

Research on the Advocacy for Water Conservation in the Promotion of Water Resource Protection

Renfei Chang^{1,a,*}

¹66th Middle School, Taiyuan, Shanxi, 030024, China

a. 3413308148@qq.com

**corresponding author*

Abstract: The question to pose is how to use an assumption to encourage water conservation in a situation where water is scarce. First, the washing time and water consumption are recorded in this article using a stopwatch and measuring cup. Second, we utilized a formula to record the duration of each person's hand washing session. We multiplied the number of seconds by the water flow rate per second to determine the total volume of water each person used. This paper then examined the change in people's hand-washing time following the poster by contrasting the change in people's hand-washing time with the control variable technique. It is possible to draw the conclusion that posters in women's restrooms use the least amount of water, followed by posters in men's restrooms and none at all in women's restrooms. These statistics demonstrate that posters have an effect on how long people spend washing their hands. As a result, after seeing the signs, people will wash their hands less frequently, fulfilling the goal of conserving water.

Keywords: Posters, hand washing, water conservation, propaganda, experiments

1. Introduction

Water is the source of life and an important basis for human survival and development. However, with the growth of the global population and economic development, the demand for water resources is increasing while the available freshwater resources are decreasing. Therefore, we must take effective measures to save water to deal with the water crisis. Economical use of water resources is conducive to alleviating the contradiction between supply and demand of water. Expanding the coverage of water saving can effectively link the water supply pressure of relevant water supply units and provide basic guarantee for the healthy development of social economy. In addition, water conservation can also reduce the living expenses of multiple families and the expenses of various enterprises and institutions [1]. In an environment where water is scarce, the question to ask is how to use a hypothesis to push people to conserve water. The first question was whether the time people spent washing their hands changed after seeing the poster. The second question is how much water can be saved. First, we need to use a stopwatch, measuring cup to record the washing time and water consumption. Second, we use a formula to record the data, which records the time each person washes his hands, and multiply the number of seconds he washes his hands by the flow of water per second to get the total amount of water he uses. Then, by comparing the change of people's hand-washing time after seeing the poster with the control variable method, we studied whether people's hand-washing time would change after seeing the

poster, and predicted whether people's water consumption would change. If there is any change, then we can urge people to save water through publicity and posters, which will affect the change of water resources. The sustainable use of water resources is an important part of sustainable development. Saving water helps to ensure the stability of the ecosystem and the sustainable development of society. In short, putting up posters in the bathroom is a simple and effective way to promote water conservation. In this way, we can remind people to pay attention to the problem of water resources, raise awareness of water conservation, and make our own contribution to protecting the earth. In this way, we can remind people to pay attention to the problem of water resources, raise the awareness of water conservation, and make our own contribution to protecting the earth home.

2. The importance of water conservation

With the development of society and the growth of population, water resources have increasingly become the focus of human attention. The accelerating pace of urban construction has brought a large number of people into the urban society, which has brought huge pressure to urban development, among which the water shortage is the most prominent problem. With the continuous increase of urban population, water demand is also growing, although China has a large total water resources, but the per capita occupancy is relatively small, the substantial increase in urban population water demand aggravates the urban water problem, so that the sustainable development of China's social economy is severely restricted[2]. However, in our daily life, the phenomenon of wasting water resources is not uncommon. In order to raise people's awareness of water saving, we propose to put up posters in the toilets to educate people to save water. First of all, posters are a form of publicity with a strong visual impact. Through its beautiful design and eye-catching slogan, the poster can attract people's attention and make them pay attention to the importance of water conservation when they go to the toilet. With the progress of communication technology, poster art has experienced more than a century of development. As a "medium" and "art" poster works, from the street to the art gallery, from war propaganda to news products, posters are an important part of witnessing the development of social civilization[3].

Through colorful symbols such as color, text, graphics and images, public welfare posters vividly express the theme and concept they express, which plays a positive role in spreading mainstream values and positive social energy. Public welfare posters play part of the role of social publicity. Only by taking all factors into account comprehensively can the posters designed in this way be accepted by all social strata and play a real role[4].

Secondly, the bathroom is one of the most indispensable places in people's daily life. People come into contact with water when they go to the toilet, wash their hands, and so on. Therefore, pasting posters in the bathroom can make people remind themselves to save water during the process of using water. Protecting water resources, saving water can reduce the waste of water resources, thus protecting the limited water resources, so that it can better meet the needs of human beings. Promoting sustainable development: The sustainable use of water resources is an important part of achieving sustainable development. Saving water helps to ensure the stability of the ecosystem and the sustainable development of society.

Saving water can reduce the pressure on water resources and reduce the risk of water crisis, thus ensuring human survival and development. Of course, poster campaigns alone are not enough. The government and society should also take a series of measures to promote the popularization and improvement of water-saving awareness. For example, publicity and education on the protection and rational use of water resources can be strengthened, and water-saving technologies and equipment can be promoted. In short, putting up posters in the bathroom is a simple and effective way to promote water conservation. In this way, we can remind people to pay attention to the

problem of water resources, raise the awareness of water conservation, and make our own contribution to protecting the earth.

3. Research Design

3.1. Method

With the intervention of new media and diversified publicity methods, posters are gradually affected. Although posters are not the most direct advertising, their own characteristics and presentation have strong artistic appeal and visual impact, especially the design posters with different themes will have their own unique creativity[5].

The amount of water people use to wash their hands changes after seeing the poster in figure 1.

First, we have a hypothesis. One had posters in the bathroom on the left, and one had no posters in the bathroom on the right. An experiment was conducted to compare the time people spent washing their hands before seeing the poster and the time they spent washing their hands after seeing the poster, so as to judge whether people's behavior would change after seeing the poster.

3.2. Experiment

Fill a measuring cup with a capacity of 550, divide the volume of water by the number of seconds it takes to fill a cup of water, and find that the water consumption per second is about 100.55 ml.100.55ml. Then multiply the time for each person to wash their hands by 100.55 to find the time for each person to wash their hands. Here is a formula, the rate of water flow per second was multiplied by the amount of time people spent washing their hands to see if those who saw the posters used less water than those who did not.

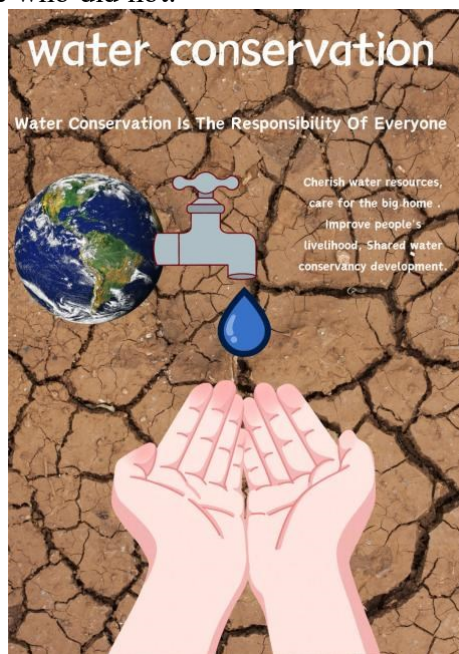


Figure 1: water conservation poster

The water consumption of posters in women's bathrooms is the least, followed by posters in men's bathrooms and no posters in women's bathrooms, followed by no posters in men's bathrooms. It shows an upward trend. It can be seen from these data that posters also have an impact on the time people spend washing their hands. Therefore, after seeing the posters, people will spend less time washing their hands, thus achieving the purpose of saving water.

4. Data description

Table 1: Women have posters

time	gender	identity	Hand washing time	Water consumption
11:36	female	teacher	3.71	373.0405
11:38	female	student	4.18	420.299
13:50	female	student	5.8	583.19
13:52	female	employee	3.43	344.8865
13:52	female	employee	4.79	481.6345
13:54	female	teacher	3.44	345.892
13:55	female	employee	3.22	323.771
14:33	female	student	5.23	525.8765
14:45	female	teacher	4.25	427.3375
15:05	female	student	4.08	410.244

Table 2: Men have posters

time	gender	identity	Hand washing time	Water consumption
11:05	Male	student	5.4	542.97
11:13	Male	employee	3.35	336.8425
11:27	Male	student	5.56	559.058
11:27	Male	student	5.73	576.1515
13:56	Male	teacher	4.3	432.365
14:37	Male	employee	5.36	538.948
14:48	Male	teacher	6.37	640.5035
15:34	Male	student	4.46	448.453
16:40	Male	student	5.03	505.7665
16:49	Male	employee	4.47	449.4585

Table 3: Women have no posters

time	gender	identity	Hand washing time	Water consumption
15:33	female	employee	5.76	579.168
15:40	female	student	3.5	351.925
15:42	female	student	3.45	346.8975
15:42	female	student	5.43	545.9865
15:50	female	teacher	7.39	743.0645
16:43	female	student	7.67	771.2185
16:56	female	student	7.77	781.2735
10:27	female	employee	6.57	660.6135
10:55	female	teacher	6.32	635.476
13:21	female	student	4.79	481.6345

Table 4: Men have no posters

time	gender	identity	Hand washing time	Water consumption
11:37	Male	student	7.4	744.07
11:53	Male	student	6.94	697.817
13:08	Male	employee	5.34	536.937
13:45	Male	teacher	6.47	650.5585
14:32	Male	employee	6.95	698.8225
14:45	Male	student	7.36	740.048
14:45	Male	teacher	7.75	779.2625
16:43	Male	employee	6.78	681.729
16:49	Male	student	7.04	707.872
17:09	Male	teacher	5.35	537.9425

The water consumption of posters in women's bathrooms is the least, followed by posters in men's bathrooms and no posters in women's bathrooms, followed by no posters in men's bathrooms. From these data, according to table 1 to 4, it can be seen that posters also have an impact on the time people spend washing their hands, so after seeing the posters, people will spend less time washing their hands.

5. Conclusion

The water consumption of posters in women's bathrooms is the least, followed by posters in men's bathrooms and no posters in women's bathrooms, followed by no posters in men's bathrooms. It can be seen from these data that posters also have an impact on the time people spend washing their hands. Therefore, after seeing the posters, people will spend less time washing their hands, thus achieving the purpose of saving water. There was no doubt that the time people spent washing their hands after seeing the poster changed, and the time they spent washing their hands became significantly shorter. But the catch is that we can't count the number of people when counting time. For example, in a crowded bathroom, people may wash their hands for less time because some people don't want to delay too much. Or in an empty bathroom, someone may want to carefully clean their hands; they may wash many times. In another case, in the men's bathroom, the sound of men flushing the toilet may mask the washing time, which can lead to a longer washing time during recording and thus draw biased conclusions. If the experiment were to be conducted again, the experimental team would choose a restroom with a large flow of people and use multiple sets of data to reach an accurate conclusion. If conditions permit, machines or cameras may be used to record data, so as to draw more accurate conclusions and data.

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