economic crisis, the social crisis and so on, have all had a more serious psychological impact on people in the US.

<sup>®</sup>Centers for Disease Control(CDC). Cases in the U.S, Last updated on June 14, 2020, <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html>

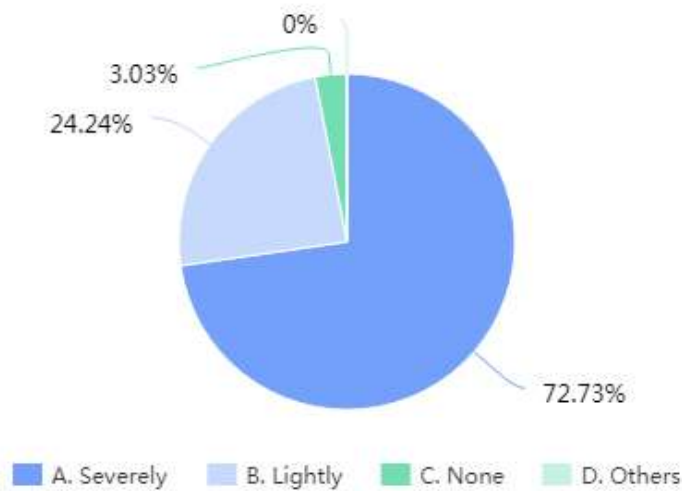


Fig. 13 Proportion of US respondents affected by extended holidays and negative impact of the pandemic

Of the respondents from North America, 70.37% say the pandemic had a “severe” negative impact on them, while 25.93% say it had been slightly affected, only 3.7% were unaffected. The proportion of those who are severely affected was well above the average in other regions (Fig. 14).

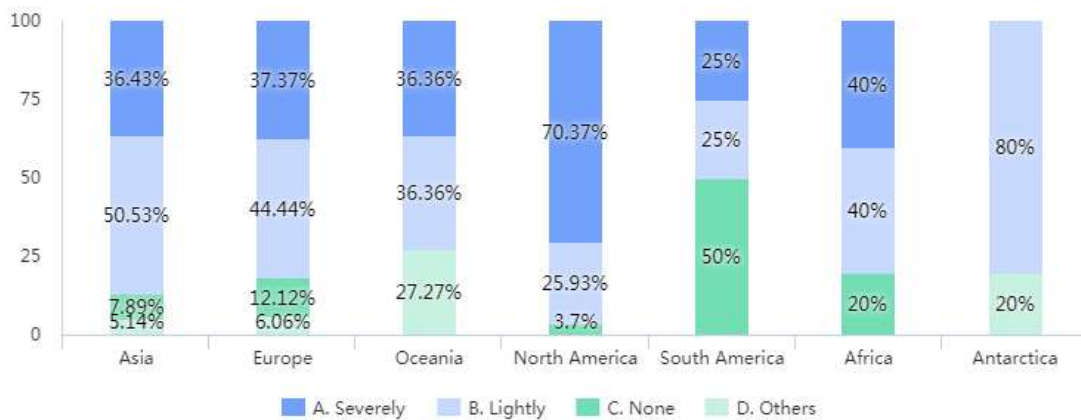


Fig. 14 Proportion from 7 continents affected by extended holidays and negative impact of the pandemic

### 2.3 Life Attitude: Cherish Life

The COVID-19 pandemic has a major impact on people’s daily life but also has an impact on people’s world outlooks and perspectives as well as life attitudes. Familiar daily life is no longer there, many people began to rethink their own views on life and others, in the effort to adjust and adapt to the new change.

### 2.3.1 Facing the Pandemic People Cherish Life more

60.7% of the respondents say they cherished life more than ever since the outbreak of the pandemic (Fig. 15). We noticed the respondents who think their lives are more seriously affected by the pandemic are more likely to cherish their lives more.

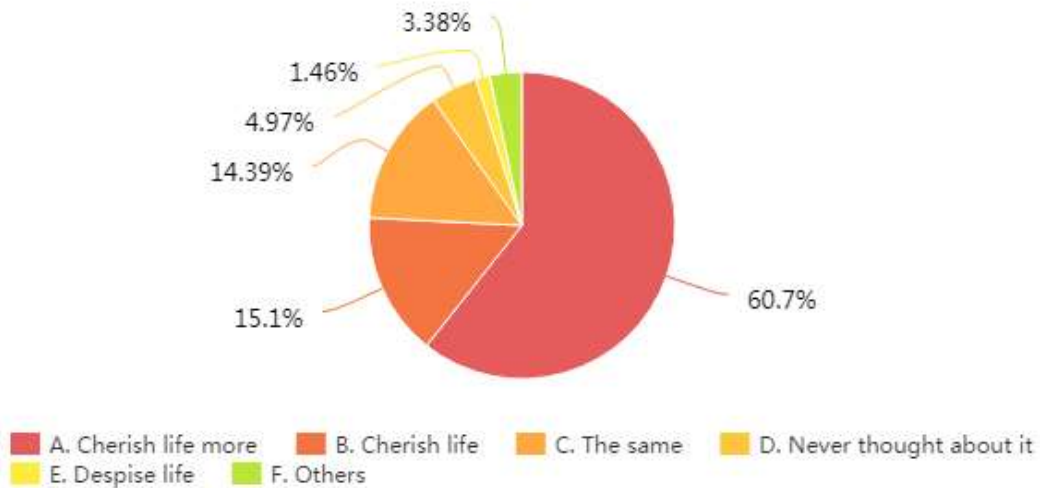


Fig. 15 The respondents' attitudes towards life

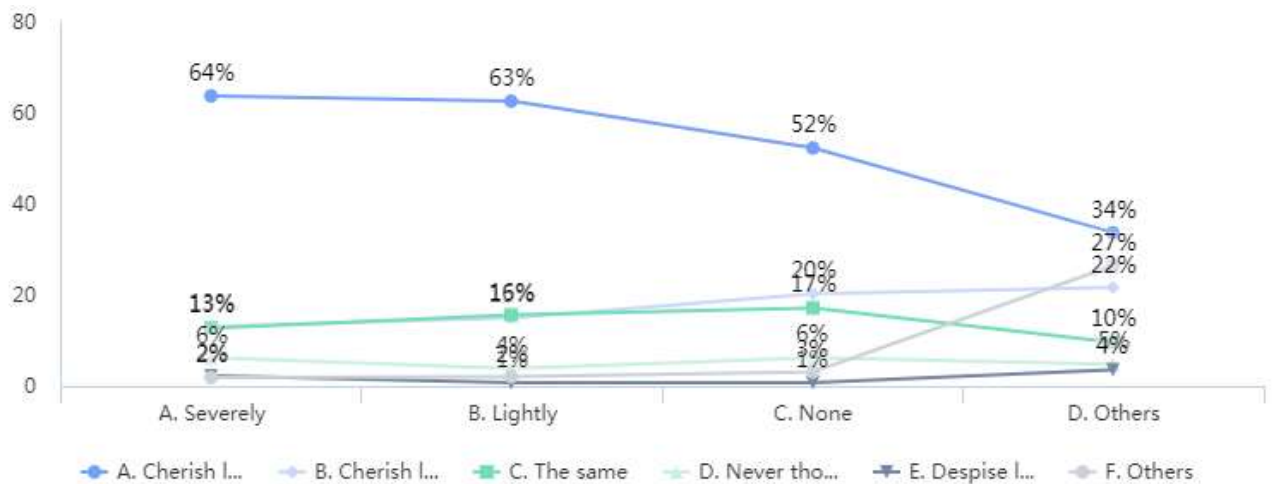


Fig. 16 A cross-analysis of the respondents' attitudes towards life and the degree to which life is affected

### 2.3.2 Care for the Confirmed Patients

In response to the question "If your relatives, colleagues, classmates or friends are unfortunately infected with COVID-19, what is your psychological reaction?"

51.85% of the respondents say they would be worried, while 25.16% say they would be concerned, while only 0.57% thought they would be indifferent (Fig. 17). The pandemic has swept the world, bringing the shadow of death and illness to many families. Being aware of the seriousness of the pandemic not only makes many people start to reflect on their attitude towards life but also cherish life to others and care about the safety of relatives and friends around them.

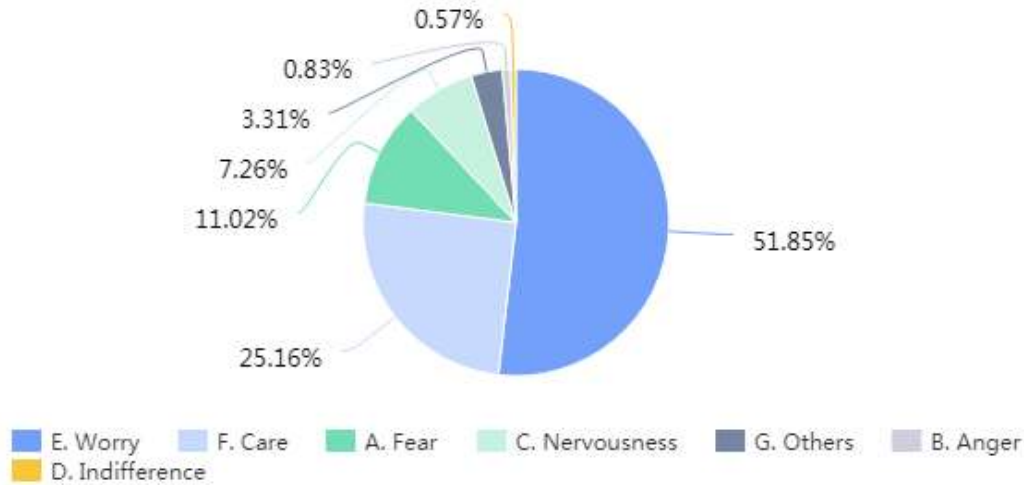


Fig. 17 Attitudes of the respondents if the relatives and friends are unfortunately infected with COVID-19

### 2.3.3 Insufficient Awareness of Labeling/Stigmatization

Nearly half of the respondents (47.64%) disagree the labeling/stigmatization of COVID-19 (Fig. 18). Labeling/stigmatization is not conducive to real understanding and solving problems, but on the contrary it leads to more contradictions. One research points out, the pandemic outbreak may cause great fear to the public or specific communities, cause discrimination and insult to the infected and related communities, and delay the time for related groups to seek medical help, which may result in even worse consequences.<sup>®</sup> In this process, timely effective assessment and anti-discrimination measures are very important. 18.28% agree with stigma. Explain that there is still a lot of people around the world who do not have sufficient awareness of the negative social impact of stigma and labeling, in which case scientific and effective public education on disease and stigmatization is necessary.

*“When I went to the supermarket to buy vegetables, I was abused by a local person on the way, saying that I brought the virus and asked me to go back to my country, which is very hurting”* (from a Chinese student in Australia). In addition to being discriminated against because of Asian peoples, the interviewed teachers and students also mentioned that they were accused of wearing face masks.

<sup>®</sup> Person, Bobbie, et al. "Fear and stigma: the epidemic within the SARS outbreak." *Emerging Infectious Diseases* 10.2 (2004): 358.

It is worth noting that in this survey, 24.2% of the respondents are not sure about their attitude towards labeling/stigmatization, while 18.28% agree with labeling/stigmatization. It shows that in the world, there are still many people who do not have enough understanding of the negative social impact of labeling/stigmatization. In this case, it is necessary to carry out scientific and effective public education on labeling/stigmatization of the pandemic.

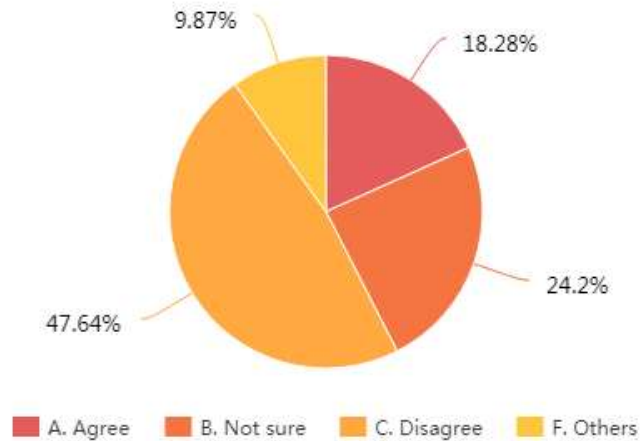


Fig. 18 The respondents' attitude to labeling and stigmatization of the COVID-19 pandemic

### 3. HEIs' Responses and Actions to the Pandemic

As HEIs are densely populated, the prevention and control of the COVID-19 pandemic should be more stringent. Once the pandemic outbreak on campus, it will have a huge impact on each HEI and the whole society. Fortunately, almost all HEIs around the world have taken measures to protect the safety of students from different angles.

#### 3.1 Crisis Intervention: Full Action

Based on HEIs' own actual situation, such as the number and composition of the students, department setting, geographical location, building quantity and usage, HEIs should make responsive plans in line with the actual situation accordingly, explore its own emergency management model, and establish a short-term as well long-term mechanism for emergency management of public health emergencies.

### 3.1.1 Extensive Health Data Collection in HEIs

78.34% of the respondents say that their HEIs collected health data. Most of the information collected was conducted in the form of online surveys. In terms of regional location, the highest proportion of health information collected is from Asian respondents (80.06%), followed by those in North America (77.78%), while those in Europe (58.59%) and Oceania (36.36%) with the lowest proportion (see Figure 19).<sup>⑩</sup>

Regarding the specific information collection, one administrator told the research group that the HEIs' health center is responsible for health data collection, not only for the collection and updating of health information for students/teachers but also giving detailed information descriptions, questions and recommendations on its website for COVID-19 pandemic and other health needs.

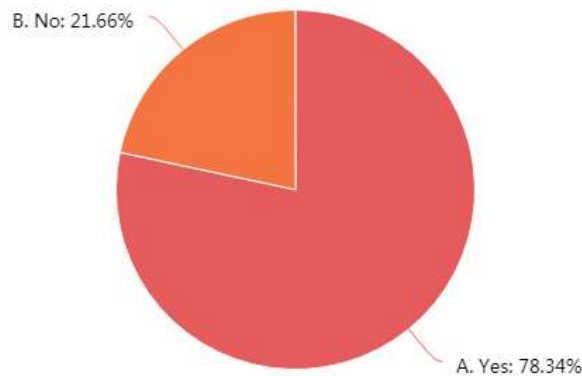


Fig. 19 HEIs collecting health data on the respondents

### 3.1.2 Great Support to HEIs' Preventions for the pandemic

Facing the sudden threat of COVID-19, HEIs around the world have taken preventive measures to avoid large numbers of people gathering on campus by way of stopping face-to-face teaching and carrying on online courses and online services, in order to avoid cross-infection because of a large number of people gathering on campus. At the same time, through the wide dissemination of COVID-19 information, medical guidance and others, students can understand the pandemic prevention from a more scientific channel, and reduce rumors and panic.

In this research, we found that the vast majority of the respondents (83.63%) expressed great support for their HEI's prevention actions, but 6.05% say they did not care. 1.85% said they opposed it (Fig. 20). Overall, HEIs' responses to the pandemic were greatly approved by students.

<sup>⑩</sup> Since the samples are unevenly distributed on each continent, there may be large errors, and information is supplemented here only.

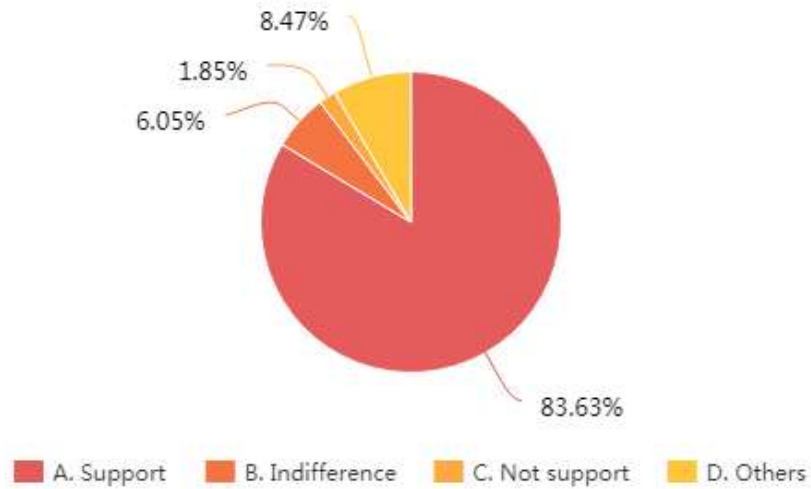


Fig. 20 The Respondents' attitudes to HEIs' prevention actions

### 3.1.3 HEIs Needs further Improvements in Comprehensive Control

During the pandemic breakout, HEIs not only need to actively participate in pandemic prevention as important social organizations, but also need to maintain the basic functions of higher education as education and research organizations, and give necessary services and guidance to students when they need. As for question 24, "from the overall perspective, do you think your HEI has done a good job in crisis management and responsive measures at the critical stage of public health emergency such as COVID-19", 61.91% say HEIs are good, while 30.96% think that their HEIs only reach the average, and 2.68% choose "poor" (Fig. 21). When being asked about the shortcomings in HEIs' crisis intervention and measures, the widely criticized items include administrative efficiency, unskilled teachers, timeliness of replies, equipment of online classroom, etc.



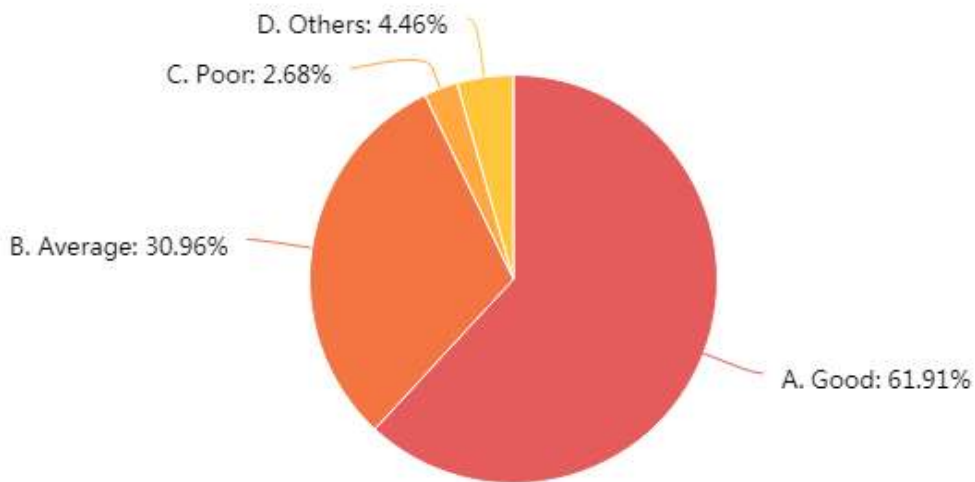


Fig. 21 Respondents' overall assessment of their HEIs' performance

## 3.2 Teaching Guarantee: Online Teaching

### 3.2.1 Online Teaching Ensures HEIs' Basic Functions

In order to ensure that HEIs can maintain the teaching and service functions during the social quarantine stage of the pandemic, HEIs have taken a variety of coping methods. 90.25% of the respondents say their HEIs have adopted teaching online. Besides, online services (50.51%), free online open courses (48.22%), online research (36.5%) and other measures were also taken (Fig. 22). Only 6.43% say that their HEIs conduct "free open virtual/simulation experiments", which is a kind of technical achievement which uses virtual reality technology to let the experimenter simulate the experiment program and give relevant feedback through the program or/and network. <sup>11</sup>



Fig. 22 HEIs' actions taken for "campus lockdown without stopping learning"

<sup>11</sup> Ferrero, Alessandro, and Vincenzo Piuri. "A simulation tool for virtual laboratory experiments in a WWW environment." *IEEE Transactions on Instrumentation and Measurement* 48.3 (1999): 741-746.

### 3.2.2 Blending teaching (online +offline) is most popular

In terms of the teaching methods that HEIs can carry out during the pandemic, 71.78% favor blending teaching (online +offline), the most popular measures taken. At the same time, “limit the flow of people in libraries, lecture halls, laboratories, and other teaching places” (57.07%) and “teachers and students wear masks and other protective measures” (55.67%) are also welcomed and recognized by over half of the respondents. “Carry out ‘off-peak teaching’ in a different time, venues and classification” (44.14%) and “student self-study while teachers answer his/her individual questions”(44.71%) are also supported. The number of respondents who choose “continue teaching as usual” is the fewest, accounting for only 15.48% (see Figure 23).

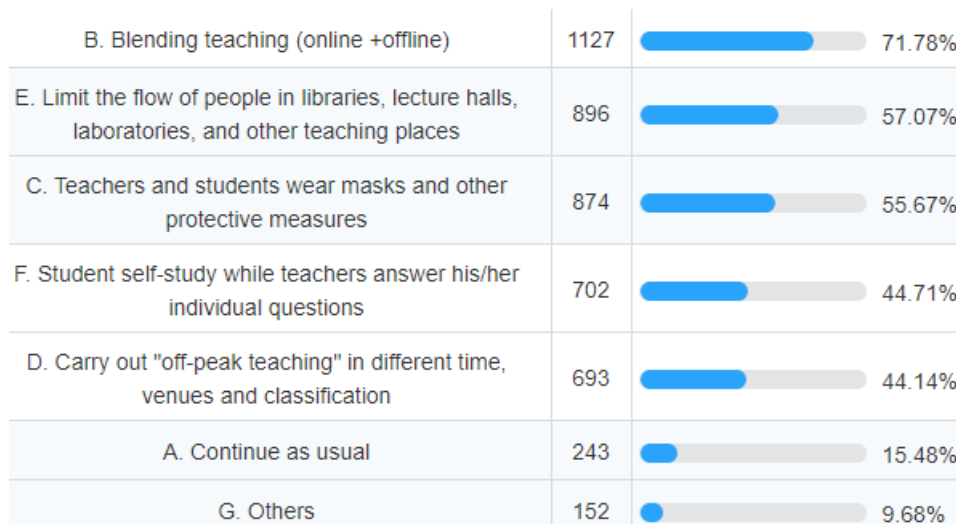


Fig. 23 Teaching methods to be taken during the pandemic (persons; %)

### 3.2.3 Overall Satisfaction with Online Teaching is not High

In terms of evaluation of online teaching, more than half of the respondents say that online teaching is “effective” (53.18%), 26.31% say it is just “OK”, while the percentage of dissatisfied respondents is 14.68%, and 5.73% choose “others” (Fig. 24). The respondents’ dissatisfaction with online teaching is mainly due to the following reasons:

1. Device failure: Students and teachers all say that due to network instability, the problems of cameras, computers and other devices, their classroom participation is interrupted to a certain extent. *“No matter how hard I tried, the computer at home can’t open Microsoft Stream (video streaming service). Only after the course began for a long time, could I successfully open the course on the mobile phone.”*

2. Increased tasks: due to the nature of the online class, class discussion, testing, teacher’s board book, experimental class are difficult to achieve. *“For my professional major where memory and thinking requirements are very high, no group*

*discussion is really hard to be used to.*” Because of the lack of the efficiency of knowledge delivery and the timely examinations of the results, many classroom contents can only be changed into the way of homework after class to ensure the learning results. As a result, students generally complained that the task of homework increased: *“I only had three reports to write in a week, but after the online class, it became 10. My eyesight decreased.”*

3. Application use problems: many teachers complained that the use of distance courses and live-streaming software has become a big obstacle to online courses. Many of the teachers interviewed agreed that remote video tools are troublesome. Whether it is in-class interaction, courseware screening, or collaborative discussions have caused learning costs and can’t fully and smoothly realize some of the original simple offline functions. One teacher said that because PPT screening and online explanations were stuck at the same time, he had no choice but to record his own explanation in PPT and send it to students in advance for learning.

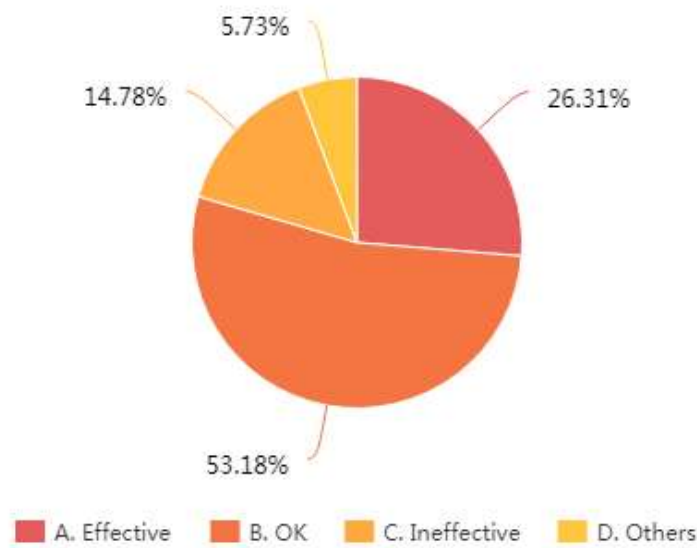


Fig. 24 Respondents’ views on the efficiency of online teaching

### 3.3 Pandemic Fight: Solidarity as One

#### 3.3.1 Stopping Face-to-Face Teaching as the most Supportive Initiative

In terms of the measures taken, the largest number of the respondents choose “stopping face-to-face teaching” (71.27%,1119 times) and “opening online courses” (69.04%, 1084 times). “Campus lockdown” and “transparency on VOVID-19 information news” were supported by more than 40%. It is well known that the global initiative is “online teaching” instead of “face-to-face teaching”, which is generally supported by students and teachers in HEIs.

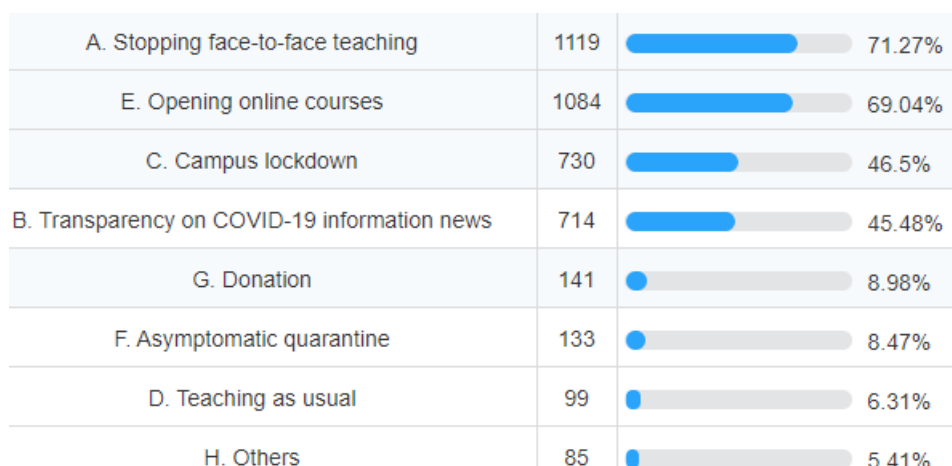


Fig. 25 Effective methods taken by HEIs during the pandemic (persons; %)

### 3.3.2 Quarantine at Home is the most Effective Anti-Pandemic Measure

For effective measures to prevent the pandemic, 90.57% of the respondents choose “no going out, indoors/ quarantine” (1422 people), more than 80% are as followings, “being sure to wear a face mask when going out to prevent droplet infection”, “paying attention to personal hygiene, wash your hands frequently”, “no going to crowded places, cancel unnecessary gatherings”, “opposing wildlife trade, avoid contact with wild animals” and “paying attention to my own health, for early detection, early quarantine and early treatment”. Some (236times) also choose “quarantine those who came back from the pandemic area in time”(Fig. 26).

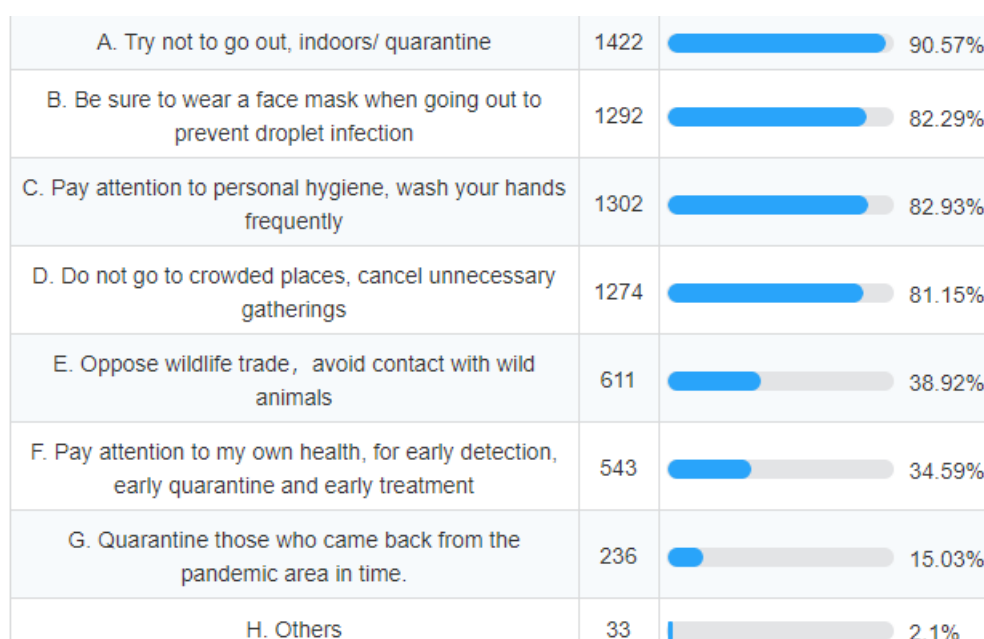


Fig. 26 The methods to effectively prevent the infection of the pandemic  
(persons; %)

## 4. HEIs' actions in the Post-Pandemic Era: Sustainable Development

As mentioned at the beginning, Max Friedman reinterpreted the abbreviations “B.C.” (before Christ) and A.C.(after Christ), as “B.C.” (before COVID-19) and A.C.( after COVID-19). That is to say, COVID -19 has divided the world into two different worlds before and after the pandemic. No matter we want to admit or not, the pandemic has profoundly changed the world we live in.

### 4.1 Risk Control: Being Cautious

As the main battlefield to cultivate talents for higher education, both the multiple geographical location of the persons and the feature of the open campus, make the persons' mobility more complex. So if HEIs make the decision for students to return to campus, the first importance premise is to make sure that the pandemic risk level in the region has been reduced to a safe degree, and must be equipped with effective medical resources and crisis intervention mechanism, in order to maximize the safety of teachers and students and eliminate the risk concerns of students and parents.

#### 4.1.1 COVID-19 Carriers are Considered the Greatest Risk Factor

If returning to campus and resume classes normally, the greatest risk factor identified by the respondents is “potential COVID-19 carriers” (77.52%, 1217 persons). “Large crowds gathering” (72.29%, 1135 persons) ranks the second place. 40.13% worry about “inadequate supply of medical resources” and 35.8% care about “inadequate sanitation and disinfection measures”(Fig. 27). Therefore, an important prerequisite for\ campus re-opening is that HEIs are well prepared for pandemic prevention, crowds control, medical resources and the improvement of crisis mechanism. At the same time, through appropriate publicity means, HEIs must ensure that relevant measures are understood and implemented by teachers and students.



Fig. 27 Awareness of back-to-campus risk factors (persons; %)

#### 4.1.2 Half Respondents cannot Accept the Returners from High-Risk Countries/Territories

As for Q. 25, “What is your reaction to the returning students from the regions/countries with a high risk of a pandemic to continue learning or return to campus?” the majority of the respondents say it is “unacceptable” (44.71%), 37.13% are “acceptable” while 7.9% are “indifferent”(Fig. 28). In order to restore the daily functions, HEIs need to fully consider the concerns of teachers and students in this aspect, provide necessary instructions, rules or guidance to ensure the smooth development of teaching and research, and to avoid the stigmatization of some communities to the greatest extent. For example, according to the prevention rules of the local community, HEIs must carry out necessary and periodic medical tests and quarantine, require teachers and students to wear protective measures, carry out popular science education on COVID-19 infection and protection, etc.

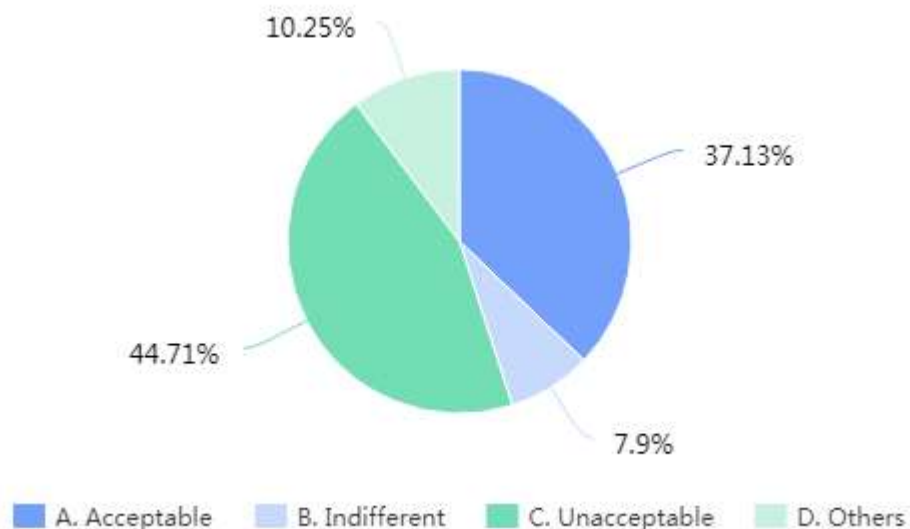


Fig. 28 Acceptance of the returners from the regions/countries with a high risk of the pandemic

## 4.2 Recovery Function: Guarding against the Unexpected

### 4.2.1 It is Necessary to Provide PTSD Counseling

For everyone to be able to learning/work and life in a better state, HEIs must consider the psychological impact on students and teachers after the public health crisis, and it is essential to provide psychological counseling to those in need.

As for Q. 29, “do you think it is necessary for HEIs to take measures to the students with Post Traumatic Stress Disorder (PTSD)”, 74.14% think it is “necessary”, 16.88% think it may be “not really necessary”, only 2.99% think it is “not necessary”(see Figure 29). Some people will have serious psychophysiological and behavioral reactions after going through a public health crisis. They often have more personal experience of the crisis or have trauma. Their traumatic experience will lead to psychological diseases such as PTSD and severe depression. In this case, professional psychotherapy is necessary.<sup>12</sup>

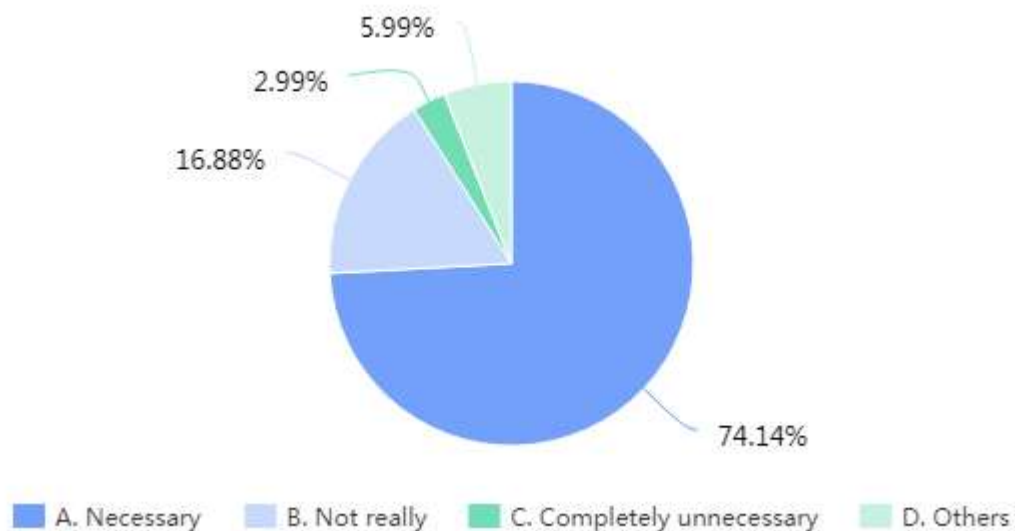


Fig. 29 Views on the necessity for students' PTSD counseling

It's worth noting that 93.94% of respondents from the U.S. say it's necessary for HEIs to take measures to the students with PTSD, which is higher than the average survey (Fig. 30). It is consistent with the above-mentioned fact that U.S. respondents say that their learning/work is more affected by the pandemic, and severely affected U.S. respondents may be more likely to need psychological treatments associated with it. At the same time, psychological therapy in the U.S. is more popular than that in Asian countries/territories.

<sup>12</sup> Friedman, Matthew J., et al. "Considering PTSD for DSM-5." *Depression and anxiety* 28.9 (2011): 750-769.

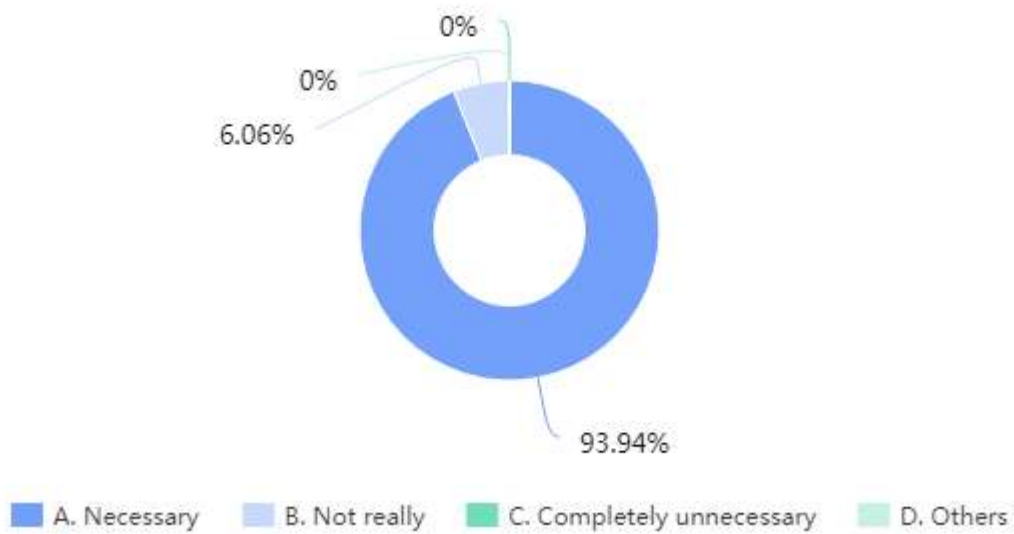


Fig. 30 U.S. respondents' thought of the need for PTSD counseling

#### 4.2.2 Combination of Continuous Pandemic Prevention and Offline Education is widely **Recognized**

If HEIs re-open campus for usual teaching in the post-pandemic era, it is necessary for HEIs to take crucial preventive measures to ensure that the normal learning/work and life do not bring health risks to the teachers and students in the HEIs. In terms of the measures to be taken, most respondents choose “Overall deployment: continuous measures to fight against pandemic” (73.69%, 1157 times), “strongly encourage blending Teaching (offline + online)”(72.55%). Over half of the respondents choose “on-line management, ability-building of public health emergencies” (67.01%). “ensure an adequate supply of medical material” (64.9%) and “pay attention to students' psychological state, provide psychological consultation and online consultation services” (57.39% ) (Fig. 31).



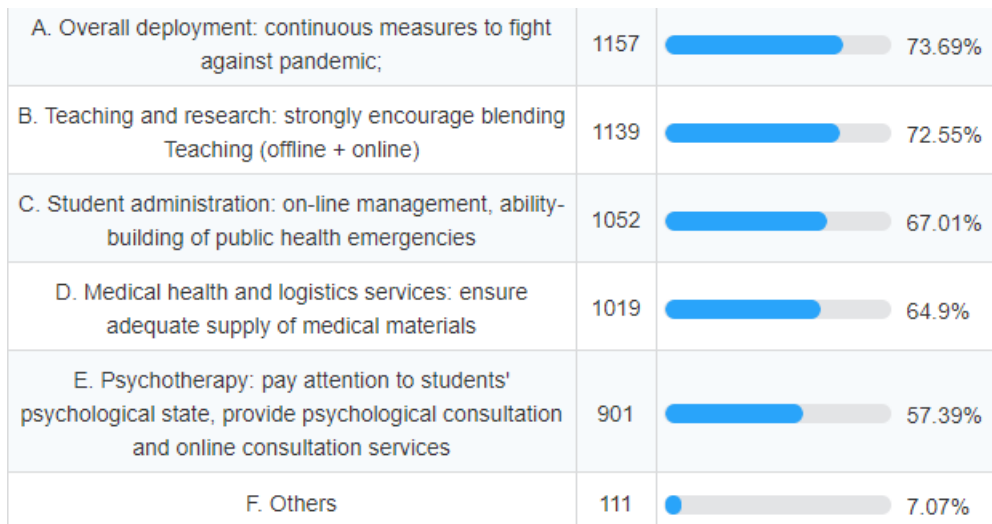


Fig. 31 Measures should be taken by HEIs in the post-pandemic era (persons; %)

In the post-pandemic era, HEIs not only need to fully consider the needs of teachers and students in the physical and mental health needs of teachers and students, equipped with pandemic prevention measures, crisis intervention mechanisms, reasonable and effective medical services but also need to respond in teaching. For example, for students unable to return to campus due to travel restrictions to provide appropriate solutions or certain online teaching and service channels to ensure their rights and interests.<sup>13</sup>

At the same time, the extensive online education practice also provides an empirical basis for the next step of teaching reform in HEIs. “We can never ever return to the original state of teaching and learning before the pandemic outbreak because online teaching integrated with ‘Internet +’ ‘intelligence +’ technology has become an important development direction of higher education in China and even the whole world.”<sup>14</sup> In the post-pandemic era, online teaching needs to emphasize 5 keywords: quality, open, share, responsibility and love. These 5 keywords are the unified standard for us to build an international online teaching platform for higher education in the future.

### 4.3 Looking into the Future: a Difficult and Long Journey

#### 4.3.1 Internationalization of Education Faces New Challenges and Opportunities

Internationalization of higher education has been attacked in the short term,

<sup>13</sup> Statement by the Ministry of Education of China ()

<sup>14</sup> Wu Yan, general director of the Department of higher education of the Ministry of Education in China. To accelerate the transformation of online teaching from "freshness" to "new normal" [EB / OL]. 2020-04-28, source: Xinhuanet, [http://edu.hebnews.cn/2020-04/28/content\\_7817736.htm](http://edu.hebnews.cn/2020-04/28/content_7817736.htm)

but not in the long term. During the pandemic, with the widespread adoption of online forms of teaching and it is nearly at the end of the semester, many overseas students choose to return to their home country for such reasons as safety concerns and reuniting with their families. In this case, 64.45% say the pandemic will impact the internationalization of higher education, 30.64% of respondents think it will “yes in the short term, but not in the long term” while 4.71% do not think there will be any impact (Fig. 32).

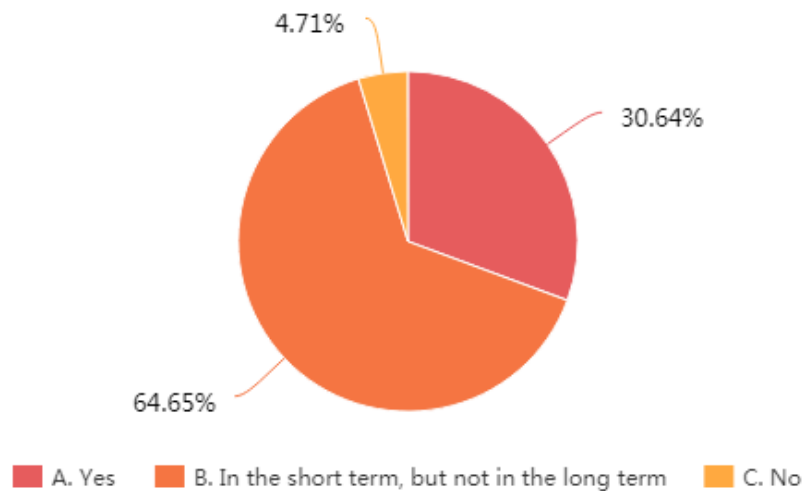


Fig. 32 Views on COVID-19’s impact on internationalization of higher education

The research team believes that the pandemic not only reminds us of the importance of online education but also shows us the unprecedented international cooperation, international exchanges and the importance of international education. With the wide spreading of the pandemic, in many countries there emerge socio-economic crisis, nationalism, populism, “anti-globalization”, which not only has caused negative experiences to many communities but also brought new impacts to the world’s cooperation, competition and population mobility. The post-pandemic era may lead to the restructure the political landscape and reorganize the geo-strategy.

These new variables are bound to affect the internationalization of higher education in the following 5 aspects. First, extensive cooperation and information exchange among countries have played a very important role in the fight against the pandemic, mankind is a closely linked community of destiny, in order to more effectively prevent and control the world health crisis in the future, scientific and technological cooperation and information exchange in HEIs is very necessary. Second, quarantine and restrictions of population mobility brought by the pandemic prevention, to a certain extent, will have a short-term impact on HE internationalization, but after the pandemic, with the re-opening of student mobility, HE internationalization should increase and in the long run. Third, the extensive practice of online education has opened up a new path for global resource sharing. MOOCs and online courses relying on online platforms are facing new development

opportunities. Fourth, from the perspective of teaching content, international understanding and world citizenship education are crucial to the cultivation of ideal, responsible, cooperative young talents. Fifth, in the scenario of “anti-globalization”, active public education and social support are also necessary for HEIs’ sustainable development in the post-pandemic era, in order to ensure that students are treated fairly and justly in campus life.

At a Webinar on the internationalization of higher education, Peggy Blumenthal, senior counselor to the President at the Institute of International Education (IIE), emphasized that online education is important, but campus life is essential to the learning experience of international students. The associate vice president at Melbourne Deakin University said, “the pandemic outbreak reminds HEIs to create a reliable image of education providers, build good reputations, especially to show diversity, openness and humanistic care for international students.”<sup>15</sup>

### 4.3.2 HEIs’ Timely Responses to Prevent Public Health Crisis is Critical

HEIs’ role in preventing and controlling public health crisis should not be underestimated. As for Q. 30, “What do you think HEIs can do during the prevention and control of public emergencies like COVID-19?” most students believe that HEIs should respond promptly, “to require students to stay indoors, ensure they are not getting infected” (79.75%, 1205 times). “Establishing prevention guidelines to educate students” (73.12%) ranks the second place. “Conducting scientific research to combat COVID-19”(58.92%) and “Medical teachers and students actively participate in front-line prevention and control work”(47.9%) are also supported by the respondents(Fig. 33).

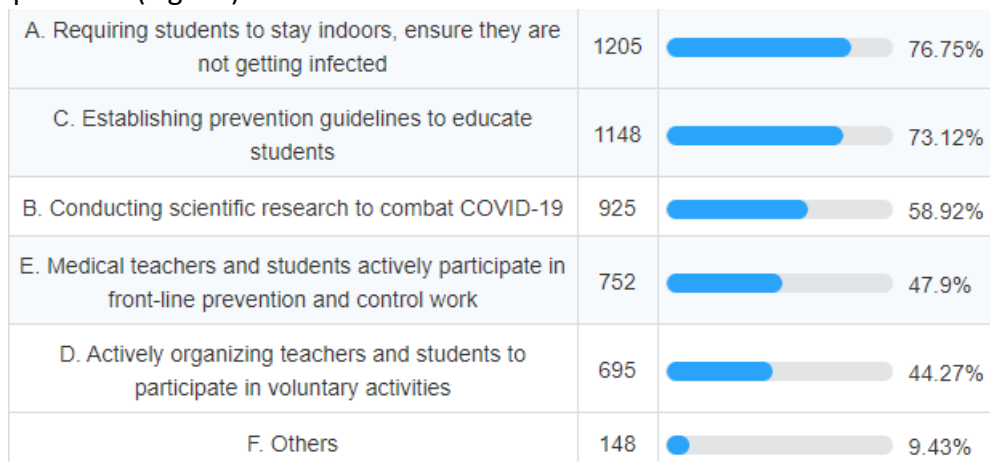


Fig. 33 HEIs’ actions to be taken during the prevention and control of public emergencies

<sup>15</sup> CCG Webinar. How will COVID-19 change international education? 2020-04-18, CCG.

### 4.3.3 Higher Education Plays an Important Role in Responding to Public Health Crises

In the Open Questions section, in response to the question “*What do you want to say facing public health emergency such as COVID-19?*”, we found that most respondents gave positive answers such as “Together”, “Go, Go, the whole world” “Cheer up” “Stay Strong” “Come on” “Calm” and so on (Fig. 34). The role and responsibility of higher education that should be borne in the pandemic are also widely mentioned.<sup>16</sup> Crisis education, health education and others are also the key words widely mentioned. Many respondents say that in response to similar public health emergencies, HEIs have the right and obligation to start with education so that more students can protect themselves more scientifically and effectively and reduce panic and other psychological problems caused by the crisis.



Fig. 34 The word cloud of the question about the views facing public health emergency such as COVID-19

## 5. Survey Founding’s and Reflections on the Pandemic

### 5.1 Survey Founding on the COVID-19 Impact

Through the survey and in-depth interview in HEIs, this research analyzes the individual and HEIs’ impact of the COVID-19 pandemic, and draws the following three brief conclusions:

**1. The impact of Individual Psychological and Behavioral Responses during the pandemic is wide and enormous.** First, the mental state of individuals has dramatic changes: 1) “fear” is the first reaction to most people; 2) the respondents have crisis

<sup>16</sup> Education-related teachers and students are the largest professional source of the sample

awareness and care about others' safety; 3) the mentality of half respondents is in a normal state; 4) 30% of the respondents are still unable to focus on learning/work and life due to stress. Second, the individuals' behavioral patterns are home quarantine: 1) most respondents choose to stay where they are; 2) most respondents are learning at home; 3) learning/work at home negatively affects most respondents; 4) the pandemic impact on the respondents' daily lives in the U.S. is particularly obvious. Third, the respondents' life attitude it to cherish life more: 1) facing the pandemic people cherish life more; 2) they care for the confirmed patients; 3) they have insufficient awareness of labeling/stigmatization.

**2. HEIs' responses and actions to the pandemic are active and supported.** First, HEIs' crisis interventions are in full action: 1) HEIs actively collect extensive health data and information; 2) great support to HEIs' preventions for the pandemic; 3) HEIs need further improvements in comprehensive control. Second, HEIs' teaching guarantee is online teaching: 1) online teaching ensures HEIs' basic functions; 2) blending teaching (online +offline) is most popular; 3) overall satisfaction with online teaching is not high. Third, To fight the pandemic HEIs are united as one:1) stopping face-to-face teaching is the most supportive initiative;2) quarantine at home is the most effective anti-pandemic measure.

**3. HEIs' actions in the post-pandemic era is sustainable development.** First, the risk control is cautious: 1) COVID-19 carriers are considered the greatest risk factor; 2) half respondents cannot accept the returners from high-risk countries/territories. Second, the recovery function is guarding against the unexpected: 1) it is necessary to provide PTSD counseling; 2) the combination of continuous pandemic prevention and offline education is widely recognized. Third, looking into the future is on a difficult and long journey: 1) internationalization of education faces new challenges and opportunities; 2) HEIs' timely responses to prevent public health crisis is critical; 3) higher education plays an important role in responding to public health crises.

## 5.2 Reflections for HE Sustainable Development

The COVID-19 pandemic pressed the "pause button" to suspend our learning/work and daily life and at the same time also open the window of reflections. We have seen the advantages, disadvantages and potentiality of HEIs in dealing with public health emergencies. It can be seen that this public health emergency has brought negative impact to people, but also brought us deep self-reflection, so that people pay more attention to mental health, life safety, care lives and social justice.

In the future, we must deeply reflect on what HEIs and individuals acted before COVID-19 ( B.C), what they are acting during COVID-19 (D.C.) and what they will do after COVID-19(A.C.). We keep an open and inclusive mind, effectively play the special role of higher education, and make contributions to the sustainable development of higher education.

**1. To make future plan to improve educational governance capacity in the "Post Crisis Era", and make modern system of educational governance to cope with**

**the public social crisis.** In response to this pandemic, the responsive measures of national education systems and national ministries of education in various countries are temporary and unconventional to a large extent, which reflects that different educational governance in different countries do not have the ability to deal with the public social crisis, including the ability to warn and respond to the crisis. First of all, we should enhance the ability to judge and research education crisis. Second, we should improve the ability to cope with education crisis; finally, higher education should give full play to crisis awareness and crisis ability to deal with the public social crisis. Only in this way, can education governance change from fuzzy to clear state, from uncertain to definite condition, can we highlight the characteristics of legalization, institutionalization and standardization of education governance system, and establish a normal crisis response mechanism for future sustainable development.

**2. HEIs must cultivate talents with “macro-education concept” from the perspective of the whole society.** The COVID-19 breakout reminds HEIs to think about education reform and development from the perspective of the whole society, and to set up “macro-education concept”, which is, to “observe education outside HEIs and education”. The function and value of education is not only to accumulate human capital, but also to cultivate social civilization, establish scientific and global perspective, possess scientific knowledge and global citizen consciousness. Education contents should not only include book knowledge, but also the inheritance of human civilization and moral education. Education forms should not only be campus education, but also social education, family education, etc. Education venues should not only be in classrooms on campus, but also be in “virtual classrooms in the air” and in various educational providers. Therefore, HEIs must cultivate talents with “macro-education concept” from the perspective of the whole society in terms of teaching purposes, contents, forms, venues and others.

**3. Higher education must further strengthen “education community of shared future for mankind”.** The COVID-19 outbreak in the world reminds everyone that the world is an inseparable whole. Virus is the common enemy to all mankind, without national boundaries nor race,. No country can stand outside and be independent. The rapid spread of the pandemic in the world has rung the alarm bell. Many countries that fail to respond in time and take preventive measures pay a huge price and experience great pain. Globalization connects people all over the world, let us share both prosperity and sufferings. The fate of mankind is closely intertwined with both happiness and bitterness. HEIs need to strengthen the global vision of “global village citizens” and “a community of shared future for mankind”.

Let’s call for responsibility and solidarity, let’s fight against COVID-19 for a better tomorrow!

## Appendix: APQN Survey on the COVID-19 Impact in HEIs



Dear teachers, administrators and students:

The pandemic outbreak of Corona Virus Disease 2019 (COVID-19) relentlessly spread all over the world! As of March 30, 2020, COVID-19 has infected more than 700,000 persons in nearly 200 countries. The winter vacation of some universities has been extended for over 2 months, higher Education Institutions (HEIs) have stopped face-to-face teaching... Our teaching, our learning, our work, our thinking and behaviors have been greatly affected. COVID-19 is a great challenge for you, for me, for each HEI, and for each country in the whole globe. "We are all citizens in this globe village." Please spend about 8 minutes to fill in the survey distributed by the Asia-Pacific Quality Network (APQN). Let's call for responsibility and solidarity, let's fight against COVID-19 for a better tomorrow!

the Asia-Pacific Quality Network (APQN)

March 31, 2020

Part 1: Basic Information

1. Your sex:[单选题] \*

- A. male
- B. female
- C. Other

2. Your age(years old):[单选题] \*

- A. Under 30
- B. 31-45
- C. 46-60
- D. over 60

3. Your field /subject:[单选题] \*

- Philosophy
- Economics
- Law
- Education
- Literature
- History
- Science
- Engineering
- Agronomy
- Medicine
- Management
- Art
- Military Science
- Other

4. You are:[单选题] \*

- A. Teacher
- B. Administrator



- C. PhD/Master candidate
- D. Undergraduate
- E. College student

5. You are from:[单选题] \*

- Asia
- Europe
- Oceania
- North America
- South America
- Africa
- Antarctica

6. Your current location: (in alphabetical order) [单选题] \*

- Afghanistan
- Albania
- Algeria
- Andorra
- Angola
- Anguilla
- Antigua and Barbuda
- Argentina
- Armenia
- Aruba
- Australia
- Austria
- Azerbaijan
- Azores
- Bahamas
- Bahrain
- Bangladesh
- Barbados
- Belarus
- Belgium
- Belize
- Benin
- Bermuda
- Bhutan
- Bolivia
- Bosnia Herzegovina
- Botswana
- Brazil
- British Virgin Islands
- Brunei Darussalam
- Bulgaria
- Burkina Faso
- Burundi

- Cambodia
- Cameroon
- Canada
- Canary Islands
- Cape Verde
- Cayman Islands
- Central African Republic
- Chad
- Chile
- China mainland
- Chinese Hongkong
- Chinese Macao
- Chinese Taipei
- Christmas Island
- Cocos Islands
- Colombia
- Comoros
- Congo Brazzaville
- Cook Islands
- Costa Rica
- Croatia
- Cuba
- Cyprus
- Czech Republic
- Democratic Republic of the Congo
- Denmark
- Djibouti
- Dominican Republic
- East Timor
- Eastern Samoa
- Ecuador
- Egypt
- El Salvador
- Equatorial Guinea
- Eritrea
- Estonia
- Ethiopia
- Falkland Islands
- Faroe Islands
- Fiji
- Finland
- France
- French Guiana
- French Polynesia
- Gambia
- Georgia

- Germany
- Ghana
- Gibraltar
- Gabon
- Greece
- Greenland
- Grenada
- Guadeloupe
- Guam
- Guatemala
- Guinea-Bissau
- Guyana
- Guinea
- Haiti
- Honduras
- Hungary
- Iceland
- India
- Indonesia
- Iran
- Iraq
- Ireland
- Islas Malvinas
- Israel
- Italy
- Jamaica
- Japan
- Jordan
- Kazakhstan
- Kenya
- Kiribati
- Korea-North
- Korea-South
- Kuwait
- Kyrgyzstan
- Lao People's Republic
- Latvia
- Lebanon
- Lesotho
- Liberia
- Libya
- Liechtenstein
- Lithuania
- Luxembourg
- Macedonia
- Madagascar
- Madeira Islands
- Malawi
- Malaysia
- Maldives
- Mali
- Malta
- Marshall Islands
- Martinique
- Mauritania
- Mauritius
- Mexico
- Micronesia
- Moldova
- Monaco
- Mongolia
- Montserrat
- Morocco
- Mozambique
- Myanmar
- Namibia
- Nauru
- Nepal
- Netherlands
- Netherlands Antilles
- New Caledonia
- New Zealand
- Nicaragua
- Niger
- Nigeria
- Niue
- Norfolk Island
- Norway
- Oman
- Pakistan
- Palau
- Palestine
- Panama
- Papua New Guinea
- Paraguay
- Peru
- Philippines
- Pitcairn Island
- Poland
- Portugal
- Qatar
- Republic of Uzbekistan
- Reunion Island
- Romania
- Russian Federation
- Rwanda
- Saint Lucia
- Saint Vincent and the Grenadines
- Samoa
- San Marino
- Sao Tome and Principe
- Saudi Arabia
- Senegal
- Serbia
- Seychelles
- Sierra Leone
- Singapore
- Slovakia
- Slovenia
- Solomon Islands
- Somalia
- South Africa
- Spain
- Sri Lanka
- St Helena
- Sudan
- Suriname
- Swaziland
- Sweden
- Switzerland
- Syrian Arab Republic
- Tajikistan
- Tanzania
- Thailand
- The Commonwealth of Dominica
- The Commonwealth of Puerto Rico
- The Federation of Saint Kitts and Nevis
- The Northern Mariana Islands
- The Republic of Cote d'Ivoire
- The Turks and Caicos Islands
- The United States Virgin Islands
- Togo
- Tokelau
- Tonga
- Tunisia
- Turkey

- Tuvalu
- Uganda
- Ukrainian SSR
- United Arab Emirates
- United Kingdom
- United States
- Uruguay
- Vanuatu
- Vatican City State
- Venezuela
- Vietnam
- Wallis and Futuna Islands
- Western Sahara
- Yemen
- Zambia
- Zimbabwe

7. The location of your Higher Education Institution (HEI):[单选题] \*

- The same as your current location
- Not the same, then name it \_\_\_\_\_ \*

Part II: your thinking and behavior during COVID-19

8. When you know that COVID-19 is a severely infectious disease, your first psychological reaction (FPI)[单选题] \*

- A. Fear
- B. Anger
- C. Nervousness
- D. Depression
- E. Indifference
- F. Others

9. If your colleagues, classmates or friends come from or have been to a high risk country/region recent your attitude is:[单选题] \*

- A. Fear
- B. Anger
- C. Nervousness
- D. Care
- E. Indifference
- F. Others

10. If your relatives, colleagues, classmates or friends are unfortunately infected with COVID-19, your psychological reaction:[单选题] \*

- A. Fear
- B. Anger
- C. Nervousness
- D. Indifference
- E. Worry
- F. Care

G. Others

11. If you are in a serious epidemic country/region and you have chance to go to a safer country/region, you may:[单选题] \*

- A. Leave
- B. Not sure
- C. Stay
- D. Others

12. Since the COVID-19 breakout , your attitude to life:[单选题] \*

- A. Cherish life more
- B. Cherish life
- C. The same
- D. Never thought about it
- E. Despise life
- F. Others

13. What is your attitude towards the labelings / stigmatization during the pandemic?[单选题] \*

- A. Agree
- B. Not sure
- C. Disagree
- F. Others

14. What are your methods to effectively prevent the infection of COVID-19: [多选题] \*

- A. Try not to go out, indoors/ quarantine
- B. Be sure to wear a face mask when going out to prevent droplet infection
- C. Pay attention to personal hygiene, wash your hands frequently
- D. Do not go to crowded places, cancel unnecessary gatherings
- E. Oppose wildlife trade, avoid contact with wild animals
- F. Pay attention to my own health, for early detection, early quarantine and early treatment
- G. Quarantine those who came back from the pandemic area in time.
- H. Others

15. What kinds of activities have you spent more time on during your quarantine/stay indoors: [多选题] \*

- A. Reading
- B. Researching
- C. Learning
- D. Communicating with the lover and close friends
- E. Playing games
- F. Watching TV plays/films
- G. Internet chats
- H. Exercise and workout
- I. Beauty treatment
- J. Cooking
- K. House keeping
- I. sleeping
- M. Reading online news
- N. Others

16. During COVID-19, many of your activities have been cancelled and you cannot go to campus. Wh you think of your teaching/learning/research/work?[单选题] \*

- A. More concentrated than ever
- B. The Same
- C. Cannot get concentrated
- D. Others

17. How bad does the long vacation or campus lockdown caused by COVID-19 affect your teaching/learning/research/work:[单选题] \*

- A. Severely
- B. Lightly
- C. None
- D. Others

18. What are the crucial issues for HEIs if the students from all over the world study as usual on camp during COVID-19? : [多选题] \*

- A. Large crowds gathering
- B. Potential COVID-19 carriers
- C. Inadequate supply of medical resources
- D. Inadequate sanitation and disinfection measures
- E. Others

Part 3: HEIs' Action fight against COVID-19

19. Have your HEI ever collected your health information concerning COVID-19?[单选题] \*

- A. Yes
- B. No

20. What is your attitude towards your HEI response to COVID-19?[单选题] \*

- A. Support
- B. Indifference
- C. Not support
- D. Others

21. What kind of HEIs' actions do you support ? [多选题] \*

- A. Stopping face-to-face teaching
- B. Transparency on COVID-19 information news
- C. Campus lockdown
- D. Teaching as usual
- E. Opening online courses
- F. Asymptomatic quarantine
- G. Donation
- H. Others

22. What kinds of actions have your HEIs adopted for "Campus lockdown without stopping learning" during COVID-19 ? : [多选题] \*

- A. Online teaching
- B. Online scientific research
- C. Online services
- D. Free and open online courses

E. Free open virtual/simulation experiments

23. How effective has on-line teaching during COVID-19? [单选题] \*

- A. Effective
- B. OK
- C. Ineffective
- D. Others

24. From the overall perspective, do you think your HEI has done a good job in crisis management and response measures at the critical stage of public health emergency such as COVID-19:[单选题] \*

- A. Good
- B. Average
- C. Poor
- D. Others

Part 4: Your suggestions to universities facing public health emergencies such as COVID-19

25. What is your reaction to the fact that your HEI requires students from the regions/countries with high risk of pandemic to continue learning or return to campus?[单选题] \*

- A. Acceptable
- B. Indifferent
- C. Unacceptable
- D. Others

26. Due to COVID-19, many overseas students have returned home. Do you think COVID-19 will impact the internationalization of higher education?[单选题] \*

- A. Yes
- B. In the short term, but not in the long term
- C. No

27. What kinds of actions must be taken by your HEI after the pandemic is under country control and the re-open of the campus? : [多选题] \*

- A. Overall deployment: continuous measures to fight against pandemic;
- B. Teaching and research: strongly encourage blending Teaching (offline + online)
- C. Student administration: on-line management, ability-building of public health emergencies
- D. Medical health and logistics services: ensure adequate supply of medical materials
- E. Psychotherapy: pay attention to students' psychological state, provide psychological consultation and online consultation services
- F. Others

28. What kinds of teaching method should be taken during COVID-19 ? [多选题] \*

- A. Continue as usual
- B. Blending teaching (online +offline)
- C. Teachers and students wear masks and other protective measures
- D. Carry out "off-peak teaching" in different time, venues and classification
- E. Limit the flow of people in libraries, lecture halls, laboratories, and other teaching places
- F. Student self-study while teachers answer his/her individual questions
- G. Others

29. The Students from the country/region with high-risk of COVID-19, might be in Acute Stress Disorder (ASD). After the pandemic is over, do you think it is necessary for HEIs to take measures to the students with Post Traumatic Stress disorder (PTSD):[单选题] \*

- A. Necessary
- B. Not really
- C. Completely unnecessary
- D. Others

30. What do you think HEIs can do during the prevention and control of public emergencies like COVID-19: [多选题] \*

- A. Requiring students to stay indoors, ensure they are not getting infected
- B. Conducting scientific research to combat COVID-19
- C. Establishing prevention guidelines to educate students
- D. Actively organizing teachers and students to participate in voluntary activities
- E. Medical teachers and students actively participate in front-line prevention and control work
- F. Others

Part 5: Open question

31. What do you want to say facing public health emergency such as COVID-19? [填空题]

\_\_\_\_\_

Let's fight against the pandemic for a better tomorrow!