Plan Overview

A Data Management Plan created using DMPonline

Title: Trade-off to avoid perceived risk of respiratory infection in train commutes: A Stated Choice Experiment study in the Netherlands; for Master Thesis

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Template: DCC Template

Project abstract:

Public Transport ridership has seen a tremendous fall after the outbreak of COVID-19. It is anticipated that usage of public transport would not go back to pre-COVID times even when the pandemic is over. This is the anticipation for the Netherlands as well. Before the outbreak of COVID-19, there have been many researches on valuation of crowding in public transport, but the highest disutility experienced from this crowding in public transport, specially trains, has been witnessed in current times of pandemic. This is so because crowding promotes the spread of Acute respiratory infections such as Coronavirus (SARS, MERS, COVID-19, Influenza). In this study, the indicator for perceived risk of catching an infection while travelling in trains would be crowding levels. This would be measured in terms of seat occupancy and social distancing on-board. Due to government restrictions and fear of catching COVID-19 amongst people, the demand for trains has fallen. But even if the demand during peak hours restores to 25% of pre-COVID-19 times, the capacity in trains with social distancing on-board would not be sufficient to accommodate demand. Government and operators are making changes on supply side. But from demand side, it is important to know if people are willing to change their departure times to avoid crowd in trains. This could help in flattening the peaks of demands. Hence the trade off which respondents would make is crowding levels in two train alternatives and change in departure time from home for catching one of them. Knowing how these trade-offs vary across different groups of people would be helpful in understanding the variations, and if the survey is representative. Personal questions would include: the age group, gender, income group, any health condition, usual purpose of travel, usual mode of travel. These questions would in Multiple Choice Question format with an option to ''Not Answer a question''. Questions regarding any respondents identity would not be asked. The respondents identity would remain anonymous. This is an important time to reduce congestions and high demand during rush hours. Based on the results from the survey, government can promote staggered commute or flexible timing for trips and various work places.

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Trade-off to avoid perceived risk of respiratory infection in train commutes: A Stated Choice Experiment study in the Netherlands; for Master Thesis

Data Collection

What data will you collect or create?

1. A survey would be created first. It would be a new and fresh survey. The format would be a Qualtrics file. The account on Qualtrics is provided by TU Delft service. The access is valid for three months with a possibility of extension.
2. The questions in the survey would be multiple choice questions with an alternative to not respond if the respondent does not want to share any information.
3. The identity of respondents would be anonymous. No questions about the identity would be asked, and respondents cannot be traced back based on the survey.
4. The responses would be stored on Qualtrics, and on my TU Delft account. The format of data exported from Qualtrics would be ***csv and txt*** which is a suitable format for computations and for input in other software Biogeme. Biogeme would be used to process the survey data for statistical analysis and estimation.
5. The survey would be circulated using a web- based platform. It will have a link to the survey, and all the responses would be stored collectively.
6. Data volume is expected to range from 200-500 responses, all from the Netherlands.
7. Data to be collected includes:
8.

State Choice Experiment			
S. No.	Alternatives: Trains (2nd class), Train (First Class), Not to Travel/Other mode		
Personal Information	**Attributes for different choice sets**	**Likert Scale questions**	
1	Age	Prevalent Infection rate	Perceived risk of catching infection
2	Gender	Vaccination stage (50/70/100 % people vaccinated in the Netherlands)	Uncertainty of future crowding
3	Education Level	Crowdedness level while boarding (Seat occupied and social distancing)	Safety perceived with mask and sanitization facilities
4	Living scenario (single/family/friends)	Mandatory Mask and Sanitising facility on-board (percentage of people on-board wearing mask)	Travel Stress experienced
5	Municipality	Choice to Delay the Trip (In minutes)	Willingness to wear mask after the pandemic is over
6	Income Level	Travel Cost	Preferred travel mode after the pandemic is over
7	Any health problems?		
8	Had COVID-19?		
9	Usual Mode Choice		
10	Usual Travel Purpose		

The size of the data would be <10 GB as the survey includes only texts and a few images.

The format of the data (CSV and text) allows to use back the files in the survey or in Biogeme.

The individual specific questions would help in determining whether the preferences vary across those groups.

How will the data be collected or created?

1. Data would be collected using a web-based survey across the Netherlands, created in Qualtrics. The methodology used is Stated Choice Experiment Survey.
2. To ensure the quality and validity of survey, first a small pilot survey will be circulated. Based on the responses and feedback, survey would be improved. At every stage the survey would also be reviewed by the thesis committee.

Documentation and Metadata

What documentation and metadata will accompany the data?

The documentation of data for future reuse would be available in TU Delft Center for Research, and the format of the survey would be available in the final thesis report.

Ethics and Legal Compliance

How will you manage any ethical issues?

1. Identity of all respondents would be anonymous.
2. Before the questions are asked in the survey, respondents will be asked to grant consent in the survey to allow future reuse or application of their responses. They will assured that their identity is not known and could not be traced(accepting terms and conditions). They will be asked to voluntarily participate in the survey, and they will be informed that they are free to opt out.
3. Access to the survey will remain with me, and would be stored only on my personal laptop. Only analysis of the entire survey as a whole would be presented in the report or presentations.

How will you manage copyright and Intellectual Property Rights (IPR) issues?

Survey responses would not be shared outside TU Delft.
The thesis report and analysis of data would remain accessible through TU Delft repository.

Storage and Backup

How will the data be stored and backed up during the research?

The data from survey responses will be stored on Qualtrics and personal laptop.
Other data related to thesis research would primarily be stored on personal laptop, TU Delft weblogin server and onedrive.

How will you manage access and security?

There is no confidential data, and the accessibility would be limited to myself.

Selection and Preservation

Which data are of long-term value and should be retained, shared, and/or preserved?

For long term use, the thesis report/paper would be retained, shared and preserved. The layout of the survey could be reused by others, but that would be included in the main report.

What is the long-term preservation plan for the dataset?

Data will be held in TU Delft Repository for educational research.

Data Sharing

How will you share the data?

The thesis report would be accessible to all TU Delft researchers, students and teachers.

Are any restrictions on data sharing required?

No

Responsibilities and Resources

Who will be responsible for data management?

Chair of graduation Committee: Professor Bert Van Wee
Myself
Supervisor: Dr. Natalia Barbour and Dr. Gonçalo Homem de Almeida Correia

What resources will you require to deliver your plan?

Access to Qualtrics software is required, but I already got the access. Other than this, no other requirements from institution.