

Study on the Impact of Virtual Teaching on Students' Psychological State during the Covid-19 Period

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Abstract: The COVID-19 has exerted tremendous effects on the myriads of parts in this globe whether they were industries or educational departments in 2020. Especially in education, the majority of schools shut down and encouraged virtual teaching in order to prevent and control the pandemic and avoid being infected by the virus.[2] It can be seen that the outbreak of the COVID-19 has thoroughly transformed traditional face-to-face teaching to a virtual one, which made it difficult for many students to adapt and evoked a great deal with problems simultaneously, particularly psychological problems. It was necessary to studied on the impact of virtual teaching on students' psychological state and suggested related coping methods. Therefore, this paper will design a relevant questionnaire, which is capable of investigating students' psychological states from many aspects to collect some valid data and statistics, to do a service to this study.

1. Introduction

The COVID-19 smashed the peace of this world, making everyone panicked. Most schools shut down and encouraged students to study at home with virtual online learning which made it difficult for students to adapt to in that they rarely met such a health emergency before and scarcely took virtual classes, thus myriads of psychological problems happened when students sit in front of the virtual learning environment for a long time. This paper studied the psychological issues of students under the influence of virtual teaching, which included many aspects such as learning motivation, psychological problems and so on. This paper based on the questionnaires which were randomly distributed to students, collecting the data to carry out a comprehensive research and analysis on the learning motivation as well as learning methods of students' learning psychology. Finally, according to the data analysis of students' psychological state, this paper would suggested the corresponding solutions concerning these problems.

2. Research Contents

2.1 Research Objects

We regard 200 college students from various grades as the research objects and distributed an amount of questionnaires. In all the valid questionnaires, 45% were males and 55% were females. Most of the respondents are juniors. The results are as follows, freshmen accounted for 19.52%, sophomores accounted for 37.13%, juniors accounted for 38.58%, and seniors accounted for 4.77%. Then, we carry out the research from the perspective of learning environment of online classes. Among all the respondents, only 23.81% of the respondents think that the online learning environment is very good, 57.14% think that the online learning environment is general, and 19.05% think that the online learning environment is not ideal. The concrete statistical data are shown Table 1.

Table 1 Grade of The Respondents

Grade	Freshmen	Sophomores	Juniors	Seniors
Proportion	19.52%	37.13%	38.58%	4.77%

2.2 STUDENTS' Learning Motivation

In order to study the impact on students' learning motivation with the introduction of two variables: the severity of the epidemic and the duration of virtual classes. We collected the data from the survey by the following methods.[1] Firstly, we get the information of the respondents through the questionnaire. In the related questions in the questionnaire, we designed questions to collect data regarding learning motivation of the respondents from January to June each month and divided students into three typical groups as comparison. Therefore, we can easily know the trend of motivation change through the chart. The specific data of motivation was shown in Figure 2. What's more, the author learned the motivation by comparing the motivation changes during COVID-19 period with them in 2018. The relevant data can refer to Figure 3, and we can be easily seen that each month's average learning motivation in 2018 was all higher than average learning motivation in COVID-19 period and we could confirm that the virtual teaching and the COVID-19 definitely affected students' psychology and learning motivation.

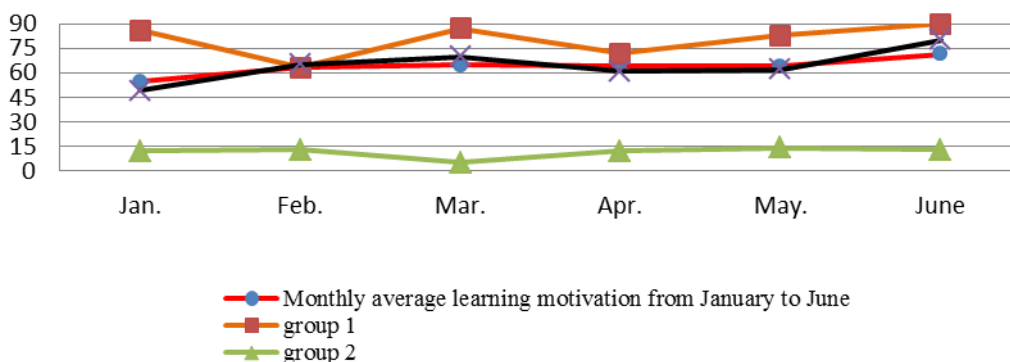


Fig.1 Monthly Learning Motivation from January to June

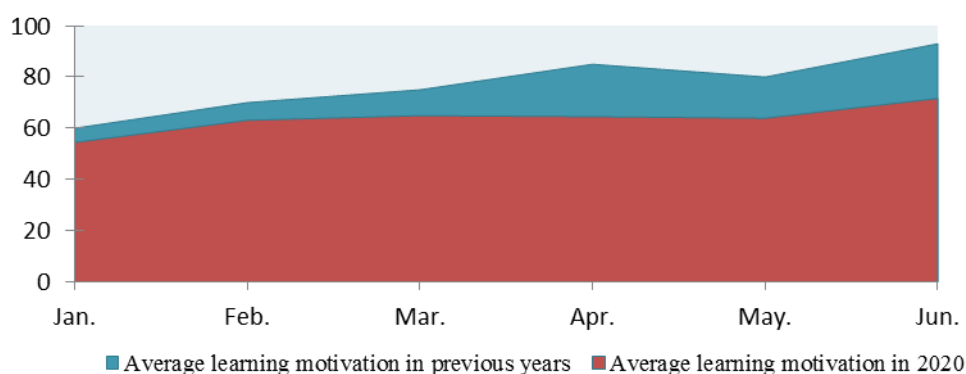


Fig.2 Comparison Average Learning Motivation between in Previous Years and in 2020

2.3 STUDENTS'S Psychological Problems under Virtual Teaching

Actually, more and more psychological symptoms have increasingly appeared in the group of students by virtue of virtual teaching. We list several psychological problems reflected by students under virtual teaching through collecting the relevant data. The specific results are shown in Table 2.[3]

Excitement	17.14%
Weariness of learning	35.43%
Anxiety	20.35%
Social phobia	7.5%
Impatience	19.58%

Table 2 Various Kinds Of Psychological Problems

According to the Table 2, we can see that 17.14% of the students were psychologically excited in the process of virtual teaching. We reckoned that these students enjoyed this novel teaching mode and could fully integrate their learning state into the virtual teaching mode.[4] However, most of the students were tired of learning, accounting for 35.43%. Perhaps it was because the virtual teaching had a relatively loose supervision on students than the traditional face-to-face teaching. Students took advantage of this loophole to entertain themselves in their study. After a long time, they became bored with learning and lose interest in learning. 20.35% of the students showed psychological anxiety during virtual teaching, and 19.58% of the students showed symptoms of psychological impatience. According to the survey, this situation mainly came from two points: 1. Students sit in front of the computer for a long time for virtual learning, and the learning atmosphere was difficult for students to mobilize their learning state, which made them have doubts about their own learning state. 2. It was very difficult for students to focus on online classroom, and it was easy to be distracted and got bored with what the teacher taught. Finally, it was hard to believe that very few people produced psychological problems such as social phobia. During the COVID-19 period, students spent a long time on virtual learning, which was much less in terms of social communication than in offline learning. They showed the symptoms of being unwilling to speak or even afraid of speaking.

2.4 Suggestions on Students with Psychological Problems

2.4.1 Flipped Class

Flipped classroom allows students to prepare learning materials independently. For example, the

background information part of the course will be given to individual students to present, so that students can fully integrate into the online classroom, so as to increase the participation of students and mobilize students' learning enthusiasm.

2.4.2 Supervised Class

Supervised classroom can be mainly reflected in three parts: signing in before class, asking in class and reporting after class. Clocking in before class is mainly to ensure the number of students' virtual learning. Questioning in class mainly focuses on the content of the class at any time, so as to prevent students from missing problems due to inattention. After class report is mainly to understand students' classroom learning situation, so as to achieve the same understanding effect as offline class.

2.4.3 Interactive Class

Interactive classroom can adjust students' psychological state and solve learning problems and psychological problems in time by communicating with teachers in virtual teaching. Teachers can also make timely adjustments through the situation reflected by students, and students can better reach an agreement with teachers.

3. Conclusion

In summary, the COVID-19 has greatly affected every student who uses virtual learning, especially the psychological status. Because sitting in the virtual classroom for a long time, whether it was psychological or physical, there were great differences between traditional classroom teaching, which also led to a series of physical and psychological problems of students. All these situations need to be alleviated under the joint efforts of the world to resist the COVID-19. In this special period, students should adjust their psychological state and gradually adapt to this form of teaching mode.

References

- [1] Su Youli, Zhang Wei, Jiang Xinfeng, Li Lili, Deng Fujun. A study of medical students' online learning burnout during the novel coronavirus pneumonia epidemic. *Journal of North China University of Science and Technology (Health Sciences Edition)*, 2020, 22(4): 306.
- [2] Chen Xiang; Cheng Dehua; Chen Zufan. The effect of students' online learning and its influencing factors were explored during epidemic prevention and control. *China Modern Education Equipment*. 2020 (11): 17-20 plus 24.
- [3] Feng Suzhen. The investigation and study of home study of undergraduate college students during the epidemic prevention and control. *High Teaching Journal*. 2020 (11): 48-51.
- [4] Wang Xinxiang. Psychological process and coping strategies of students' online learning [J]. *Parents*, 2020 (14): 169-170