

**Summary:**

# **The Car Harms the Environment - But Do I Matter?**

**A study of attitudes towards transport and travel behaviour among young people in Oslo**

## **Background and approach**

Most young people are concerned about environmental problems. However, in Norwegian research little focus has been put on young people's travel behaviour and their attitudes towards traffic and environmental questions. The aim of this study is to shed light on the attitudes towards and knowledge about environmental questions related to car use. Do young people's attitudes correspond with their travel behaviour?

The car is one of the most important symbols of the modern society. The car is often associated with speed, efficiency and freedom, and the car traffic in the Oslo area is increasing. Simultaneously, car traffic is experienced as an important environmental problem among the inhabitants of Oslo. More than half of the inhabitants are bothered by noise or air pollution. The car use requires areas and energy, and polluting effluent and noise from the traffic can be damaging to health in long and short term.

During the last 20 years there has been an increasing focus on the environmental problems as a consequence of car traffic. It is reason to believe that today's young generation has more knowledge about the environmental consequences from car use than the young generations some years ago. The question is whether environmental consciousness is of importance for young people's choice of transport modes.

## **Sample and method for data collection**

The study was carried out by means of postal questionnaires in approx. autumn 1997. The sample contains 2000 young people in the age of 13 to 20 years, living in five urban areas in Oslo. In this study we concentrate on respondents between the age of 18 and 20 years because these people are old enough to obtain a driving licence and thus to choose car as a travel mode. This gives a sample of 637 respondents.

## **There are differences between groups of young people in access to car and use of transport modes**

There are relatively few of the respondents who own a car, but half of them have a driving licence. Around half of the young people in the survey have good

opportunity to borrow a car, probably from their parents. One third of the respondents have two cars or more in the household.

Access to car, motorbike and moped varies between groups. Boys who have ended secondary education at advanced level, who have high or medium high household income, who live together with both parents and who have parents with manual work or are self-employed, seem to have better access to transport resources than other groups. Boys who are working, unemployed or trainees, those who are living with both of their parents and those who have parents who work as clerical/manual workers or have independent jobs have better access to motor vehicles than other groups.

This study concentrates on everyday travel activities. Everyday journeys will be divided into obligatory (journeys related to school/job), optional (journeys related to leisure activities), and a category that consists of journeys related to shopping.

Most young people use public transport to their various activities. The use of transport means varies between groups of young people.

Cycling and walking are usual among young people who live distant from their parents, among those who have their background in the middle and upper class, and among those who have poor transport resources. Girls, those who belong in low-income households (who live together with their parents) and who have poor transport resources use public transport more than other groups. When it comes to use of cars, this kind of transport means is most used among boys who live together with both parents and who have more transport resources than others.

### **Use of car as a social dilemma**

The theoretical perspective that is used in the study is termed social dilemmas. Social dilemmas are characterised as situations where private interests are at odds with collective interests. Social dilemmas can also be defined as situations where each decision-maker is best off acting in his self-interest, regardless of what other persons do. Each self-interested decision, however, creates a negative outcome or cost for other people involved. When a large number of people make the self-interested choice, the costs or negative outcome accumulate. This creates a situation where everybody could have done better if they decided not to act in their own private interest.

The perspective of social dilemmas can be used in the choice of transport modes if car is the preferred alternative from an individual point of view, and if use of car is seen as having collective disadvantage, as pollution and noise. If a large number of people choose to drive a car, in spite of the knowledge of the collective disadvantages this choice creates, the pollution and noise will increase. This creates a situation where everybody would have been better off if they had chosen not to drive a car.

The findings point out that social dilemmas are a relevant theoretical perspective to study choice of transport modes among young people. The youths think that use of car have positive individual consequences as it represents flexibility. On the other hand, cars have negative collective consequences because of the pollution and noise this mode of transport causes.

### **Public transport is too expensive, but young people support an expansion of the public transport supply**

It is a major opinion that public transport is too expensive, slow and not flexible. At the same time a majority of the youths support an expansion of the public transport supply, also prior to building roads. This indicates that young people support public transport solutions, even though they do not have positive attitudes towards public transport.

Attitudes towards public transport and attitudes towards car use seem to be related to each other. People who have a positive attitude towards public transport are more concerned about the environmental consequences of car use than those who have a negative attitude towards public transport. Those who have a negative attitude towards public transport have a more positive attitude to the individual advantage of the car than those who have a positive attitude to public transport have.

### **Values and knowledge of environmental concern are related to attitudes towards car use**

The intention of using social dilemmas as a theoretical perspective is to shed light on the conditions under which people choose to act in their own interest or in the interest of the society. We suppose that *social dilemmas represent a contradiction that people handle in different ways*. It is not obvious that all people seek to maximise their own self-interest. Care for the collective welfare can also influence people's choice of travel mode .

A value is an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence.

Value orientation is divided into a material and an immaterial dimension. Those with immaterially oriented values are willing to accept a low standard of living to reduce the environmental problems, and give preference to friends before career. Those with materially oriented values give preference to work places before environmental consideration, and think that good payment is more important than a challenging job.

The findings indicate that value orientation is related to attitudes to car use. Those who are materialistically oriented emphasise individual positive consequences of car use more than others do. Those who are immaterially oriented emphasise collective negative consequences of car use more than others do.

Knowledge of environmental consequences of car use is related to attitudes towards car use. Those who have good knowledge about the environmental consequences of car use emphasise the collective negative consequences stronger than others do, and those who have poor knowledge emphasise the individual positive consequences of car use stronger.

### **Attitudes towards car use are related to use of transport modes**

Social dilemmas as theoretical perspective are relevant to shed light on the importance of attitudes to car use for choice of transport modes.

Rational considerations of individual advantages and disadvantages are probably important for the choice of transport modes. Values and attitudes to the consequences are also expected to be significant in choosing means of transport.

The findings show that there are relations between the attitude towards car use and the choice of transport modes. Those who emphasise the collective negative consequences of car use travel more often by public transport than those who are less engaged in this question. They travel more by car/motorbike/moped than the other group.

### **Transport resources and attitudes towards the environmental consequences of car use are of importance when considering car as a transport mode.**

Multiple analysis indicates that the supply of transport resources is of great importance when car is considered as a transport mode, a finding that is supportive to earlier research. The analysis shows that this is the case especially on optional journeys.

In addition, the analyses indicate that the attitudes towards environmental consequences of car use are of importance when considering car as a transport mode on different kinds of journeys. It is less likely that a person who are engaged in the collective consequences of car use will choose car as a transport mode than a person who don't emphasise this question does.

The multiple analysis indicates that attitudes towards the environmental consequences of car use have an *independent* significance for choice of car as a transport mode. Even when two people have the same amount of transport resources, the one who is engaged in environmental consequences of car use is less likely to choose car as a transport mode than the one who is not engaged in this question.

Furthermore, the multiple analysis indicates differences between the activities when it comes to the importance of attitudes and knowledge. Attitudes and knowledge are more important when considering choice of car use at an obligatory journey than when considering choice of car at an optional journey. Obligatory journeys are predictable and give opportunity to long-term planning. People who prefer car because of its individual advantages seem to be planning for use of car, while those who emphasise the collective negative consequences try to *avoid* car use when they plan their journeys.

There is a relation between the attitudes towards positive individual consequences of car use and use of car on journeys to school/university that does not exist on the other journeys. Again, this can probably be related to the planning possibility that follows the obligatory journeys. If the individual positive consequences of car use are of great importance to you, it is natural to take this into consideration when you plan your everyday journeys to obligatory activities.

The supply of transport resources is of great importance for the choice of travel modes. Access to car is a factor that must be included when analysing the choice between car and environmentally friendly transport modes. At the same time, the results of this study indicate that choice of transport modes does not represent a choice where only rational “selfish” considerations are of importance. Attitudes towards environmental consequences of one’s choice do matter when young people choose travel modes. This indicates that it is important to include knowledge about and attitudes towards environmental consequences in the studies of transport mode choices .