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The household as an instrumental and affective trigger in intervention programs for travel behavior change

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1. Introduction

Household members are important to lifestyle-related behavior changes. This has been shown during interventions aimed at changing eating habits and managing obesity (Epstein et al., 1994; (Arsenault et al., 2014; Epstein et al., 2015), and promoting physical activity (Holm et al., 2012). For instance, a positive correlation has been noted between parents' goal achievement and children's eating behavior (Epstein et al., 2015). Thus, children who have parents that achieve their goals are more likely to succeed in achieving similar goals. Incorporating household members into interventions is suggested as supporting the treatment and prevention of childhood obesity (Epstein et al., 1994). Similarly, in a study by Holm et al. (2012), 83 families were recruited in order to investigate parental influence on children's changes in physical activity (measured as the number of steps per day using pedometers). The participating parents were asked to increase their number of steps by more than 2000 per day. The findings showed that, when the parents achieved their goals, their children also increased their numbers of steps, generally by 1000 per day. Although household-based interventions have successfully been implemented in a number of life domains, including travel behavior, a limited amount of research has focused on understanding the triggers of voluntarily-changed travel behavior, which is the focus of the present study. We add to the much-studied trip chaining models (Adler and Ben-Akiva, 1979), the activity-based models (Axhausen and Gärling, 1992), and the other models capturing interactions between household members' activities which help to explain household travel demands and behavior (e.g., Golob and McNally, 1997) concerning everyday travel. In studies by Kitamura (1988), household structure and travel patterns are focused, whereby the presence of children is argued as influencing the household members' everyday travel behavior. Everyday travel includes trips to and from work or school, shopping, and other activities, but excludes vacation trips. The present study supplements previous research focusing on intra-household interactions in everyday travel, interactions primarily concentrating on instrumental triggers such as time, cost and frequency. The present study focuses not only on instrumental triggers, but also on affective triggers, such as stress, safety and autonomy, triggers which may influence the household during the intervention. It thus adds to current knowledge and the gap of understanding that influences triggers, including affective triggers relating to households and voluntary travel behavior change. The household is defined as a unit consisting of either adult(s) with child(ren) or adults without child(ren), living together. Thus, single adult households without child(ren) are excluded from the present study.

Travel demand management is a collection of different measures (e.g. policies and strategies) implemented with the aim of modifying people's travel behavior and changing the demand for a specific travel mode (Meyer, 1999). Travel demand management has been used with the aim of reducing car use (Gärling and Schuitema, 2007) and/or increasing public transport use (Gärling et al., 2002). There are several techniques for changing demand; either regulating people in terms of what they do (i.e. push measures), using fines, fees, restrictions and other penalties (Gärling and Schuitema, 2007; Taylor and Ampt, 2003), or encouraging them (i.e. pull measures) to voluntarily change their travel behavior. The pull measures are also called voluntary travel behavior change measures (Taylor and Ampt, 2003), or soft policy measures (Richter et al., 2010), to underline the fact that people are empowered to choose rather than forced to change their travel behavior. Promoting alternative behaviors based on voluntary change ensures that the solutions being presented are desired by the people making the change (Brög et al., 2009; Thøgersen, 2014). People who want to stay healthy may, for instance, be presented with and

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given access to information about cycle routes. It is common for such campaigns to have objectives; e.g. reducing exhaust fumes and pollution and encouraging public transport use. Influencing car use on the basis of voluntary change can be achieved in three different ways: 1) by reducing the attractiveness of the car, 2) by promoting alternative travel behavior generally, or 3) by promoting travel behaviors constituting alternatives to car use. Studies focusing on the psychological determinants of car use (Steg et al., 2001; Steg, 2005) reveal that both instrumental and affective reasons are of importance. For instance, Steg (2005) has shown that car use is most strongly related to affective reasons, while instrumental reasons are less important. The present study investigates whether or not instrumental and affective triggers are present and influential in households where one member has volunteered to change his/her travel behavior.

To encourage people to change their travel behavior, incentives are frequently used (Gneezy et al., 2011). These can be used either alone or in combination with, for instance, marketing campaigns. One advantage of incentives is that the individual may be motivated, due to these having either monetary or non-monetary value, to try an alternative behavior. Common incentives include free travel passes on local public transport (Thøgersen and Møller, 2008), bike-sharing to encourage more cycling (Midgley, 2011), and pedometers to encourage more walking (Bravata et al., 2007). It has been concluded that economic incentives can be more effective in changing behaviors than the mere provision of information (Lefebvre, 2013). Two travel change programs are included in this study that feature incentives for the participating household member. Many travel change programs focus on the individual car user, but few include the household. Examples of change programs targeting entire households include school travel planning programs (e.g. Buliung et al., 2011) and social marketing programs (e.g., Bröge et al., 2009). Parental involvement is a prerequisite for changing children's school journeys and, as regards social marketing programs, the assumption is that at least one public transport card holder in the household increases the probability of change. Thus, one selection criterion is households that are liable to make changes. However, few of these programs have combined instrumental and affective triggers within the household as in the present paper.

Against the backdrop of stating that household members can play an influential part in behavior change in other life domains, we are interested in exploring this potential in travel behavior, with a focus on understanding more about the influencing triggers. The reason for studying free travel passes is that these are quite commonly used (in Sweden); they are easily distributed to lots of people and are deemed to be an acceptable measure by politicians, officials, and the public. Although studies have been conducted that include entire households, few have focused on triggers within the household that relate to supporting or hindering travel behavior change.

The purpose of this paper is twofold. The first study investigates whether or not participation in a travel change program has any effect on the other household members' travel behavior. The aim is to increase our understanding of instrumental and affective triggers in voluntary change. The second study examines triggers influencing travel behavior change and whether or not the household is perceived as hindering or supporting travel behavior change. Based on the findings, suggestions are made as regards how to improve intervention programs. In doing so, this study aims to supplement previous research on household travel behavior change.

2. Study 1

Study 1 reports on whether or not household members' travel behavior is influenced when one member participates in a travel change program, tapping into triggers for change. Alongside households' behavior changes among, other aspects influencing households during intervention programs are also reported on; i.e. the individual household's travel satisfaction and feelings of safety during travel, time and money spent during programs, adjustments to activities, and the general physical health and life satisfaction of the household.

2.1. Survey design

Värmlandstrafik, the regional public transport provider for Värmland County in Sweden, recruited participants in a test traveler program in 2014 via a large-scale marketing and information campaign (e.g. poster advertising and ads in local newspapers). Fifty-five thousand car owners were invited to apply for the program, in which participants were offered a two-week travel pass free of charge. From the more than 10,000 replies, 5000 people were selected as participants. The selection criteria were based on car ownership and predominantly current car use in relation to everyday public transport use. All 5000 were offered a free travel pass by *Värmlandstrafik*, which was valid for two weeks throughout the whole region (value approx. €100) as a reward for participating in the intervention program. Four months after the intervention, we received the e-mail addresses of 500 participants from *Värmlandstrafik*. These participants were contacted by e-mail and asked to complete a web questionnaire. The participants completing the survey were rewarded with a multi-user voucher of €10, that could be used in about 150 stores. A response rate of 27%, yielding 108 completed questionnaires, was obtained[1]. The final sample consisted of 60 households containing child(ren) and two adults, and 48 households containing adults without child(ren). The participants were sent a web-based survey that was available for two weeks. A reminder was sent after one week. Although he/she was encouraged to discuss and answer the questions jointly with other members of the household, the person participating in the program was responsible for completing the questionnaire. The questionnaire was divided into three sections; (a) household characteristics; (b) travel behavior, experiences, and consequences within the household during the intervention program; and (c) travel behavior, experiences, and consequences within the household after the intervention program. The survey took approximately five to ten minutes to complete.

2.2. Data

2.2.1. Household characteristics

The household structure was verified via questions about the number of adults and children contained in the household. For single households without children, participation ended here.

2.2.2. Travel behavior and experiences

The initial question asked the participants if they had changed their travel behavior compared to before the intervention (measured dichotomously using yes/no); those reporting a change were asked to state the degree to which they attributed this change to the free travel pass on a five-point scale ranging from "not at all" to "to a very large extent". All the participants who had changed their behavior reported how often they were currently traveling by public transport, by car, by bike, and on foot. This was reported separately for the adults and children in the household. The question was phrased thus: "Think about the everyday travel of the adult(s)/child(ren) and compare it to before the intervention. How much are you now traveling by car/public transport/bike

[1] One hundred e-mail addresses were excluded due to being single households.

and on foot (four months after the intervention)?". This was answered on a five-point scale ranging from "much less than before the intervention program" to "a lot more than before the intervention program".

2.2.3. Consequences

All the participants were asked questions about the amount of time their households spent together, about how safe their households felt during everyday travel, and about adjustments to their activities during the intervention. The participants were also asked questions about their households' physical health, life satisfaction, everyday travel expenses, and satisfaction with travel both after the intervention and before. The participants answered the questions by rating them on a scale ranging from "a lot less/worse" to "a lot more/better".

At the end of the questionnaire, an open-ended question gave the participants the possibility of writing down their thoughts about their travel; thoughts that were not captured by the preceding questions. The question was phrased thus: "Besides what we have already asked you, was your household influenced in any other way during the intervention program? Please specify if one member of your household was influenced more than the other members: If so, in what way?"

2.3. Analysis

The independent samples *t*-test is a well-established method of comparing the means in two groups. In the present study, we compared the experiences of the travel behavior change group with the group reporting no travel behavior changes. With the aim of discovering the responses that individuals provide spontaneously (Reja et al., 2003), we also analyzed the included open-ended question. Coding categories for the open-ended questions were developed from previous research on instrumental and affective triggers. These two broad categories were further divided into a number of sub-categories called; planning, external circumstances and internal circumstances (instrumental triggers); supporting incidents and hindering incidents (affective triggers).

2.4. Results

An initial descriptive analysis focusing on travel behavior change among the participants showed that 49 of 108 of them reported a change in their travel behavior four months after the intervention, compared to 59 who had not changed. All of those who had changed their behavior reported that this change was to some extent due to participating in the intervention program. For the participants who had changed their behavior, in the vast majority of cases, their change was decreased car use and increased use of public transport, cycling and walking. Almost all adults in the households who had changed traveled more by public transport, with the great majority traveling less by car. Fewer, but still 30%, reported traveling more by bike or on foot, compared to before the intervention. Among the children, about a third were traveling less by car and more by public transport, with a few having increased their cycling/walking.

A number of independent *t*-tests were run to test the potential differences between those reporting a change in their travel behavior and those reporting no change. As can be seen in Table 1, a significant difference was observed with respect to households' sense of safety while traveling during the intervention program, with households that had changed reporting a higher level of safety than those who had reported no change in their travel behavior four months after the intervention. The households that had changed also reported a significantly higher level of satisfaction with their everyday travel four months after the intervention program.

As can be seen in Table 1, there was no difference between the groups concerning the amount of time the household members spent together, adjustments to household activities, the amount of money the household members spent on everyday travel, the general physical health of the household members, and the general life satisfaction of the household members.

About one fifth (n = 20) of the participants provided short statements in the open-ended question where they indicated other aspects that had influenced their respective households during the intervention program. The responses were inductively coded using the respondents' own words. We looked for recurring patterns in the data, which we sorted into categories characterized by internal homogeneity and external heterogeneity. Two distinct dimensions emerged, which we interpreted as: (a) instrumental triggers and (b) affective triggers. These dimensions could be further sub-divided into six sub-categories capturing the different aspects of the triggers (see Table 2).

As noted above, households were affected by both instrumental and affective triggers. As can be seen in Table 2, the instrumental triggers involved planning, external/internal circumstances, and consequences, whereas the affective triggers were present in both the hindering and supporting critical incidents that were experienced during travel.

2.5. Discussion

Taken together, the findings in Study 1 show that a household member participating in the intervention program influences his/her other household members' travel behavior and that this influence includes both instrumental and affective triggers. The findings acknowledge not only the fact that there are positive effects from targeting households instead of individuals via travel behavior programs, but also that there are psychological aspects of such intervention programs that may not have been fully investigated yet. In line with previous research into interventions for travel behavior change and in other lifestyle areas, e.g. changing eating habits, managing obesity and promoting physical activity, the influencing triggers in Study 1 indicate that household members seem to play a major role in the participating household members' behavior change. The present study shows that reasons such as collaboration, illness, convenience, adjustments and enjoyment all seem to be important when it comes to further understanding household triggers relating to travel behavior change due to intervention programs. Hence, we suggest that the household member participating in the program is influenced both instrumentally and affectively by the other household members during the travel change process. This paves the way for more of a focus on influential household triggers, including affective triggers, when designing intervention programs, in favor of retaining a predominant focus on behavior alone.

3. Study 2

In Study 2, we report on interviews with participants in another travel behavior change program, with the aim of understanding more about the instrumental and affective triggers that influence travel behavior change, as well as in what way the household influences the participant.

3.1. Survey design

A local municipality (Karlstad, in Western Sweden) recruited 34 participants from four local workplaces within 15 min of the city center to participate in a travel behavior change program. To be eligible for the intervention program, participants had to use a car to commute to work on at least three days a week. The participants

Table 1
Group comparisons (t-tests, means and standard deviations) between those reporting changed or unchanged travel behavior four months after the intervention.

	M (Sd) Change (n = 49)	M (Sd) No Change (n = 59)	t	p
Experiences during intervention				
Household satisfaction with travel	3.73 (0.79)	3.39 (1.00)	2.01	<0.05*
How safe the household felt when traveling	3.67 (0.97)	3.25 (0.80)	2.42	0.02*
Amount of time the household spent together	2.90 (0.62)	2.71 (0.77)	1.42	0.16
Amount of money the household spent on travel	3.02 (1.01)	3.17 (0.79)	−0.84	0.40
Household adjustments to activities	2.35 (0.99)	2.22 (1.07)	0.64	0.53
Experiences four months after the intervention				
Household life satisfaction	3.40 (0.54)	3.20 (0.76)	1.53	0.13
Household physical health	3.37 (0.73)	3.17 (0.70)	1.43	0.16

Note: * = $p < 0.05$.

Table 2
Examples of household-related instrumental and affective triggers among the statements reported by the participants.

Trigger	Sub-category	Definition	Quote
Instrumental	Planning	Collaborations between household members, regulating travel behavior change	*-My husband had to pick me up at the train station*
	External circumstances	Triggers outside the household, regulating travel behavior change	*-On some occasions, the ordinary pick-up time from day-care didn't work out, so my partner had to finish work earlier, to do the pickup*
	Internal circumstances	Triggers within the household, regulating travel behavior change	*-One member of our household was ill, making it impossible to actively think about and plan travel by public transport. We've been forced to use the car more than usual*
	Consequences	Travel behavior consequences for the household due to the intervention program	*-Easier for the kids to get into town when we (the adults) were working – and cheaper when it was free*
Affective	Supporting incidents	Enabling triggers for travel behavior change	*-The kids thought it was fun and exciting to travel by bus*
	Hindering incidents	Inhibiting triggers for travel behavior change	*-(But) it wasn't that much fun standing in the cold, when the bus was late*

consisted of 22 women and 12 men, who were residents of Värmland County (population approximately 270,000) and aged between 20 and 62 (M = 44.8). All of the participants, but one, were living in households containing two or more people. The participants were voluntarily taking part in the intervention program, in doing which they agreed to replace their cars with public transportation, and active travel modes such as cycling and walking, on at least three days a week. The program ran for 10 weeks, during which time all the participants were provided with a free travel pass (value = €500) by *Värmlandstrafik* for participating. Half of the participants were additionally offered the possibility of borrowing a bike that could be locked away at the city center train station (including bike servicing). Additionally, all the participants were given the opportunity to do fitness tests before and after the intervention. The only 'cost' attached to participating was having to leave the car at home three days a week and reporting on travel behavior (travel chain) while commuting. No incentives were offered for participating in our interview study.

3.2. Data

At the start of the intervention program, the participants were contacted by phone (or email if no answer was obtained) and asked if they wanted to participate in the present study. All those who were reachable (n = 20) agreed to participate, and a date was scheduled for an interview 6 months after the end of the project. When initially contacted, the participants were asked to describe their commuting trip chain. The phone interviews conducted six months later lasted between 6 and 17 min, and were transcribed directly after each interview. The research instrument was a semi-structured questionnaire. The trip chain, as described by the participant when initially contacted, was presented and discussed in order to identify any changes in travel behavior both during and after the program. Questions were asked about supporting and hindering factors (e.g., influential triggers) relating to behavior change before and after the program. Finally, current travel behavior, adaptions, and consequences, e.g. activity adjustments and reprioritizations for both the participants and their households, were also discussed. All the questions were open, allowing various reasons/answers.

3.3. Analysis

Data analysis was based on the Switching Path Analysis Technique (SPAT) (Roos, 1999). SPAT was chosen as the analytical method primarily in order to identify influential triggers. The starting point for our analysis was identifying influential triggers relating to changed travel behavior versus no change in travel behavior due to the intervention, i.e. investigating the trip chains during and after the change program. The next step was to compare influential triggers vis-à-vis choosing to participate in the intervention program with influential triggers vis-à-vis maintaining change. Lastly, the participants' perceptions of the influence of the household on travel behavior change was analyzed.

3.4. Results

3.4.1. Trip chain during and after the program

The trip chain was defined as a sequence of trips starting at a participant's home and ending at his/her workplace after the morning commute. During the interviews, a general finding among the participants was complex trip chains using multiple modes during the program, e.g. car-walk-bus-cycle or walk-bus-cycle-walk. The trip chains observed after the program were generally less complex, i.e. they included fewer modes. However, even though many of the participants had returned to simple single-mode (often car) commutes, others to some degree retained, their

changed travel behavior after the program had ended, essentially by reducing their car use. Statements from participants experiencing modified travel behavior after the program (n = 9) signaled that other household members had helped them to change their behavior, i.e. a way of keeping car use down.

We use the car if both my husband and me are heading to Karlstad City, then we carpool (Female, 62)

Another participant articulated the hardship of switching completely to alternative modes, while simultaneously seeing that her reduced car use could be attributed to increased cooperation within her household.

The children's day (at daycare) is too long if I continue traveling by bus only. (But) we travel a lot less by car now. We carpool now, only using one car instead of two (Female, 46)

Participants who returned to their old travel behavior after the end of the intervention program also described the influencing triggers as being related to their households, and as hindering their behavior change. One participant reported that his children were the trigger of his increased car use after the intervention program had ended.

The children are the reason why I use the car (Male, 43)

Another participant explained her increased car use in terms of time efficiency, in order to be able to spend more time with the other members of her household.

My working day is too long if I combine bus and bike, it affects the children (Female, 45)

These examples demonstrate that the influence of the household can be exerted differently, either by enabling behavior change or by hindering it.

3.4.2. Influential triggers before and after the program

At the start of the intervention program, the participants were asked to describe why they had decided to participate in the program, i.e. influential triggers for voluntarily change behavior. Some reported only one trigger, but several of the participants reported two or more. Analysis revealed various types of influential triggers, which were divided into nine different categories (see Table 3). A common influential trigger at the start of the program was the ambition of being environmentally aware.

I like to use public transport, both for my own sake and for the environment. (Female, 39)

Health aspects were also reported to trigger participation in the program. Several participants stated that they wanted to "*feel good*". Improved health was associated with fresh air and physical activity, from walking to the bus or cycling.

My goal was to be more physically active (Male, 38)

Yet another influential trigger was financial, providing the possibility of lowering weekly commuting costs by saving money on gasoline, parking and running costs by leaving the car at home. One participant stated that her finances were almost as important as the environment when it came to choosing to participate.

Mostly for environmental reasons, and then there's the financial aspect (Female, 61)

It was less common to report a positive preference for public transport, cycling or walking as an influential trigger, or an appreciation of public transport as an efficient travel mode. A few participants reported their curiosity about trying other travel modes as an influence on their will to participate.

Table 3
Influential triggers, as stated by the participants, before and after participating in the intervention program.

Influential triggers	Before	After
Environment	36%*	7%
Health	20%	3%
Finances	20%	11%
Positive preference for active modes	16%	16%
Perception of public transport efficiency	8%	–
Household	–	43%
Time	–	18%
Work	–	11%
Habit	–	7%

Note: A dash means no statement for that trigger.
* The proportion of participants stating a specific trigger.

After describing triggers influencing participation in the intervention program, the interview shifted toward triggers influencing the participants' current travel behavior. As can be seen in Table 3, there is a difference between the influential triggers before and after completion of the intervention program. Discussion during the interviews predominantly shifted from focusing on supporting the influential triggers for behavior change, and participation in the program, toward hindering triggers concerning why the behavior change, in most cases, was smaller than intended. After the program, the household was the prime hindering trigger for travel behavior change. In fact, it seems as if the household had exerted a greater influence than the participants themselves had initially been expecting, with the household not being mentioned at all. When asked directly about everyday travel planning, it turned out to be the case that the household's everyday activities were perceived as restricting travel behavior choices. In situations where the household and its activities were perceived as a barrier, the car was the number one choice.

I'm not free to choose (travel mode). The car and the children belong together (Female, 39)

The role of the household also seems to vary with the situation. Analysis showed, for instance, that the children were reported as a major influence. Being able to quickly pick them up after work was clearly an important factor; the participants wanted to minimize the length of their children's school days, making every minute of travel count. Furthermore, when the participants took their households into account, it was often the need for flexibility that dominated.

The household, primarily the children, are better off when I use the car. There isn't enough time, especially after a long day at work (Female, 45)

The car is a tool for carrying out household activities. One participant expressed frustration over how the household was a barrier to her travel behavior choice.

It's the household that decides, in my case. Otherwise, I'd leave the car at home three days a week (Female, 45)

Before the intervention, the supporting and influencing triggers for behavior change were perceived and reported as: concern for the environment, health, and finances. After the intervention, the focus switched to influencing triggers that hindered prolonged change. The household was reported as the main influential trigger hindering participants from changing their behavior to the extent which they were aiming to. Thus, despite the fact that about half of the participants made behavior changes (i.e. less car use and more travel using active modes), their perception was that the other household members had hindered their behavior change.

3.5. Discussion

The findings in Study 2 show that household influence includes both instrumental and affective triggers, and that the household is predominantly reported as a hindering factor in travel behavior change. The shift in focus, from initially supporting triggers to eventually hindering triggers, can be explained by the participants' inner and outer expectations as regards participating in an intervention program. However, the findings also show that failing to maintain the exact trip chain, as stated at the start of the intervention program (e.g., completely giving up the car), was perceived as a failure to change travel behavior. Thus, participants report this failure to fulfill change as originating from the hindering influence of the household. However, travel behavior change was actually achieved, not as much as initially intended, but nevertheless a reduction in car use, which is worthy of attention. The participant's perception of the hindering household influence suggests a note of caution. Future self-fulfilling prophecies are at risk, i.e. that hindering thoughts and experiences affect and thus hinder future behavior change.

4. General discussion

While some of the findings may be intuitive, i.e. that the household has a part to play in changing travel behavior, the findings still has implications for further research and design, and for the implementation of intervention programs. Other findings may be more surprising, i.e. the participant's perceptions of the other household members' hindering influence on behavior change, despite the fact that behavior changes have been achieved. As demonstrated in Study 1, we suggest that households' influencing effects during travel behavior programs need further attention in research. Measuring the magnitude of these effects would be a first step. Based on the combination of survey and interview data, we argue that attempts to change travel behavior are more likely to succeed if the complexities associated with the household are addressed, instead of narrowly focusing solely on the program participants. While instrumental and affective triggers seem to play a part by either supporting or hindering travel behavior changes, these kinds of triggers are not well-known yet and are thus not actively supported during programs. Many recent travel change programs conducted in Sweden, which have included free travel pass trials, are framed as marketing activities with no support provided during the processes, neither to the participant nor to his/her household. A closer look at the importance of instrumental and affective triggers, in order to detect triggers that support change in both the participant and in the other household members, would be a fruitful venture for future research. There may also be differences between household types and, thus, variations in how intervention programs should be designed to fit. However, before taking action, research needs to gain a better understanding of the triggers associated with households that have varying compositions.

4.1. Limitations

When using incentives, there is a risk of attracting participants who are only interested in the incentive itself. Incentives like those used in the present study are, however, well established when it comes to achieving reliable surveys. Previous research (see, for instance, Thøgersen and Møller, 2008) shows that handing out free travel passes valid for a couple of weeks is a successful way of making people aware of the benefits of public transport once they have tried it out for a limited period of time. As an effect of this new awareness, public transport usage increases. We are also aware of the limitations of open-ended questions. However, the more diverse set of answers received (Reja et al., 2003) is advantageous when exploring the household as an instrumental and affective trigger during intervention programs aimed at travel behavior change.

4.2. Conclusion

Using these two studies (Study 1 and Study 2), it has been possible to show that household members' travel behaviors are affected by one single household member's participation in a voluntary change program, and that the other household members in turn affect the participant. We are already able to find useful effects of household influence without including households actively in intervention programs. It may be speculated that active inclusion, in the form of household intervention programs, will, as a result, pave the way for potentially greater effects than those previously observed.

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