UNDERSTANDING OF UNIVERSITY STUDENTS' ENVIRONMENTAL BACKGROUNDS

In the Case of Seoul National University

Research Proposal |
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INTRODUCTION

Human population is projected to reach 9.8 billion in 2050 and 70 percent of the world population will live in urban. The continuous enlargement of human settlements and urban areas has been the major cause to environmental degradation and major disruption to natural environment. Population growth is known to have significant roles to play in sustainability of the world's vast resources. High levels of consumption and industrialization, inequality in wealth and land distribution, inappropriate government policies, poverty, and inefficient technologies all contribute to environmental decline. The awareness of human impacts on the environment and reflecting on our daily behaviour are, therefore, the most crucial first step in shifting towards more sustainable future.

This research aims to explore correlations between socio-demographic factors and individual's level of environmental awareness and behaviour within Seoul National University student population. The research methodology and data collection can be reiterated nationwide and the accumulated findings will provide a profound understanding on environmental backgrounds of individuals and will be of great benefit for planning more effective environmental education and policies that can have actual impact on our daily behaviour.

LITERATURE REVIEW

The solutions to intensifying environmental problems are continuous education through which the number of environmentally aware, concerned and active citizens increases (Holl *et al*, 1999). In order to have a detailed understanding of the environmental backgrounds of individual, many studies have conducted to highlight contributing socio-demographic factors that influence individual's environmental attitudes and behviour (Ewert & Baker, 2001). Some researchers looked at a very specific population, which is university students (Hvenegaard, 2007; Kilbourne et al, 2001; Lang, 2011; Müderriso!lu & Altanlar, 2011). Universities are one of the many institutions that assist in educating citizens. It is of importance to improve the understanding of which socio-demographic characteristics are correlated to one's environmental attitudes and behaviours. Previous researches have found gender (Lang, 2011; Müderriso!lu & Altanlar, 2011), academic major, (Ewert & Baker, 2001; Hvenegaard, 2007; Müderriso!lu & Altanlar, 2011), and social beliefs (Kilbourne et al, 2001; Xio, 2007).

In Hvenegaard's segmentation research (2007), groups that show higher engagement with environmentally responsible behaviour were more likely to be female than male. Lang's research (2011) also found that political inclination also has an impact on one's perception on environmental awareness and protection. People who identify themselves to be associated with Liberal party are likely more concerned about environmental issues than those with Conservative party people because the laissez-faire and pro-business attitude often means reluctance to accept social changes.

RESEARCH METHODOLOGY

The key objective of this study is to examine the correlations between socio-demographic backgrounds and their environmental perspectives and behaviour. As such, it provides evidence to assess whether the population of students at the Seoul National University conforms to the common findings that iterate correlational relationship

Measuring one's belief and behaviour patterns needs an instrument that captures a more holistic and contextual understanding (Jick, 1979). This study enabled the data triangulation of a combined quantitative and qualitative research approach. The quantitative data analysis focused on examining statistical correlations between measures. The qualitative data analysis was implemented to enhance our understanding by gathering in-depth and personal opinions on the research findings. Finally, the research findings will then be compared with similar research results from other countries to further explore country specific patterns in the findings.

The research will take place during the winter and fall semesters of 2018. Using convenience online sampling tool, Survey Monkey. Once departmental approval is landed, the link will be sent out to both undergraduate and graduate students through the departmental network. Prior to completing the survey, the students will be issued a statement explaining the voluntary nature of their participation.

The self-report questionnaire survey was composed of questions and statements about environmental concerns (Question 1), views (Questions 2, 3, 4, 5, 6), behaviours (Questions 7, 8), levels of trust in different information sources (Question 9), and social demographic characteristics (Questions 10, 11, 12, 13, 14, 15). Each question is structured to capture various aspects of one's beliefs and behaviours in the aspect of environmental protection. A broad concept of environmental views can be induced from responses to questions 5 and 6. Subset questions under question 4 regarding environmental beliefs incorporated pro-environmental view on general issues, pro-environmental view on Korea-specific issues and pro-economic view in environmentalism. Questions on behaviour (Questions 7, 8) are to probe student's environmental behaviours at an individual level and a societal level, respectively.

First, students will be asked with an open-ended question to report pending environmental concerns in Korea. Second, students will be asked to report levels of agreement with statements with regards to environmental views, using a 5-point Likert scale (where 1= strongly agree and 5=strongly disagree). Questions on behaviours and other items are in the form of simple Yes/No answers. Third, student's socio-demographic backgrounds (such as academic major, birth year, gender, location of residence, employment statement and region of origin) are also reported.

The Statistical Package for Social Sciences (SPSS) will be utilized in entering the data and producing statistical analysis. The X-square (chi-square) test will be a most efficient tool to test significant correlations between variables. P-value at 0.05 will determine statistical significance. As for comparison between groups, cluster sampling will be mainly used to investigate the relationship between each variable and student's environmental perceptions. One strategy employed to minimize possible statistical errors in comparing unequal sized groups is to adjust the group sample with probability proportional to the size of each group (Lee et al, 1977). The adjusted data retains the same level of statistical significance.

Twenty interviews will be conducted for qualitative data collection in this study. Without using specific sampling techniques, ten male and ten female random students will be approached at various location. Each interview will be 10 to 15 minutes long and conducted by trained researchers to eliminate any potentials of bias. All interviews will be recorded and transcribed verbatim for data collection. Without specific data analysis software utilized for the qualitative analysis, the coding process will identify discrete codes and emergent themes. Interviewers will be asked to explain those topics from the quantitative questionnaires such as their environmental perspectives, environmental concerns, socio-demographic variances in environmental perceptions (gender and region of origin) and information sources. A numerical analysis for the interviews is not included in this study because a) interviewee students are asked to respond to open-ended questions; and b) the sample size is very small. However, qualitative responses will be quoted in concert with respective quantitative analysis.

Finally, this study also aims to develop larger nationwide database. Since the outcomes of questionnaires and interviews from this study will also either confirm or deny conformity to previous research findings from different universities and countries, cross-national comparative work will deepen the understanding of the effect of country-specific characteristics on outcomes. The raw dataset from other countries can be obtained through academic arrangements and a multivariate regression analysis will be conducted to provide robust conclusions about country-specific patterns.

REFERENCES

Ewert, A., and D. Baker. 2001. Standing for where you sit: An exploratory analysis of the relationship between academic major and environment beliefs. Environment and Behavior 33, (5): 687-707, www.scopus.com.

Hvenegaard, G. 2007. A novel approach to deepen understanding of undergraduates' environmental backgrounds. International Research in Geographical and Environmental Education 16, (4): 328-338, www.scopus.com.

Kilbourne, W. E., S. C. Beckmann, A. Lewis, and Y. Van Dam. 2001. A multinational examination of the role of the dominant social paradigm in environmental attitudes of university students. Environment and Behavior 33, (2): 209-228, www.scopus.com.

Kosnik, Lea-Rachel D. 2007. The greening of higher education. *SSRN eLibrary*, http://ssrn.com/paper=1016153.

Lang, K. B. 2011. The relationship between academic major and environmentalism among college students: Is it mediated by the effects of gender, political ideology and financial security? Journal of Environmental Education 42, (4): 203-215, www.scopus.com.

Müderriso"lu, H., and A. Altanlar. 2011. Attitudes and behaviors of undergraduate students toward environmental issues. International Journal of Environmental Science and Technology 8, (1): 159-168, www.scopus.com.