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Driving in old age: Use of Protection Motivation Theory on a
fictional on-road program

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Thomas Berndl

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Abstract

The present master thesis investigated the influence of the Protection Motivation on possible intentions to change the driving behavior above the age of 65 years. We examined the protection motivation, in this study referred to as openness towards feedback, conviction of sufficient self-assessment and concrete plans of self-regulation with regards to the effects of its threat and coping appraisal components on it. Furthermore the influence of the PMT-factors was tested concerning the participation in a fictional on-road program in order to obtain feedback on the present driving abilities as well as regarding two scenarios in which one entailed possible consequences for the driver. 24 participants were consulted in focus groups in the first part of the study in order to create a suitable questionnaire, 102 participants took part in the subsequent section of the research. Although overall outcome demonstrated a diversity of predictors for each dependent variable, results yet showed that “severity”, “vulnerability” and “self-efficacy” were the most important predictors in order to forecast protection motivation and furthermore the willingness to participate in the program and both scenarios. This master thesis outlines that the PMT as explanatory model of behavioral changes in health threatening situations by the means of adaptive and maladaptive coping can be applied on the issue of driving behavior in old age, however future research is necessary in order to adapt the PMT to a version more suitable to use it on so far new fields of application.

Keywords: protection motivation theory, behavioral changes, driving in old age, participation willingness, openness towards feedback, plans of self-regulation, conviction of self-assessment

Introduction

"Old age is the most unexpected of all things that happen to a man."

Leon Trotsky, 1935

Most people remember the day they got their driving license very well. It is one of the greatest achievements to get in youth and suddenly one feels independent and a big step closer in being a grown-up. The privilege to drive a car is classified as life-long and never could anyone take it away again. However, have you ever racked your brain about what is going to be happening in the future, as soon as you get older? Without a doubt there are situations in traffic where lots of drivers get upset because of older people keeping the speed limit to the exact or spend sensed hours to turn at crossing. Have you ever wondered why those old people still drive, why they are not taking the bus or the subway or why they are not carried by their relatives? Perhaps we sometimes ask ourselves if older people in general even still dispose of the physical and mental abilities to drive, but there should be one fact considered, we all are going to be one of them someday.

This gives rise to the question if driving in old age is of equal importance as it was before. Of course, the term "old age" has to be seen relatively; however, usually it is determined as above 65 years with the transition into a new stage of life with various changes in the daily routines. It is a matter of fact that the demographic structure will be changing in the future, the OECD countries have to face that in 2030 25% of the population will be over the age of 65 years (Schlag, 2008). According to Fildes (2006) the "population spurt that happened during the 1940s and 1950s, the so-called 'baby boomer' generation, begin to reach their golden years" (p.307) and this development could lead to alterations in mobility. As life expectancy has increased over the past few decades traffic faces more elderly drivers than ever before as the time span of driving extended (Schlag, 2008). He outlines in his research that elderly people never have been as mobile as before due to the fact that they belong to the first generation of life-long drivers and that they are used to drive all time and "have adjusted their lives to that" (p.73). But what if our skills to drive have already degenerated within the past years and we refuse to believe it? What if fear and panic are spreading among our passengers because of the way we drive? Would we ever do a certain change on our driving behavior just because we get older?

In the following master thesis we examine the acceptance of a fictional on-road program on checking the fitness to drive accompanied by a driving instructor with people above the age of 65 years (in the following text also referred to as “elderly people” or “people of old age”). Using the theoretical framework of the protection motivation theory this study investigates whether people are open-minded towards feedback on their driving, dispose of concrete plans to self-regulation and are convinced of sufficient self-assessment concerning their driving skills. We furthermore examine the influence of the Protection Motivation Theory on the general willingness to participate in this program and possible changes in the willingness if the program results would entail possible consequences such as driving restrictions. As it required considerable effort on recruiting sufficient people above the age of 65 years still driving research and implementation of this project was carried out in collaboration with my colleague Lena Eisenmann. Although we both tested the influence of the Protection Motivation Theory on the willingness to participate on the fictional on-road program we performed it, in particular, with regards to different scenarios.

Before elaborating on explaining the Protection Motivation Theory and proceeding how we implemented it in our research we should do a review on the increasingly relevant issue of elderly people and driving, especially their impacts on public safety, changing driving patterns and the importance of driving in old age.

Theoretical Background

Researchers have already focused on investigating correlations between driving competences and impairment of people belonging to the older community in the later Sixties with a directional tendency to concentrate on social perspectives and psychological impacts in the beginning of the 1980s. Current research has recognized the necessity of continuing to explore this field of study, as already mentioned in particular due to an increasing proportion of the elderly population over the next years (Monterde i Bort, 2004). According to Keskinen, Ota, and Katila (1998) "it is therefore more important than ever to find out what effects this may have in the future on traffic safety in general and on the increasing older drivers' population in particular" (p. 323). Ragland, Satariano, and MacLeod (2004) outline that there are two reasons why this field of research is of considerable importance for the general public. On the one hand they emphasize a connection between public safety and a steady rising number of drivers in old age suffering from physical impairment, on the other hand they focus on insights that limitation on older peoples' driving behavior might contribute social disadvantage by inaccessibility to services.

Old drivers and traffic safety

With regard to public safety previous research demonstrates that ageing brings several changes on a sensory, cognitive and motoric level which could possibly lead to insecurities in driving a car and consequently to traffic problems (Schlag, 2008). In his studies Nasvadi (2007) emphasizes especially worries about a rising number of car accidents due to the baby-boomer cohort. In accordance to McGwin and Brown (1999) the percentage of elderly people with medical impairments as a decisive factor to cause an accident exceeds with 8.4 % the proportion of younger drivers with 1.4 %. Hakamies-Blomqvist and Henriksson (1999) investigated in their research a significant connection between drivers of old age and specific types of accidents as elderly people rather crash in unmanageable situations and at crossings. Keskinen et al. (1998), however, argue that elderly drivers considerably drive less often and cover less mileage than younger people, therefore their risk for having an accident only seemingly increases. Same argument, called the Low Mileage Bias, is outlined by Langford, Methorst, and Hakamies-Blomqvist (2006) in their research

whereas they do not argue that “all older drivers are sufficiently safe to continue driving” (p. 577).

Schade (2008) reports in his study a significant correlation between specific forms of infringements and age. While norm violations such as driving without a driving license, drink-driving or travelling at excess speed decreased, driving errors such as disregard for the right of way, red light contempt or various misbehavior at turning, reversing and at zebra crossings rose among elderly drivers.

However, drivers of old age can countervail their decreasing functional skills and therefore they can do the same by modifying their driving behavior (Fildes, 2006). According to Rimmö and Hakamies-Blomqvist (2002) drivers among the older society often demonstrate compensatory performance to level out stressful traffic conditions such as avoiding driving at night. Schade (2008) found in his research indications that a lack of mobility among old drivers successfully can be compensated by other forms of mobility. Schlag (2008) argues that compensatory measures of elderly people have been neglected in research so far.

Change of driving patterns

There are several changes in mobility requirements of elderly people due to the fact that an individual's life structure changes throughout living (Fildes, 2006). In particular it concerns the facts that active drivers cover fewer distances per day in old age and that the average length of a distance decreases in the older community (Schlag, 2008). Whelan, Langford, Oxley, Koppel, and Charlton (2006) however argue that there is no actual diminution before the age of 75. Although prior investigations show alterations in driving patterns of elderly people, Schade (2008) emphasizes that there are no great declines noticeable. According to his research the percentage of active road users only decreases from 87% to 83% among male drivers and from 86 % to 72 % of female drivers in the time course of 40 to 70 years of age. Nevertheless he states that diminished mobility already occurs at the age of 50, however, in a gently descending curve. Concerning the length of covered distances per year Mollenkopf and Flaschenträger (1996) indicated in their research that it decreases significantly by age with 21 % of people above the age of 65 years driving less than 5.000 kilometers, 55 % driving between 5.000 and 10.000 kilometers and 24 % more than 10.000 kilometers per year.

According to Raitanen, Törmäkangas, Mollenkopf, and Marcellini (2003) 62 % of drivers in Finland and Germany and 44 % of drivers in Italy above the age of 55 specified to use their cars less often than the years before. They outline in their research that driving less demonstrates similar sources like giving up driving at all, both decision underlie sophisticated factors. Especially negative health conditions and the ability to reach places without driving were strong arguments among the old society of drivers. However, it is more common for elderly people of being incapable of walking or using public transportation than being forced to give up driving (Schlag, 2008).

Although several studies have investigated that functional limitations as vision problems and cognitive restrictions are major indicators of driving cessation among older people research indicates that emotional sources such as strain about driving also result in driving less (Ragland et al., 2004). Rimmö and Hakamies-Blomqvist (2002) confirm latter argument as they report in their research that elderly drivers are given to decrease their driving behavior due to demanding situations. Other negative issues of driving in old age entail anxiety of driving itself, apprehension of getting into and out of the car and problems in cognitive procession of traffic demands (Gardezi et al., 2006). In their study the authors argue that older people often feel stigmatized due to their age by younger drivers and are put under pressure by others towards driving cessation.

Concerning gender differences male elderly drivers tend to reduce their driving behavior due to physical disabilities, whereas women rather have emotional reasons for driving cessation (Ragland et al., 2004). Rimmö and Hakamies-Blomqvist (2002) point out that the probability to limit driving in old age is in general higher among women than men due to the fact that female drivers report more mistakes controlling the vehicle which subsequently creates strain and ultimately result in driving cessation.

Though previous research found that driving in old age often helps to maintain self-esteem and avoid loss of independence, Ragland et al. (2004) indicate that many elderly people are willing to reduce or even avoid their driving. Evidence for this comes from a study where old drivers listed reasons not related to medical impairment such as the anxiety getting involved in an accident. Since one considerable reason mentioned was that there is no need to drive at all, the assumption of the researchers was that this driver group might have limited need of services to use (Ragland et al., 2004).

Importance of driving in old age

Nasvadi (2007) criticizes in his research that the majority of studies in the past drew the attention on driving skills and not on varying driving attitudes and customs. As outlined before limitation on older peoples' driving behavior might contribute social disadvantage by inaccessibility to services (Ragland et al., 2004). Due to Keskinen et al. (1998) the elderly generation takes part in social activities more than ever and the laboring proportion is estimated to rise as well.

Whelan et al. (2006) investigated that driving comprises more aspects leading to a better quality of life such as psychological and exercise advantages, accessibility to people and places and participation in social activities or hypothetical possibility to travel even if it's not currently necessary.

Donorfio, D'Ambrosio, Coughlin, and Mohyde (2008) point out that a loss of mobility among older people can cause reduced attendance at out-of-home activities and lead to stressful relations to others they depend on concerning driving around. According to Ragland, Satariano, and MacLeod (2005) the state of research reports that a termination of driving results in "reduced independence, reduced access to essential services, impaired ability to maintain a household or to conduct other essential activities, and reduced community activity and social integration" (p.399). According to Mollenkopf and Flaschenträger (1996) most activities of the daily living in old age are shopping and procurements, togetherness with friends and relatives as well as health care. In old age driving less also contributes the occurrence of depressive and other negative emotional symptoms (Ball & Wahl, 2002). Gardezi et al. (2006) report that elderly people often have regrets after stopping to drive and especially men feel a decrease of self-respect. In addition, the probability of moving into a care institution rises (Turano et al., 2009). Latter argument is also represented by Freeman, Gange, Munoz, and West (2006) who claim in their study that limitation of driving constitutes a considerable risk factor regarding the necessity of long-term care. Sustaining the aptitude to drive might support self-sufficiency and life quality in a positive way, particularly in older ages (Ball & Wahl, 2002).

Driving in old age involves several benefits as it strengthens the feeling of group belonging and life self-regulation and contributes to a sense of independence, pleasure and flexibility. Preliminary support for this argument comes from a study of Gardezi et al. (2006). According to the authors older people literally fear the day they are not able to drive any

more. In their research they claim that elderly people make no plans to stop driving and beware of even thinking about it, even the old society is making use of public transportation as they see it as addition to the car.

Wehlan et al. (2006) investigated in their research that the private car is the primary means of transportation chosen by elderly people in the majority of OECD countries. They point out that, however, while in European countries walking still is popular with 30-50 % of people above the age of 65 the elderly population of North America prefer to drive. In the USA people over the age of 65 use their own car to cover 89% of their distances. According to Schlag (2008) the car dominates in Europe as well even though alternative means of transportation exist. However, especially in areas outside of the cities disposition of a car is of higher significance as abandoning the car could entail limitations in life quality and could subsequently lead to physical impairments.

In summary, it almost seems to be a vicious circle by having a deeper insight into existing research: on the one hand elderly drivers are often overstrained with demanding situations in traffic caused by physical impairments and emotional reasons and therefore reduce or even stop driving (Ragland et al., 2004), on the other hand several studies (Satariano & MacLeod, 2005; Ball & Wahl, 2002; Turano et al., 2009; Freeman et al., 2006) showed that decreased or terminated driving behavior could result in major social disadvantages, psychological diseases such as depression or even long-term care. Is it still a question about if there is a moment in life where we have to change our driving behavior, or is it more a question about when that moment is? And who decides?

Evaluation of driving skills

According to Lundberg and Hakamies-Blomqvist (2003) "on-road tests appear to be widely accepted as the most realistic measure of driving capacity" (p.164). A recent survey conducted in Germany in which 1500 people participated showed interesting results on the issue of future driving tests. According to the study 57.4 % of people above the age of 66 rejected a driving test from the age of 70 if it is mandatory, however, 75.8 % voted for a driving test as long as it is a voluntary option. Most mentioned ideas on how drivers could drive securely and independent for as long as possible were "participation on driving course/safety trainings" (11 %), "aptitude tests" (10.4 %) and "should remain in personal responsibility of the driver" (10 %) (Wente, Kraus & Uhse, 2010). According to Boccara,

Delhomme, Dommès, Vidal-Gomel and Rogalski (2010) a combination of a classroom presentation and a practical test in assessing one's driving skills seems to be the most attractive and acceptable evaluation form in which elderly drivers were willing to adapt their driving behavior. Boccara et al. (2010) however outline that drivers who are unaware of self-regulative driving behavior are not attracted by driving tests on a voluntary basis.

Gardezi et al. (2006) investigated in their research that elderly people prefer to consult a doctor concerning driving aspects compared to talking with family members and friends. Opinions by the latter are just desired if they are of supportive nature, putting elderly people under pressure to terminate driving might result in excessive stress. According to Gardezi et al. (2006) previous research investigated older drivers in focus groups and found that 47 % prefer a physician to decide whether to drive or not while just 16 % let family members make the decision. Recent results of a study performed by Wente et al. (2010) demonstrate that 52 % of people above the age of 66 years would hand in their driving license at request of relatives or good friends, 88.4 % at request of their family physician. Concerning the question "As a passenger, have you ever felt afraid or had reservation because of the driver's unsafe way of driving?" most participants above the age of 66 who answered in the affirmative (41.4 %) reported the driver to be above the age of 61 years or more.

As already mentioned Nasvadi (2007) criticizes in his research that the majority of studies in the past drew the attention on driving skills and not on varying driving attitudes. Griffeth and Rogers (1976) first investigated in their research fear-arousing factors in driving education of students and the effects on driving behavior and attitudes. Nevertheless, there is a lack of research concerning cognitive mediation processes and their effects on changes of the driving behavior, especially for the older society. According to the present state of research we have to consider that elderly drivers often have strong reasons for still driving and perhaps overlook their own degenerating physical conditions in doing so. As already mentioned there are some groups of people that are able to convince drivers of old age to drive less or even stop, however, in the majority of cases the person concerned decides for himself/herself.

In our study we tried to confront the participants of old age with the possible threats of their current driving behavior and furthermore to examine what factors have influence on their coping strategies and possible future driving behavior by using an adapted framework

of a concept deriving from the domain of health psychology, the Protection Motivation Theory.

Protection Motivation Theory

The Protection Motivation Theory (Figure 1 + 2), subsequently described in simple terms as PMT, derives from the work of Richard Lazarus in 1966 and explains human behavioral changes by the means of adaptive and maladaptive coping in health threatening situations (Boer & Seydel, 1996). Cismaru, Lavack and Markewich (2009) highlight the importance of the PMT as a “theoretical framework to understand the factors that influence the persuasiveness of health communication” (p. 295). In accordance with Pechmann, Zhao, Goldberg and Reibling (2003) the PMT describes that “people’s motivations or intentions to protect themselves from harm are enhanced by four critical cognitions or perceptions, regarding the severity of the risks, vulnerability to the risks, self-efficacy at performing the advocated risk-reducing behavior and the response efficacy of the advocated behavior” (p.2).

Original aim of the PMT postulated by Rogers in 1975 was to specify fear appeal characteristics and coping processes by means of three determining variables: severity of a threatening event, probability of occurrence of that event and availability of a protective measure. Rogers assumed that these dimensions considerably influence human motivation to perform preventive behavior with a multiplicative linking of the components (Barth & Bengel, 1998). The protection motivation as a result of these factors can be equaled with the intention to behavioral performance. As a consequence, if one of these variables were 0 the purpose to behavioral change would be 0 as well (Block & Keller, 1998). The theoretical manifestations of the PMT can be organized into two different areas of evaluation: threat appraisal and coping appraisal.

Threat appraisal describes the factors of the PMT which have influence on the extent of a threatening sensation an individual perceives in a certain situation, this includes perceived vulnerability, severity and fear arousal. The former explains how an individual personally feels affected by a threatening situation, severity evaluates to what perceived extent a threat can harm an individual’s life and fear arousal defines the degree of fear that can be caused by the threat, whereas latter factor can be seen as interceding variable between the first two ones (Milne, Sheeran & Orbell, 2000). According to Cismaru and

Lavack (2007) high scores in perceived vulnerability and severity promote significantly greater alteration in protection motivation.

In a revised version of the PMT in 1983 Rogers added intrinsic and extrinsic rewards as additional factors to the threat appraisal components of the theory (Floyd, Prentice-Dunn & Rogers, 2000). However, in contrary to the other two factors of the threat appraisal part, high scores in the rewards means less change in protection motivation (Milne et al., 2000). While the original version of the PMT more tried to bring clearness to understand the insights of fear appeals the revised version intends to reveal mediative influence on behavioral change, the multiplicative linking of the former version was abandoned in favor of an additive linking (Boer & Seydel, 1996).

In one sentence, the threat appraisal part of the PMT zeroes in on the threatening source and the components that increase or decrease the probability of maladaptive coping behavior such as avoidance, denial, wishful thinking or hopelessness (Milne et al., 2000).

According to Milne et al. (2000) "coping appraisal evaluates the components of a fear appeal that are relevant to an individual's assessment of the recommended coping response to the appraised threat" (p. 109). This part of the PMT is mainly characterized by response efficacy which defines to what extent an individual believes that a certain coping response will successfully decrease threat. In addition, Rogers extended the coping appraisal components in the revised version of the PMT with the factors response costs and self-efficacy. Former describe to what extent a certain coping reaction entails costs for the individual, self-efficacy defines if an individual personally feels able to realize a coping behavior to a threatening situation and overcome the response costs (Milne et al., 2000). Cismaru and Lavack (2007) emphasize in their study that "perceived costs represent the sum of all barriers to engaging in the recommended behavior and include monetary costs and non-monetary costs such as time, effort, inconvenience, discomfort, etc." (p. 253). In accordance with the authors high scores in self-efficacy and response efficacy are more likely to promote protection motivation, response costs behave opposite and low scores help to significantly increase protection motivation behavior.

In one sentence, in the coping appraisal part the difference between response efficacy and self-efficacy minus the response costs, either physical or psychological, represents adoptive coping behavior to the advised preventive response (Milne et al., 2000).

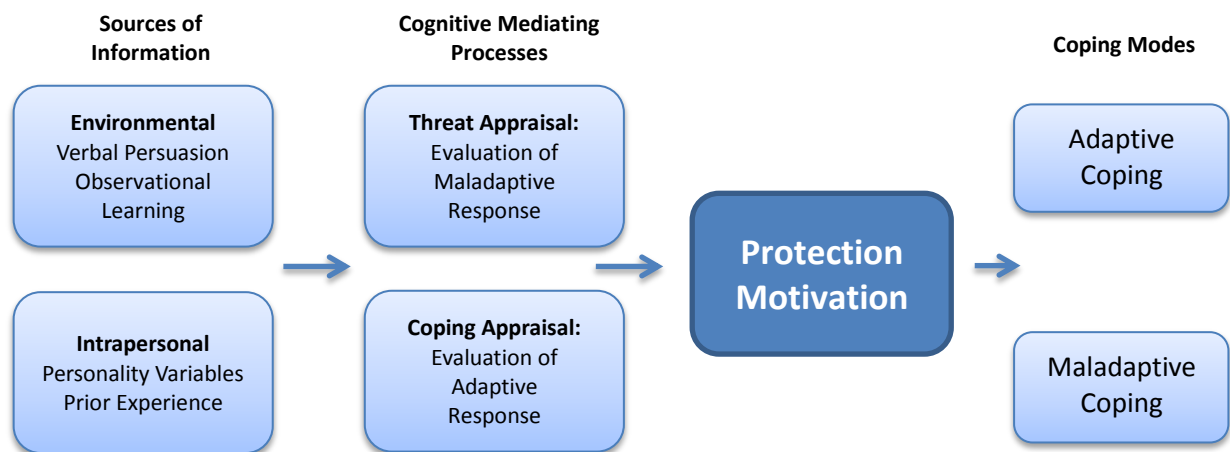


Figure 1. Protection Motivation Theory by Floyd, D. L., Prentice-Dunn, S., & Rogers, R. W. (2000). A Meta-Analysis of Research on Protection Motivation Theory. *Journal of Applied Social Psychology*, 30(2), 407-429.

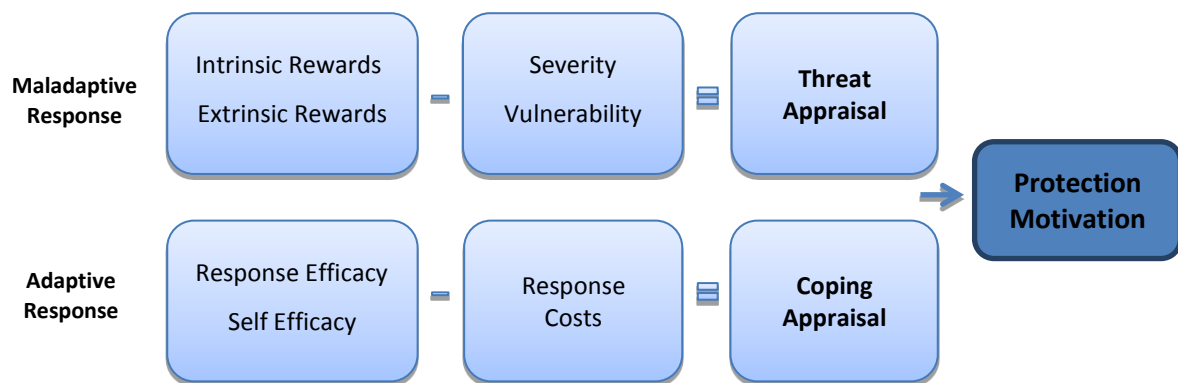


Figure 2. Cognitive Mediating Processes of the PMT by Floyd, D. L., Prentice-Dunn, S., & Rogers, R. W. (2000). A Meta-Analysis of Research on Protection Motivation Theory. *Journal of Applied Social Psychology*, 30(2), 407-429.

To summarize, Protection Motivation is maximized with (Cismaru et al., 2009):

- High scores in perceived severity
- High scores in perceived vulnerability
- Low scores in intrinsic/extrinsic rewards
- High scores in response efficacy
- High scores in self-efficacy
- Low scores in response costs

Past research has focused on using the PMT in order to explain behavioral changes by the means of adaptive and maladaptive coping in health threatening situations (Boer &

Seydel, 1996). PMT already found use in studies regarding HIV-related preventive sexual behavior, use of sunscreen, smoking cessation, tooth brushing behavior or fatty food consumption (Milne et al., 2000). Although there has also been research using the PMT on driving-related topics such as usage of the safety belt in the car it still focused on health threatening events. Studies that investigate behavioral changes as a result of non-health related issues have been neglected so far (Floyd et al., 2000).

The Research Model and Hypotheses

As we made use of the PMT to a so far insufficiently explored field of application we therefore had to adapt the theoretical framework in some areas to suit our particular research interests. In contrary to the previous research we did not investigate coping strategies as answer to a health-threatening behavior; however, we used the different factors of the PMT as cognitive mediating processes in order to examine their influence on a possible coping behavior that might result from obtaining feedback on someone's driving skills.

As already mentioned this master thesis examined whether the different factors of the PMT influence the acceptance of a fictional on-road program on checking the fitness to drive for elderly people. We therefore expanded the PMT in order to measure appropriate mediating factors that might contribute to behavioral changes in driving as a result of the assumed received feedback; however we did not change the structure of the original theoretical framework. For a better understanding the components of the PMT used in this study (figure 3) will be described in the following with simplified item examples consistent with our intention of research, whereas a more detailed description will follow in the method part of the thesis. As illustrated in figure 3 the threat appraisal part of the theory in our research model is composed of the factors **intrinsic/extrinsic rewards** ("Driving means freedom to me"), **severity** ("The older a driver is the higher is the chance of having an accident") and **vulnerability** ("Considering your state of health, what are your chances of causing an accident?"). Moreover we added a further component to the threat appraisal part named as **feedback rewards** ("Seeking feedback on driving is a sign of personal strength") as we argue that rewards concerning feedback on driving skills differ from the rewards of driving itself and high scores contribute to protective behavior. The coping appraisal part of our research model is made up of the factors **response efficacy** ("If I would obtain feedback on my driving I could do necessary adjustments"), **self-efficacy** ("I could deal with a negative feedback") and **response costs** ("I would feel awkward of a poor performance in the test"), unaltered compared to the original version.

In our study the actual Protection Motivation was divided into three components which we assumed as results of the preceding PMT-factors, however, different aspects of the intention to do a coping behavior, named as **openness towards feedback** ("I would be very interested

in getting feedback on my driving skills”), **concrete plans of self-regulation** (“I am actively doing something to maintain my abilities to drive”) and **conviction of sufficient self-assessment** (“In my opinion I can best tell how I drive”).

Ackerman et al. (2010) state in their research that the concept of giving feedback on driving could result in changes of older people’s driving behavior. The authors investigated that feedback concerning cognitive abilities can subsequently result in alterations of driving self-regulation; however, they also point out that some people who obtained negative feedback made no changes on their self-regulation on driving. Due to the authors this could be attributable to the fact that coping with feedback might strengthens self-appraisals as it threatens the driver’s autonomy.

Schwarzer (1999) outlines in his research the importance of self-regulation processes as it significantly influence a realistic detection of a threatening situation. Ackerman et al. (2010) point out that there is an association with high level of driving self-regulation and old age as well as with low ratings in driving confidence, however, the authors state that some elderly drivers have the tendency to overestimate their driving skills. Other investigations state that drivers of old age not being aware of their skill degeneration show no self-regulating behavior, however, as soon as they were informed about their impairments they reported self-regulation of their driving (Meng & Siren, 2012).

According to McPeck, Nichols, Classen and Breiner (2011) 80 % of people consider their abilities being as above-average including their driving skills. They outline in their research that old drivers showed in at least one study better scores in self-assessment than younger ones. The authors also emphasize that changes on driving behavior call for acceptance of decreasing abilities what only could be done by sufficient self-assessment. Boccara et al. (2010) highlight that self-assessment might influence self-regulating in driving but they also indicate as others before the potential to overestimation of one’s driving abilities. Due to their results once being conscious of their own driving skills they tend to self-regulate their driving behavior.

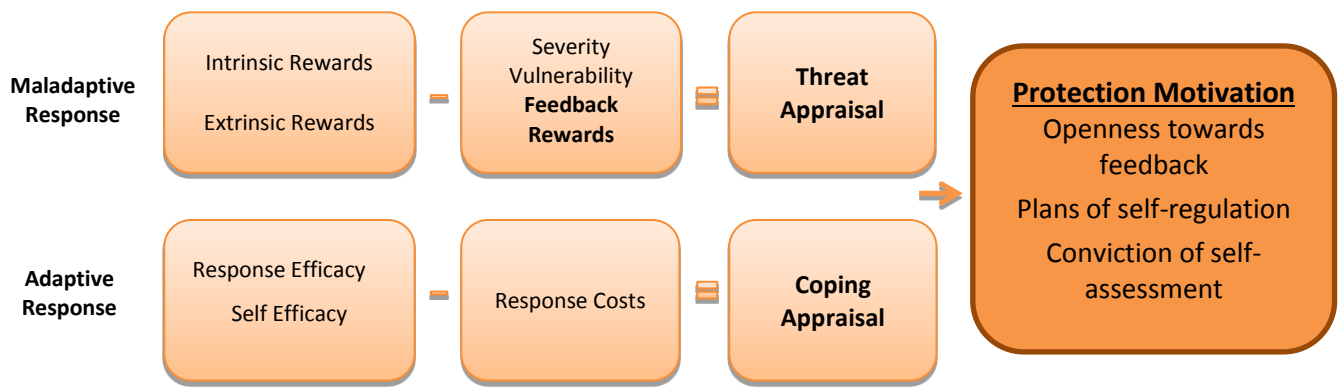


Figure 3. Research version of the PMT. Adapted from Floyd, D. L., Prentice-Dunn, S., & Rogers, R. W. (2000). A Meta-Analysis of Research on Protection Motivation Theory. *Journal of Applied Social Psychology*, 30(2), 407-429.

It has already been illustrated that we expect the different PMT-factors to predict the protection motivation, described as openness towards feedback, concrete plans of self-regulation and conviction of sufficient self-assessment in our study. We therefore derive the following hypotheses:

Hypothesis 1a: The different PMT-factors will predict openness towards feedback as part of the protection motivation.

Hypothesis 1b: The different PMT-factors will predict conviction of sufficient self-assessment as part of the protection motivation.

Hypothesis 1c: The different PMT-factors will predict concrete plans of self-regulation as part of the protection motivation.

Furthermore we assume that the PMT-factors have a direct influence on the willingness to participate in the program “accompanied driving” as well as in two scenarios of the program where one entails no consequences for the participant and the other one could result in consequences for the driver. As we expect the parts of the protection motivation to be influenced by the PMT-factors we assume that the willingness to participate in the programs act similar as it is representative to the coping mechanisms in the original PMT (Floyd et al., 2000). The hypotheses are as follows:

Hypothesis 1Ia: The PMT-factors will predict the willingness to participate in the program “accompanied driving”.

Hypothesis IIb: The PMT-factors will predict the willingness to participate in the scenario “participation without consequences”.

Hypothesis IIc: The PMT-factors will predict the willingness to participate in the scenario “participation with consequences”.

Moreover we expect drivers with high scores in protection motivation to be less influenced by the two different scenarios and that the high perceived protection motivation will lead to greater willingness to participate in both scenarios compared to drivers with low scores in protection motivation. Thus, the following hypothesis is formulated as:

Hypothesis III: The higher the protection motivation the less the scenarios play a decisive role.

Preliminary Study

This study was composed of two parts, a preliminary study consisted of six focus groups held in Vienna and Berlin in July and August 2012, and the second part comprised a paper-pencil questionnaire given just to individuals in Vienna which will be explained more detailed in the method part of this thesis. The aim of the focus groups was to examine general attitudes towards driving behavior and to deliver information for the different parts of the PMT which subsequently formed the basis to design the questionnaire. The preliminary study consisted of 24 participants in total, 7 in Vienna and 17 in Berlin.

Before proceeding with the actual realization of the focus groups we had to decide on how the groups should be established, on the setting of the discussions and on the size and number of focus groups. As the primary achievement of focus groups is to explore in-depth beliefs and opinions of people, an appropriate selection of participants should be more considered than a statistically representative sample (Morgan, 1998; Smith & Albaum, 2005).

Main aspect of the group compilation is to consider, if the focus groups should be homogeneously or heterogeneously assembled. Most researchers suggest a homogeneous composition as the method of choice (Stewart & Shamdasani, 1990; Greenbaum, 1993; Krueger, 1994; Templeton, 1994; Morgan, 1998; Tscheulin & Helmig, 2004; Hair et al., 2006), however, a homogeneous approach also requires a larger number of groups to ensure sufficient diversity (Montoya-Weiss, Massey & Clapper, 1998). Homogeneity itself can be understood in different ways, on the one hand as convergence of demographic variables such as age, gender, income or educational level, and on the other hand as resemblance of experiences, attitudes and behavior among the participants (Morgan, 1998).

According to Miranda (1994) some researchers claim that heterogeneous groups surpass homogeneous ones on sophisticated tasks due to the variety of the group members which allows approaching the discussed topic from different views and perspectives and therefore opening a broader range of arguments and ideas.

In this study we recruited the focus group participants with regard to two specific characteristics – age and driving status. Only people above the age of 60 years in possession of a driving license were chosen and it was assumed that this combination determines a similar driving behavior. Although homogeneous in the major criteria the participants were

not divided into pro or contra groups, so their opinions and attitudes towards the topic were not assessed prior to the focus groups. In this way we tried to achieve a maximum of information-gathering which formed the basis for subsequent research in form of the questionnaire.

Number and Size of Focus Groups

Previous research indicates various views on the number of participants in a focus group, going from three (Hamersveld & De Bont, 2007) up to fifteen participants (Tscheuling & Helmig, 2004) although the leading opinion about the typical group size is eight to twelve people (Hoyer & MacInnis, 2001; Baines & Chansarkar, 2002; Smith & Albaum, 2005; Hair, Bush & Ortinau, 2006). Additionally Baines and Chansarkar (2002) announce a tendency to smaller focus groups of six or seven people. According to Morgan (1998) the size of the focus group is mainly depending on the research topic. The larger the focus group is, the less time the participants have to express their opinions. However, particularly when conducting smaller groups, the moderators have to prevent the focus group session to be dominated by one or two participants. The researchers should take particular care to ensure that each individual has enough time to share its opinion about each question (Hair et al., 2006). Glaser, Barney, and Strauss (1967) state in their research that theoretical saturation, defining a situation when new cases no longer yield information, should determine the number of focus groups used during research. According to Hair et al. (2006) a minimum of two groups should be held, Kühn and Kreuzer (2006) and Smith and Albaum (2005) suggest four to six groups.

In our study the size of the focus groups was limited to three to five people per session in order to maintain an atmosphere where every participant has sufficient time to outline their arguments and to generate a wealth of information to establish a basis for the later questionnaire.

Processing of Data

As Morgan (1998) recommends to use both video and audio recordings we used a dictaphone which was placed in the middle of the table to record voices and a two video cameras, one camcorder and an integrated notebook camera, which were located in two different spots to video-record the focus group session from two different perspectives in order to see every participant. In accordance with the standard the participants were

informed about the recording prior to the session beginning and a declaration of consent was signed by each of them.

Discussion guideline

Krueger (1998) and Hair et al. (2006) both present the concept of a discussion guideline with opening, introductory, transition and ending questions. The discussion guideline used in our research was divided into seven parts: opening, warming up, symbol of the car itself, pros and cons of driving, sensitization for limitation of driving, protection motivation theory and ending discussion.

In the opening part we started with presenting the study itself, introducing ourselves as well as explaining the process and length of the session and kept going by asking the participants to tell a bit about themselves. To warm up the participants were invited to talk about their driving behavior by answering open questions like “How often do you drive?” or “How important is your car to you?” (Appendix). Those questions were not only important to the research but also essential to break the ice among the participants. According to Krueger (1998) and Hair et al. (2006) it is typical to answer opening questions in the beginning of the focus group session in order to promote a pleasant atmosphere.

As the prior two parts are seen as the opening and introductory parts of the focus group the next two parts consist of transition questions which should lead the conversation toward the key questions of the group session. The main aim of these questions is to give the participants the chance to share their opinions about the issue and create a link among the participants and the examined topic (Krueger, 1998; Hair et al., 2006).

In the next part of the process the participants were given questions about the symbol of the car itself, more specifically what role the car plays in everyone’s life. The people were asked to write down an allegory of the car which came first to their minds. Afterwards the papers were collected and read out loud in order to find more symbols together within the group. The main aim of this part was to identify the car’s personal value to everyone.

The next step of the focus group session was to discuss the advantages and disadvantages of driving. Results were written on a wall in order to integrate them in the next steps of the process.

The main purpose of the next part of the focus group was to find out how people could be sensitized for the limitation of driving. The request to the participants was to imagine a situation where somebody wants to convince them to reduce their driving, for instance because of health reasons. The challenge here was to sort out, what person was imagined by the participants. We wanted to sort out whom they would rather believe and whose advice they would most likely trust. By the same token, it was important to us to figure out, if there was somebody the participants would not take notice of. As soon as the specific people were identified, they were listed and the pros and cons of each were collected. In the end of this step, after the reference people and their advantages and disadvantages were sorted out, the participants were asked to choose one specific person they would most likely trust on advising them to reduce their driving.

The next fragment of the focus group session was of the utmost importance to our study and exclusively dedicated to the factors of the PMT. As the theory consists of several parts we created questions suitable in order to fill each part with a wealth of information and more overtly to form a fundamental basis for the later questionnaire. The results of the prior parts of the focus group session should all be used to generate information on each part of the protection motivation theory. The following table shows the different parts of the PMT with example questions (Figure 4):

Severity	Please consider what negative consequences might occur by not consulting a doctor/driving instructor/etc. regarding your driving fitness.
Vulnerability	We just worked out what negative consequences might occur by not verifying the driving fitness. Do you feel affected by those negative consequences?
Intrinsic/Extrinsic rewards	Please consider which advantages you would have by not consulting a doctor/driving instructor/etc. regarding your driving fitness.
Response Costs	Please consider what costs and fears are involved in consulting a doctor/driving instructor/etc. regarding your driving fitness.
Response Efficacy	Please consider which advantages you would have by consulting a doctor/driving instructor/etc. regarding your driving fitness.
Self-Efficacy	Do you feel capable of consulting a doctor/driving instructor/etc. regarding your driving fitness? Why yes/why not?

Figure 4. PMT-factors and focus group question examples

The final part of the focus group session consisted of a general discussion regarding the whole topic in order to identify so far missing arguments and a short clarification of the research project by the moderators.

Performance

According to Morgan (1998) choosing a suitable time and location for the focus group participants is an important aspect. He recommends envisioning daily routines of the participants in order to suggest a proper time.

As the focus groups in Berlin were conducted by another group within our research team, the following information regarding time, place and framework of the focus groups only refer to those performed in Vienna. As the members of our study mainly were retired people, we chose forenoon as a convenient time and premises of the University of Vienna as an appropriate location since the place is situated in the city center of Vienna and therefore easier to reach by every participant. The participants were recruited by handing out flyers with a short study introduction and dates to choose to several people suitable for the

sample. After at least three people were found for the same date we invited them officially to take part in our focus group sessions. The day the focus groups were performed the participants were asked to arrive at least 15 minutes prior to the beginning and were accompanied by a research member to the premises where the group sessions took place. In order to create a balanced and stress-reduced atmosphere the participants were offered drinks, coffee and pastries before they were asked to sign the declaration of consent and the actual focus group session started. The length of the entire focus group session was scheduled with two hours. After the discussion ended the participants were thanked for their time and were given a compensation for expenses of ten euros.

Results

Complete findings of the focus groups held in Vienna and Berlin are listed in the Appendix. The statements most mentioned and in our views most significant were assigned to the different parts of the Protection Motivation Theory and formed the basis for the subsequent questionnaire.

Method

As already mentioned before the second part of the study comprised a questionnaire built-on the results of the preliminary study. The purpose of the questionnaire was to identify the acceptance of a fictional on-road program we called “accompanied driving” to assess the ability and fitness to drive above the age of 65 years. This part of the study was conducted in November 2012.

Participants

The results of the questionnaire were obtained from 102 people in Vienna. Participants of the questionnaire part were aged between 62 and 90 ($M = 69.84$, $SD = 5.45$), 46 (54.9 %) were male and 56 (45.1 %) were female. All participants disposed of a driving license and almost everyone ($N = 97$, 95.1 %) had an own car. At the time of the survey 93 participants (91.2 %) were retired.

Questionnaire

The subsequent part of the study signified a questionnaire with the title “mobility in old age” which was completely created for the purposes of the project by the research team itself right after the focus group sessions were conducted and the data was processed. Since the questionnaire was given in a paper-pencil version it represented a challenge for the team to recruit a sufficient number of participants due to the fact that the sample consisted of people over the age of 65 years who were in possession of a driving license and still driving. Therefore the questionnaire was distributed mainly in associations and clubs where a larger number of retired people found was more guaranteed. We handed it out in parishes, elderly clubs and knitwear groups and gladly we were also able to find a reasonable number of participants among family members and acquaintances. Beside the age and the fact of still having an active driving behavior another precondition for participating in the study was to live within the city. Once the questionnaire was handed out the participants had an average of one week to fill out before it was collected by the research team. Each individual questionnaire was filled out anonymously, only demographic variables were stated.

Structure

In order to guarantee a simple overview of the questions posed the questionnaire was divided into four parts: driving behavior, protection motivation theory, specific scenarios and demographic information. The original German version of the questionnaire is to be found in the appendix.

In the first section the participants were asked questions about their general driving behavior, completely the same questions which were posed at the beginning of the focus group sessions.

The second part of the questionnaire first introduced a fictional on-road program called “accompanied driving”:

We would like to introduce a program to you and kindly ask you to answer several subsequent questions about it.

Other countries present specific concepts, where drivers obtain an assessment of their driving abilities by an expert of driving safety in certain periods of time. By taking part in this program the expert accompanies the driver as passenger in the driver's own car and gives feedback about the driving condition. The main purpose lies in giving the driver a better insight of the abilities in order to improve the driving behavior. Such a program is free of charge and the result will not be handed out to any authorities or institutions.

This introduction was immediately followed by three questions: What do you think about the program? Do you think such a regulation is useful? Would you take part in that program? The participants had to answer the questions on a 6-point scale (1 = very bad/not useful/no way, 6 = very good/very useful/absolutely).

In the following the participants were asked to choose on a multiple-choice basis, whom they most likely trust on giving an advice regarding their driving fitness. The several answers to this question were chosen from the most frequent statements the focus group participants gave in the sessions.

The subsequent statements refer especially to the PMT and represent the main part of the questionnaire. Due to the results of the focus group the questionnaire consisted of the adapted version of the PMT explained in the research model part of this thesis.

Participants had to rate their agreement on a 6-point scale (1 = fully disagree, 6 = fully agree)

and were asked to always keep the program “accompanied driving” in mind while answering the questions. Prior to the statements it was also pointed out that there are no correct or wrong answers. The answers are all about a personal estimation and if the individuals feel unsure they should choose which was most likely to be their opinion. In the following examples of the statements are listed (Figure 5):

Openness towards Feedback	I feel an assessment of my driving abilities is useful. If a competent person (doctor, family, driving instructor) gives an advice regarding my driving fitness, I would follow it.
Plans of Self-Regulation	I don't need any feedback because I am able to assess my driving abilities best myself. I am aware of my possible insecurities in driving.
Conviction of sufficient Self-Assessment	I am actively doing something to maintain the abilities I need to drive. If a driving error occurs I would try to find out how and why it happened.
Severity	By getting older visual, auditory and reaction capacities decrease and therefore the risk of causing an accident increases. By reaching a certain age drivers should check their driving competence through an expert.
Vulnerability	If I am not getting an assessment of my driving abilities I run a higher risk of causing an accident. I fear that I will get feedback about poor driving skills.
Extrinsic/Intrinsic Rewards	Driving means independence to me.
Feedback Rewards	For me it would be an expression of responsibility if someone seeks feedback.
Response Costs	Poor results at the program would be embarrassing. If I would drive less as consequence to the assessment, I could not maintain my everyday life as before.
Response Efficacy	By obtaining feedback I could estimate my abilities better. By getting estimation I could suit my driving behavior to my abilities.
Self-Efficacy	If I would get unfavorable estimation I could come up with alternatives how to have fewer restrictions without a car. Even if I would be shocked by a negative result I could manage it.

Figure 5. Statement examples of the questionnaire

The third part of the questionnaire introduced two different scenarios in which the fictional program “accompanied driving” could be implemented. Although the questionnaire in the appendix shows up three scenarios, the first one (Scenario 1) is negligible for this study as it was not relevant. This part of the questionnaire starts again with the description of the program “accompanied driving” itself in order to recall it to the minds of the participants. In the following the two scenarios were introduced, both scenarios were presented to each participant of the study.

Scenario “participation without consequences”

Imagine, every citizen who reaches the age of 65 automatically is registered for the program “accompanied driving” and obtains several date proposals. Everyone who does not want to take part in the program has the possibility to unsubscribe within 2 weeks at the transport office. Every two years you get registered again and have the chance to cancel it personally. Participation is free of charge and the results will not be handed out to authorities or institutions.

Scenario “participation with consequences”

Imagine, every citizen who reaches the age of 65 automatically is getting invited for the program “accompanied driving”. Participation is free of charge. If there are any deficits occurring during the drive with an expert the results may have certain consequences and the expert is obliged to inform the transport authority. Possible consequences concern different driving restrictions such as a night driving prohibition, a highway or freeway ban or even a temporary or unlimited driver’s license revocation.

Each scenario was immediately followed by two questions: Do you think such a regulation is useful? Would you take part in that program? The participants had to answer the questions on a 6-point scale (1 = not useful/no way, 6 = very useful/absolutely). All participants were presented both scenarios.

In the last part of the questionnaire socio-demographic data was collected from the participants, such as sex, age, profession, highest educational attainment and monthly net income.

Reliability of the questionnaire scales

First of all, in order to ensure sufficient reliability of the different scales of the questionnaire for further calculations, we applied a reliability analysis (Table 1). According to Field (2009) a cronbach- α between .70 and .80 is acceptable, however, due to the variety of psychological constructs a value below .70 can be considered as suitable as well. As vulnerability ($\alpha = .557$) scored even below .60 we decided to exclude one item to increase the reliability ($\alpha = .685$), same with response efficacy ($\alpha = .727$) as elimination of item 1 considerably increased the value of its cronbach- α ($\alpha = .882$). In the case of self-efficacy ($\alpha = .606$) we decided to not exclude one item as it would have diminished the number of items to only two and its cronbach- α would have not increased importantly.

Table 1
Reliability analysis of the questionnaire scales

Scale	Cronbach-Alpha
openness towards feedback (3 items)	.838
conviction of self-assessment (4 items)	.648
plans of self-regulation (3 items)	.696
severity (7 items)	.854
vulnerability (5 items)	.557 → without item 3 → .685
intrinsic/extrinsic rewards (I) (5 items)	.807
rewards feedback (II) (3 items)	.824
response costs (6 items)	.806
response efficacy (4 items)	.727 → without item 1 → .882
self-efficacy (3 items)	(.606 → without item 3 → .690)
program „accompanied driving“	.923
scenario „without consequences“	.864
scenario „with consequences“	.926

As a further step the mean scores of each questionnaire scale have been generated in consideration of the eliminated items and represent the basis for subsequent calculations.

Results

Facts and Figures

Throughout the questionnaire different aspects of the participant's driving behavior were also determined. Regarding the question about their average driving frequency the majority answered with "several times a week" (45.1 %), followed by "several times a day" (26.5 %), "several times a month" (9.8 %) and "once in a week" (8.8 %). Only 6 % of the participants indicated of driving "once in a month" or less.

About the average distance the participants covered last year 19.6 % answered with "less than 2.500 km", 30.4 % with "2.500 to 5.000 km", 13.7 % indicated "5.000 to 10.000 km", 22.5 % "10.000 to 15.000 km" and 11.8 % gave "15.000 to 30.000 km" as answer.

With regards to the question about the longest distance they covered at a stretch last year 28.4 % answered with "more than 400 km", 24.5 % with "between 200 and 400 km" and 27.5 % indicated "100 to 200 km". 19.7 % drove "100 km or less" in one piece the year before.

Concerning the most frequent driving destination almost half of the participants (44.1%) specified "shopping/procurement" as leading motive to drive. 15.7 % visit their "families and friends", 21.6 % use their cars for "trips" or "hobbies" and 4.9 % for their "vacation". An interesting fact here is that only one participant indicated to make use of the car to "visit the doctor".

Another question concerned the importance of the car itself on which 83.3 % answered with "very important or important", 11.8 % with "less important" and only 3.9 % with "not important". In addition 64.7 % declared to prefer the car to other means of transportation.

Regarding openness towards feedback on the driving abilities we could not detect significant correlations concerning age ($r = -.047$), gender ($r = .056$) and driving performance ($r = -.008$). However, we found a significant correlation between severity and age ($r = -.253$) as well as between concrete plans of self-regulation and income ($r = .321$).

Testing the Hypotheses

We supposed that the PMT-factors have a significant influence on the openness towards feedback, concrete plans of self-regulation and sufficient conviction of self-assessment (Hypotheses Ia-Ic). Furthermore we assumed that the PMT-factors influence that willingness in the fictional on-road program and both the scenarios “without consequences” and “with consequences” (Hypotheses IIa-IIc).

Table 2 gives a demonstration of overall correlations among the different factors of the PMT and the subsequent outcomes. Concerning openness towards feedback there was a significant relationship between all factors of the PMT except intrinsic/extrinsic rewards ($r = -.102$). Conviction of self-assessment showed significant correlations to none of the PMT factors, however, a significant relationship to plans of self-regulation ($r = .445, p < 0.01$). Latter one was significant related to all factors of the PMT except intrinsic/extrinsic rewards ($r = -.134$) and response costs ($r = -.138$). With regards to the willingness to participate in the program “accompanied driving” we found significant correlations to all factors of the PMT except intrinsic/extrinsic rewards ($r = -.134$). The willingness to participate in the scenario “without consequences” correlated significantly with all factors except intrinsic/extrinsic rewards ($r = -.120$) and self-efficacy ($r = .026$) and the willingness to participate in the scenario “with consequences” showed significant correlations to all of the PMT-factors.

Explanation Table 2:

FB:	openness towards feedback
SA:	conviction of self-assessment
SR:	plans of self-regulation
sev:	severity
vul:	vulnerability
rew_l:	intrinsic/extrinsic rewards
rew_FB:	rewards feedback
re:	response efficacy
se:	self-efficacy
progr:	program “accompanied driving”
Sce1:	scenario 1 “without consequences”
Sce2:	scenario 2 “with consequences”

Table 2
Overall Correlation Matrix

	FB	SA	SR	sev	vul	rew_l	rew_FB	costs	re	se	progr	Sce1	Sce2
FB	-	,159	,458**	,595**	,531**	-,102	,463**	-,236*	,476**	,408**	,506**	,250*	,371**
SA	,159	-	,445**	,177	-,092	,031	,080	,037	,023	,098	,103	-,165	-,002
SR	,458**	,445**	-	,452**	,326**	-,134	,343**	-,183	,377**	,347**	,366**	,078	,246*
sev	,595**	,177	,452**	-	,605**	-,243*	,590**	-,444**	,517**	,233*	,708**	,433**	,396**
vul	,531**	-,092	,326**	,605**	-	-,323**	,403**	-,344**	,408**	,319**	,481**	,238*	,275**
rew_l	-,102	,031	-,134	-,243*	-,323**	-	,037	,641**	,099	-,212*	-,134	-,120	-,234*
rew_FB	,463**	,080	,343**	,590**	,403**	,037	-	-,163	,675**	,365**	,506**	,394**	,459**
costs	-,236*	,037	-,183	-,444**	-,344**	,641**	-,163	-	-,083	-,224*	-,307**	-,288**	-,384**
re	,476**	,023	,377**	,517**	,408**	,099	,675**	-,083	-	,407**	,567**	,241*	,308**
se	,408**	,098	,347**	,233*	,319**	-,212*	,365**	-,224*	,407**	-	,291**	,026	,309**
progr	,506**	,103	,366**	,708**	,481**	-,134	,506**	-,307**	,567**	,291**	-	,353**	,495**
Sce1	,250*	-,165	,078	,433**	,238*	-,120	,394**	-,288**	,241*	,026	,353**	-	,521**
Sce2	,371**	-,002	,246*	,396**	,275**	-,234*	,459**	-,384**	,308**	,309**	,495**	,521**	-

** . Correlation is significant at the 0.01 level (1-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

For further statistical evaluation of the hypotheses Ia-Ic and IIa-IIc backward multiple regression analyses have been used as the procedure of choice in order to identify the most suitable predictors for protection motivation behavior. This technique of the analysis eliminates all of the independent variables that would cause a significant reduction of the variance explained (Field, 2009). According to the author the backward method of the multiple regression analysis is to be preferred over the forward method as latter is more sensitive of risking a Type II error which possibly misses a predictor that actually predicts the dependent variable. All factors of the PMT as described in the research model have been included in the regression in order to see value of explanation.

Table 3-8 show the results of the multiple regression analyses on the dependent variables of the PMT and furthermore on the willingness of participating in the program “accompanied driving” and scenarios “with consequences” and “without consequences. Using the backward method of multiple regressions the following tables demonstrate both the first and the last step of the regressions.

The analysis revealed that only severity, $\beta = .425$, $t = 4.563$, $p = .000$, vulnerability, $\beta = .233$, $t = 2.394$, $p = .019$, and self-efficacy, $\beta = .263$, $t = 3.342$, $p = .001$, were meaningful predictors for openness towards feedback (Hypothesis 1a).

Table 3
Multiple regression: openness towards feedback

Predictors	B	β	t	p
Constant	-.406		-.508	.613
Severity	.499	.397	3.378	.001
Vulnerability	.251	.222	2.221	.029
Intrinsic/Extrinsic Rewards	.102	.102	.966	.336
Rewards Feedback	.000	.000	.002	.998
Response Costs	.011	.011	.106	.916
Response Efficacy	.067	.074	.666	.507
Self-Efficacy	.249	.091	2.723	.008
Constant	-.538		-.794	.429
Severity	.535	.425	4.563	.000
Vulnerability	.263	.233	2.394	.019
Self-Efficacy	.274	.263	3.342	.001
Intrinsic/Extrinsic Rewards	.132	.132	1.672	.098

Concerning conviction of sufficient self-assessment (Hypothesis Ib) the multiple regression demonstrated that severity, $\beta = .367$, $t = 3.052$, $p = .003$, and vulnerability, $\beta = .314$, $t = -2.613$, $p = .010$, predict the dependent variable significantly.

Table 4

Multiple regression: conviction of sufficient self-assessment

Predictors	B	β	t	p
Constant	2.228		2.574	.012
Severity	.527	.495	3.295	.001
Vulnerability	-.312	-.327	-2.560	.012
Intrinsic/Extrinsic Rewards	-.012	-.014	-.102	.919
Rewards Feedback	-.016	-.020	-.138	.891
Response Costs	.152	.180	1.328	.187
Response Efficacy	-.113	-.149	-1.045	.299
Self-Efficacy	.169	.193	1.715	.090
Constant	3.439		6.719	.000
Severity	.390	.367	3.052	.003
Vulnerability	-.300	.314	-2.613	.010

The results below show that significant predictors for concrete plans of self-regulation (Hypothesis 1c) were severity, $\beta = .393$, $t = 4.440$, $p = .000$, and self-efficacy, $\beta = .256$, $t = 2.893$, $p = .005$.

Table 5
Multiple regression: concrete plans of self-regulation

Predictors	B	β	t	p
Constant	1.573		1.843	.068
Severity	.430	.375	2.726	.008
Vulnerability	-.004	-.004	-.031	.975
Intrinsic/Extrinsic Rewards	-.050	-.055	-.445	.657
Rewards Feedback	-.026	-.029	-.221	.826
Response Costs	.067	.074	.593	.555
Response Efficacy	.101	.123	.944	.348
Self-Efficacy	.215	.227	2.207	.030
Constant	1.668		3.130	.002
Severity	.450	.393	4.440	.000
Self-Efficacy	.243	.256	2.893	.005

Concerning the willingness to participate in the program “accompanied driving” (Hypothesis IIa) it could be found that severity, $\beta = .566$, $t = 7.232$, $p = .000$, and response efficacy, $\beta = .274$, $t = 3.497$, $p = .001$, are considerable predictors.

Table 6

Multiple regression: willingness to participate in the program "accompanied driving"

Predictors	B	β	t	p
Constant	-.622		-.754	.453
Severity	.778	.547	5.103	.000
Vulnerability	.040	.031	.341	.734
Intrinsic/Extrinsic Rewards	.021	.019	.196	.845
Rewards Feedback	-.042	-.038	-.367	.715
Response Costs	-.042	-.037	-.382	.704
Response Efficacy	.274	.270	2.653	.009
Self-Efficacy	.062	.053	.662	.509
Constant	-.612		-1.294	.199
Severity	.805	.566	7.232	.000
Response Efficacy	.278	.274	3.497	.001

With regards to the willingness to participate in the scenario “without consequences” (Hypothesis IIb) results show that only rewards feedback, $\beta = .302$, $t = 2.623$, $p = .010$, could predict the variable significantly.

Table 7

Multiple regression: willingness to participate in the scenario "without consequences"

Predictors	B	β	t	p
Constant	1.576		1.121	.265
Severity	.447	.239	1.722	.088
Vulnerability	-.053	-.032	-.268	.789
Intrinsic/Extrinsic Rewards	.002	.001	.011	.991
Rewards Feedback	.463	.318	2.399	.018
Response Costs	-.267	-.181	-1.438	.154
Response Efficacy	-.046	-.034	-.262	.794
Self-Efficacy	-.250	-.162	-1.556	.123
Constant	1.616		1.256	.212
Severity	.399	.214	1.775	.079
Rewards Feedback	.439	.302	2.623	.010
Response Costs	-.270	-.183	-1.829	.071
Self-Efficacy	-.270	-.175	-1.827	.071

Following results demonstrate that significant predictors of the willingness to participate in the scenario “with consequences” (Hypothesis IIc) were rewards feedback, $\beta = .407$, $t = 4.807$, $p = .000$, and response costs, $\beta = -.317$, $t = -3.746$, $p = .000$.

Table 8

Multiple regression: willingness to participate in the scenario "with consequences"

Predictors	B	β	t	p
Constant	1.631		1.208	.230
Severity	.116	.062	.464	.644
Vulnerability	-.081	-.048	-.428	.670
Intrinsic/Extrinsic Rewards	-.097	-.065	-.545	.587
Rewards Feedback	.546	.375	2.946	.004
Response Costs	-.365	-.247	-2.049	.043
Response Efficacy	-.021	-.016	-.127	.900
Self-Efficacy	.171	.110	1.108	.271
Constant	2.215		2.888	.005
Rewards Feedback	.593	.407	4.807	.000
Response Costs	-.469	-.317	-3.746	.000

As the correlation matrix in Table 2 revealed that conviction of self-assessment only showed a significant correlation to concrete plans of self-regulation interesting results followed by integrating former variable as a possible predictor into the multiple regression analysis. Furthermore Boccara et al. (2010) highlight that self-assessment might influence self-regulating.

With regards to influence of the PMT-factors on concrete plans of self-regulations, conviction of self-assessment could be uncovered as significant predictor, $\beta = .363$, $t = 4.538$, $p = .000$. Similar effects could be found out concerning the willingness to participate in the scenario “without consequences” where conviction of self-assessment acted as a significant predictor, $\beta = -.244$, $t = -2.794$, $p = .006$. Also severity could this time be revealed as predicting the willingness to participate, $\beta = .355$, $t = 3.292$, $p = .001$, however, rewards feedback could no longer hold its value of significance, $\beta = .204$, $t = 1.915$, $p = .058$. On the other regressions there were no significantly changes on the predictors verifiable.

As the PMT-factors severity, vulnerability and self-efficacy could be identified as the strongest predictors on the protection motivation behavior and furthermore to willingness to participate in the program and the scenarios a factor analysis was calculated by using the mean scores of the three variables. As Table 9 show there could be only one considerable factor be extracted from the procedure and on the basis of the predictive power of its items was being referred to as “protection motivation score”.

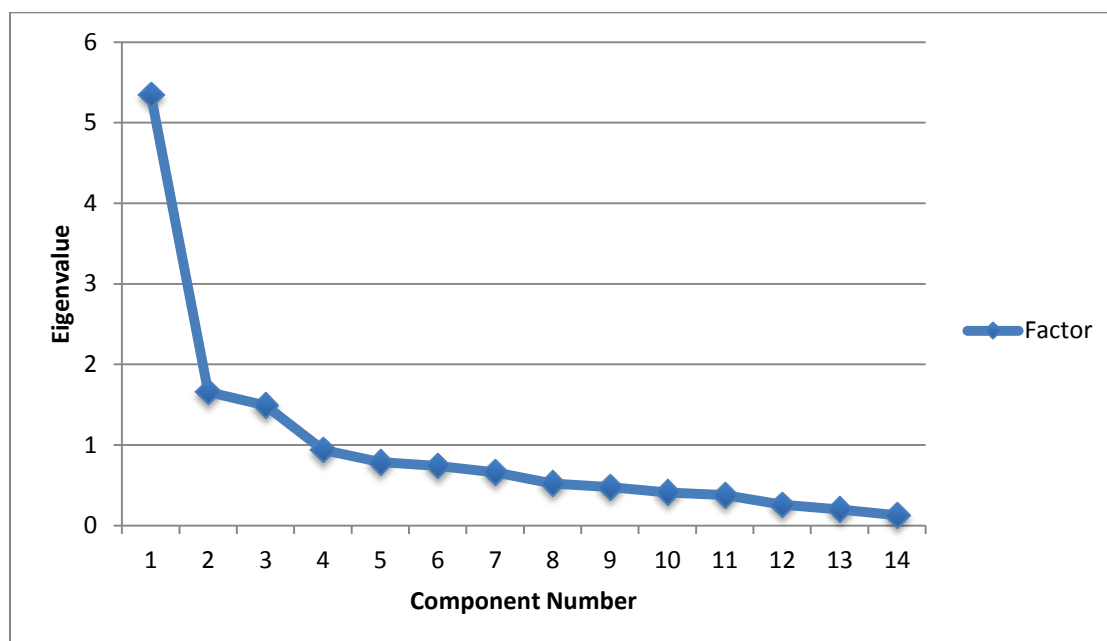


Figure 6. Factor extraction screeplot

Table 9

Factor extraction: severity, vulnerability, self-efficacy

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5,351	38,222	38,222	5,351	38,222	38,222
2	1,662	11,873	50,095			
3	1,489	10,633	60,729			
4	,940	6,713	67,442			
5	,785	5,609	73,051			
6	,742	5,303	78,354			
7	,657	4,693	83,047			
8	,525	3,750	86,797			
9	,475	3,392	90,189			
10	,413	2,952	93,140			
11	,376	2,688	95,828			
12	,255	1,819	97,647			
13	,200	1,426	99,073			
14	,130	,927	100,000			

Extraction Method: Principal Component Analysis.

After having extracted the factor “protection motivation score” extreme values were formed by splitting the participants into three groups ($N = 34$) due to their factor score with, however, only focusing on the lower (“low score”) and upper third (“high score”). We supposed that the higher the PMT score the less the scenarios play a decisive role (Hypothesis III). According to our results of the strongest PMT-factors and the subsequent factor “protection motivation score” we decided to compare both scenarios with regards to that in order to obtain a more descriptive outcome.

By calculating a two-way repeated measure ANOVA (Table 11) to examine possible interactions between both scenarios and the protection motivation score we found out that there was no significant main effect of the scenarios, $F(1, 66) = 1.397$, $p = .242$ and no significant interaction between both scenarios and the protection motivation score, $F(1, 66) = .012$, $p = .915$, detectable.

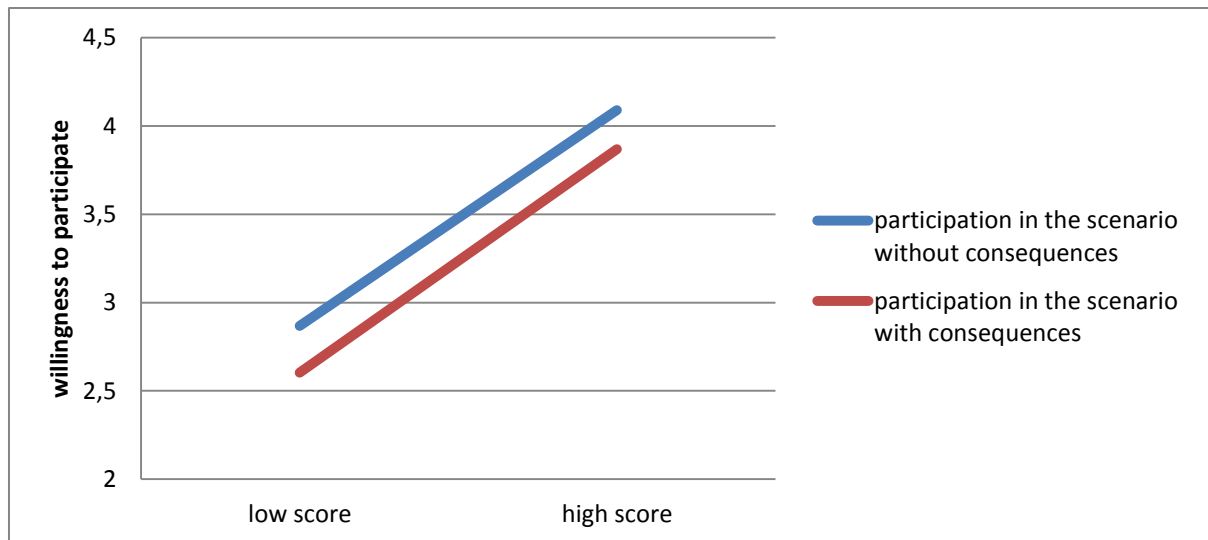


Figure 7. Mean scores: scenario comparison

Table 10

Mean scores of both scenarios in consideration of "protection motivation score"

		N	Mean	Std. Deviation
Scenario 2	low score	34	2.8676	1.69808
	high score	34	4.0882	1.83596
Scenario 3	low score	34	2.6029	1.69124
	high score	34	3.8676	1.93574

Table 11

Two-way ANOVA: scenario and PM score

Tests of Within-Subjects Effects						
Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Scenario	Sphericity Assumed	2.002	1	2.002	1.397	.242
	Greenhouse-Geisser	2.002	1.000	2.002	1.397	.242
	Huynh-Feldt	2.002	1.000	2.002	1.397	.242
	Lower-bound	2.002	1.000	2.002	1.397	.242
Scenario*PM score	Sphericity Assumed	.017	1	.017	.012	.915
	Greenhouse-Geisser	.017	1.000	.017	.012	.915
	Huynh-Feldt	.017	1.000	.017	.012	.915
	Lower-bound	.017	1.000	.017	.012	.915
Error(Scenario)	Sphericity Assumed	94.607	66	1.433		
	Greenhouse-Geisser	94.607	66.000	1.433		
	Huynh-Feldt	94.607	66.000	1.433		
	Lower-bound	94.607	66.000	1.433		

Further analysis

As we considered it as a very interesting fact to investigate, which people are able to influence older people's driving we also focused on the question, whom the participants most likely trust on giving an advice regarding their driving fitness. Results show that 52% chose the driving instructor, 28.6% their children, 26.5% their spouse and 23.5% the physician.

In addition a two-way repeated-measure ANOVA was carried out in order to analyze possible interactions between the sources of advice and gender. Results (Table 12) demonstrate that there was a significant main effect of the advices, $F(10, 650) = 3.316, p < .01$, a significant interaction between advice and gender, $F(10, 650) = 3.010, p < .01$ and a significant interaction between advice and the protection motivation score, $F(10, 650) = 3.870, p < 0.01$. Figure 8 demonstrates that female drivers would rather trust the driving instructor, friends and acquaintances than male drivers. The other way around men would rather listen to the advice of their spouse, children, their best friend and their physician.

Table 12
Two-way ANOVA: advice, gender and protection motivation score

Tests of Within-Subjects Effects						
Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Advice	Sphericity Assumed	3.462	10	.346	3.136	.000
	Greenhouse-Geisser	3.462	7.220	.480	3.136	.000
	Huynh-Feldt	3.462	8.463	.409	3.136	.000
	Lower-bound	3.462	1.000	3.462	3.136	.000
Advice*Gender	Sphericity Assumed	3.324	10	.332	3.010	.005
	Greenhouse-Geisser	3.324	7.220	.460	3.010	.014
	Huynh-Feldt	3.324	8.463	.393	3.010	.011
	Lower-bound	3.324	1.000	3.324	3.010	.114
Advice*PM score	Sphericity Assumed	4.273	10	.427	3.870	.000
	Greenhouse-Geisser	4.273	7.220	.592	3.870	.000
	Huynh-Feldt	4.273	8.463	.505	3.870	.000
	Lower-bound	4.273	1.000	4.273	3.870	.053
Error(Advice)	Sphericity Assumed	71.773	650	.110		
	Greenhouse-Geisser	71.773	469.320	.153		
	Huynh-Feldt	71.773	550.086	.130		
	Lower-bound	71.773	65.000	1.104		

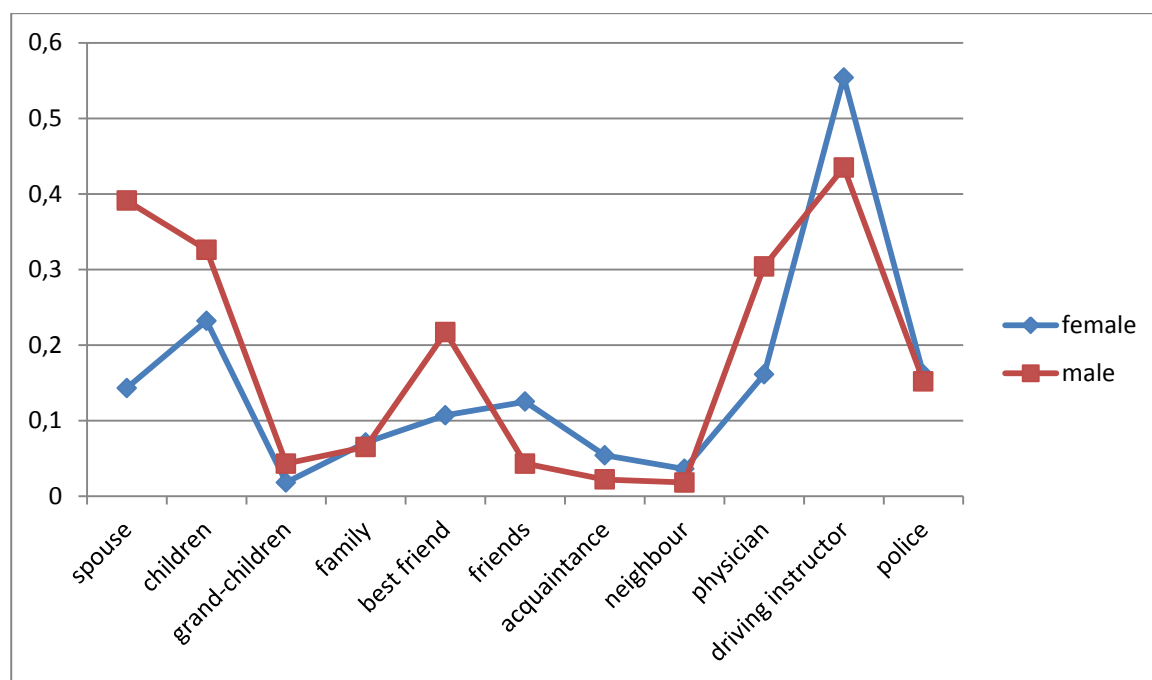


Figure 8. Interaction Advice*Gender

Discussion

In this study we examined the acceptance of a fictional on-road program on checking the fitness to drive accompanied by a driving instructor with people above the age of 65 years.

Using an adapted version of the Protection Motivation Theory we investigated whether elderly drivers are open-minded towards feedback, dispose of concrete plans to eventually self-regulate their driving behavior and are convinced of sufficient self-assessment concerning their actual driving abilities. Furthermore we checked the influence of the different factors of the PMT on the willingness to participate in the on-road program “accompanied driving” and two scenarios in which one induced no consequences and another entailed possible consequences for the driver. According to our prior assumptions we last examined if the scenarios play a less decisive role the stronger the protection motivation is.

Our general results showed that the PMT also could be implemented on a non-health related issue in order to find suitable predictors that forecast protection motivation behavior and furthermore coping mechanisms as a result to the threat perceived in obtaining feedback concerning the present driving skills, however not every predictor was sorted out to be suitable for the outcome variables used in this study.

Concerning openness towards feedback as one aspect of the protection motivation results show that severity, vulnerability and self-efficacy could be identified as suitable predictors. This effect could be derived to the fact that if someone considers driving in old age in general as threatening or irresponsible it possibly increases the openness towards feedback. In combination with vulnerability as another predictive factor our results show that fear as intervening variable between both predictors (Milne et al., 2000) plays a significant role in forecasting the attitude regarding feedback. If an elderly driver estimated his/her own driving abilities as sufficient and cannot see the point in getting a feedback the openness towards feedback might decrease. According to McPeck et al. (2011) such estimations could also be derived to the fact that 80 % of old drivers tend to consider their driving skills as above-average and therefore generally refuse feedback. Self-efficacy might contribute to openness towards feedback as elderly drivers were able to cope even with negative results and see no problem in limiting their driving. Latter result can be supported

by the results of Fildes (2006) that drivers of old age are able to countervail their decreasing skills by modifying their driving behavior.

With regards to a sufficient conviction of self-assessment results indicate that again severity and vulnerability were able to predict this part of the protection motivation. In this case once more fear could be detected as a considerable contribution to influence the outcome variable. A possible explanation could be that by considering driving in old age as a threat and fearing to soon cause an accident by not obtaining feedback this leads to a more clear perception of someone's own driving skills and eventual degenerations. These results could be reflected with the findings of Gardezi et al. (2006) as elderly drivers often feel anxiety about driving itself or have cognitive problems in processing demands of traffic and subsequently and perhaps therefore have a higher perception of their own driving skills. However, again according to the investigations of McPeck et al. (2011) 4 out of 5 drivers of old age consider their abilities being sufficiently good, and therefore possible overestimations of people's own driving abilities might also lead to a high conviction of self-assessment with low scores in severity and vulnerability. This argument can be also underlined by the findings of Boccara et al. (2010) in which the authors outline a significant relationship between overestimation of one's skills to drive and self-assessment.

Concrete plans of self-regulation were investigated in our study as being significantly predicted by severity and self-efficacy, and furthermore by self-assessment as well. Latter result support the results of Boccara et al. (2010) as they emphasize that conviction of self-assessment might have an influence on self-regulation in driving. Severity as a predictor can be explained by the assumption that a high perceived threat of driving in old age without seeking feedback might strengthens one's self-regulation and furthermore the intention to do a change on the driving behavior. The predictive power of self-efficacy can be substantiated by the research of Boccara et al. (2010) as they argue that being conscious of the own driving abilities might lead to a tendency to self-regulate someone's driving behavior.

The fact that the willingness to participate in the program "accompanied driving" is predicted by severity and response-efficacy can be derived to the assumption that once being aware of the threats of driving in old age and not seeking feedback in order to monitor someone's ability to drive the participation willingness increases. Response-efficacy as part of the coping appraisal might also contribute to the willingness to participate as long as

someone perceives the advantages of obtaining feedback on his driving. However, if someone considered a personal estimation of a driving instructor as not relevant this could also lead to a lower willingness to participate in the program.

There was a difference noticeable between both scenarios “without consequences” and “with consequences” as the results revealed different predictors on the willingness to participate in the two programs. The first scenario “without consequences” showed that perceiving feedback as a reward appears to be the strongest predictors, however, by adding conviction of self-assessment as another possible predictor rewards feedback was rejected and severity and self-assessment took over its place. This could be derived to the fact that both factors collaborate on the willingness to participate and perceived threat of the danger to drive in old age together with the awareness of eventual insecurities to drive are stronger predictors than rewards feedback which zeroes only on personal values of seeking feedback.

The scenario “with consequences” however revealed rewards feedback as well as response costs as considerably predicting the willingness to participate in that program. As already mentioned that rewards feedback emphasizes values such as personal strength and responsibility in seeking feedback high scores might compensate that this program entails possible consequences for the driver. Furthermore the fact that response costs significantly predict the willingness to take part in the scenario “with consequences” seems not surprising as high perceived costs might decrease the willingness to participate.

With regards to our assumptions that the scenarios play a less decisive role the stronger the protection motivation is we found out that this hypothesis could not be uphold as no significant results could be detected. One explanation for these results could be the presumption that the scenarios were just presented in a hypothetical way and not as real-life scenarios, in any way more research is needed in this field.

As our results indicate that intrinsic and extrinsic rewards indeed show significant relationships to other factors, however, in no case were able to predict an outcome we assume that this factor of the PMT might be unsuitable to properly forecast protection motivation related to the present topic of research and furthermore the willingness to participate in the program.

In addition to our findings of the hypotheses testing we could also detect some commonalities as well as differences to our participants’ demographic variables and stated driving behavior compared to the literature. According to Keskinen et al. (1998) drivers

above the age of 65 years are estimated to still work which could be not evidenced in our study as 91.2 % of our participants were already retired by an average mean of 70 years in our study. The results of our study also showed that the majority of the participants drive at least several times a week which go along with the findings of Schade (2008) that the percentage of active road users not significantly decreases in old age.

Concerning the results on the average length the participants covered last year 50 % answered with less than 5.000 kilometers, 13.7 % with 5.000 to 10.000 kilometers and 34.3 % with more than 10.000 kilometers per year. These results go along with the findings of Mollenkopf and Flaschenträger (1996) as they indicated in their research that the average length covered significantly decreases by age. Investigations of Whelan et al. (2006) in which it is outlined that there is no actual decline noticeable before the age of 75 do not support our results. However, our findings also reflect investigations of Schlag (2008) in which he points out that the average driving performance significantly decreases in the older community.

With regards to the most frequent driving destination our results go along with the findings of Mollenkopf and Flaschenträger (1996) as the majority of the participants use their car in order to do shopping and procurements, however the fact that only one participant in our study stated to visit the doctor does not reflect their investigations in which use of health care was one of the most mentioned activities for elderly people.

Our results that 4 out of 5 participants consider their car as important support the research of Whelan et al. (2006) that the private car is the primary means of transport for elderly people. The fact that almost one third of our participants prefer their own car to other means of transportation go along with the findings of Schlag (2008) in which he stated that the car dominates even though alternative means of transport exist.

Our last results which demonstrate the influence of people of the driver's surroundings on driving behavior support the findings of Gardezi et al. (2006) that the physician and family members belong those people, whom the participants most likely trust on giving an advice regarding their driving fitness. The results also go along with the investigations of Wente et al. (2010) in which the majority would hand in their driving license at request of their family physician and 52 % at request of relatives or good friends. As there was also a significant interaction between the different advice-giving groups of people and gender this could be explained with regards to the findings of Ragland et al. (2004) in which

the authors state that male elderly drivers would rather reduce their driving due to physical disabilities which could explain the fact that men rather ask their physician for advice in our study than women. The results also showed that there was a significant interaction between the source of advice and the protection motivation score which could be derived to the fact that elderly drivers with a strong protection motivation rather listen to advice on their driving skills from people of their surroundings.

Limitations

As the present study focused on applying the Protection Motivation Theory as a confirmed theoretical framework in psychology on a new field of research there are limitations that arise in this context, though the results can be utilized for future investigations. First of all, although the different scales of the questionnaire show sufficient reliability, they need to be tested concerning their validity by further research. As the questionnaire for this study was created by the research team itself it should be figured out if the scales of the questionnaire measure what we wanted them to measure. Although the questionnaire was built due to results of comparable focus groups a larger number of participants could have helped to draw up a more representative questionnaire. Another limitation is that according to the fact that the questionnaire items were statements and the be answered on the basis of a subjective estimation the risk of susceptibility was higher and might have led to responses that were untrue or desirable, especially concerning an issue where someone has to admit possible faults and weaknesses.

Implications for future research

This master thesis zeroes in on cognitive processes that might contribute to behavioral changes in driving of elderly people. As already Keskinen et al. (1998) emphasize that this field of study is of the utmost importance for future research concerning traffic safety and the fact that the population of old drivers which will increase particularly over the next few decades our findings established a proper basis for future research in this context. Knowing that a theoretical framework coming from health-related issues can also be partly implemented in other contexts in order to examine the influence threat and coping appraisals on behavioral changes the results of this study should be replicated and the research model should be expanded by more explanatory and suitable factors that might be able to forecast protection motivation concerning driving behavior more precisely.

It would have also been very informative to simulate a “real” program by not just proposing an on-road test in the questionnaire but by claiming that the government has already decided to adopt it, however this also offers room for more research in the future. Furthermore it could be also very beneficial to manipulate the protection motivation score in order to find out if and how the willingness to participate in such programs will change.

Conclusion

As the proportion of elderly drivers is going to be incredibly increasing over the next few decades and this generation of drivers might find itself in a vicious circle of possibly overestimated driving skills, increased frequencies of unmanageable situations in traffic and social and psychological needs that could only be satisfied by still driving it leads to demands to investigate whether elderly drivers would do changes on their driving behavior by obtaining feedback on their abilities. The findings of the present study showed that cognitive mediating processes play a significant role in behavioral changes due to the perceived or not perceived threats of still driving in old age and delivered conclusive results to proceed further in future research.

Contribution

As research in this field of study has so far been neglected we tried to make a first move into exploring cognitive mediating processes and their consequences on future driving behavior of elderly people. We consider this topic as a contribution to everyday society as upcoming problems such as traffic overload are in need of research that include different approaches and can work with different viewpoints. We hope that our work encourages other research scientists to continue on discovering this young field of study to get better insights on the psychological parts of driving and furthermore to save a more enlightened future for the next generations.

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Appendix

Gesprächsleitfaden Fokusgruppe Mobilität

1. Opening

10 Minuten

- Heute geht es um eine Gesprächsrunde zum Thema Autofahren. Wir würden gerne mit Ihnen über Ihr Fahrverhalten sprechen und über die Rolle, die das Auto für sie spielt.
- Diese Gesprächsrunde ist Teil eines Diplomarbeitsprojekts der Universität Wien im Fachbereich angewandte Sozialpsychologie unter der Leitung/Betreuung von Herrn Prof. Dr. Arnd Florack. Durch Ihre Mitarbeit helfen sie dem Diplomarbeitsprojekt sehr! Alles, was hier gesagt wird, wird vertraulich behandelt und gelangt nicht an die Öffentlichkeit. „Es gibt keine richtigen oder falschen Antworten, alle Ihre Einschätzungen sind wichtige Informationen!“
- Vorstellung des Moderators und des Ablaufes sowie der Dauer.
- **Kurze** Vorstellung der Teilnehmer: (Vor-)Name, berufliche Aufgabe, Alter, Interessen (Mitschrift durch Student). Namensschilder selbst schreiben und aufstellen lassen.

2. Warming up – Fahrverhalten

20 Minuten

- Haben Sie einen Führerschein?
- Haben Sie ein Auto?
- Wie oft fahren Sie Auto?
- Wie viele Kilometer sind Sie ca. im letzten Jahr gefahren?
- Wohin fahren Sie am häufigsten?
- Was war die längste Strecke, die Sie im letzten Jahr gefahren sind?
- Würden sie sagen, dass sie deutlich weniger Auto fahren, als vor 5 Jahren?
- Wie wichtig ist Ihnen ihr Auto?
- Besitzt außer Ihnen noch eine weitere Person in Ihrem Haushalt einen Führerschein?
- Fahren Sie meistens alleine oder gemeinsam mit anderen Familienmitgliedern bzw. Freunden?
- Ziehen Sie das Auto anderen Fortbewegungsmöglichkeiten vor?

3. Sinnbild des Autos

10 Minuten

Wir haben grade schon kurz darüber gesprochen, wie wichtig Ihnen ihr Auto ist. Nun möchten wir genauer analysieren, welche Rolle das Auto für sie spielt.

Eigenes Sinnbild**5 Minuten**

Für was steht das Auto für Sie?

Schreiben sie ein Sinnbild für das Auto, das Ihnen als erstes einfällt auf eine Karte. Wir werden dann gemeinsam versuchen noch weitere Sinnbilder zu finden.

(Karten werden von ModeratorIn eingesammelt)

ModeratorIn liest die eingesammelten Karten vor und steckt diese an die Metaplan-Wand.

Weitere Sinnbilder**5 Minuten**

Für was könnte das Auto noch stehen?

Denken sie hierbei nicht nur an ihre eigenen Sinnbilder, sondern auch an die von anderen Personen.

AssistentIn schreibt die genannten Sinnbilder auf Karten und steckt diese an die Metaplan-Wand.

4. Vor- und Nachteile des Autofahrens**10 Minuten**

Was sind Ihrer Meinung nach die Vor- und Nachteile des Autofahrens?

AssistentIn schreibt die Vor- und Nachteile stichwortartig auf die Metaplan-Wand.

5. Beratung: Sensibilisierung für die Einschränkung**35 Minuten****Beratung durch****15 Minuten**

Stellen Sie sich vor, jemand kommt auf Sie zu und möchte Sie überzeugen, dass es besser für Sie wäre, wenn sie das Autofahren einschränken würden.

(Aus gesundheitlichen Gründen; weil Ihre Reaktionsfähigkeit / Konzentrationsfähigkeit nicht mehr so gut ist)

- Wer könnte diese Person sein?
- Auf wen würden Sie am ehesten hören?
- Wessen Urteil würden Sie am ehesten vertrauen?

Die Personen, die für die Beratung in Frage kommen, werden von der AssistentIn auf Karten geschrieben und nebeneinander an die Metaplan-Wand gesteckt.

Gibt es jemanden in ihrem Umfeld, auf dessen Meinung sie diesbezüglich nicht hören würden?

Vor- und Nachteile**15 Minuten**

Wir haben nun einige Personen aufgelistet, von denen Sie sich im Bezug auf Ihre Fahrtüchtigkeit beraten lassen würden.

Was wären die Vor- und Nachteile der einzelnen Personen?

Die Vor- und Nachteile werden stichwortartig auf Karten geschrieben und von der AssistentIn unter der jeweilige Person an der Metaplan-Wand befestigt.

Gewichtung**5 Minuten**

Wir haben jetzt einige Personen und deren Vor- und Nachteile für die Beratung herausgearbeitet. Bitte entscheiden Sie sich nun für die Person, von der Sie sich am ehesten beraten lassen würden.

Die Teilnehmer sollen somit abstimmen, von wem Sie sich am ehesten beraten lassen würden. Diese Person wird für das Szenario in der nächsten Übung benutzt.

5. Protection Motivation Theory**30 Minuten****Liftübung****20 Minuten**

Zwei Personen werden ausgewählt um folgendes Rollenspiel durchzuführen und bekommen jeweils eine Karte mit den Instruktionen.

Wir haben ja nun gerade herausgefunden, dass Sie am ehesten dem Urteil von ...(Arzt / Fahrlehrer / etc.) bezüglich ihrer Fahreignung vertrauen würden.

Stellen Sie sich nun folgendes Szenario vor:

Herr Y fährt mit dem Lift und trifft dort auf seinen guten Freund Herrn X. Herr Y hat gehört, dass Herr X letzte Woche einen Fast-Unfall verursacht hat, weil er ein Stoppschild übersehen hat. Herr Y möchte Herrn X davon überzeugen einen ... (Arzt / Fahrlehrer / etc.) aufzusuchen um seine Fahreignung überprüfen zu lassen.

Herr X: Ist dagegen zu einem ... (Arzt / Fahrlehrer / etc.) zu gehen, um die Fahreignung überprüfen zu lassen. Er zählt alle Vorteile auf, die es gibt wenn man nicht hinget und alle Nachteile, die es gibt man wenn hinget.

Herr Y: Ist dafür zu einem ... (Arzt/Fahrlehrer) zu gehen, um die Fahreignung überprüfen zu lassen. Er zählt alle Vorteile auf, die es gibt wenn man hinget und alle Nachteile, die es gibt, wenn man nicht hinget.

Nach der kurzen Diskussion zwischen Herrn X und Herrn Y werden die Zuschauer gefragt, ob Ihnen noch weitere Gründe einfallen, die dafür bzw. dagegen sprechen einen ... (Arzt / Fahrlehrer / etc.) aufzusuchen, um seinem Rat in Bezug auf die Fahrtüchtigkeit einzuholen.

Weiterführende Fragen:

Herr X:

Überlegen Sie sich genau,

- welche Kosten es bedeutet / welche Ängste damit verbunden sind zu einem ... (Arzt / Fahrlehrer / etc.) zu gehen, um seinem Rat in Bezug auf die Fahrtüchtigkeit einzuholen. **(response costs)**

- welchen Vorteil es hat nicht zu einem ... (Arzt / Fahrlehrer / etc.) zu gehen, um seinem Rat in Bezug auf die Fahrtüchtigkeit einzuholen. **(intrinsic/extrinsic rewards)**

Herr Y:

Überlegen Sie sich genau,

- welche Vorteile es hat zu einem ... (Arzt / Fahrlehrer / etc.) zu gehen, um seinem Rat in Bezug auf die Fahrtüchtigkeit einzuholen. **(response efficacy)**

- welche negativen Konsequenzen es haben kann zu nicht zu einem ... (Arzt / Fahrlehrer / etc.) zu gehen, um seinem Rat in Bezug auf die Fahrtüchtigkeit einzuholen. (physischen Schaden, psychische Beeinträchtigung, negative soziale Folgen, finanzieller Verlust, Schaden für andere Personen). **(Severity)**

Die Vor- und Nachteile zu einem ... (Arzt / Fahrlehrer / etc.) zu gehen bzw. nicht zu gehen werden auf der Metaplan-Wand gesammelt.

Weitere Diskussion

10 Minuten

- Wir haben gerade herausgearbeitet, welche negative Konsequenzen haben kann nicht zu einem ... (Arzt / Fahrlehrer / etc.) zu gehen, um seine Fahrtüchtigkeit überprüfen zu lassen. Fühlen sie sich von diesen negativen Konsequenzen betroffen? **(Vulnerability)**

- Fühlen Sie sich in der Lage / Würden Sie zu einem ... (Arzt / Fahrlehrer / etc.) zu gehen, um Ihre Fahrtüchtigkeit überprüfen zu lassen. **(Self-efficacy)** Warum ja / warum nein?

- Was wäre die Hürde für Sie zu einem ... (Arzt / Fahrlehrer / etc.) zu gehen, um ihre Fahrtüchtigkeit überprüfen zu lassen?

- Haben Sie eine Idee was es Ihnen erleichtern würde zu einem ... (Arzt / Fahrlehrer / etc.) zu gehen, um ihre Fahrtüchtigkeit überprüfen zu lassen?

Wie stehen sie zur folgenden Idee:

- Ihre Versicherung bietet Ihnen eine Prämie von 100 Euro an, wenn sie innerhalb eines Jahres ihre Fahrtüchtigkeit überprüfen lassen. Andernfalls müssen Sie der Versicherung die 100 Euro wieder zurückzahlen.

Protection Motivation Intention:

- Würden sie zu einem ... (Arzt / Fahrlehrer / etc.) zu gehen, um ihre Fahrtüchtigkeit überprüfen zu lassen. ja/nein; Angabe in %

6. Aufklärung, Schlußdiskussion und Ausklang

5 Minuten

- In unserem Forschungsprojekt möchten wir herausfinden, welche Rolle das Auto für ältere Menschen spielt und wie man sie für ihre eigenen Fähigkeiten in Bezug auf das Autofahren sensibilisieren kann.
- Aktuelle Studien zeigen, dass sich ältere Menschen wenig bis kaum darauf vorbereiten, dass sie irgendwann nicht mehr Auto fahren können. Umso wichtiger ist es ihre Selbstregulation zu fördern.
- Wir versuchen nun herauszufinden wessen Urteil man in diesem Zusammenhang am ehesten vertrauen würde und welche Faktoren eine Rolle spielen, damit sich ältere Menschen in Bezug auf ihre Fahrtüchtigkeit beraten lassen. Wir danken Ihnen sehr dafür, dass Sie uns so spontan einen Einblick in Ihre Wahrnehmung gewährt haben!
- Es wäre toll, wenn Sie zum Abschluss kurz einen anonymen Fragebogen ausfüllen (Fragebogen mit demographischen Daten + Selbstausfüller)

Lockeres Plaudern, Bedanken, Verabschieden

Fragebogen

- Geschlecht

männlich ☐ weiblich ☐

- Alter

_____ Jahre

- Beruf

- Familienstand

- höchste abgeschlossene Ausbildung

- durchschnittliches monatliches Nettoeinkommen

_____ €

- Wie viele Personen leben in ihrem Haushalt?

_____ Personen

- Besitzen sie einen Führerschein?

Ja ☐ Nein ☐

- Besitzen sie ein Auto?

Ja ☐ Nein ☐

- Sind Sie dafür, dass ab einem bestimmten Alter eine Beratung in Bezug auf die Fahrfähigkeit der älteren Verkehrsteilnehmer eingeführt wird?

Ja ☐ Nein ☐

– Ab welchem Alter erachten Sie eine solche Beratung als Sinnvoll?

Ab _____ Jahren

– Wer sollte ihrer Meinung nach eine solche Beratung durchführen?

Items Fokusgruppen Wien

- Ich brauche das Auto um große Dinge zu transportieren.
 - Mit öffentlichen Verkehrsmitteln kommt überall gut hin.
 - An manche Orte kann man nur mit dem Auto fahren.
 - Mein Auto steht viel in der Garage.
 - Der Zug ist bequemer als das Auto.
 - Mit dem Auto ist man nicht immer schneller, als mit öffentlichen Verkehrsmitteln.
 - Das Auto gehört zur Lebensqualität.
 - Wie wichtig das Auto ist, ist mit den lokalen Gegebenheiten verbunden.
 - Das Auto ist ein Statussymbol.
 - Das Auto steht für Mobilität.
 - Das Auto ist ein Transportmittel für mich
 - Ich verbinde das Auto mit Freiheit.
 - Das Auto ist bequemer, besonders im Alter.
 - Man braucht ein gutes Reaktionsvermögen zum Autofahren.
 - Es sollte eine regelmäßige Überprüfung der Fahrtauglichkeit geben.
 - Wenn ich in der Fahrstunde gut abschneide, kann ich beruhigt weiterfahren.
 - Der Fahrlehrer sollte entscheiden wie gut ich unter normalen Bedingungen noch fahren kann.
 - Ich könnte vom Fahrlehrer falsch beurteilt werden.
 - Wenn ich weiß, welche Defizite ich habe, kann ich versuchen sie zu beheben.
-
- Es gibt eine psychische Schwelle, die mich davon abhält an der Fahrstunde teilzunehmen.
 - Ich könnte in der Fahrstunde falsch beurteilt werden.
 - Für ältere Menschen stellt die Familie eher eine Autorität dar, als ein Fahrlehrer.
 - Wenn man nicht mehr Autofahren kann, ist man nicht mehr die Person, die man einmal war.
 - Wenn ich in der Fahrstunde schlecht beurteilt werde verliere ich mein Ansehen.
 - Wenn ich nicht mehr Autofahren kann, verliere ich einen Teil meiner Persönlichkeit.
 - Autofahren steht für mich für Männlichkeit und Potenz.
 - Wenn man nicht mehr Autofahren kann verliert man seine Männlichkeit und Potenz.
-
- Wenn ich nicht zur Fahrstunde gehe, vermeide ich die Angst schlecht beurteilt zu werden.
 - Ich habe Angst davor in der Fahrstunde schlecht beurteilt zu werden.
 - Wenn ich nicht zur Fahrstunde gehe, muss ich mich nicht mit eventuellen Defiziten auseinandersetzen und die Welt ist noch in Ordnung für mich.
 - Es bedeutet eine Anstrengung für mich die Fahrstunde zu besuchen
 - Ich bin zu bequem die Fahrstunde zu besuchen.
 - Man ist froh, wenn man im Alter Anstrengungen vermeiden kann.
-
- Ich bin froh wenn ich mich nicht mehr um das Auto kümmern muss.
 - Für mich ist es einfacher wenn ich nicht selbst Auto fahren muss.
 - Es ist keine Schande wenn man im Alter nicht mehr so gut Autofahren kann.
 - Meine persönliche Sicherheit ist mir wichtig.
 - Ich sehe einen Vorteil darin, wenn mir meine Fahrtauglichkeit bestätigt wurde.
 - Wenn mir meine Fahrtauglichkeit vom Fahrlehrer bestätigt wird bin ich noch wer.
 - Wenn meine Fahrtauglichkeit bestätigt wurde, muss ich mir bei einem Unfall nichts vorwerfen.
 - Wenn meine Fahrtauglichkeit bestätigt wurde, kann man mir bei einem Unfall nichts vorwerfen.
-
- Ich habe Angst einen Unfall zu verursachen.
 - Ich möchte niemand anderen gefährden.
 - Wenn ich trotz Defiziten weiterhin uneingeschränkt Auto fahre ist das rücksichtslos gegenüber den anderen Verkehrsteilnehmern.
 - Wenn ich trotz Defiziten weiterhin uneingeschränkt Auto fahre ist das verantwortungslos gegenüber den anderen Verkehrsteilnehmern.
 - Mein Versicherungsschutz könnte regressiert werden, wenn ich nicht mehr fahrfähig bin.
 - Wenn ich einen Unfall verursache muss ich mit der Schuld leben.
-
- Die Fahrtüchtigkeit im Alter wird öfter in meinem Freundeskreis diskutiert.
 - Ein Freund, der in meinem Alter ist hat freiwillig seine Fahrerlaubnis abgegeben.
 - Ältere Menschen sollten sich aktiv körperlich und geistig fit halten.
 - Ich fühle mich betroffen, weil ich merke, dass meine Fähigkeiten nachlassen.
 - Ich versuche aktiv meine Fähigkeiten zu trainieren.

- Pensionistenverbände oder die Politik sollten darauf aufmerksam machen, dass es wichtig ist an einer Fahrstunde teilzunehmen, damit man seine eigenen Fähigkeiten besser einschätzen kann.

- Es gibt zu wenig Parkplätze. / Es wird immer schwieriger einen Parkplatz zu finden.
- Wenn man mit öffentlichen Verkehrsmitteln fährt kann man auch mal ein Glas Wein mehr trinken.
- Es ist bequemer für mich mit der U-Bahn in die Stadt zu fahren.
- Wenn ich mehrere Besorgungen machen muss ist es einfacher für mich mit dem Auto zu fahren.
- Ich brauche das Auto um in die Arbeit zu fahren.
- Das Parken ist teuer.
- Das Auto ist schlecht für die Umwelt.
- Das Auto ist ein Statussymbol.
- Auto bedeutet Unabhängigkeit für mich.
- Mich begeistert die Technik des Autos.
- Das Auto ist mein Hobby.
- Das Auto ist ein Gebrauchsgegenstand für mich.
- Das Auto ist ein Luxusobjekt für mich.
- Autofahren ist teuer.
- Ich möchte mit meinem tollen Auto andere beeindrucken.
- Das Auto bedeutet Mobilität für mich.
- Das Auto ist praktisch zum einkaufen.
- Die anderen Autofahrer werden immer aggressiver.
- Meine Reaktionsfähigkeit nimmt mit dem Alter ab.
- Meine Sehfähigkeit wird mit dem Alter geringer (z.B. bei Nacht oder grellem Sonnenschein).
- Ein Auto kann eine Waffe sein.
- Es ist schwer sich einzugestehen, dass man nicht mehr (so gut) fahren kann.
- Wenn ich das Gefühl habe, dass ich körperliche Einschränkungen habe, lasse ich mich untersuchen.
- Wenn ich nicht mehr so mobil bin wie bisher, besteht die Gefahr der sozialen Isolation.
- Ältere Menschen hören eher auf eine Autoritätsperson.
- Eine Fahrstunde ist gut um die Reaktionsfähigkeit zu überprüfen.

- Die Kosten für die Fahrstunde werden übernommen.
- Es liegt in meinem eigenen Interesse zu wissen, ob ich noch vollkommen fahrtüchtig bin.
- Ich ja froh, wenn mir jemand sagt, dass ich nicht mehr fahren kann.
- Bei eingeschränkter Sehkraft ist Autofahren unmöglich und gefährlich.
- Oft will man gar nicht wissen, ob einem etwas fehlt.
- Ich möchte jegliche Art von Unfall vermeiden.
- Ich möchte auf keinen Fall durch eine eingeschränkte fahrtüchtigkeit einen Unfall verursachen.
- Auch sehr viele junge Menschen verursachen Unfälle.
- Ich würde selbst bei niemandem mitfahren, dessen fahrtüchtigkeit eingeschränkt ist.

- Für mich hat die Fahrstunde nur Vorteile.
- Gewisse körperliche Einschränkungen sind normale Alterserscheinungen.
- Es bleibt mir selbst überlassen, ob ich das Fahren einschränke oder gar den Führerschein zurückgebe.

- Aus Interesse an meiner eigenen Gesundheit würde ich die Fahrstunde besuchen.
- Kleinere Defizite lassen sich leicht beheben (z.B. Brille)
- Wenn ich mir meiner Einschränkungen bewusst bin, kann ich besser mit ihnen umgehen.

- Ich möchte nicht, dass jemand zu Schaden kommt.
- Man muss sich im Alter an Veränderungen anpassen.
- Auch jüngere Menschen haben manchmal körperliche Einschränkungen und sollen sich aber nicht testen lassen.
- Ich würde mich erst testen lassen, wenn wirklich etwas passiert ist.
- Wenn man eine Konzentrationsschwäche unterläuft einem öfter Fehler.
- Unfälle können jedem passieren.
- Junge Menschen fahren wesentlich aggressiver als alte
- Junge Menschen haben weniger Routine beim fahren und machen mehr Fehler.
- Wenn ich merke, dass ich mir gewisse Dinge im Straßenverkehr nicht mehr zutraue, sollte ich eine

Fahrstunde in Anspruch nehmen.

- Wenn man nicht mehr normal Auto fährt (z.B. viel langsamer als erlaubt) stellt dies eine große Gefahr dar.

- Im Moment sehe ich keine Veranlassungen eine Fahrstunde zu besuchen.
- Wenn ich eine Veränderung meiner Fähigkeiten bemerken würde, würde ich mich testen lassen.
- Solange ich keine Veränderungen meiner Fähigkeiten bemerke, lasse ich mich nicht testen.
- Ich würde die Fahrstunde zu meinem eigenen Schutz besuchen.
- Ich würde die Fahrstunde auch zum Schutz der anderen Verkehrsteilnehmer besuchen.

Items Fokusgruppen Berlin

- Im Alter lässt die Reaktionsfähigkeit nach.
- Der Verkehr heutzutage ist schlimmer und es ist somit viel schwieriger zu fahren.
- Wenn man kein Auto hat spart man so viel ein, dass man sich leicht ein Taxi leisten kann.
- Man findet nur schwer Parkplätze.
- Autofahren ist teuer.
- Früher habe ich das Auto gebraucht um zur Arbeit zu kommen, jetzt kann ich eher darauf verzichten.
- Als ich jünger war habe ich allgemein mehr unternommen und das Auto viel öfter benutzt.
- Auf dem Land braucht man das Auto für viel mehr Dinge als in der Stadt.
- Wenn ich einen Unfall verursache, weil meine Fähigkeiten eingeschränkt sind, muss ich mit der Schuld leben.
- Mit dem Auto ist man unabhängig und flexibel.
- Mitunter ist es mit körperlichen Einschränkungen einfacher Auto zu fahren, als mit den öffentlichen Verkehrsmitteln (kein Sitzplatz, wackelt).
- Viele Dinge die man mit dem Auto macht kann man auch gut mit öffentlichen Verkehrsmitteln machen.
- Ich fühle mich in meinem Auto sicherer.
- Ich habe Angst abends alleine U-Bahn zu fahren.
- Das Auto ist sehr praktisch für Großeinkäufe.
- Mit dem Auto muss man sich nicht nach dem Fahrplan richten.
- Als Rentner hat man viel Zeit und kann leicht mit dem Bus fahren.
- Mit einem Automatikauto kann man sehr einfach fahren.
- Wenn ich selbst Auto fahre muss ich niemanden bitten, dass er mich fährt.
- In der Stadt ist man mit öffentlichen Verkehrsmittel schneller als mit dem Auto.
- Bewegung schadet mir nicht (wenn ich zur Bushaltestelle gehe).
- Das Auto verschmutzt die Umwelt.
- Man fährt immer weniger je älter man wird.
- Je weniger man fährt, desto stärker lässt die Routine und Übung nach.
- Hör-, Seh- und Reaktionsfähigkeit nehmen mit dem Alter ab.
- Mit zunehmendem Alter sieht man bei Dunkelheit und Regen immer schlechter.
- Einparken wird mit zunehmendem Alter immer schwieriger.
- Mit zunehmendem Alter lässt die Reaktionsfähigkeit nach.
- Wenn mein Auto kaputt geht kaufe ich mir kein neues mehr.
- Die Leute fahren heute aggressiver als früher.
- Ab einem gewissen Alter sollten die Autofahrer ihre Seh-, Hör- und Reaktionsfähigkeit überprüfen lassen.
- Jeder trägt für sich selbst die Verantwortung sicherzustellen, dass er noch fahren kann.
- In vielen anderen Ländern muss man ab einem gewissen Alter regelmäßig seine Fahrfähigkeit überprüfen lassen.
- Viele Menschen wissen gar nicht, dass sie körperliche Einschränkungen haben.
- Man nimmt oft nicht so wahr, dass gewisse Fähigkeiten mit dem Alter nachlassen.
- Die andere Verkehrsteilnehmer lassen sich auch nicht untersuchen (Fußgänger Radfahrer).
- Es ist verantwortungslos weiterhin Auto zu fahren, wenn man es eigentlich nicht mehr kann.
- Viele ältere Personen überschätzen ihre Fähigkeiten.
- Viele ältere Personen wollen nicht wahrhaben, dass sie manche Dinge nicht mehr so gut können wie früher.
- Manche Geschäfte erreicht man nur mit dem Auto.
- Man muss das Alter akzeptieren und sich an die Veränderungen anpassen.
- Ich fahre nur noch in Notsituationen Auto.

- Ich bin froh, dass ich mich nicht mehr um das Auto kümmern muss.
- Ich fahre so wenig mit dem Auto, dass es sich nicht mehr lohnt.
- Ich muss topfit sein wenn ich mich ans Steuer setze.
- Man kann sich ein Taxi nehmen.
- Oft hören die Menschen erst auf Auto zu fahren wenn sie körperlich überhaupt nicht mehr in der Lage sind.
- Ein Fahrlehrer muss objektiv sein.
- Ein Fahrlehrer muss mich sachlich beurteilen.
- Es ist ein bürokratischer Aufwand für mich, mich überprüfen zu lassen
- Man sollte sich selbst frühzeitig Ziele setzen ab welchen Einschränkungen man nicht mehr fährt.
- Ich würde selbst bei älteren Leuten nicht mehr mitfahren, weil ich nicht weiß wie gut sie noch fahren können.
- Ältere Leute lassen sich ungern etwas vorschreiben.
- Das Auto ist ein Statussymbol
- Man will nicht wissen, dass man mit zunehmendem Alter mache Dinge nicht mehr so gut kann.
- Es ist vernünftig den Rat des Fahrlehrers zu befolgen.
- Eine kommerzielle Beratung kann nicht objektiv sein.
- Die Fähigkeiten der einzelnen Person sind im Alter sehr unterschiedlich.
- Der Fahrlehrer kennt einen nicht und kann einen somit schlecht beurteilen.
- Ich wäre erschrocken, wenn sie bei der Fahrstunde zeigen würde, dass ich nicht mehr gut fahren kann.
- Ich wäre froh, wenn ich wüsste, welche Einschränkungen ich habe.
- Ich kann keine Fahrstunde in einem Auto machen, dass ich nicht kenne, weil ich damit nicht umgehen kann.

- Solange man autofährt ist man noch beweglich und es stärkt das Selbstbewusstsein.
- Ich würde sagen das Auto ist wie Ersatzbeine.
- Wenn ich an mein Alter denke möchte ich das immer noch ein bißchen hinausschieben (Überprüfung)
- Also ich denke, ich würde das von selber merken (Defizite)
- Also ich denke schon, wenn der Augenarzt das sagt, dann ist ja da was daran. (Arzt)
- Ich mache ihn auch jedes Mal darauf aufmerksam, dass ich noch Auto fahre, wenn er mir die Augen untersucht. (Arzt)
- Also ich frage nicht den Hausarzt, ob ich Autofahren kann.
- Wir lassen uns nicht gern beraten, wir Alten sind stur.
- Nehmen Sie mal einen 17- oder 18-jährigen her und lassen den einen Fahrtst machen.
- Also ich benehme mich schon altersgerecht.
- Ich wüsste nicht, was mich davon überzeugen könnte, einen Fahrtst zu machen.
- Ich kann selbst abschätzen, wenn ich merke, dass es mir schwerfällt.
- Als ich in Rente gegangen bin habe ich mir schon vorgenommen so einen Selbsttest zu machen.
- Nicht, dass ich da Angst hätte davor, aber das ist mir einfach zu beschwerlich. (Fahrtst)
- Und warum sollte ich das unbedingt machen. (Fahrtst)
- Also, das macht mir jetzt auch nichts, der könnte ruhig mitfahren. → Fahrlehrer
- Wenn mir irgendetwas fehlt, gehe ich zum Arzt und befolge seinen Rat. Ich gehe nicht nochmal extra zur Überprüfung hin, wenn alles ok ist.
- Wenn Sie den Führerschein nicht abgeben, können Sie immer noch einen Leihwagen nehmen, auch wenn Sie kein Auto mehr haben. Also warum sollte ich mir diese Chance entgehen lassen.
- Solange es mir noch gut geht, fahre ich Auto.
- Also da gibt's dann kein Wenn und Aber, wenn es nicht geht, geht's nicht.
- Aber ich bin der Meinung von einem bestimmten Alter an muss man sich sehr genau überlegen was man macht.
- Also für die, die sich noch fit fühlen und die das Auto auch wirklich brauchen.
- Leute die bei Fahreignungstests 50% der Regeln nicht mehr kennen möchte ich im Verkehr nicht begegnen.
- Ab 75 sollte man generell nicht mehr fahren.
- Aber eins glaube ich wäre wichtig: Das man von einem bestimmten Alter an ärztlich untersucht wird.
- Also kurz zusammengefasst: Gehör, Reaktionsfähigkeit, Augen, Gesichtsfeld, müsste für mein Empfinden ganz dringend überprüft werden.
- Das Auto wäre viel teurer als wenn ich gelegentlich Taxi fahre.
- Ein Statussymbol kann das Auto nicht mehr sein, weil ja jeder ein Auto hat.
- Ist eine Überprüfung in anderen Ländern nicht bereits Pflicht?

- Ich würde es auch begrüßen wenn es dazu käme, dass man als Autofahrer ab einem bestimmten Alter diese Untersuchungen machen lässt
- Das finde ich auch sinnvoll, zur eigenen Rettung und auch zur Verkehrssicherheit allgemein.
- Ich schlage eine Kombination vor, so wie mein Auto zum TÜV werde gleichzeitig neben dem Auto auch ich gecheckt: Augen, Gehör, Herz vielleicht und dann werden wir mal beide als gesund entlassen.
- Wenn es bei diesen Prüfanstalten, also das sind ja reine Gewerbebetriebe, dann müssten da auch Ärzte angesiedelt werden.
- Es kommt immer auf die Art der Defizite an, die beim Fahrttest festgestellt werden.
- Irgendeine Kontrolle, die zwangsweise eingeführt wird, wäre schon sinnvoll
- Ich denke, der Amtsarzt sollte eine grobe Voruntersuchung machen, wo Augen, Gehör und auch Medikamenteneinnahme gecheckt werden, denn diese können ja auch die Fahrtauglichkeit beeinträchtigen. Danach bekommt man ein Attest und Überweisung zu weiteren Ärzten. Das sollte man im Abstand von 5 Jahren machen müssen.
- Mit dem Fahrlehrer sollte man eine Runde fahren und zeigen, was man noch kann.
- Fahrlehrer- ja, wer soll denn sonst prüfen? Wer soll denn sonst meine Fahrtüchtigkeit einschätzen können?
- Na ich denk da könnte doch ein Prüfkatalog erstellt werden, wie bei einer Klassenarbeit.
- Fahrlehrer sollte jemand sein, der vielleicht selber schon ein gewisses Alter und eine gewisse Erfahrung hat und auch mit Älteren auch umgehen kann
- Wenn man eben erkennt: Es geht nicht mehr, dann muss man eben so vernünftig sein oder muss eben gezwungen werden.
- Also ich würde es akzeptieren, wenn meine Tochter jetzt neben mir säße und sie erlebt mich jetzt, dass ich irgendwelche Fehler im Straßenverkehr gemacht habe und weist mich darauf hin, da würde ich das akzeptieren und dann als Alarmzeichen sehen.
- wenn meine eigenen Kinder mir damit kommen, da würde ich denken die wollen nur mein Auto haben
- Wenn mir jemand aus meiner Familie rät, nicht mehr Autozufahren, würde ich antworten, dass es sie nichts angeht.
- Die Defizite im Alter nehmen auf jeden Fall zu und es gibt immer wieder was Neues, was man vorher noch konnte und jetzt nicht mehr kann
- Weil es ja auch sehr subjektiv ist, wie der betreffende Fahrer sich fühlt.
- Die Meisten überschätzen sich.
- Das Problem ist einfach leider, das mit zunehmendem Alter die Einsichtsfähigkeit leidet.
- Freiwillig ist da nichts zu machen (Fahrttest)
- Und ich sehe dass die, ich sehe es ja auch bei mir, ich bin ja auch viel sturer geworden, und äh, und äh die, die nimmt ab, die Fähigkeit, Fehler zu erkennen.
- ich hatte auch keine Lust neben jemandem zu sitzen von dem ich den Eindruck hatte der könnte also irgendwie demnächst noch nen Unfall verursachen.
- Mit dem selbst entscheiden, da entscheiden die Meisten dann nochmal zu ihren Gunsten
- Also mir würde die ausgesprochene Sorge vom Arzt nicht reichen
- Das muss streng gesetzlich in die Hand genommen werden
- Man müsste bei Nicht-Überprüfung der Fahrtauglichkeit Bußgelder und Führerscheinentzug einführen.
- Vielleicht sollte die Überprüfung gleich ein Bestandteil des Führerscheins generell sein. So braucht man ab einem gewissen Alter eine Bestätigung der Fahrtauglichkeit, die bei Kontrollen gezeigt werden muss.
- Freiwillig würde ich nicht zum Arzt gehen.
- Ich denke meine Kinder würden mir das sagen, mit denen fahre ich ja auch.
- Wenn mir meine Kinder vom Fahren abraten denke ich, dass sie nur mein Auto wollen.

Fragebogen „Mobilität im Alter“

Sehr geehrte Studienteilnehmerinnen, sehr geehrte Studienteilnehmer!

Vielen Dank dass Sie an dieser Studie zum Thema „Autofahren“ teilnehmen. Diese Befragung findet im Rahmen eines Diplomarbeitsprojektes der Fakultät für Psychologie an der Universität Wien statt. Ziel dieser Studie ist es, die Akzeptanz eines Programms zur Überprüfung der Fahrtüchtigkeit im höheren Alter zu untersuchen. Ihre Daten werden ausschließlich zu wissenschaftlichen Zwecken verwendet, nicht an Dritte weitergegeben und anonym behandelt.

Hinweise zum Ausfüllen des Fragebogens

- Das Ausfüllen des Fragebogens nimmt **ca. 20 Minuten** in Anspruch.
- Es ist wichtig, dass Sie den Fragebogen **alleine** bearbeiten.
- Beantworten Sie jede Frage **spontan**, ohne viel darüber nachzudenken.
- **Ihre Meinung** ist uns wichtig, Es gibt keine richtigen oder falschen Antworten.
- Für die Auswertung ist es sehr wichtig, dass Sie den Fragebogen **komplett** beantworten und keine Fragen auslassen.

Wir bedanken uns vorab herzlich für Ihre Mitarbeit!

Im Namen des Forschungsteams:

Univ.-Prof. Dr. Arnd Florack (arnd.florack@univie.ac.at)

Dr. Susanne Leder (susanne.leder@zu.de)

Thomas Berndl (a0500071@unet.univie.ac.at)

Lena Eisenmann (a0607148@unet.univie.ac.at)

Sozialpsychologie und Konsumentenverhaltensforschung

Institut für Angewandte Psychologie: Arbeit, Bildung, Wirtschaft

Universität Wien

Universitätsstraße 7

A - 1010 Wien

soko.psychologie@univie.ac.at

Fahrverhalten

Im ersten Teil des Fragebogens bitten wir Sie, einige Fragen zu Ihrem Fahrverhalten zu beantworten.

– **Haben Sie einen Führerschein?**

- ☐ Ja
- ☐ Nein

– **Haben Sie ein Auto?**

- ☐ Ja
- ☐ Nein

– **Wie oft fahren Sie Auto?**

- ☐ mehrmals am Tag
- ☐ einmal am Tag
- ☐ mehrmals die Woche
- ☐ einmal die Woche
- ☐ mehrmals im Monat
- ☐ einmal im Monat
- ☐ seltener
- ☐ nie

– **Wie viele Kilometer sind Sie ca. im letzten Jahr gefahren?**

- ☐ < 2.500 km
- ☐ 2.500-5.000 km
- ☐ 5.000-10.000 km
- ☐ 10.000-15.000 km
- ☐ 15.000-30.000 km
- ☐ 30.000-50.000 km
- ☐ 50.000-100.000 km
- ☐ > 100.000 km

– **Wohin fahren Sie am häufigsten?**

- ☐ Einkaufen/Besorgungen
- ☐ Arztbesuch
- ☐ Familie/Freunde besuchen
- ☐ Hobbies
- ☐ Ausflüge
- ☐ Urlaub
- ☐ Sonstiges: _____

– **Was war die längste Strecke, die Sie im letzten Jahr am Stück gefahren sind?**

- ☐ < 5 km
- ☐ 5-20 km
- ☐ 20-100 km
- ☐ 100-200 km
- ☐ 200-400 km
- ☐ > 400 km

- **Wie wichtig ist Ihnen ihr Auto?**
 - ☐ Sehr wichtig
 - ☐ wichtig
 - ☐ weniger wichtig
 - ☐ überhaupt nicht wichtig

- **Besitzt außer Ihnen noch eine weitere Person in Ihrem Haushalt einen Führerschein?**
 - ☐ Ja
 - ☐ Nein

- **Fahren Sie meistens alleine oder gemeinsam mit anderen Familienmitgliedern bzw. Freunden?**
 - ☐ alleine
 - ☐ in Begleitung eines Familienmitglieds/Freundes
 - ☐ in Fahrgemeinschaften

- **Ziehen Sie das Auto anderen Fortbewegungsmöglichkeiten vor?**
 - ☐ Ja
 - ☐ Nein

Programm „Begleitetes Fahren“

Wir möchten Ihnen nun ein Programm vorstellen und bitten Sie im Anschluss daran einige Fragen zu beantworten.

Programm „Begleitetes Fahren“

In anderen Ländern existieren Konzepte, bei denen Autofahrer in bestimmten Zeitabständen durch einen Experten für Fahrsicherheit eine Einschätzung zu ihren Fahrfähigkeiten erhalten. Dabei fährt dieser Experte bei einer Fahrt im eigenen Auto als Beifahrer mit und gibt dem Fahrer anschließend eine Rückmeldung zu seinem Fahrverhalten.

Ziel ist es, dass die Autofahrer einen besseren Einblick in ihre Fähigkeiten bekommen und ihr Fahrverhalten verbessern können.

*Ein solches Programm ist **kostenlos** und die **Ergebnisse werden nicht an Behörden oder Institutionen weitergeben**.*

	Sehr schlecht					Sehr gut
Wie finden Sie dieses Programm?	①	②	③	④	⑤	⑥

	Gar nicht sinnvoll					Sehr Sinnvoll
Denken Sie diese Regelung ist sinnvoll?	①	②	③	④	⑤	⑥

	Auf keinen Fall					Auf jeden Fall
Würden Sie an diesem Programm teilnehmen?	①	②	③	④	⑤	⑥

Geben Sie nun bitte an, von wem Sie am ehesten einen Rat bezüglich Ihrer Fahrtüchtigkeit /-fähigkeit annehmen würden. (Mehrfachnennungen möglich)

- ☐ meiner Ehefrau / meinem Ehemann
- ☐ meinen Kindern
- ☐ meinen Enkelkindern
- ☐ jemandem aus der Familie
- ☐ meinem besten Freund / meiner beste Freundin
- ☐ jemandem aus meinem Freundeskreis
- ☐ einer/einem Bekannten
- ☐ meinem Nachbarn
- ☐ meinem Hausarzt
- ☐ dem Trainer von „Begleitetes Fahren“
- ☐ Polizei

Bitte lesen Sie sich nun jede Aussage genau durch und geben Sie anschließend an, inwieweit Sie der Aussage zustimmen. Behalten Sie bei der Beantwortung bitte stets das oben beschriebene Programm „Begleitetes Fahren“ im Hinterkopf.

Es ist wichtig, dass Sie alle Fragen beantworten. Es geht um Ihre persönliche Einschätzung, es gibt keine richtigen oder falschen Antworten. Wenn Sie sich bei einer Frage nicht ganz sicher sind, kreuzen Sie einfach das Feld an, das am ehesten zutrifft.

	Stimme gar nicht zu					Stimme vollkommen zu
	①	②	③	④	⑤	⑥
Ich habe großes Interesse daran zu erfahren ob meine Fahrtüchtigkeit gewährleistet ist.	①	②	③	④	⑤	⑥
Eine Einschätzung meiner Fähigkeiten beim Autofahren halte ich für sinnvoll.	①	②	③	④	⑤	⑥
Wenn mir eine kompetente Person (z.B. Arzt, Familie, Fahrlehrer) einen Rat bezüglich meiner Fahrtüchtigkeit geben würde, würde ich diesen beherzigen.	①	②	③	④	⑤	⑥
Ich benötige kein Feedback, da ich selbst am besten beurteilen kann, wie gut ich Auto fahre.	①	②	③	④	⑤	⑥
Ich achte bewusst darauf, ob sich meine Fähigkeiten mit zunehmendem Alter verändern.	①	②	③	④	⑤	⑥
Ich bin mir meiner eventuellen Unsicherheiten beim Autofahren bewusst.	①	②	③	④	⑤	⑥
Ich bin der Meinung, dass ich sehr gut selbst beurteilen kann, wie ich Auto fahre.	①	②	③	④	⑤	⑥
Sollten mir wiederholt kleine Fehler beim Autofahren unterlaufen, würde ich mein Fahren dementsprechend anpassen oder einschränken.	①	②	③	④	⑤	⑥
Ich unternehme aktiv etwas damit ich mir die Fähigkeiten, die ich zum Autofahren benötige, erhalte.	①	②	③	④	⑤	⑥
Sollte mir beim Autofahren ein Fehler unterlaufen, würde ich versuchen herauszufinden wie und warum ich diesen Fehler gemacht habe.	①	②	③	④	⑤	⑥

	Trifft nicht zu					Trifft genau zu
Mit dem Alter lässt die Seh-, Hör und Reaktionsfähigkeit nach und somit erhöht sich die Gefahr, einen Verkehrsunfall zu verursachen.	①	②	③	④	⑤	⑥
Man nimmt oft nicht wahr, dass gewisse Fähigkeiten mit dem Alter nachlassen.	①	②	③	④	⑤	⑥
Ab einem gewissen Alter sollten die Autofahrer ihre Fahrkompetenz bei einem Experten überprüfen lassen.	①	②	③	④	⑤	⑥
Ab einem gewissen Alter sollten Autofahrer ihre Seh- und Hörfähigkeit bei einem Arzt überprüfen lassen.	①	②	③	④	⑤	⑥
Es ist verantwortungslos weiterhin Auto zu fahren, wenn es die eigenen Fähigkeiten nicht mehr wirklich zulassen.	①	②	③	④	⑤	⑥
Für viele Autofahrer wäre es hilfreich, wenn sie eine Einschätzung ihrer Fähigkeiten beim Autofahren bekämen.	①	②	③	④	⑤	⑥
Für viele Autofahrer wäre es hilfreich, wenn sie zur Verbesserung Ihrer Fahrfähigkeiten eine Unterstützung bekämen (z.B. Sitzposition, nicht einsehbare Bereiche beim Fahren, Lichtverhältnisse).	①	②	③	④	⑤	⑥
Wenn ich keine Einschätzung meiner Fähigkeiten bekomme, trage ich ein höheres Risiko einen Unfall zu verursachen.	①	②	③	④	⑤	⑥
Wenn ich mir meiner körperlichen und kognitiven Einschränkungen nicht bewusst bin, trage ich ein höheres Risiko einen Unfall zu verursachen.	①	②	③	④	⑤	⑥
Ich hätte die Befürchtung, dass ich in einer Fahrstunde die Rückmeldung bekäme, dass meine Fähigkeiten nicht mehr so gut sind.	①	②	③	④	⑤	⑥
Ich brauche keine Rückmeldung von jemand anderem, da ich meine Fähigkeiten selbst gut einschätzen kann.	①	②	③	④	⑤	⑥
Ich fahre sehr gut Auto. Eine Einschätzung durch eine andere Person ist deshalb nicht notwendig.	①	②	③	④	⑤	⑥
Autofahren bedeutet für mich, unabhängig zu sein.	①	②	③	④	⑤	⑥
Autofahren ist bequem.	①	②	③	④	⑤	⑥
Autofahren ist im Vergleich zu anderen Möglichkeiten der Fortbewegung sicher.	①	②	③	④	⑤	⑥
Solange ich Auto fahre bin ich jemand.	①	②	③	④	⑤	⑥
Autofahren bedeutet für mich, dass ich am Leben teilhaben kann.	①	②	③	④	⑤	⑥
Für mich wäre es ein Ausdruck von Verantwortung, wenn man sich Feedback holt.	①	②	③	④	⑤	⑥

Für mich wäre es ein Zeichen persönlicher Stärke, wenn man sich Feedback einholt.	①	②	③	④	⑤	⑥
Kann ich meine Fähigkeiten besser einschätzen, fahre ich sicherer.	①	②	③	④	⑤	⑥
	Trifft nicht zu					Trifft genau zu
Ich könnte beim „begleiteten Fahren“ von dem mitfahrenden Experten falsch beurteilt werden.	①	②	③	④	⑤	⑥
Ein schlechtes Abschneiden wäre mir peinlich.	①	②	③	④	⑤	⑥
Es wäre ein bürokratischer Aufwand für mich, meine Fahrfähigkeit einschätzen zu lassen.	①	②	③	④	⑤	⑥
Wenn ich als Konsequenz der Beurteilung weniger fahren würde, dann würde ich meine sozialen Kontakte verlieren.	①	②	③	④	⑤	⑥
Wenn ich als Konsequenz der Beurteilung weniger fahren würde, dann würde ich meinen Alltag nicht mehr so wie bisher aufrechterhalten können.	①	②	③	④	⑤	⑥
Wenn ich als Konsequenz der Beurteilung weniger fahren würde, dann wäre dies ein deutlicher Verlust an Lebensqualität.	①	②	③	④	⑤	⑥
Die Einschätzung einer anderen Person wäre für mich nicht relevant.	①	②	③	④	⑤	⑥
Durch das Feedback könnte ich meine eigenen Fähigkeiten besser einschätzen.	①	②	③	④	⑤	⑥
Durch eine Einschätzung konnte ich mein Fahrverhalten an meine Fähigkeiten anpassen.	①	②	③	④	⑤	⑥
Durch das Feedback könnte ich mein Fahrverhalten verbessern.	①	②	③	④	⑤	⑥
Wenn ich eine ungünstige Einschätzung erhalten würde, würden mir Alternativen einfallen, wie ich auch ohne Auto wenige Einschränkungen hätte.	①	②	③	④	⑤	⑥
Wenn ich eine ungünstige Einschätzung erhalten würde, wäre es kein Problem für mich mein Fahrverhalten dementsprechend einzuschränken.	①	②	③	④	⑤	⑥
Selbst wenn mich eine negative Einschätzung schockieren würde, würde ich schon damit klar kommen.	①	②	③	④	⑤	⑥

Im Folgenden sind einige Beispiele beschrieben, wie das „Begleitete Fahren“ angeboten werden könnte. Bitte lesen Sie sich diese Beispiele genau durch und beantworten Sie im Anschluss die Fragen.

Zur Erinnerung noch einmal die Beschreibung des Programms „Begleitetes Fahren“

In anderen Ländern existieren Konzepte, bei denen Autofahrer in bestimmten Zeitabständen durch einen Experten für Fahrsicherheit eine Einschätzung zu ihren Fahrfähigkeiten erhalten. Dabei fährt dieser Experte bei einer Fahrt im eigenen Auto als Beifahrer mit und gibt dem Fahrer anschließend eine Rückmeldung zu seinem Fahrverhalten.

Ziel ist es, dass die Autofahrer einen besseren Einblick in ihre Fähigkeiten bekommen und ihr Fahrverhalten verbessern können.

Ein solches Programm ist kostenlos und die Ergebnisse werden nicht an Behörden oder Institutionen weitergeben.

Szenario 1: Versicherungszuzahlung bei Nichtteilnahme

Stellen Sie sich vor, Sie haben eine Autoversicherung abgeschlossen, bei der folgendes Standardpaket besteht:

Sie bezahlen eine **Prämie von 500 Euro** und erhalten umfassenden Versicherungsschutz. Sie haben die Versicherung für einen **Zeitraum von 10 Jahren** abgeschlossen, um Vergünstigungen zu bekommen.

Wichtig ist: Sie verpflichten sich **innerhalb der 10 Jahre zweimal** an dem Programm „Begleitetes Fahren“ teilzunehmen. Zum ersten Mal müssen Sie dies **innerhalb der nächsten 12 Monate** tun.

Sie können sich jetzt dafür entscheiden, **jedes Jahr EUR 100 mehr zu bezahlen**, wenn Sie auf die Teilnahme an dem Programm verzichten wollen.

	Gar nicht sinnvoll	Sehr Sinnvoll
Wie sinnvoll denken Sie ist diese Regelung?	① ② ③ ④ ⑤ ⑥	

	Auf keinen Fall	Auf jeden Fall
Würden Sie an diesem Programm teilnehmen?	① ② ③ ④ ⑤ ⑥	

Szenario 2: Teilnahme ohne Konsequenzen

Stellen Sie sich vor, jeder Bürger, der das 65. Lebensjahr erreicht hat, wird automatisch zum Programm „Begleitetes Fahren“ angemeldet und erhält Terminvorschläge. Wer nicht an dem Programm teilnehmen möchte, kann sich binnen 2 Wochen beim Verkehrsamt abmelden. Alle zwei Jahre wird man erneut mit Terminvorschlägen zur Teilnahme eingeladen. Es besteht immer die Möglichkeit sich persönlich abzumelden. Die Teilnahme ist kostenlos und die Ergebnisse werden nicht an Behörden oder Institutionen weitergeben.

	Gar nicht sinnvoll	Sehr Sinnvoll				
Wie sinnvoll denken Sie ist diese Regelung?	①	②	③	④	⑤	⑥

	Auf keinen Fall	Auf jeden Fall				
Würden Sie an diesem Programm teilnehmen?	①	②	③	④	⑤	⑥

Szenario 3: Teilnahme mit Konsequenzen

Stellen Sie sich vor, jeder Bürger, der das 65. Lebensjahr erreicht hat, wird automatisch zur Teilnahme am Programm „Begleitetes Fahren“ eingeladen. Die Teilnahme ist kostenlos. Stellt sich bei der Fahrt mit dem Experten heraus, dass Defizite vorhanden sind, kann das Ergebnis Konsequenzen nach sich ziehen und der Experte ist verpflichtet, diese dem Verkehrsamt mitzuteilen. Mögliche Konsequenzen betreffen etwaige Fahreinschränkungen wie z.B. ein Nachtfahrverbot, ein Autobahn- und Schnellstraßenfahrverbot oder sogar den befristeten oder unbefristeten Führerscheinentzug.

	Gar nicht sinnvoll	Sehr Sinnvoll				
Wie sinnvoll denken Sie ist diese Regelung?	①	②	③	④	⑤	⑥

	Auf keinen Fall	Auf jeden Fall				
Würden Sie an diesem Programm teilnehmen?	①	②	③	④	⑤	⑥

Zum Abschluss ein paar Angaben zu Ihrer Person

- **Geschlecht**
 - ☐ männlich
 - ☐ weiblich
- **Alter** _____ Jahre
- **Beruf**
 - ☐ Arbeitslos
 - ☐ Arbeiter/Angestellter
 - ☐ selbständig
 - ☐ Pension
- **Familienstand**
 - ☐ ledig
 - ☐ in einer Beziehung
 - ☐ verheiratet
 - ☐ geschieden
 - ☐ verwitwet
- **Haben Sie Kinder?**
 - ☐ Ja
 - ☐ Nein
- **höchste abgeschlossene Ausbildung**
 - ☐ Universität/Fachhochschule
 - ☐ Matura/Berufsbildende höhere Schule
 - ☐ Matura/Allgemeinbildende höhere Schule
 - ☐ Lehrlingsausbildung
 - ☐ Pflichtschule

Wie viel Geld steht ihnen durchschnittlich (im Haushalt) monatlich netto zur Verfügung?

- ☐ <500
- ☐ 501-1000
- ☐ 1001-1500
- ☐ 1501-2000
- ☐ 2001-2500
- ☐ >2500

Wie viele weitere Personen leben in ihrem Haushalt?

- ☐ Ich lebe alleine
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ mehr als 3

Vielen Dank für Ihre Teilnahme!

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Summary (Zusammenfassung)

Die vorliegende Forschungsarbeit untersuchte den Einfluss der Theorie der Schutzmotivation auf mögliche Veränderungen im Fahrverhalten von Personen über 65 Jahren, in dieser Studie zusammengefasst ausgedrückt als Offenheit gegenüber Feedback, ausreichende Überzeugung der Selbstbeurteilung und konkrete Pläne zur Selbstregulation. Weiters wurde durch die Präsentation eines fiktiven Programms „Begleitetes Fahren“ die Bereitschaft der Teilnehmer, ihre aktuellen Fähigkeiten in Anwesenheit eines ausgebildeten Fahrtrainers unter Beweis zu stellen, getestet. Die kognitiv vermittelnden Prozesse einer angepassten Theorie der Schutzmotivation wurden bezüglich ihres Einflusses auf die Schutzmotivation der Teilnehmer als Resultat von Bedrohungs- und Bewältigungseinschätzung des Autofahrens im Alter geprüft. 102 Personen im Alter von über 65 Jahren nahmen an der Untersuchung teil, wobei im Vorfeld 24 Personen in Fokusgruppen befragt wurden und die daraus resultierenden Ergebnisse die Grundlage zur Erstellung der Items des in dieser Studie verwendeten Fragebogens darstellen. In den Ergebnissen zeigte sich, dass die Faktoren der Theorie „severity“, „vulnerability“ und „self-efficacy“ in Summe als stärkste Prädiktoren für eine mögliche Veränderung des Fahrverhaltens im Alter und des Weiteren für eine Teilnahme am Feedbackprogramm dienten. Allerdings zeigte sich in unserer Studie, dass eine starke Schutzmotivation nicht automatisch zu einer hohen Bereitwilligkeit der Teilnahme in beiden Szenarien führt. Zusammenfassend zeigte sich, dass die Theorie der Schutzmotivation nicht umfassend, allerdings aber in einigen Bereichen, auf ein nicht-gesundheitsbezogenes Thema wie das Fahrverhalten im Alter anwendbar ist, weitere Forschung auf diesem Gebiet ist aber dennoch erforderlich.

Curriculum Vitæ

Persönliche Daten

Name	Thomas Berndl
Anschrift	Arnethgasse 38/5, 1160 Wien
Telefon	+43 676 5756428
E-Mail	thomas_berndl@gmx.at
Geburtsdaten	22.11.1984
Staatsbürgerschaft	Österreich
Familienstand	ledig
Führerschein	B

Berufserfahrung

seit 10/2009	Schönherr Rechtsanwälte GmbH, Wien 1 Besucherempfang und –betreuung, Telefonzentrale, Terminkoordination, administrative u. organisatorische Tätigkeiten
07/2010-09/2010	Karmasin.Motivforschung GmbH, Wien 18 Ferialpraktikum Durchführung von Interviews und Usability Tests, Unterstützung bei der Organisation von Projekten, Gestaltungs- und Formatierungs- arbeiten, Übersetzungstätigkeit (Englisch/Deutsch)
06/2005-09/2009	Installationsunternehmen Josef Berndl GmbH, Wien 16 Vertretung und Assistenz der Geschäftsleitung, Kundenbindung, Buchhaltung, Administration, Korrespondenz Boutique Gabini, Wien 16 Aushilfstätigkeit im Verkauf und in der Kundenbetreuung
06/2003-08/2003	Magic Life Korfu Classic, Nissaki, Griechenland Ferialpraktikum in den Bereichen Front Office und Guest Relations
07/2002-09/2002	Hotel „zur Linde“, Maria Wörth, Kärnten Ferialpraktikum im Service-, Bar- und Bankettbereich
06/2001-07/2001	Hotel „zur Tenne“, Kitzbühel, Tirol Ferialpraktikum im Service-, Bar- und Bankettbereich
07/2000	Café „Old Vienna“, Myrtle Beach, South Carolina, USA Ferialpraktikum im Service- und Barbereich

Schulische Ausbildung, Präsenzdienst, Studium

seit 10/12	Diplomstudium der Humanmedizin, Medizinische Fakultät Medizinische Universität Wien
08/2011-01/2012	University of Copenhagen, Denmark Auslandssemester mit den Schwerpunkten: Academic English, Danish Language, Work & Organizational Psychology

seit 10/2005	Diplomstudium der Psychologie , Psychologische Fakultät Universität Wien
10/2004-06/2005	Präsenzdienst beim österreichischen Bundesheer
1999-2004	Hotel- und Tourismusschulen Modul , Wien 19 Matura 07/2004 mit ausgezeichnetem Erfolg abgeschlossen Ausbildungsschwerpunkte: Tourismus und Marketing, Hotel- und Tourismusmanagement, Betriebs- und Volkswirtschaftslehre, Rechnungswesen und Controlling
1995-1999	Bundesrealgymnasium, Wien 16
1991-1995	Volksschule Josefinum, Wien 14

Sprachen

Deutsch	Muttersprache
Englisch	in Wort und Schrift
Französisch	gute Kenntnisse
Dänisch	Grundkenntnisse

Fort- und Weiterbildung

05/2011	Jubiläumskongress 2011 „Gesundheit, Beziehung & Entwicklung“ Psychosomatisches Zentrum Waldviertel, Eggenburg
03/2010-01/2011	Ausbildung zum student advisor im Rahmen des Supervised Orientation Tutorium (SOT) an der Universität Wien
09/2009	Kongress „Hypnosis and Neurosciences: Clinical Implications of The New Mind-Body Paradigms“, Rom, Italien
06/2007	Vortragender beim Kongress “Modern Urban Identities and Cultures in Old Cities“, Lviv, Ukraine
06/2004	Cambridge Business English Certificate Higher

Sonstige Fähigkeiten

03/2012-09/2012	Ausbildung zum Rettungssanitäter beim Wiener Roten Kreuz Abschluss mit ausgezeichnetem Erfolg
09/2012-02/2013	Tätigkeit als Buddy für das Erasmus Student Network
05/2012	Lehrgang zur Qualifikation „Brandschutzwart“
05/2002	Jungsommelier Österreich mit Auszeichnung