Scholar of Tomorrow

Examining the Nexus Between Gender Equality Perceptions and Sustainability Actions among High School Students in China

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Abstract

This study examines the relationship between one's view on gender equality and sustainability actions among Chinese high school students through a self-developed survey based on the analytical frameworks from relevant indices. Despite revealing weak negative correlations between gender equality views and ecological footprint scores that are statistically insignificant, the re-search underscores the intricate interplay of socio-economic factors, age, and broader context in influencing sustainable behaviors. These findings advocate for comprehensive sustainability education, integrating environmental awareness and gender equality principles to foster paradigm shift and contribute to sustainable development. The study also emphasizes the need for further research with expanded demographics and quantification methods to refine these insights and guide effective policy interventions for addressing environmental challenges.

Keywords: sustainability; gender equality; environmental education; ecological footprint; high school; Beijing

"The world is a complex, interconnected, finite, ecological - social - psychological - economic system. We treat it as if it were not, as if it were divisible, separable, simple, and infinite. Our persistent, intractable global problems arise directly from this mismatch."

— Donella H. Meadows, Whole Earth Models and Systems.

1. Introduction

High-ecological-footprint lifestyle is a complex anthropogenic sustainability issue that involves municipal solid waste, energy consumption, air and water pollution, etc. It can trigger a series of environmental crises that may end up with civilizational collapse around 2040 if humanity continues exploiting natural resources according to the Limits to Growth Model established by MIT scientists. (Meadows) Therefore, investigating factors that influence people's lifestyles in terms of their sustainability actions measuring through ecological footprint is important for improving the issue solutions. According to the UN Framework Convention on Climate Change (UNFCCC), raising public awareness through environmental education is assigned as a responsibility to the Parties of the Convention. (United Nations) It is believed that environmental education can reform people's attitudes which will change their behaviors and help them to make informed decisions. Yet, despite concrete evidence and progressive educational systems in countries like the Netherlands, Italy, the UK, and the US, there is still about 30%-40% of their population who does not see climate change as a major threat to humanity and remains a high-ecological-footprint lifestyle. (Fagan and Huang) Therefore, it may be necessary to redesign and expand the emphasis on environmental education to include more categories to meet the aim of a paradigm shift and change in people's lifestyles to save our

ecosystem and future generations from the existential threat since the result of recently published research by a Swiss think tank aligned with the 2040-collapse prediction. (Helmore)

As early as 1998, a report published by the Women and Development Unit of ECLAC, UN pointed out that the concept of sustainability has gradually broadened. “It was originally applied in the biological and physical context, but has then come to imply the balance that must be struck between environmental, economic, political, social, and cultural processes under a systemic, multidimensional view of development that incorporates intergenerational solidarity, social equity, and long-term considerations as essential elements.” (Nieves Rico) Sustainability today is an interdisciplinary concept that crosses environmental protection, social equity, and economic viability. (Purvis et al.) So, when trying to make people’s lifestyles more sustainable, it is important to consider a holistic mindset that includes both environmental and socioeconomic factors. For one, gender factors in society are closely intertwined with sustainability. According to multiple IUCN reports, gender equality and women’s empowerment are not only matters of fundamental human rights and social justice, but also a prerequisite for sustainable development. Gender inequality creates obstacles to it by limiting women’s access to resources and decision-making in politics, the workplace, society, and family. Based on their 2020 Environment and Gender Information (EGI) data analysis, although there have been improvements, women only held 15% of 712 environmental sector minister positions. (IUCN) Moreover, the UN and academic studies (i.e. Benevolenza and DeRigne) explained that women are disproportionately impacted by sustainability crises due to gender inequality, blocking the progress of sustainable development and amplifying such gap in a positive feedback loop. (UN Women) Therefore, the

investigation of the relationship between gender inequality and people's actions on sustainability can potentially provide insight into sustainable development. Similar research done through quantitative meta-analysis suggested that gender inequality increases the vulnerability to climate change impacts while gender equality facilitates climate actions as the results shown below.

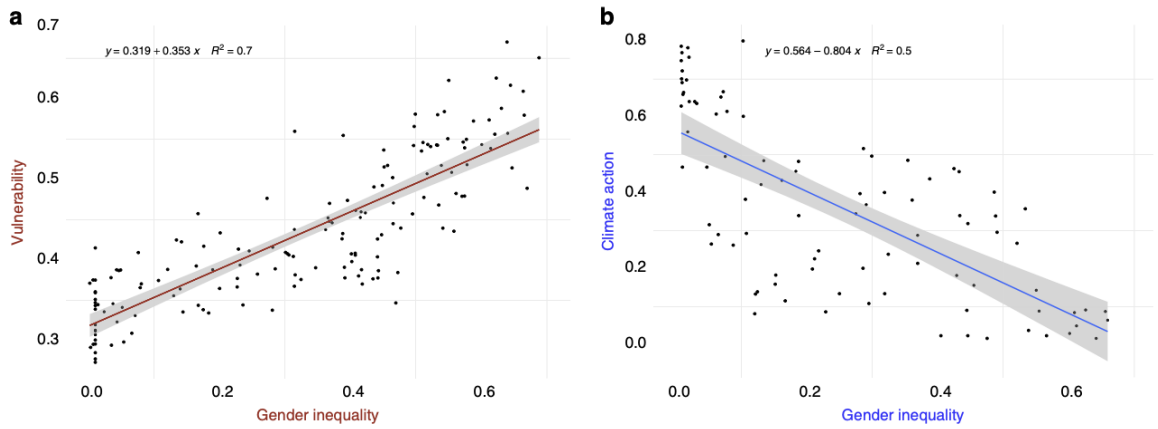


Figure 1. Gender Inequality Index (GII)-correlation with vulnerability and climate actions. (a) GII vs. vulnerability component of the ND-GAIN index (country-level estimates for 2017). (b) GII (country-level average 2005-2010) vs. CLIMI (countries' communications of climate policies 2005-2010) (Andrijevic et al.)

As China is rapidly developing, people's ecological footprint (3.71 hectares per capita) has exceeded the domestic biocapacity of 0.92 hectares per capita.[11] This research, therefore, narrows down to the investigation of the extent to which high school students' views on gender equality will affect their actions on sustainability in terms of ecological footprint scores in China through survey. It can potentially reflect more on people's attitudes and its correlation with their lifestyle, which it may help with the more effective redesign of the current curriculum for environmental and sustainability education in China.

2. Methods

2.1. Hypotheses

Null hypothesis (H0): High school students' view on gender equality has no significant effect on their actions on sustainability in terms of ecological footprint scores in China.

Alternative hypothesis (H1): High school students' view on gender equality has a significant effect on their actions on sustainability in terms of ecological footprint scores in China. Specifically, the more progressive view on gender equality one has (the higher gender equality view scores are), the more actions on sustainability they have (the higher ecological footprint scores are).

2.2. Methodology

A simplified survey (Figure 2) with 8 questions on gender equality view and 8 questions on sustainability actions and the mark scheme is designed based on the reference and the analysis (see subsection 2.3. Justification for details). To reduce the chance of participants guessing out the hypothesis and giving intentioned answers, the questions were relocated through a random number generator and then inserted into the survey generation website https://www.wjx.cn which yielded a web link for participants to access.

*1. On a scale of 1 to 10 (1–not at all, 10–very much), how much do you think that there is gender–stereotypical and biased language use in society?

*2. On a scale of 1 to 10 (1–not at all, 10–very much), how much does the sustainability of a product (for example whether it is eco–friendly labelled) affect your purchase decision?

*3. On average, what percentage of the food on your plate do you throw away uneaten after each meal?

- 0 precent
- Less than 25 percent
- 25–50 percent
- 50–75 percent
- More than 75 percent

*4. On average, what percentage of your daily food intake consists of animal–based products (beef, pork, chicken, fish, eggs, dairy products)?

- 0 precent
- Less than 25 percent
- 25–50 percent
- 50–75 percent
- More than 75 percent

*5. On a scale of 1 to 10 (1–strongly disagree, 10–strongly agree), how much do you agree that childbirth is not women's innate responsibility?

*6. On a scale of 1 to 10 (1–never, 10–very often), how often would you recognize gender–based unfair decisions made by people in your daily life?

*7. On a scale of 1 to 10, how often do you travel by car each week?

*8. On a scale of 1 to 10 (1–strongly disagree, 10–strongly agree), how much do you agree that women should have equal access to all occupational opportunities when they have equal educational background with men?

*9. On a scale of 1 to 10 (1–strongly disagree, 10–strongly agree), how much do you agree that addressing gender inequality should also consider other factors, such as race, ethnicity, socioeconomic status, sexual orientation, and disability, to ensure equal opportunities for all?

*10. On average, how long time in minutes do you take a shower a day?

- Less than 4 minutes
- 4–8 minutes
- 8 minutes
- more than 8 minutes

*11. On a scale of 1 to 10 (1–strongly disagree, 10–strongly agree), how much do you agree that household chores and caregiving responsibilities should be equally shared between men and women?

*12. On a scale of 1 to 10 (1–strongly disagree, 10–strongly agree), how much do you agree that equal funding, support, and recognition should be provided to both male and female athletes and sports teams?

*13. On a scale of 1 to 10 (1–never, 10–always), how often do you reuse/recycle/donate your used items?

*14. On a scale of 1 to 10 (1–never, 10–always), how often do you use reusable bags, bottles, or containers instead of single–use plastic items?

*15. On a scale of 1 to 10 (1–not at all, 10–very important), how important do you think it is to incorporate gender–sensitive education and discussions about gender equality in schools?

*16. On a scale of 1 to 10 (1–never, 10–always), how often do you consider the energy efficiency of appliances and electronics when making a purchase decision?

Figure 2. Survey on one's view of gender equality and their actions on sustainability.

As this study is conducted in a high school (see subsection 2.3.1. Sampling Strategy for details), come into the grade 11 homerooms at the reserved time. Introduce to the participants about the questions in the survey and the nature of anonymity of this survey. Due to the nature of this survey being voluntary, tell the participants to ignore the following part if they are unwilling or unable to do the survey. They are not asked to leave their homerooms since it might cause conformity and spotlight anxiety for the participants and they may feel pressured to leave and be forced to participate. Then, send out the survey link to them. The participants were not informed of the aim and research question beforehand to avoid demand characteristics.

While the participants are answering the survey, wait in their homeroom and explain any questions about the survey raised by the participants. However, explanations should only focus on the meaning of certain words and not lean toward any opinions or attitudes that may potentially affect participants' responses. After data collection, debrief the survey to the participants by explaining the aim, research question, and hypotheses.

Download the raw data into Microsoft Excel, then organize those data. Using the mark schemes (Figure 3), calculate the gender equality view score by adding the rating of the 8 gender questions through summation in Excel. Then, convert all the choices in the sustainability questions into corresponding marks through the substitution formula in Excel, then sum them up to the ecological footprint score.

Mark scheme for questions (1, 5, 6, 8, 9, 11, 12, 15) on one's view on gender equality

The participants will receive the number that they give for each question in this category as their score.
They can receive 80 in total.
The higher their scores are, the more progressive their views on gender equality are.

Mark scheme for questions (2, 3, 4, 7, 10, 13, 14, 16) on one's sustainability actions in terms of ecological footprint scores

The participants will receive the number that they give for the rating questions in this category as their score (except for question 7 the number will reverse with the score, for example, if they choose 10, they will only receive 1 for the score).
For question 10 (choosing A will receive 10, B for 6.66, C for 3.33, and D for 0).
For the multiple-choice questions with five choices (choosing A will receive 10, B for 7.5, C for 5, D for 2.5, and E for 0).
They can receive 80 in total.
The higher their scores are, the more sustainable their lifestyles are.

Figure 3. Mark scheme of the survey on one's view of gender equality and their actions on sustainability.

Represent data in graphs with error bars and construct linear regression lines to show the correlation between one's view on gender equality and their ecological footprint score considering both the overall score and specific categories of the actions on sustainability.

2.3. Justification

2.3.1. Sampling Strategy

Opportunity sampling is used in this study. Grade 11 students in my school are selected as participants primarily because they are conveniently available for the research, but they are also the most suitable group. They have been receiving environmental science and social science education unlike grade 9 and 10 students who do not have these courses and cannot understand all the concepts of gender equality and sustainability. The grade 11 student group is also greater than the grade 12 student group and more data points can be collected for better analysis. The participants were all voluntarily taken part in the study.

2.3.2. Survey Development

The survey is designed based on the analysis of any reference to the authorized surveys and indices from UNDP, UN Women, the Global Footprint Network, etc. Though considering the age and education level of the participants, the survey cannot be as complicated as the authorized surveys online. Moreover, some of the questions in those surveys are not applicable to the participants like "What is the average fuel economy of the vehicles you use most often?" on the footprint calculator. (Global Footprint Network) Therefore, the survey employs a simplified self-developed calculation based on the main dimensions of relevant indices, such as the dimensions of the Gender Inequality Index from UNDP Human Development Reports:

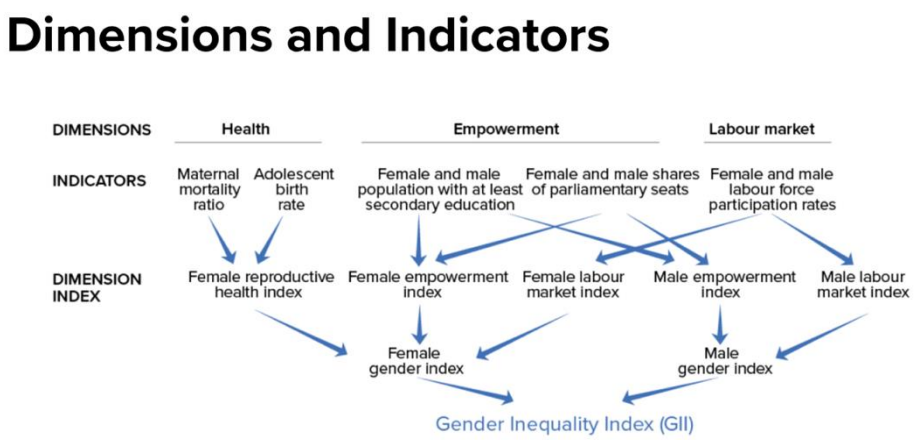


Figure 4. GII Dimensions and Indicators. (United Nations Development Programme)

For the questions on one's view on gender equality, the survey includes the evaluation of one's view on workplace inequality (question 8) including athleticism (12), language use (1), sensitivity to gender inequality (6), reproductive freedom (5), intersectionality in gender inequality (9), family responsibility (11), sex education (15). For one's action on sustainability in terms of ecological footprint scores, the survey includes water usage (10), municipal solid waste

(13), energy choices and efficiency (2, 4, 16), plastic pollution (14), transportation (7), and food waste (3). As discussed in the introduction, these categories are important because they are the main sources of human impacts on the environment. For the specific values in the choices are all referred from studies, for instance, the choices in the daily shower time question are from Harvard University. (Harvard University)

2.3.3. Ethical Considerations

The ethical considerations for this study mainly focus on anonymity since it is collecting personal opinion-based data on gender equality and sustainability. It is guaranteed the participants that the survey will be anonymous since the survey website will not collect participants' names and IP addresses. The environmental considerations mainly focus on the impact of using the laptop for research and all the power used by participants while answering the survey. The study did not use hard copies for the survey to reduce paper waste and deforestation.

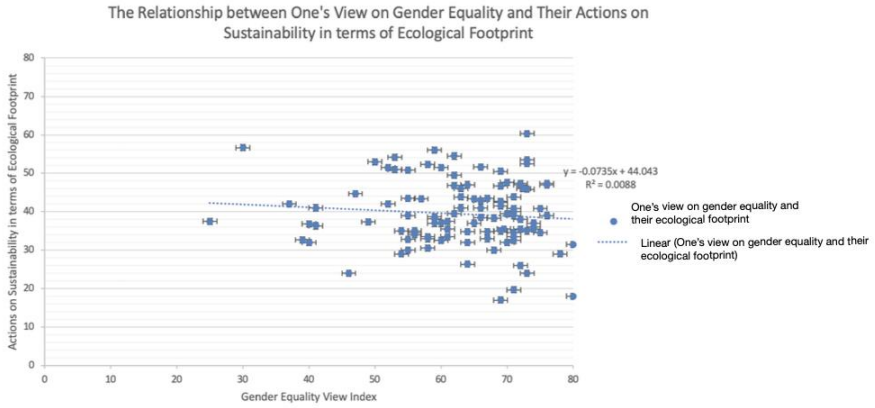
2.3.4. Risk Assessments

Although the survey is anonymous, the survey may still trigger participants' demand characteristics. Participants may still feel pressured to answer socially sensitive questions on gender and sustainability, so they may answer the questions in a socially desirable way. Also, as the survey is voluntary, those students who choose not to answer the questions may have different opinions and answers from those who do. Moreover, students are all from the same school, which may yield similar results. Thus, the data collected may be biased and less reliable.

3. Results

3.1. Data Analysis and Graphical Representation

To thoroughly analyze the data (see Appendix A for raw data), the relationships between high school students' view on gender equality and their actions on sustainability in terms of ecological footprint score in China and all the single actions on sustainability mentioned in the survey have been established.



	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	44.63211858	4.987276933	8.94919596	1.38711E-14	34.7432697	54.52096746	34.7432697	54.52096746
Gender Index	-0.082843504	0.078086943	-1.060913653	0.291163353	-0.237675488	0.07198848	-0.237675488	0.07198848

Figure 5. The Relationship between One's View on Gender Equality and Their Actions on Sustainability in terms of Ecological Footprint.

Figure 5 demonstrates a weak negative relationship between one's view on gender equality and their actions on sustainability in terms of ecological footprint. However, the null hypothesis significance testing shows that it is insignificant as the P-value is 0.2912, which is greater than 0.05.

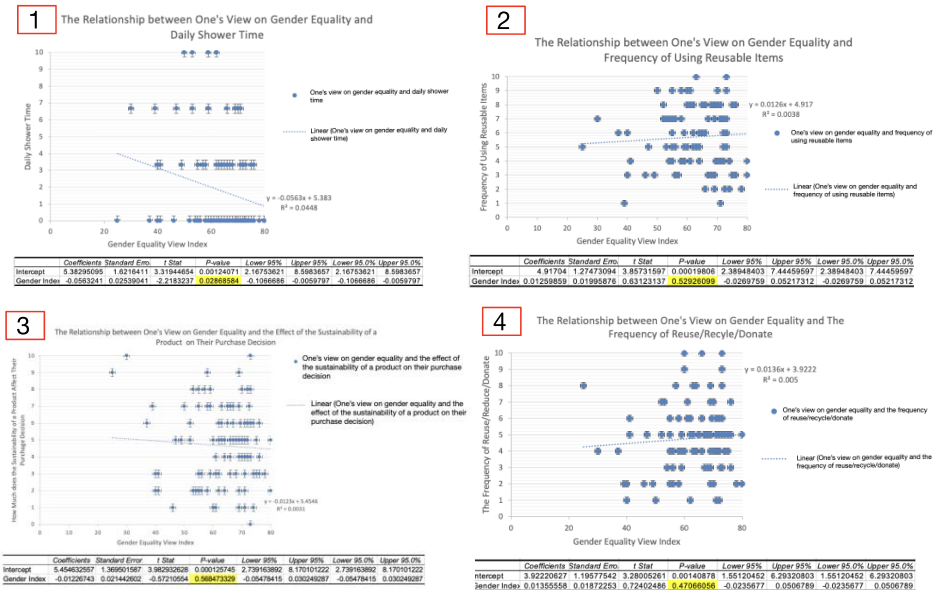


Figure 6. Graphical representation for the first four questions on the survey with data analysis.

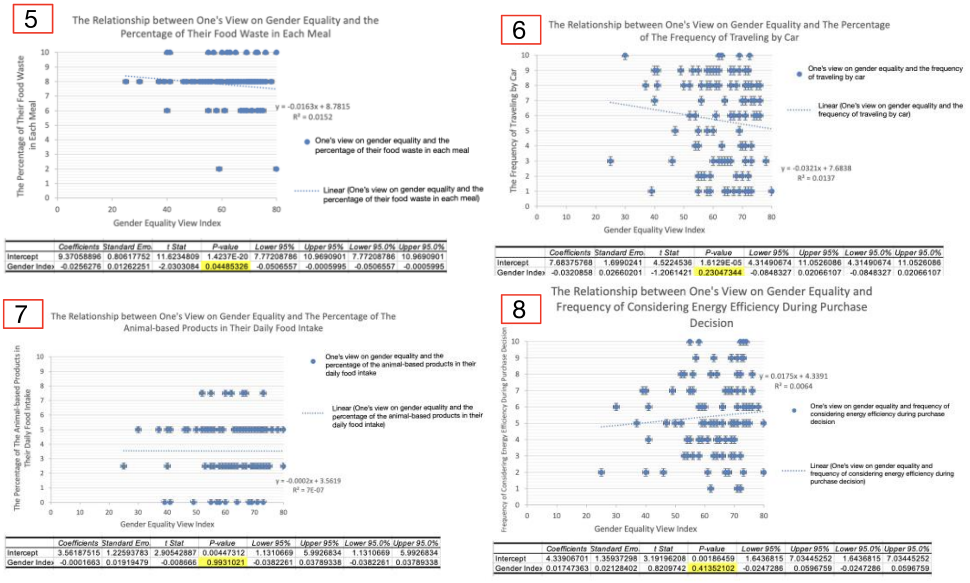


Figure 7. Graphical representation for the last four questions on the survey with data analysis.

The graphs above in Figure 6 and Figure 7 demonstrate significant weak negative relationships between one's view on gender equality and their food waste in each meal (graph 5, P-value≈0.0449), and daily shower time (graph 1, P-value≈0.0287). There are insignificant weak

negative relationships between one's view on gender equality and the percentage of animal-based products in their daily food intake (graph 7, P-value≈0.9931), the frequency of traveling by car (graph 6, P-value≈0.2305), and the sustainability of a product on their purchase decision (graph 3, P-value≈0.5685). There are insignificant weak positive relationships between one's view on gender equality and the frequency of reuse/recycle/donate (graph 4, P-value≈0.4707), the frequency of considering energy efficiency in purchase decisions (graph 8, P-value≈0.4135), and the frequency of using reusable items (graph 2, P-value≈0.5292). However, there are outliers in the data that may affect the overall result.

3.2. Conclusion

The null hypothesis (H0) is accepted that high school students' view on gender equality has no significant effect on their actions on sustainability in terms of their ecological footprint scores in China. However, one's view on gender equality and their food waste in each meal, and daily shower time have weak negative correlations, that is, the more progressive one's view on gender equality is, the higher daily shower time they have and the more food they waste in each meal (since they have lower scores.)

4. Discussion

The majority of the published research on gender and sustainability is investigating whether one's gender affects their ecological footprint or not, and an exemplar's result suggests that males tend to have more resource-intensive lifestyles than females. (Medina and Toledo-Bruno) This research, on the other hand, is studying one's gender equality view instead of studying genders solely (in the case of students in Beijing, China), which is innovative and closely related to the ecocentric approach in addressing sustainability issues through education. However, the finding is not totally consistent with the literature reviewed since it shows the relationships between gender equality views and actions on sustainability are generally insignificant. This can be explained by several potential reasons. First, there are extraneous variables that cannot be controlled which makes it unable to yield an accurate result to draw a significant correlation. Also, the participants who have a more progressive view on gender equality may have higher socioeconomic status. (NW et al.) Therefore, they may have more luxurious lifestyles resulting in fewer actions on sustainability and lower ecological footprint scores. Thirdly, the participants do not have full control of their ecological footprint since their parents may be involved in the decision-making of their daily life which does not reflect their true lifestyle once they are independent. Following that, the results only from grade 11 students are not representative enough and prone to bias. Finally, since the data are gathered through a self-reported survey, the accuracy cannot be tested, reducing the validity of the conclusion. Despite there are limitations to what this study can achieve, I hope that it may take one small

step into understanding this issue more and the improvement of such an approach from a broader socioeconomic perspective.

4.1. Evaluation of Methodology and Modifications

To improve the methodology in future research, more rigorous quantification of ecological footprint and view on gender equality should be conducted by designing a weighting algorithm for each question as different categories of the questions may impact the environment differently. However, this requires a higher level of math, statistics in social science, and environmental science knowledge. Also, interviews can be used to improve the accuracy of the self-reported data since the participants might give more detailed and vivid data for analysis. The survey can also be done in more schools, and different groups of participants such as the students who do not like on campus and the students from different educational systems to improve the generalizability of the result.

4.2. Applications

Despite similar published studies suggesting the correlation between genders and sustainability, this research found that there is no significant correlation between high school students' views on gender equality and sustainability actions in China, specifically in this Beijing international high school Haidian Foreign Language Academy. The results can be applied to Chinese public policy design that the policymakers should fund more in sustainability education on environmental protection to curb high-ecological-footprint lifestyles and achieve sustainable

development goals instead of shifting the curriculum focus. A strength is that a focused environmental education can systematically change people's behaviors since their paradigms will shift. It is more cost-efficient as the government will not need to allocate more budget to the education sector for the design of gender environmental education. Meanwhile, this will also reduce future environmental concerns as people will then spontaneously live more sustainably in the long run once the idea of sustainability becomes part of their values. Though a limitation is that such an approach is still not directly addressing the environmental issue, more direct ways like taxation and regulations might be more effective and quicker than a paradigm shift through sustainability education. Nevertheless, even though there is no significant correlation between gender equality view and sustainability actions, it is still crucial to take gender and environmental education seriously as they are both important ways to promote sustainable development in general and allow humanity to strive for a bright future. Moreover, it is possible that the replications of the study with greater samples at various regions and improved survey questions will yield different results. Therefore, more empirical evidence should be gathered for reference.

Appendix A-Raw Data

1. On a scale of 1 to 10 (1-not at all, 10-very much), how much do you think that there is gender-stereotypical and biased language use in society?	2. On a scale of 1 to 10 (1-not at all, 10-very much), how much does the sustainability of a product (for example whether it is eco-friendly labelled) affect your purchase decision?	3. On average, what percentage of the food on your plate do you throw away uneaten after each meal?	4. On average, what percentage of your daily food intake consists of animal-based products (beef, pork, chicken, fish, eggs, dairyproducts)?	5. On a scale of 1 to 10 (1-strongly disagree, 10-strongly agree), how much do you agree that childbirth is not women's innate responsibility?	6. On a scale of 1 to 10 (1-never, 10-very often), how often would you recognize gender-based unfair decisions made by people in your daily life?	7. On a scale of 1 to 10, how often do you travel by car each week?	8. On a scale of 1 to 10 (1-strongly disagree, 10-strongly agree), how much do you agree that women should have equal access to all occupational opportunities when they have equal educational background with men?
10.0	2.0	25-50 percent	25-50 percent	10.0	10.0	10.0	10.0
6.0	7.0	Less than 25 percent	25-50 percent	8.0	5.0	9.0	10.0
6.0	5.0	Less than 25 percent	Less than 25 percent	8.0	3.0	2.0	10.0
4.0	1.0	Less than 25 percent	50-75 percent	1.0	6.0	2.0	10.0
6.0	2.0	Less than 25 percent	50-75 percent	6.0	4.0	2.0	10.0
7.0	2.0	Less than 25 percent	50-75 percent	9.0	5.0	7.0	8.0
8.0	7.0	Less than 25 percent	50-75 percent	4.0	8.0	10.0	10.0
9.0	2.0	Less than 25 percent	50-75 percent	10.0	6.0	5.0	8.0
7.0	3.0	Less than 25 percent	25-50 percent	9.0	6.0	3.0	10.0
6.0	4.0	Less than 25 percent	50-75 percent	4.0	6.0	5.0	10.0
7.0	3.0	25-50 percent	50-75 percent	10.0	6.0	3.0	10.0
8.0	7.0	0 precent	More than 75 percent	2.0	10.0	6.0	10.0
6.0	3.0	0 precent	50-75 percent	10.0	10.0	3.0	10.0
7.0	9.0	0 precent	25-50 percent	3.0	8.0	3.0	10.0
8.0	4.0	0 precent	50-75 percent	7.0	8.0	4.0	10.0
7.0	5.0	0 precent	50-75 percent	8.0	10.0	5.0	10.0
8.0	2.0	Less than 25 percent	More than 75 percent	10.0	4.0	10.0	10.0
7.0	3.0	25-50 percent	25-50 percent	10.0	8.0	3.0	10.0
10.0	6.0	25-50 percent	50-75 percent	10.0	6.0	4.0	10.0
8.0	0.0	Less than 25 percent	More than 75 percent	8.0	7.0	10.0	10.0
8.0	4.0	Less than 25 percent	50-75 percent	10.0	6.0	5.0	10.0
8.0	5.0	25-50 percent	50-75 percent	10.0	8.0	8.0	10.0
3.0	3.0	0 precent	50-75 percent	7.0	2.0	4.0	7.0
7.0	6.0	Less than 25 percent	50-75 percent	9.0	8.0	4.0	10.0
7.0	3.0	Less than 25 percent	25-50 percent	4.0	6.0	3.0	10.0
8.0	2.0	Less than 25 percent	25-50 percent	3.0	7.0	2.0	10.0
8.0	5.0	25-50 percent	25-50 percent	10.0	7.0	3.0	9.0
5.0	2.0	Less than 25 percent	25-50 percent	1.0	4.0	5.0	10.0
10.0	10.0	25-50 percent	25-50 percent	10.0	10.0	7.0	7.0
6.0	8.0	Less than 25 percent	50-75 percent	4.0	3.0	2.0	9.0
7.0	1.0	Less than 25 percent	50-75 percent	9.0	3.0	8.0	9.0
8.0	5.0	25-50 percent	More than 75 percent	2.0	7.0	2.0	8.0
3.0	2.0	25-50 percent	50-75 percent	8.0	5.0	6.0	10.0
8.0	5.0	Less than 25 percent	25-50 percent	10.0	1.0	4.0	10.0
6.0	4.0	25-50 percent	More than 75 percent	9.0	5.0	4.0	10.0
10.0	10.0	0 precent	25-50 percent	7.0	5.0	1.0	1.0
10.0	5.0	0 precent	50-75 percent	5.0	2.0	2.0	10.0
10.0	1.0	Less than 25 percent	More than 75 percent	10.0	10.0	10.0	10.0
8.0	6.0	Less than 25 percent	25-50 percent	10.0	7.0	10.0	7.0
10.0	8.0	Less than 25 percent	25-50 percent	10.0	6.0	2.0	9.0
6.0	6.0	25-50 percent	25-50 percent	5.0	5.0	3.0	6.0
6.0	7.0	25-50 percent	More than 75 percent	10.0	10.0	10.0	7.0
10.0	1.0	Less than 25 percent	25-50 percent	10.0	10.0	5.0	4.0
10.0	5.0	Less than 25 percent	Less than 25 percent	10.0	8.0	2.0	10.0
10.0	5.0	Less than 25 percent	25-50 percent	5.0	10.0	4.0	8.0
8.0	6.0	25-50 percent	Less than 25 percent	4.0	6.0	3.0	10.0
7.0	6.0	Less than 25 percent	25-50 percent	9.0	6.0	5.0	10.0
8.0	2.0	Less than 25 percent	25-50 percent	8.0	4.0	7.0	10.0
7.0	9.0	Less than 25 percent	50-75 percent	2.0	1.0	8.0	2.0
7.0	9.0	Less than 25 percent	50-75 percent	10.0	8.0	1.0	10.0
6.0	3.0	Less than 25 percent	50-75 percent	7.0	1.0	4.0	8.0
3.0	6.0	Less than 25 percent	50-75 percent	4.0	7.0	3.0	10.0
7.0	4.0	Less than 25 percent	25-50 percent	10.0	7.0	3.0	10.0
8.0	4.0	25-50 percent	25-50 percent	10.0	8.0	3.0	10.0
8.0	5.0	Less than 25 percent	50-75 percent	5.0	7.0	8.0	9.0
8.0	6.0	Less than 25 percent	25-50 percent	10.0	8.0	5.0	10.0
7.0	5.0	25-50 percent	25-50 percent	9.0	6.0	5.0	10.0
8.0	2.0	0 precent	Less than 25 percent	8.0	4.0	1.0	10.0
7.0	8.0	Less than 25 percent	Less than 25 percent	10.0	8.0	3.0	10.0
10.0	6.0	Less than 25 percent	25-50 percent	10.0	8.0	9.0	10.0
9.0	8.0	Less than 25 percent	50-75 percent	9.0	4.0	9.0	10.0
6.0	3.0	25-50 percent	More than 75 percent	2.0	3.0	3.0	7.0
5.0	7.0	0 precent	25-50 percent	9.0	2.0	9.0	10.0
8.0	4.0	Less than 25 percent	25-50 percent	9.0	5.0	7.0	10.0
8.0	3.0	Less than 25 percent	25-50 percent	10.0	6.0	4.0	10.0
6.5	6.0	Less than 25 percent	50-75 percent	10.0	3.0	7.0	10.0
3.0	2.0	Less than 25 percent	More than 75 percent	4.0	3.0	6.0	10.0
8.0	4.0	25-50 percent	50-75 percent	10.0	7.0	7.0	10.0
6.0	4.0	25-50 percent	50-75 percent	10.0	7.0	2.0	10.0
8.0	7.0	0 precent	25-50 percent	4.0	4.0	3.0	6.0
10.0	5.0	0 precent	50-75 percent	6.0	2.0	1.0	10.0
8.0	5.0	Less than 25 percent	More than 75 percent	8.0	8.0	9.0	10.0
9.0	6.0	50-75 percent	25-50 percent	10.0	8.0	10.0	10.0
7.0	1.0	25-50 percent	More than 75 percent	5.0	3.0	6.0	10.0
8.0	3.0	Less than 25 percent	50-75 percent	10.0	8.0	3.0	10.0
5.0	8.0	Less than 25 percent	50-75 percent	1.0	3.0	10.0	10.0
6.0	7.0	Less than 25 percent	25-50 percent	10.0	1.0	5.0	10.0
4.0	3.0	Less than 25 percent	25-50 percent	5.0	3.0	2.0	10.0
5.0	2.0	Less than 25 percent	25-50 percent	2.0	4.0	3.0	10.0
5.0	1.0	Less than 25 percent	25-50 percent	8.0	5.0	8.0	10.0
4.0	7.0	Less than 25 percent	More than 75 percent	5.0	2.0	10.0	8.0
6.0	5.0	25-50 percent	25-50 percent	5.0	5.0	5.0	10.0
5.0	5.0	0 precent	25-50 percent	8.0	6.0	6.0	6.0
5.0	8.0	Less than 25 percent	25-50 percent	5.0	8.0	3.0	10.0
10.0	3.0	Less than 25 percent	25-50 percent	10.0	8.0	8.0	10.0
8.0	2.0	Less than 25 percent	More than 75 percent	10.0	5.0	10.0	8.0
7.0	6.0	Less than 25 percent	25-50 percent	8.0	8.0	3.0	10.0
6.0	4.0	Less than 25 percent	50-75 percent	5.0	7.0	8.0	10.0
7.0	3.0	Less than 25 percent	More than 75 percent	10.0	8.0	2.0	10.0
2.0	8.0	Less than 25 percent	50-75 percent	5.0	2.0	2.0	10.0
8.0	6.0	Less than 25 percent	25-50 percent	9.0	5.0	7.0	10.0
8.0	3.0	Less than 25 percent	25-50 percent	10.0	5.0	9.0	5.0
10.0	5.0	25-50 percent	50-75 percent	10.0	10.0	10.0	10.0
4.0	2.0	Less than 25 percent	25-50 percent	8.0	3.0	2.0	5.0
10.0	10.0	25-50 percent	50-75 percent	9.0	9.0	8.0	10.0
9.0	3.0	Less than 25 percent	25-50 percent	10.0	9.0	4.0	10.0
8.0	7.0	50-75 percent	More than 75 percent	10.0	1.0	10.0	10.0
10.0	5.0	Less than 25 percent	Less than 25 percent	5.0	8.0	2.0	10.0
7.0	1.0	Less than 25 percent	More than 75 percent	10.0	5.0	2.0	10.0
7.0	5.0	Less than 25 percent	50-75 percent	9.0	8.0	10.0	10.0
6.0	8.0	Less than 25 percent	More than 75 percent	6.0	4.0	9.0	10.0
3.0	2.0	Less than 25 percent	25-50 percent	5.0	3.0	2.0	9.0
8.0	7.0	0 precent	25-50 percent	5.0	7.0	8.0	10.0
3.0	3.0	Less than 25 percent	Less than 25 percent	5.0	2.0	10.0	10.0
7.5	7.0	Less than 25 percent	25-50 percent	10.0	7.5	1.0	10.0
8.0	7.0	Less than 25 percent	25-50 percent	10.0	8.0	8.0	7.0
5.0	3.0	0 precent	Less than 25 percent	1.0	8.0	8.0	10.0

Scholar of Tomorrow

9. On a scale of 1 to 10 (1-strongly disagree, 10-strongly agree), how much do you agree that addressing gender inequality should also consider other factors, such as race, ethnicity, socioeconomic status, sexual orientation, and disability, to ensure equal opportunities for all?	10. On average, how long time in minutes do you take a shower a day?	11. On a scale of 1 to 10 (1-strongly disagree, 10-strongly agree), how much do you agree that household chores and caregiving responsibilities should be equally shared between men and women?	12. On a scale of 1 to 10 (1-strongly disagree, 10-strongly agree), how much do you agree that equal funding, support, and recognition should be provided to both male and female athletes and sports teams?	13. On a scale of 1 to 10 (1-never, 10-always), how often do you reuse/recycle/donate your used items?	14. On a scale of 1 to 10 (1-never, 10-always), how often do you use reusable bags, bottles, or containers instead of single-use plastic items?	15. On a scale of 1 to 10 (1-not at all, 10-very important), how important do you think it is to incorporate gender-sensitive education and discussions about gender equality in schools?	16. On a scale of 1 to 10 (1-never, 10-always), how often do you consider the energy efficiency of appliances and electronics when making a purchase decision?
10.0	more than 8 minutes	10.0	10.0	2.0	4.0	10.0	2.0
9.0	4-8 minutes	9.0	4.0	5.0	5.0	8.0	6.0
10.0	more than 8 minutes	10.0	10.0	5.0	7.0	10.0	4.0
10.0	more than 8 minutes	10.0	10.0	6.0	9.0	10.0	2.0
10.0	more than 8 minutes	6.0	9.0	4.0	4.0	7.0	3.0
7.0	8 minutes	5.0	8.0	2.0	6.0	6.0	7.0
8.0	8 minutes	10.0	9.0	5.0	3.0	10.0	7.0
10.0	more than 8 minutes	8.0	10.0	5.0	7.0	10.0	5.0
9.0	more than 8 minutes	10.0	10.0	4.0	7.0	10.0	7.0
8.0	more than 8 minutes	7.0	10.0	7.0	8.0	10.0	4.0
9.0	8 minutes	10.0	10.0	5.0	7.0	9.0	9.0
10.0	4-8 minutes	9.0	10.0	8.0	7.0	10.0	7.0
5.0	more than 8 minutes	5.0	8.0	6.0	4.0	7.0	4.0
7.0	8 minutes	8.0	10.0	2.0	9.0	5.0	10.0
10.0	8 minutes	10.0	10.0	6.0	7.0	8.0	5.0
10.0	8 minutes	10.0	10.0	5.0	8.0	10.0	5.0
10.0	more than 8 minutes	7.0	10.0	3.0	2.0	10.0	3.0
7.0	more than 8 minutes	10.0	10.0	3.0	3.0	6.0	2.0
10.0	more than 8 minutes	10.0	8.0	5.0	4.0	10.0	5.0
10.0	more than 8 minutes	10.0	10.0	6.0	6.0	10.0	5.0
5.0	more than 8 minutes	10.0	10.0	8.0	8.0	10.0	7.0
5.0	more than 8 minutes	10.0	10.0	4.0	4.0	10.0	8.0
8.0	8 minutes	5.0	5.0	2.0	6.0	3.0	7.0
9.0	8 minutes	10.0	10.0	8.0	7.0	10.0	6.0
10.0	more than 8 minutes	9.0	10.0	6.0	8.0	10.0	3.0
8.0	Less than 4 minutes	3.0	7.0	7.0	7.0	7.0	3.0
10.0	more than 8 minutes	10.0	10.0	5.0	6.0	8.0	1.0
10.0	more than 8 minutes	10.0	9.0	3.0	7.0	5.0	4.0
6.0	8 minutes	10.0	10.0	10.0	10.0	10.0	10.0
8.0	4-8 minutes	8.0	8.0	7.0	5.0	7.0	8.0
8.0	more than 8 minutes	8.0	8.0	4.0	9.0	8.0	5.0
5.0	8 minutes	4.0	9.0	2.0	3.0	6.0	7.0
8.0	more than 8 minutes	10.0	8.0	6.0	4.0	6.0	6.0
7.0	more than 8 minutes	8.0	10.0	8.0	6.0	10.0	8.0
5.0	more than 8 minutes	10.0	10.0	4.0	5.0	9.0	4.0
1.0	4-8 minutes	1.0	1.0	4.0	7.0	4.0	6.0
10.0	more than 8 minutes	10.0	10.0	5.0	5.0	5.0	5.0
10.0	4-8 minutes	10.0	10.0	1.0	1.0	1.0	1.0
3.0	more than 8 minutes	10.0	10.0	5.0	8.0	10.0	4.0
8.0	more than 8 minutes	9.0	10.0	4.0	5.0	10.0	8.0
4.0	more than 8 minutes	4.0	2.0	4.0	6.0	5.0	5.0
5.0	more than 8 minutes	8.0	5.0	6.0	7.0	7.0	4.0
10.0	more than 8 minutes	10.0	10.0	4.0	2.0	10.0	10.0
1.0	more than 8 minutes	10.0	10.0	4.0	2.0	7.0	3.0
7.0	4-8 minutes	10.0	10.0	4.0	9.0	10.0	3.0
6.0	more than 8 minutes	5.0	7.0	7.0	7.0	6.0	8.0
10.0	more than 8 minutes	8.0	9.0	3.0	3.0	8.0	2.0
6.0	more than 8 minutes	10.0	3.0	3.0	4.0	5.0	3.0
10.0	more than 8 minutes	1.0	1.0	8.0	5.0	1.0	2.0
8.0	more than 8 minutes	8.0	10.0	4.0	8.0	8.0	9.0
7.0	more than 8 minutes	9.0	10.0	4.0	3.0	8.0	7.0
8.0	Less than 4 minutes	10.0	10.0	6.0	8.0	10.0	1.0
9.0	more than 8 minutes	10.0	10.0	3.0	5.0	10.0	2.0
10.0	8 minutes	10.0	10.0	3.0	8.0	10.0	8.0
9.0	8 minutes	9.0	9.0	4.0	4.0	8.0	5.0
10.0	more than 8 minutes	10.0	10.0	7.0	8.0	10.0	7.0
8.0	more than 8 minutes	9.0	10.0	3.0	3.0	10.0	5.0
10.0	Less than 4 minutes	10.0	10.0	1.0	8.0	2.0	8.0
10.0	more than 8 minutes	10.0	10.0	5.0	9.0	8.0	7.0
5.0	8 minutes	10.0	10.0	6.0	7.0	9.0	10.0
9.0	more than 8 minutes	10.0	10.0	7.0	8.0	9.0	4.0
10.0	8 minutes	5.0	1.0	6.0	4.0	7.0	4.0
4.0	more than 8 minutes	10.0	10.0	5.0	5.0	5.0	7.0
10.0	more than 8 minutes	10.0	8.0	2.0	4.0	10.0	5.0
10.0	more than 8 minutes	10.0	10.0	4.0	4.0	10.0	6.0
10.0	more than 8 minutes	10.0	10.0	6.0	4.0	10.0	5.0
8.0	more than 8 minutes	9.0	10.0	4.0	7.0	8.0	4.0
10.0	more than 8 minutes	10.0	6.0	4.0	4.0	10.0	8.0
9.0	more than 8 minutes	10.0	10.0	4.0	5.0	10.0	3.0
5.0	Less than 4 minutes	4.0	9.0	1.0	9.0	10.0	5.0
10.0	8 minutes	10.0	10.0	5.0	5.0	5.0	5.0
9.0	8 minutes	8.0	10.0	5.0	8.0	7.0	7.0
5.0	more than 8 minutes	10.0	10.0	1.0	4.0	10.0	1.0
9.0	more than 8 minutes	6.0	10.0	9.0	8.0	10.0	6.0
9.0	more than 8 minutes	10.0	10.0	4.0	3.0	10.0	6.0
10.0	4-8 minutes	10.0	10.0	3.0	4.0	10.0	5.0
10.0	4-8 minutes	9.0	10.0	6.0	8.0	10.0	5.0
7.0	more than 8 minutes	10.0	10.0	4.0	4.0	10.0	4.0
8.0	more than 8 minutes	10.0	7.0	3.0	5.0	10.0	3.0
2.0	more than 8 minutes	3.0	3.0	2.0	3.0	10.0	2.0
5.0	4-8 minutes	5.0	5.0	2.0	1.0	5.0	7.0
1.0	more than 8 minutes	5.0	10.0	5.0	8.0	10.0	5.0
6.0	4-8 minutes	5.0	5.0	5.0	5.0	6.0	5.0
1.0	Less than 4 minutes	10.0	10.0	5.0	6.0	10.0	6.0
10.0	more than 8 minutes	10.0	10.0	2.0	2.0	10.0	6.0
8.0	8 minutes	6.0	10.0	4.0	5.0	9.0	3.0
10.0	more than 8 minutes	10.0	10.0	4.0	7.0	8.0	1.0
8.0	8 minutes	10.0	10.0	10.0	6.0	10.0	6.0
8.0	more than 8 minutes	9.0	9.0	6.0	8.0	10.0	6.0
10.0	8 minutes	8.0	8.0	6.0	4.0	10.0	10.0
7.0	more than 8 minutes	10.0	8.0	4.0	5.0	6.0	9.0
5.0	more than 8 minutes	5.0	8.0	2.0	7.0	10.0	8.0
10.0	more than 8 minutes	10.0	10.0	5.0	3.0	10.0	5.0
6.0	more than 8 minutes	7.0	3.0	5.0	4.0	5.0	6.0
9.0	more than 8 minutes	10.0	8.0	9.0	10.0	8.0	9.0
8.0	more than 8 minutes	10.0	10.0	5.0	3.0	10.0	6.0
10.0	more than 8 minutes	10.0	10.0	5.0	8.0	10.0	4.0
8.0	more than 8 minutes	4.0	5.0	10.0	5.0	10.0	5.0
10.0	4-8 minutes	7.0	10.0	2.0	7.0	10.0	7.0
6.0	more than 8 minutes	10.0	10.0	7.0	8.0	9.0	9.0
3.0	8 minutes	10.0	9.0	8.0	3.0	9.0	9.0
4.0	more than 8 minutes	7.0	3.0	1.0	3.0	6.0	2.0
10.0	more than 8 minutes	5.0	10.0	8.0	10.0	8.0	3.0
10.0	more than 8 minutes	5.0	10.0	6.0	9.0	10.0	7.0
9.5	more than 8 minutes	10.0	10.0	3.0	2.0	8.0	9.0
7.0	8 minutes	9.0	7.0	5.0	6.0	9.0	4.0
10.0	8 minutes	8.0	10.0	6.0	6.0	10.0	8.0

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