

The Analysis of Environmental Attitude and Haze Cognition and the Protection Behavior of Chinese College Students

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Keywords: health protection awareness, environmental attitude, haze awareness

Abstract: The frequent occurrence of air pollution in China, especially severe haze weather, has aroused people's concern and exploration on environmental problems. The Chinese government takes solving the haze problem as the breakthrough of environmental governance, but the public lack personal protection awareness or even does nothing in collaborative governance. The article analyses the health protection awareness, environmental attitude and haze awareness, as well as the haze prevention and protection of Chinese college students. Self-health protection awareness and environmental attitude will have a significant positive impact on college students' protection against haze, and haze awareness exists in a direct impact.

1. Introduction

In 2016, 254 out of 338 prefecture-level cities exceeded air pollution standards, accounting for 75.1% of the total. Of these, severe pollution occurred 2464 days and severe pollution 784 days. The number of days with PM_{2.5} as the primary pollutant accounted for 80.3% of the days with severe pollution or above [1] among them, heavy pollution occurs. Haze is not a new phenomenon in recent years, but it has recently become an environmental issue of urgent concern to the public and has triggered public anxiety and dissatisfaction with environmental issues. Therefore, environment and public health, environment and public concern become hot topics. In terms of environment and public health, studies have shown that atmospheric particulate pollution caused by smoke and dust emissions has a significant impact on the public health of Chinese residents. Death caused by cardiovascular disease and cerebrovascular disease in Chinese population is related to long-term exposure to air pollution environment, and short-term exposure to PM_{2.5} will increase the death rate.

People are eager to have a safe, lucky and healthy living environment. However, at the current stage, environmental pollution and frequent occurrence of haze have caused people's concern, panic and dissatisfaction. People's life and health are threatened, and they lack confidence in the government to deal with haze. From the viewpoint of the college students can understand young people's attitude to environment and haze. herefore, it is of great importance to study the college students' awareness level and environmental attitude.

2. Experimental Methods

It is necessary to design a questionnaire according to the theoretical model of KAP, which is a theoretical model and one of the patterns of change human health related behavior, also is a kind of behavioral intervention theory, it will be divided into one type of behavior change of the access to knowledge, attitudes and beliefs, and form practice three consecutive process. The questions involve knowledge, belief, behavior and other aspects related to haze, including health protection awareness, environmental attitude, haze cognition and protective behavior. On the basis of the survey data, a multiple regression method was adopted, and the relevant indicators were statistically analyzed by some data. The health protection awareness in the questionnaire includes 4 questions, the environmental attitude part includes 3 questions, the basic cognition of haze includes 5 questions, and the protection measures and behaviors of haze includes 4 questions (table 1).

Table 1. Questions

Classification	Specific problems
Health Protection Awareness	Whether to drink bottled water for a long time? Whether to buy air purifiers? Do you smoke? Do you take time to exercise?
Environmental Attitude	Reuse the plastic shopping bag? Whether to choose bus or other public transportation as a daily means of transport? Will you have a complaint or report to the relevant departments when finding environmental pollution events?
Haze Cognition	Do you know the air of dust, sulfuric acid, nitric acid and other particles composed of the aerosol system are caused by visual obstacles called haze? Do you know what PM2.5 is? Do you know the occurrence of haze is related to air humidity? Whether the formation of haze weather is related to natural factors such as terrain and climate? Whether haze weather increase the incidence of lung cancer?
Protective Behavior	Whether you will wear a professional anti-haze mask when you go out in hazy weather? Do you wash face and clear nasal cavity immediately when you go out in hazy weather? Do you reduce your outdoor activity time because of the haze weather?

In order to have an in-depth understanding of the relationship between environmental attitudes, haze awareness and protective behaviors of college students, this study designed the questionnaire content, 90 questionnaires were distributed and collected, among which 80 were valid. Of the respondents, 42 were men and 38 were women. The analysis data are as follows:

(1) Health Protection Awareness

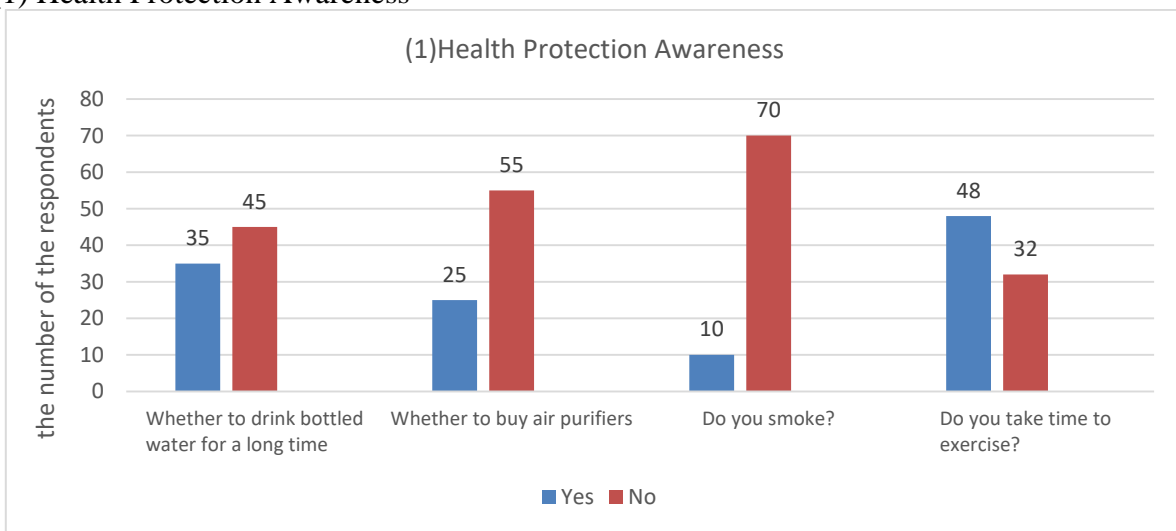


Figure 1. Health Protection Awareness

(2) Environmental Attitude

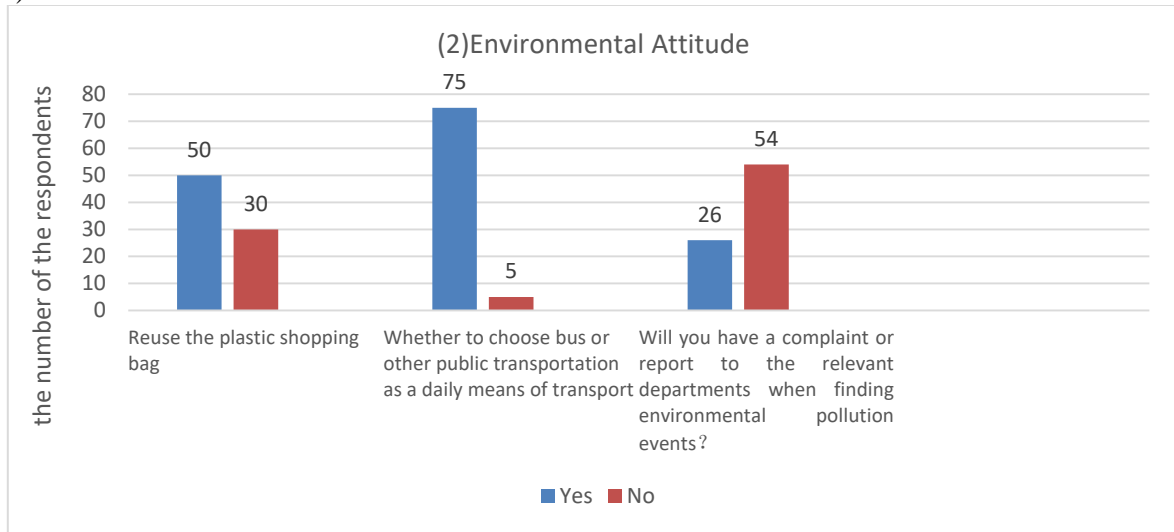


Figure 2. Environmental Attitude

(3) Haze Cognition

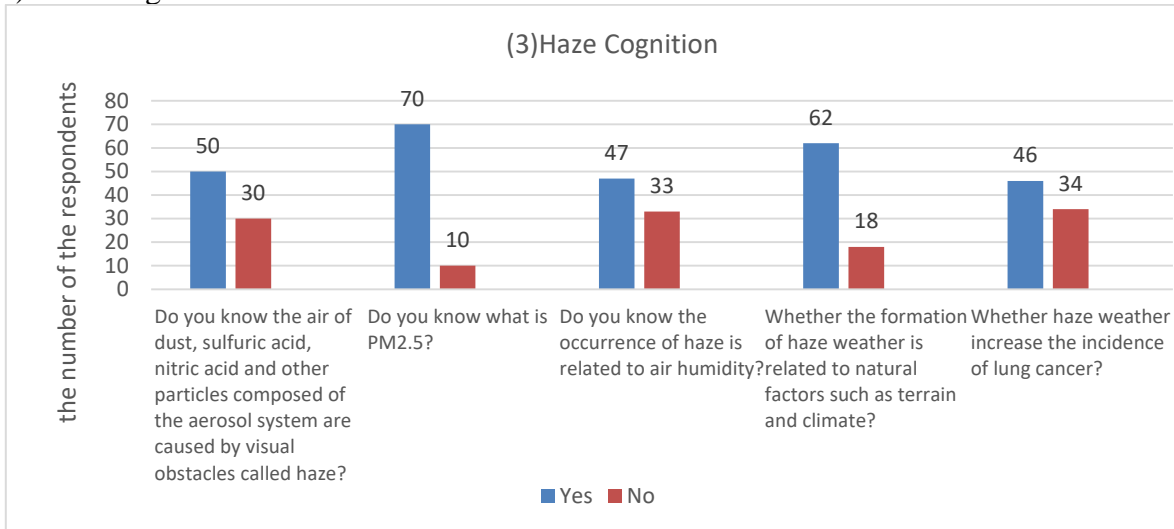


Figure 3. Haze Cognition

(4) Protective Behavior

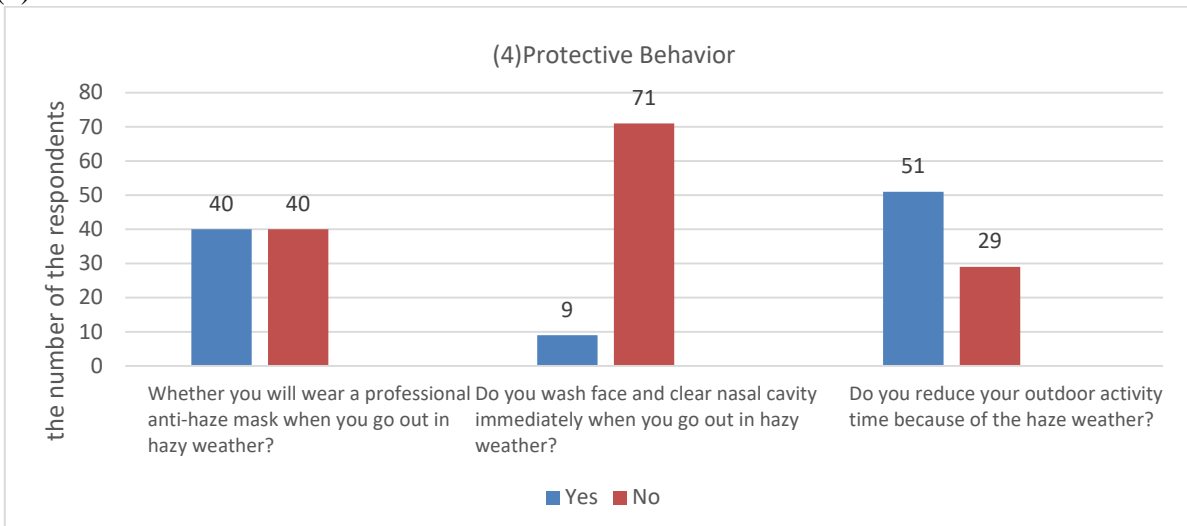


Figure 4. Protective Behavior

3. Questionnaire Analysis

As can be seen from the data of figure 1 and figure 2, majority of the respondent college's students are concerned with the environment and have health protection awareness. Moreover, 50 students of the 80 respondents reuse the plastic shopping bag and 75 students of the total 80 respondents choose public transportation as a daily means of transport, which show that most of the college students have a positive environment attitude. But only 24 respondents of total 80 will report to the relevant departments when finding environmental pollution events.

As for haze cognition, it includes basic cognition of haze, the cognition of haze cause, and the cognition of haze harm. 50 students of 62.5% respondents know that the air of dust, sulfuric acid, nitric acid and other particles composed of the aerosol system are caused by visual obstacles called haze. 70 of the 87.5% respondents know what is PM_{2.5} and 47 of the 58.8% respondents can understand the occurrence of haze is related to air humidity. 62 respondents of the total respondents know that haze weather is related to natural factors such as terrain and climate. 46 respondents of the total respondents realize the haze harm to human health and it increase the risk of lung cancer.

Referring to protective behavior, half of the total respondents will wear professional anti-haze mask when it is hazy. Only 9 respondents of the total 80 will wash face and clear nasal cavity immediately when going out in hazy weather. Moreover, 63.8% respondents will reduce their outdoor activity time because of the haze weather.

4. Conclusion

This study carried out an empirical study on respondents in Wuhan colleges, and found: Firstly, there was a positive correlation between college students' health protection awareness and haze protection behavior. The stronger the health protection consciousness of college students, the better their protective behaviors. Secondly, there was a positive correlation between environmental attitudes and protective behaviors of college students. The better the environmental attitude of college students, the better the protective measures. Thirdly, both basic cognition and harm cognition of haze have an impact on haze protection behavior of college students. The higher the students' basic cognition and harm cognition of haze, the better their protective behaviors against haze. Fourthly, haze awareness has no effect on the haze protection behavior of urban residents.

Moreover, limited by the conditions, the research activities were only carried out in 3 universities in Wuhan, and no questionnaire survey was conducted in other regions. At the same time, the sample size of this study is small, and the results may have some errors, which need to be supplemented and improved in future studies.

References

- [1] Ministry of ecological environment of the People's Republic of China. 2016 China environmental situation bulletin [EB/OL]. [2019-01-08]. <http://www.mee.gov.cn/hjzl/zghjzkgb/lnzghjzkgb/>.