

STORYING CLIMATE CHANGE

HANGZHOU, CHINA

DAIRE DALY
JAKE MARKO
KELLEY TOWNLEY
BEN WATKINS

West Lake, Hangzhou, Zhejiang Province, China

EXECUTIVE SUMMARY

WHY WE CAME TO HANGZHOU

We are facing a global environmental crisis. The planet's temperature is rising, weather patterns are changing, sea levels are rising, and storms are becoming more extreme. We chose two terms to explain environmental issues in this project: climate change and the environmental crisis. Climate change refers to physical changes in nature like rising temperature and extreme weather events. The environmental crisis is a broader term that includes the causes and consequences of climate change. Though the climate is changing, it is the environmental crisis that includes the negative effects on life. China's rapid growth and development has impacted the environment, and Hangzhou is a city that portrays this change; both the industries and population are increasing.

The purpose of our project was to document the consequences of climate change and the environmental crisis on individuals in Hangzhou. We felt there was a need for more studies on how people are affected personally. We conducted a qualitative study focusing on the stories and experiences of residents using passive observation and active conversation. We then used psychological theories to build the narrative and draw conclusions about the impact of the environmental crisis in Hangzhou.

HOW WE COLLECTED THE DATA

When we came to China, we started by noting our observations and personal experiences, and we took pictures and videos where possible. In an attempt to capture trends, we took one picture every day from Daire's hotel window. As we became more comfortable in Hangzhou, we discussed how to document people's personal stories as a group and with students from Hangzhou Dianzi University (HDU) who helped us with the project. We decided to conduct semi-structured interviews to let locals share their experiences and the changes they have witnessed. The HDU students helped us find interview subjects and aided in translation when the subjects did not speak English. Since we knew of China's gift-giving culture, we made red, white, and blue friendship bracelets for each interview subject. During the interviews, we recorded video and took pictures to document the stories and to present them in the future.

HOW WE INTERPRETED THE DATA

We decided to use four psychological theories to help us understand the stories that we found. The Holistic Model showed how each consequences can affect different parts of a person's wellbeing (Figure 1). A grasp on values helped us understand how people's beliefs guide their actions. Maslow's Hierarchy of Needs gave an explanation of how people can focus on greater issues when their baseline needs are met (Figure 2). The Transtheoretical Model of Behavior Change portrayed the connection between people's perceptions and their actions (Figure 3). These four models helped us build a narrative of the psychology of climate change in Hangzhou.

Figure 1: The Holistic Model

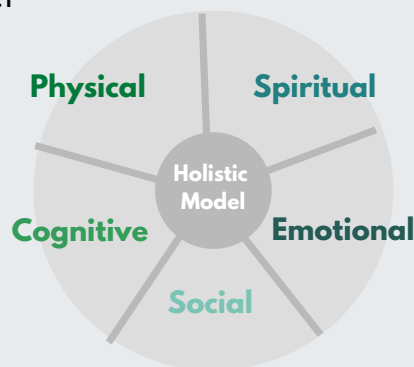


Figure 2: Maslow Hierarchy of Needs

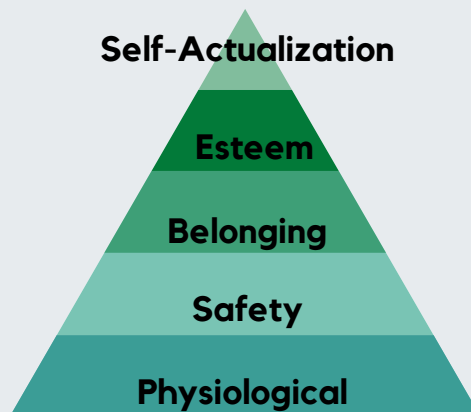
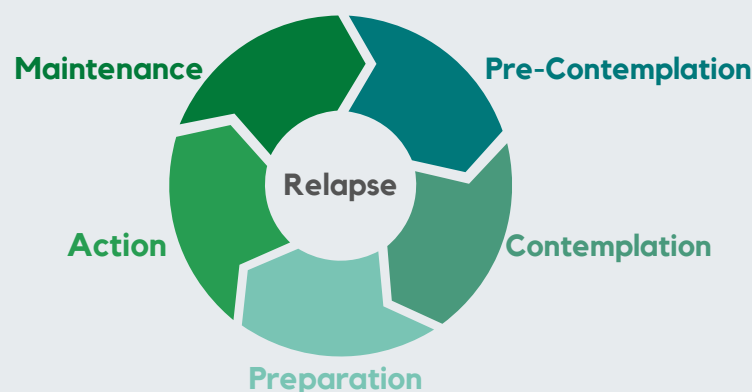


Figure 3: Transtheoretical Model of Behavior Change



WHAT WE FOUND

Our findings fell into three categories: how people are affected by the environmental crisis, how China's rapid growth and development has played a role, and what actions are being taken in response to this crisis. Each category connected well with at least one of the psychological theories to help explain the story of Hangzhou.

We found that people were most affected by temperature increase, weather changes, and pollution, and the consequences manifested holistically. People believe that temperature increase leads to pests harming the harvest of tea, fruits, and vegetables. One subject fears that the warmer weather will prevent her from wearing her traditional Chinese dresses, which connect her to Chinese culture. Changes in weather, like an increase in rain and flooding, may hurt the communities and infrastructure of Hangzhou. Conversely, one tea farmer has experienced a decrease in rain which hurts the strength of her tea trees and leads to a worse harvest. Both air and water pollution have affected the people of Hangzhou. They spoke of air pollution leading to breathing issues and causing terrible smell in the urban environment. Water pollution has destroyed childhood swimming spots and forces people to drink bottled water instead of tap.


Hangzhou has gone through rapid economic growth and development. People's perceptions of this growth reflect how values and Maslow's Hierarchy play a role in the environmental crisis. A common belief we found is that the increase in industry and population has led to pollution in the cities. The industries highly value profit, and many people value the ease of personal cars for transportation. However, we also found that people believe the growth of China has led to an increase in education and standard of living. People's basic needs are met, so they can focus on helping the environment with the problem solving skills they gain in school. We also found that when choosing where to live, people need to decide how much they value money and clean air. People in the city make more money than those in rural areas, but the quality of air is much worse. Each person must make their own choice on what they value more.

We found that people in Hangzhou adapt to changes, try to mitigate the effects, and trust the government to make sustainable policies. The different perceptions and responses are indicative of different stages of the Transtheoretical Model of Behavior Change. People who are further in the stages of change are more likely to mitigate environmental issues, and those who are less far may only adapt to the changes they face. Some people said they adapt to changing weather by moving their harvest schedules and adapt to pollution by wearing masks and using air purifiers. The mitigation attempts we found were focused mainly on reducing personal car use; these people use the metro system, bicycles, and electric scooters to get around the city. We also found that people believe that government intervention has improved environmental issues and has made life easier. If the government continues to act in this way, it may inspire more action globally. The perception we found is that the environmental crisis is a global issue, and the whole world needs to act together to fight it.

WHAT WE CREATED


We created a portfolio of videos interviews with the intention of integrating them into a transmedia platform and on climatestoriesproject.org. We also designed a joint Instagram account for all groups working on the Storying Climate Change projects around the globe. We believe this will help build a following for this initiative by presenting all of the projects in one Instagram location. Posting these videos online will give the residents of Hangzhou a platform to share how climate change has affected their lives.

We recommend for the future that this study be continued in Hangzhou, as well as in other cities in China. China is a diverse nation, and there may be different experiences and perspectives in various cities. Continuing the project will increase awareness of how the all people's lives can be shaped by climate change.



"If it doesn't rain, the trees will die in the sun. Farmers eat from the sky."

-WANG SHUFANG, TEA FARMER



"We are doing our best in order to leave a better environment for our descendants"

-PROFESSOR ZHONG,
PROFESSOR OF ENGLISH