

**UNIVERSITY STUDENTS' JUSTIFICATION  
ACCOUNTS FOR PERSISTENCE IN AND  
DESISTANCE FROM CAR USAGE**

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## **DECLARATION OF AUTHORSHIP**

I, Chijioke Dike Uba, hereby declare that this thesis and the work presented in it is entirely my own. Where I have consulted the work of others, this is always clearly stated.

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Date: 27th June 2013

## ABSTRACT

*Global CO2 emissions are on the increase worldwide and must be substantially reduced to abate the associated impact of global warming. The potential importance of their impact on the planet and future generations calls for immediate collective action.*

*Car usage is one of the major culprits on the sustainability agenda. For this reason, numerous environmental campaigns focus on convincing people to reduce car usage. Despite efforts, individuals are sticking to their cars. There is also growing evidence that this is not due to a lack of awareness about its impact on the environment. Therefore, the marginal impact of further awareness campaigns is unlikely to be substantial. Campaigns targeting reductions in car use will benefit from deeper level understandings of what motivates people to persist in using the car despite environmental awareness.*

*A number of studies focus on the motivations underlying car use. However, few have specifically examined the deeper level justifications and mechanisms that can free individuals from the environmental imperative to reduce car usage. In addition, little is known about how individuals who match pro-environmental cognitions with actual reductions in car use justify their behaviour vis-à-vis the normative imperatives that favour car use. This study is an attempt to address both gaps. I explore the accounting mechanisms that individuals employ to justify persistence in and desistance from use of the car. A theoretical framework underpinned by the neutralisation theory (Sykes & Matza, 1957) and affirmation techniques (Copes & Williams, 2007) is used to explore the linguistic accounts and mechanisms employed by a university student sample to justify and maintain continuous car use (persistence) and discontinued or reduced car use (desistance).*

*In the final analysis, the thesis discusses the implications of the research findings for interventions. The discussions of intervention, it is hoped, will enhance the possibility of creating a generation of (future) decision-makers that account for the potential detrimental impact of their transport decisions in their everyday life by aligning behaviour to expressed environmental (desistance-oriented) frames of reference.*

## GLOSSARY

**Account:** A linguistic device “employed whenever an action is subjected to evaluative inquiry”. They are representative of the ways that individuals organise schemas (see schema below)

**Attribution:** The individual’s explanation of events (car user behaviour) using self-explicated accounts.

**Binary:** Refers to the twofold nature of reality. This term is used specifically in this thesis to conceptualise justifications for car use as characterised by persistence or desistance.

**Coping:** The act or process of dealing with stressful events. It involves the mastery, tolerance, reduction or minimisation of stressful events or cognitions.

**Coping strategies:** The specific efforts (behavioural and psychological) the individual employs in coping.

**Desistance:** The opposite of persistence (see persistence below).

**Explanatory style:** The habitual pattern of explanations an individual makes for events and actions.

**Green cars (GCs):** Used in this thesis to refer to any environmentally friendly car (EFC). EFCs are cars designed to produce less harmful impacts to the environment than conventional internal combustion engines that run on gasoline or diesel. The term Green Cars are used interchangeably with EFCs to cover hybrids, electric cars, clean diesel cars, natural gas cars, flexible-fuel cars, and hydrogen and fuel-cell cars etc.

**Persistence:** Continuance in a course of action, car usage, despite opposition, i.e., the environmental imperative to reduce car use.

**Pro-environmental Behaviour:** A conscious behaviour an individual performs to minimise negative impacts on the natural and built environment. The implication is that some behaviour may minimise the individual's impacts on the natural or built environment but are not pro-environmental if they do not involve a conscious response to the environmental imperative to act or live sustainably.

**Schema:** The broad cognitive representations or views that people have of themselves, others, roles, events and the social world, as well as how these become embedded in practices and ways of living.

**Justification:** An account whereby the individual accepts responsibility for actions but denies the pejorative quality associated with it (Scoot & Lyman, 1968). In this thesis, behavioural Justification refers to the act of defending persistence in or desistance from use of the car.

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## LIST OF ABBREVIATIONS

BGMG	Bristol Green Momentum Group
CADM	Comprehensive Action Determination Model
CASE	Centre for Analysis of Social Exclusion
DECC	Department of Energy and Climate Change
DfT	Department for Transport
EFC	Environmentally Friendly Car
ESP	Environmentally Significant Behaviour.
GC	Green Car
GHG	Greenhouse Gas.
IPCC	Intergovernmental Panel on Climate Change
ITPOES	Industry Task Force on Peak Oil and Energy Security
NAM	Norm Activation Model.
ONS	Office for National Statistics
PEB	Pro-environmental Behaviour
REN	Retrofitted Environmental Nudges
RCT	Rational Choice Theory
TPB	Theory of Planned Behaviour
TTB	Travel Time Budget
TTS	Theory of Travel Socialisation

## **INTRODUCTORY CHAPTER**

### **1.0 INTRODUCTION AND BACKGROUND TO THE STUDY**

#### **1.1 BASELINE DISCUSSION**

Increased rates of consumption hinder the achievement of ecological sustainable development and growth (Bandura, 2002). Bandura (2002) notes that the rate at which global consumptive patterns are depleting natural resources is faster than that at which the earth is able to renew or replenish used up resources. In other words, the earth has a carrying capacity and the limits to which the ecosystem can support burgeoning population growth and current consumptive lifestyles are gradually being exceeded. Given that some of the natural resources that are depleted are not renewable, the negative impacts of unsustainable levels of consumption on the ecosystem may become irreversible (Ehrlich et al., 1985; Root et al., 2003; Miller & Spoolman, 2009).

It is argued that global warming poses the greatest environmental challenge facing our generation (IPCC, 2007; World Watch Institute, 2004; Gardner & Abraham, 2007; Beirao & Cabral, 2007; Klockner & Friedrichsmeier, 2011). Claims that our present generation witnesses increases in global temperatures and climate variability (climate change) are supported by science and everyday experiences (IPCC, 2007). The potential effects of climate change are documented, e.g., increased disease occurrences (McMichael & Martens, 1995; McMichaels & Haines; 1997, Michael et al., 2006); food shortage; variability, especially rises, in sea levels with dramatic impact on many species (Thomas et al., 2004; Franco et al, 2006; Jepsen et al., 2008); irreversible damage and losses in biodiversity (Root et al., 2003; IPCC,

2007). If left unabated, the negative impacts of climate change may lead to the inability of current and future generations to sustain themselves (WCED, 1987).

Given that present anthropogenic activities are largely responsible for global environmental problems such as climate change (Jackson, 2005; McMichaels & Haines, 1997; IPCC, 2001; IPCC, 2007), it is imperative that present generations mitigate the potential effects of environmental problems by reducing current rates of consumption (IPCC, 2007; Miller & Spoolman, 2009). Since climate change is, perhaps, the most serious environmental problem, the need to address the anthropogenic root causes of climate change are emphasised (Gardiner, 2006; IPCC, 2007; Miller & Spoolman, 2009; Gardiner, 2011).

Carbon dioxide is the main greenhouse gas (GHG) responsible for climate change (IPCC, 2007; Miller & Spoolman, 2009). By implication, there is a need to reduce carbon emissions from major anthropogenic sources if we are to mitigate the potential impacts of climate change.

## **1.2 CARBON EMISSIONS AND THE TRANSPORT SECTOR**

Carbon emissions from the transport sector are the major source of household carbon footprints after construction and food production (Lorek & Spangenberg, 2001). The argument is that since vehicular tailpipe emissions are responsible for a great percentage of overall carbon dioxide emissions, there is a need to attain CO<sub>2</sub> emissions reductions from the transport sector (World Watch Institute, 2004; Gardner & Abraham, 2007; Beirao & Cabral, 2007; IPCC, 2007; ActonCO<sub>2</sub>, 2008; Klockner & Friedrichsmeier, 2011). Although technology can, and has, played a crucial role in this regard through the development and production of “green” vehicles (low emission vehicles), a major barrier to achieving the required



reductions in CO<sub>2</sub> emissions from the transport sector relates to individual persistence in the adoption of unsustainable travel modes (King et al., 2009).

Specifically, the use of cars is a major culprit in terms of overall emissions from the transport sector (Klockner & Friedreichmeier, 2011). Private cars constitute the primary mode of daily commuting, especially for people living in the industrialised world (Bergstad et al., 2011). In the private sector of developed countries like the United Kingdom, the use of cars is one of the largest single contributors of carbon dioxide emissions from the transport sector (Department for Transport (DfT), 2009b; Klockner & Friedrichsmeier, 2011). For instance, private cars account for 92% of total CO<sub>2</sub> emissions from the entire transport sector in the United Kingdom (DfT, 2009b). There is potential for reducing overall carbon emissions if individuals reduce use of the car. However, this travel behaviour (use of cars) is very resistant to change (Thorgesén, 2004). Thus, the persistent use of cars by individuals jeopardises the attainment of maximal carbon reductions from the overall transport sector (Steg & Tertoolen, 1999; Thornton et al., 2010).

Furthermore, the need for reducing car usage is not limited to the emission of GHGs. The human and social costs that arise from accidents are added justifications for reductions in car usage (Groeger & Rothengatter, 1998). In addition, growing health concerns, e.g., increased rates of obesity caused by sedentary lifestyles are linked to excessive car usage (Dora & Phillips, 2000; Frank et al., 2004; Wen et al., 2006; Davis et al., 2007; Bassett et al., 2008).

On the other hand, it is equally important to note that the car is not an “evil” object of consumption. Cars serve numerous purposes for individuals<sup>1</sup>. Thus, numerous arguments for emission reductions from car use focus majorly on emphasizing reductions in car usage as against total abstinence from car use (Klockner & Freidrichsmeier, 2011).

Succinctly, reducing car traffic as a way of enhancing transport sustainability has become a major focus of transport policy in many countries (Cullinane & Cullinane, 2003). A range of intervention approaches is applicable for interventions aiming to get people to reduce car usage. On one hand, there are soft measures that invite people to make smart choices, such as informing people of the need to adopt the use of fuel-efficient cars or more sustainable alternatives such as public transport, cycling or walking. On the other hand, hard measures (e.g. taxes and charges) that make the use of the car more difficult are also applicable. Despite the introduction of these and other measures, getting people to reduce car usage has not been very successful, especially in developed parts of the world, due to high levels of dependency on car usage (Klockner & Friedrichsmeier, 2011; Gardner & Abraham, 2007; Guiver, 2007). The problem of increased CO<sub>2</sub> emissions from car usage persists; and the need to reduce CO<sub>2</sub> emissions from car usage becomes even more pressing.

### **1.3 THE RESEARCH PROBLEM**

Numerous studies show that people are generally aware of the environmental externalities associated with dependency and overreliance on the use of private cars

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<sup>1</sup> This point is discussed in detail in chapter two.

(Gardner & Abraham, 2007; Commission for Integrated Transport, 2002). However, this knowledge has not led to corresponding behavioural change, i.e., reductions in overall levels of car usage for the sake of the environment (Steg & Sievers, 2000; Gardner & Abraham, 2007). People persist in the use of cars despite generic awareness of car user externalities and agreement that there is a need to reduce car usage. If anything, evidence suggests that car usage has continued to increase in most developed countries (Cullinane & Cullinane, 2003). Some argue that governments in developed countries have not shown the required political will in addressing the issue of persistence in use of the car (Whitmarsh & O'Neill, 2010). Ockwell et al. (2009) note that this lack of political will stems partly from governments' fear of public antagonistic reactions and loss of political support. In turn, the lack of political will has led to most governments' adoption of soft, cost effective and socially acceptable intervention approaches to behaviour change, e.g. "nudges" that do not restrict consumer choice per se (McSmith, 2010; Cialdini, 2006; Thaler & Sustein, 2008). The dominant soft policy approach that has been applied along this line focuses on the creation of environmental awareness via the dissemination of environmental information. The assumption is that people would make the rational choice of aligning pro-environmental beliefs with actual pro-environmental behaviour (Axsen & Kurani, 2012; Jackson, 2005). Study findings highlight that this approach to intervention has not been very successful (Kollmus & Agyemang, 2002). Ockwell et al. (2009) note that the awareness created using this dominant approach has not been successful in making people translate expressed pro-environmental cognitions to actual pro-environmental behaviour. That this dominant intervention approach has not been entirely successful implies the need to re-evaluate this dominant intervention approach (Stern, 2005). In terms of

reductions in car usage, successful interventions would benefit from deeper level understandings of the complex dynamics that underpin car users; especially, why pro-environmental cognitions fail to lead to corresponding reductions in car usage. This, in turn, suggests the need to understand how and why individuals are able to free themselves from the moral environmental imperative to reduce car usage.

Literature on car usage and car user behaviour highlights that peoples' motivations in using the car are largely attributable to their interpretations of the roles and meanings assigned to car usage (Bamberg et al., 2007; Bamberg et al., 2011) as well as their perceptions of alternatives to car use (Guiver, 2007). Thus, the individual's decision to use or not use the car for environmental reasons is subject to, and largely determined by, their interpretations of perceived benefits and motivations for either pro-car or anti-car user behaviour. This view is consistent with the broader literature on pro-environmental behaviour; that a diversity of factors influences the adoption of different pro-environmental behaviours (Whitmarsh & O'Neill, 2010). For instance, studies on environmental behaviour find that although the adoption of certain pro-environmental behaviours are motivated by environmental concerns, other motivations and structural factors play greater roles in determining whether a specific pro-environmental behaviour is adopted (Jackson, 2005; Kollmus & Agyemang, 2002). In other words, factors other than environmental concerns could underpin people's engagement in environmentally significant behaviour (behaviour that has positive impact on the environment) (Stern, 2000; Kollmuss & Agyemang, 2002). For instance, findings highlight that reductions in household energy consumption are motivated more by financial and health reasons than environmental concerns (Whitmarsh, 2009). An implication is that decisions to engage in pro-environmental behaviour are made on activity-by-activity basis (Thorgesen, 2004).

Therefore, expectation that people will act consistently across different domains of behaviour or that pro-environmental behaviours will have a common motivational basis may not always hold (Whitmarsh & O'Neill, 2010).

Literature on car user behaviour is consistent with these findings; that car usage and car user behaviour are motivated largely by individual subjective perception and interpretations of what purposes the car serves for the individual that uses it (Bamberg & Schmidt, 2003). Numerous factors (e.g. social, economic, psychological and demographic) motivate car usage in line with the individual's perceptions and interpretations of their car user behaviour (Wright & Curtis, 2005; Bamberg & Schmidt, 2003; Klockner & Friedricshmeier, 2011). Thus, persistence in use of the car depends on individual perceptions and interpretations of a multiplicity of factors. In addition, such perceptions could become barriers that underpin unsustainable lifestyles (Miller & Spoolman, 2009; Carter, 2003; Line, 2008). Studies identify some of these barriers, e.g., feelings that the individual's pro-environmental behaviour will not make a difference and that climate change will occur with or without human intervention etc. (Kollmus & Agyemamng, 2002). The implication is that perceptual barriers could become extra motivations for persistence in unsustainable consumptive patterns and behaviour.

The overall implication is that getting people to reduce use of their cars is not a simple matter and that interventions aimed at getting people to reduce use of the car need to take into account the complex dynamics that underpin car usage and the individual's car user behaviour. The nature of the complex motivators that drive use of the car suggest that there may not be one best way or approach for enhancing the knowledge base needed for the development and implementation of effective

policies and interventions to reduce car usage. However, recent studies highlight research areas that could yield the required deeper levels of understanding. For example, the need for targeted studies, i.e., studies that focus on uncovering the distinct characteristics of specific traveller segments and how these characteristics drive car user behaviour is noted (Anable, 2005). Whitmarsh & O'Neill (2010) have argued for more studies that investigate the functions, constructions and communications of the various forms of pro-environmental identity. In addition, Bamberg & Moser's (2007) meta-analysis of the psycho-social determinants of pro-environmental behaviour reiterates previous arguments (see Pieters et al., 1998) that studies on pro-environmental behaviour ought to consider how individuals attribute cause of behaviour to self and others. In fact, it is argued that studies have failed to gravitate towards understanding of how the individual's attributions underpin and drive behaviour (Gardner & Abraham, 2008), making this an understudied (yet important) area for research on car user behaviour.

Attributions are explanations for events and behaviour. They are dependent on, and shaped by, schemas (Crittenden, 1983). Schemas refer to the broad cognitive representations that people have about themselves, others, roles, events and the social world, as well as how these become embedded in practices and ways of living (Maruna & Mann, 2006)<sup>2</sup>. The individual's cognitive representations of self, e.g. identity perceptions and constructions of selfhood, constitute key determinants of behaviour (Aronson, 1997). In addition, the individual's cognitive representations are acquired and shaped by social and cultural cognitions that are learnt during social development (Miller, 1984). Therefore, schemas have individual and social

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<sup>2</sup> Schema research has been applied to the following main areas: person schemas, self-schemas, event schemas and role schemas (Fiske & Taylor, 1991).

cognitive orientations. They facilitate behaviour and interactions in the social world. Thus, when the individual explains events and behaviour, their explanations (attributions) are underpinned by, and reflective of, schemas. Numerous study findings highlight the interplay of different schemas on behaviour in current studies on pro-environmental behaviour (see Whitmarsh, 2009; Thorgesen, 2004).

Cognitive dissonance studies on general pro-environmental behaviour highlight that what determines behaviour is the individual's subjective perceptions; how an individual perceives acting in a particular manner as consistent or inconsistent with the individual's schemas (Thorgesen, 2004). In order to maintain consistency between schemas, the individual would need to find ways of justifying favoured behaviour when this conflicts with expressed beliefs (Sykes & Matza, Shotter, 1984; McGregor, 2008). In justifying behaviour, the individual offers explanations (attributions) for behaviour (Orbuch, 1997; Crittenden, 1983). Thus, if individuals are able to justify persistent use of the car, the justification and explanatory mechanisms employed in this regard would serve the purpose of freeing the individual from the environmental imperative to reduce use of the car. In addition, the cognition representations (schemas) that underpin adopted or favoured behavioural choices will underpin behavioural justifications.

The implication is that the explanatory mechanisms used by individuals to free themselves from the environmental imperative to reduce car usage are linked to the interplay between behavioural justifications and attributions for behaviour, and their underpinning schemas. Therefore, understanding car usage or car user behaviour from the perspective of this interplay has the potential to offer fresh insights on the individual's car user behaviour. As far as I am aware, no study on car usage or car

user behaviour has focused explicitly on exploring the import of this interplay in relation to how individuals are able to persist in use of the car by freeing themselves from the environmental imperative to desist in using the car. The current study builds on this gap as its main point of departure.

## **1.4 THE CURRENT STUDY'S FOCUS**

The current study expands on what is known about car user behaviour by gravitating towards a deeper level understanding of car user motivations from an understudied perspective - how persistence (continued use of the car) and desistance (discontinued or non-use of the car) are justified and maintained. This is achieved via the exploration of individuals' justification accounts for their adopted car user behaviour. Individual and group justification accounts for behaviour are conceptualised in the current study as a basis for maintaining persistence in or desistance from car use, and are explored in relation to their schema underpinnings.

### **1.4.1 Study context and approach**

Understanding the behavioural inconsistency of why individuals' pro-environmental cognitions fail to translate to actual reductions in car usage forms the study's initial point of departure. Specifically, justifications for persistence in car use are explored as a means of understanding how individuals are able to free themselves from the environmental imperative to reduce use of the car. However, since the study also focuses on desistance, I consider how individuals who align pro-environmental cognitions with actual reductions in car user behaviour justify their adopted car user behaviour. The context of understanding how individuals free themselves from the environmental imperative to reduce car usage and how they are able to align



behaviour to these imperatives (i.e. behavioural justifications) is the group and individual self-explicated accounts. This is in line with findings that the individual's subjective perceptions and social or collective perspectives underlie reasons for behaviour (Thorgesen, 2004; Thorgesen, 2006) and that focusing on individual and collective accounts can reveal deep-seated motivations for behaviour (Orbuch, 1997; Gergen, 2009). Particularly, the application of an accounts-based approach as adopted in this study is relevant for several reasons.

First, car user behaviour is largely dependent on subjective interpretations and perceptions, implying that focusing on the individual's self-explicated justifications (accounts) for adopted behaviour can help uncover why and how the inconsistency between pro-environmental cognitions and actual car user behaviour may exist for different individuals. It can also uncover how and why the reverse might be the case, that is, that some individuals' actual behaviours are aligned to their pro-environmental cognitions. I am not aware of any study that has approached the understanding of car user behaviour from the perspectives of persistence and desistance.

Second, individual accounts are bundles of attributions (Harvey et al., 1992; Crittenden, 1983), implying that an analysis of justification accounts can help uncover the deep-seated attributions for persistence or desistance. As discussed in the previous section, when individuals account for behaviour, they explain their behavioural choices (Orbuch, 1997) and their attributions and explanations in this case are reflective of schemas. Thus, in addition to uncovering the different rationalisations that are employed to justify and consequently maintain car usage persistence or desistance, an extended analysis of the attributions inherent in

justification accounts can uncover the specific individual and group schemas that underpin persistence or desistance. This approach is in line with calls for a better understanding of the complex factors that determine the individual's choices of specific travel modes (Beiro & Cabral, 2007; Fujii & Kitamura, 2003) and the travel behaviour of specific traveller segments (Anable, 2005).

Furthermore, the study's conceptualisation of car user behaviour from persistence and desistance perspectives adds to the literature on car usage and car user behaviour. The study findings noted in section 1.3 identified rationalisations (such as individuals' beliefs that their own pro-environmental behaviour will not make a difference, or the belief that governments are not doing enough to address environmental problems) as barriers to individuals' adoption of pro-environmental behaviour (Pieters et al., 1998; Carter, 2003; Kolmuss & Agyemang, 2002). A key issue is that such rationalisations could become extra motivators for adopted car user behaviour when the individual employs them as justification for persistence or desistance. To use an example, an individual is not likely to claim they were motivated to buy or use a car because they believe their individual pro-environmental behaviour does not make a difference in addressing environmental problems. They are more likely to explain decisions to buy or use the car in terms of their interpretations of the function(s) or role(s) that the car plays for them (e.g. status, commuting, safety, etc.). However, if their car user behaviour is called into question, e.g. by highlighting their expressed pro-environmental cognition, their justification accounts for persistence or desistance could go beyond an appeal to perceived car functions and role to include barrier rationalisations. Thus, rationalisations (e.g., that personal reductions in car usage do not make a difference) can become extra motivations for adopted car user behaviour when they are

employed as justifications for persistence or desistance. In other words, the accounts used to justify persistence or desistance in such instances go beyond the car-role or functions motivations. Succinctly, barrier-rationalisations could become further motivations, or add-ons to the usual car-role or car-function motivators that have been identified in studies.

Finally, the current study also focuses on the corresponding issue of how the deeper level understanding gained from the uncovering of justification accounts for persistence or desistance can enhance intervention(s) aimed at getting people to reduce use of their cars. A key insight from the study findings in this regard is that intervention could benefit from the understanding of what drives persistence as well as desistance.

#### **1.4.2 The study's theoretical framework**

In addition to focus on the interplay between justification accounts, attributions and schemas, focus on persistence and desistance informed the development and implementation of the theoretical framework and methodological choices that I adopted for the study.

The theoretical framework applied to the study considers persistence and desistance as binary components of justifications for favoured car user behaviour. The binary import is linked to the view that the meaning of persistence is better captured in relation to desistance. This is in line with the view that the meaning of a word or concept exists in a network, in relation to other words (Derrida, 1997). For example, that the meaning of black resides not only in understanding “blackness”, but in conjunction with that which is not black. Thus, a holistic understanding of

behavioural justifications for car usage implies understanding persistence with its binary, desistance, and vice versa. In addition, a binary perspective highlights how constructions around self, others and cultures (schemas) inform justifications and attributions for favoured behavioural choice.

In line with the social constructionist views that behavioural justifications are facilitated via use of linguistic devices, the theoretical framework applied in the current study combined the neutralisation (Sykes & Matza, 1957) and affirmation techniques (Copes & Williams, 2007). Neutralisation techniques are rationalisations employed to justify inconsistent behaviour; particularly when the individual's behaviour is called to question (Sykes & Matza, 1957; Maruna & Copes, 2005; McGregor, 2008). In line with this definition, neutralisation techniques were included in the theoretical framework as a basis for exploring persistence in car usage. On the other hand, affirmations are counter-neutralisations, employed by individuals whose behaviour does not confirm to the mainstream normative contexts (Copes & Williams, 2007). As counter-neutralisations, affirmation techniques are employed in this study as a framework for uncovering the justification accounts for desistance from use of the car.

Laughlin's (1995) view that theory guides research underpins the application of the study's theoretical framework. I neither set out to test these theories nor to apply them as used in their original formulation. Essentially, the study's theoretical framework was used as guide for the exploration and uncovering of the different accounting rationalisations and mechanisms that underpin desistance and persistence in line with the binary perspective considered in the foregoing discussion. The use of these theories as such, i.e. as a guide to exploring

justifications for choice of behaviour, has been applied in different studies (see Maruna & Copes, 2005), especially those that focus on exploring justifications as dissonance resolution mechanisms (Shotter, 1984; Maruna & Mann, 2006; Maruna & Copes, 2005).

### **1.4.3 Methodology and methods**

Focus groups constituted the data collection method. Focus groups are useful in capturing the interactional negotiations and constructions that highlight the influences of individual and group perspectives on behaviour (Kitzinger, 1994). They are suited to studying individual and social cognitions that underpin behavioural justification. In line with the social constructionist epistemology that an understanding of human conduct implies focus on how language is used in the construction of social reality, I applied an interpretivist approach to the analysis of data. I started by documenting the different rationalisations employed to justify persistence or desistance using a thematic analytic approach (Braun & Clarke, 2006; Masey, 2010). Subsequently, I applied the logical induction research strategy (Copi & Cohen, 2002) to obtain a deeper-level analysis and understanding of how rationalisations (affirmations and neutralisations) are used and what purposes they serve for individuals using them. This inductive interpretation is underpinned by Gergen's (2009) view; of analysing self-explicated accounts from content (what is communicated in accounts) and function (what is implied in the communicated content) perspectives.

#### 1.4.4 Choice of study sample

In line with calls for studies on car user behaviour to target specific traveller segments (Anable, 2005), the study employed the use of a university students sample.

University students constitute an important target group for sustainability intervention (Thomas, 2004; Jackson & Michaelis, 2003). At an international level, the need to incorporate and educate university students to become sustainable citizens has led to the development of several initiatives (Thomas, 2004)<sup>3</sup>. This in turn has led to generally high levels of specialised environmental programmes in universities (Cosgrove & Thomas, 1996; Wolfe, 2001). However, despite the growing emphasis on involving universities and university students in the sustainability project, not many studies have focused on understanding university students' perceptions of sustainability and sustainable development, leaving this important area under-researched (Kagawa, 2007). By exploring students' use of accounts to justify persistence and desistance, the current study adds to literature in this area.

It is interesting to note that the majority of academic studies that have systematically considered university students' experiences were conducted between the 1950s and 1970s (Flacks & Thomas, 2007). This has prompted calls for the stimulation of more studies that incorporate the group processes (interactions and construction)

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<sup>3</sup> Thomas lists various such international initiatives: Tallories Declaration of University Leaders for a Sustainable Future (1990); Halifax Action Plan for Universities on "Creating a Common Future"(1991); Swansea Declaration of the Association of Commonwealth Universities (1993); Kyoto Declaration of the International Association of Universities (1993); Student Charter for a Sustainable Future of the student unions of the United Kingdom (1995).

that mediate behaviour amongst this target group. Therefore, in addition to understanding car user behaviour from the perspective of university students, the current study also adds to literature aimed at understanding the situation (positioning) of the 21<sup>st</sup> century university student in a globalised world characterised by consumerism.

#### **1.4.5 Specific research questions and objectives**

In line with the foregoing discussion, the following research questions were formulated for the current study:

1. Why do students' awareness of car user externalities and beliefs that car usage ought to be reduced not translate to reductions in actual and aspired car usage?
2. How are neutralisation and affirmation techniques constructed and used to justify persistence or desistance in car usage by the study's sample population?
3. How are justifications for desistance or persistence reflective of the university students' schemas?
4. How can an understanding of students' justifications for car usage (desistance or persistence) be applied to enhance car user reduction interventions?

In line with the research questions outlined above, the following constitute the study's objectives:

1. To explore the mechanisms used by students to justify persistence in car use (i.e. not reducing car usage by invoking the use of justifications).

2. To explore the mechanisms used by students to justify desistance from use of the car.
3. To analyse how student accounts (accounts for maintaining persistence/desistance) are reflective of their individual and group schemas.
4. To discuss practice interventions that aim at enhancing reductions in car usage.

## **1.5 THE STUDY'S CONTRIBUTION TO KNOWLEDGE**

The study's contribution to knowledge links to the noted objectives. First, focusing on respondents' justification accounts add to what we already know about the motivations for car usage. The study's conceptualisation and focus on persistence and desistance add to what we already know about motivations for car usage (as I have argued in section 1.4.1) by considering how justification accounts underpin persistence in or desistance from use of the car. Furthermore, the study's findings uncovered how the employed accounting mechanisms are used to work around the contrasting normative imperatives that underpin desistance and persistence. The study's findings located how individuals are able to free themselves from the normative imperative to reduce car usage. The findings shed more light on how people work around and cope with different normative imperatives in a bid to resolve the conflict between pro-environmental cognitions and actual car user behaviour. Specifically, the study identified "re-arrangement" as a coping mechanism adopted by respondents in their bid to negotiate and work around different normative contexts: the environmental that favours reduction in car usage versus the pro-market that favours car usage and consumption in general.



In addition, the study's findings on how the uses of mechanisms used for persistence or desistance justification are underpinned by schemas adds to what we know about the relationships between the constructions of self, identity, perceptions of other and cultures in relation to car usage. Discussions (in chapters 7) relate these latter schema-related findings specifically to the context of present day university students.

Conclusively, the study proposes and discusses intervention strategies in line with implications induced from the study's findings.

## **1.6 STRUCTURE OF THE CURRENT STUDY**

The study consists of eight chapters. In this introduction (chapter one), I start by elaborating on the need for reductions in global CO<sub>2</sub> emissions. The problem of increased carbon emissions from the transport sector, specifically from car usage, is also noted. The issues of not matching pro-environmental cognitions with actual reductions in car usage, limited success of the dominant intervention approach aimed at car user reduction and gaps in the literature on car usage and car user behaviour are discussed. Subsequently, I discuss the point of departure and focus for the current study. The discussions in the following chapters build and expatiate on this general introduction. The proceeding chapters (two to eight) are introduced in the following sections.

### **1.6.1 Chapter 2 – Literature Review**

In this chapter, I critically review existing literature on car usage and car user behaviour. The review of literature considers literature on car usage from different perspectives (theoretical approaches; models' application; recommendations for

further studies) to identify gaps and points of departure for the study. In other words, it extends the arguments for the adopted study's focus and approach that are introduced in chapter one.

In line with identified gaps and points of departure from existing literature on car usage, I develop broad research questions and objectives for the current study. In addition, I argue in more detail for the study's approach.

### **1.6.2 Chapter 3 – The study's theoretical framework**

In this chapter, I develop a theoretical framework that I apply to the current study. Summarily, the framework serves, amongst others, the main purpose of guiding the study's approach in addressing the research questions formulated in line with the review of literature from the preceding chapter.

The discussion of the study's theoretical framework commences with an elaboration on the nature and basis of human behaviour. Given that the current study seeks to explore how behavioural inconsistency is resolved and maintained by individuals using justification accounts, the theoretical framework is specifically oriented towards theorizing how the moral dilemma in use or non-use of the car is resolved vis-à-vis individual possession of pro-environmental cognitions. The study's theoretical framework combines the neutralisation theory (Sykes & Matza, 1957) and affirmation techniques (Copes & Williams, 2007).

Furthermore, the theoretical framework laid the foundations for the methodology and methods that I apply to the study's research process. Finally, the broad research questions developed in the preceding chapter are refined in line with the theoretical frame.

### **1.6.3 Chapter 4 – Research methodology and methods**

The study's research methodology and methods are grounded on the assumptions of the constructionist research paradigm that underpin the theoretical framework; that social reality is essentially a construct of individual and group interpretations and assignment of meaning to their everyday life activities. In other words, that accounts for justifying adopted car user behaviour are individual and group constructions, and are formulated in interaction via use of language. The epistemological implication is that the understanding of action and behaviour ought to focus on the linguistic representations that are used in the construction of events and experiences. This constructionist assumption guided the choice of methods for data collection and analysis.

Focus groups with university students constituted the main data collection method. Thematic analysis was then applied for the analysis of data. Thematic analysis is aligned to the constructionist research enquiry (Massey, 2010; Braun & Clarke, 2006). In line with thematic analysis, data was subject to analysis from content and latent points of views (Braun & Clarke, 2006). The former corresponds with Gergen's (2009) constructionist analysis of content (focusing on content of accounts for justifying persistence or desistance), while the former deals with analysis of function (the purposes that accounts are meant to serve). Deductive and inductive logics of reasoning were applied for the respective thematic analysis approaches (content and function).

The study's findings are presented in the subsequent three chapters.

#### **1.6.4 Chapter 5 – Students’ justifications for persistence and desistance: a content level description and presentation of findings**

Chapter 5 addresses the first two research questions. The discussions in this regard focused majorly on descriptive analysis of the content of justification accounts and mechanisms for persistence and desistance in use of the car. Specifically, representative quotes from focus group respondents were deduced in line with the neutralisation and affirmation techniques they reflect.

In the discussion section, I interpret the descriptions from preceding sections in the light of relevant theoretical perspectives. This introductory interpretation paved the way for more in-depth interpretation of justification accounts from function perspectives in the following chapter.

#### **1.6.5 Chapter 6 – A functions approach to uncovering schema underpinnings of persistence and desistance justifications**

This chapter addresses the third research question and objective. The chapter’s focus is on uncovering how the use of accounting techniques (neutralisation and affirmations) is reflective of respondents’ schemas. Analysis and discussions in this chapter are aligned to the constructionist analysis of discourse from function points of view (Gergen, 2009).

The deeper level interpretation of the functions of neutralisation and affirmation techniques identified the moral dilemma of using (or not using) the car as a conflict arising from the normative imperatives of a pro-market mainstream context that favours use of the car and the environmental context that favours reductions in car usage. Re-arrangement is identified as the key mechanism that was used by persisters (respondents who argue for persistence) and desisters (respondents who

favour reductions in use of the car) to work around the normative imperatives of these contexts. I also explore how the use of neutralisations and affirmations and the negotiations of different contexts relate to the specific university subculture, noting especially how this is reflective of their schema representations and evolving sense of self, i.e. their process of becoming - in line with Alport (1955).

### **1.6.6 Chapter 7 - Implications of study findings for car user reduction interventions**

In chapter seven, I discuss the implications of key study findings for intervention aimed at car user reduction. In line with these intervention implications, I argue for (de)constructive transformation approaches and strategies. (De)constructive transformations aim at deconstructing dominant neutralisation techniques and persistence-oriented re-arrangement. In addition, it advocates strengthening of the dominant affirmations that underpin desistance. This approach derives from the drift implication that weak persisters and weak desisters experience drift and are liable to change their frames of reference. Subsequently, I show how a prototypical (de)constructive transformation approach (Retrofitted Environmental Nudges) could be applied using the instance of cycling introduction in a university environment. Concluding discussions focus on the applicability and conditions that affect the successful application of (de)constructive transformation and the REN approach.

### **1.6.7 Chapter 8 – Concluding Chapter**

I summarise findings and arguments within the chapters, linking these to the research questions and objectives. The study's contributions to knowledge are also outlined and discussed. Subsequently, I reflected on the study's theoretical

framework and limitations of the study. In line with the discussions on contribution and study limitations, areas for further research are noted.

## **CHAPTER TWO**

### **2.0 LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

In this chapter I critically review existing literature on car usage. In the course of the review I identify gaps and points of departure for the present study. Consequently, the review serves as a basis for introducing the study's broad research questions, in line with identified gaps and points of departure that I identify in the review of literature.

This chapter consists of five sections. In the first section, I elaborate on the different motivations that studies have found to underpin car user behaviour. I categorise these motivations according to the following factors:

1. Psychological (affective) and utilitarian factors
2. Situational factors
3. Social factors
4. Demographic factors
5. Habits.

The following section builds on this initial review of motivator types by exploring the major theoretical models and approaches that have been applied to studies on car usage and car user behaviour. In line with Jackson's (2005) outline of the dominant theories that have been applied to studying behaviour, the following models and approaches to car user behaviour are reviewed: Rational choice, Expectancy-Value, Adjusted expectancy-value, Sociality perspectives and Habits. I also discuss the limitations of these theoretical approaches.

Section three reviews study findings and discussions on the costs of car usage (the externalities of car usage). I then review some of the dominant policy approaches that have been put in place to address the problems associated with the externalities that arise from use of the car. The limitations of these dominant intervention approaches are identified and discussed.

In the final section, I discuss key issues from the review base. I summarise the literature review, focusing specifically on the identified gaps in existing literature and the points of departure that form the current study's focus and approach. Along this line, broad research questions are developed for the current study. The chapter concludes by linking key discussions from the current chapter to proceeding chapters (the theoretical framework and methodology and methods chapters).

## **2.2 MOTIVATIONAL FACTORS UNDERPINNING CAR USER BEHAVIOUR**

The aim of this section is to critically review study findings and discussions on the motivational factors that drive or underpin car usage. Car user motivations are categorised into five types and are discussed in the following sections.

### **2.2.1 Psychological (affective) and utilitarian factors**

Steg & Tertoolen (1999) discuss the psychological correlates of car use; noting the link between behaviour, individuals' attitudes and choices of private car purchase and use. They contend that it is important to incorporate knowledge of the different roles that the car plays for the individual, roles that go beyond the conventional perception of the car's primary use as an object that serves the individual's need of



commuting. This view is shared by the majority of authors<sup>4</sup> whose study findings are premised on evidence that decisions to use the car go beyond commuting purposes. In other words, that the car serves other purposes other than getting the user from point A to B. The car is perceived as possessing extra benefits and advantages, in addition to serving commuting needs (Gartman, 2003; Wright & Curtis, 2005).

Findings supportive of this view note that the car has seemingly more advantages over public transport modes from individually defined perspectives. It is seen to offer psychological advantages which in themselves possess subjective intrinsic values (Steg et al., 2001). It offers the pleasures of driving, and feelings of power or superiority over others (Steg & Tertoolen, 1999). These are coupled with other psychosocial benefits which include, but are not restricted to, mastery, self-esteem, feelings of autonomy, protection and prestige (Ellaway et al., 2003; Wright & Curtis, 2005). In addition, the emotional relationships that sometimes exists between individuals and their cars has been argued as re-enforcing the bond between the car and owner (Sheller, 2004), with the car sometimes perceived as an extension of the owner's self (Wright & Curtis, 2005). Gardner & Abraham's (2008) meta-analysis of the psychological correlates of car use reiterate the impacts of these sorts of affective and emotional motivators on decisions to use the car. Interestingly, this study also notes the effect of other motivator types such as habits, and pro-environmental cognitions, implying that individuals are motivated to use the car for numerous reasons that may not necessarily be psychologically oriented (see Klockner & Friedrichsmeier, 2011). Along this line, attempts have been made to

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<sup>4</sup> Gardner & Abraham's (2008) meta-analysis of the psychological correlates of car usage discusses these studies in detail.

categorise car user motivators to facilitate a clearer understanding of motivator types and how these relate to individuals' decisions to embark on use of the car.

Gardner & Abraham (2007) have suggested a categorisation that extends car user motivators beyond psychological considerations. They opine that research on car use highlights two broad categories of driving motivations; the instrumental or utilitarian and the affective or psychological. The former are linked to current goals in that the subject strives towards maximising the expected utility of the transport modes that are available. It is from this point of view that car users are argued as being driven by such needs as reducing travel time, seeking convenience and security, the attainment and maintenance of personal space, the attainment of flexibility and the reduction of financial costs associated with travel (Wardman et al., 2001; Tertoolen, et al., 1998; Van Vugt et al., 1996). On the other hand, affective motivations find their basis in factors such as perceived levels of enjoyment of the act of driving, excitement, uncertainty and safety. All of these have been related to the individual's eventual choice of travel mode (Wardman et al., 2001; Mann & Abraham, 2006; Bamberg & Schmidt, 2001; Ellaway et al., 2003). Some researchers have treated these two broad motives (i.e. the instrumental and affective), independently (Steg, 2005; Wardman et al., 2001). However, Gardner & Abraham (2007) have noted that there is a thin line, and sometimes none at all, between some instrumental and affective motives under certain circumstances. For example, considerations of time, costs and reliability may find significance in the fact that they are weighed in relation to their affective consequences in terms of stress, frustration and enjoyment.

Categorizing motivators as psychological and utilitarian highlights the interplay of the considerations that affect the individual's eventual decisions to use or not use the car. For instance, where a particular mode of transport, say car use, is considered most beneficial in terms of offering pleasure, the availability of resources (time and money) could affect whether a preferred travel mode is actually adopted or rejected. Zhahavi & Ryan (1980) argue that Travel Time Budgets (TTB), i.e. considerations of commuting time and financial cost, constitute the basis for the analysis of travel demands and individual decisions. However, TTBs and other psychological and utilitarian factors are not the only determinants of behaviour. In fact, even when affective and utilitarian considerations consistently direct individual choice towards a specific travel mode, other motivators could determine the eventual decision and adoption of the commuting mode.

### **2.2.2 Situational factors**

Apart from the noted psychological and utilitarian motivational factors discussed above, recent studies have gravitated towards understanding the role and influences of situational factors on people's perceptions of the car, its uses and indeed other travel alternatives (Klockner & Friedrichsmeier, 2011). Along this line, decisions to use the car have been identified as being dependent on how the situational factors that affect perceived benefits from use of the car are interpreted and understood by the user (Bamberg et al., 2011). Situational factors refer to the set(s) of circumstances or state of affairs that influence travel mode choice (Klockner & Friedrichsmeier, 2011). Empirical evidence highlights the influence of such factors on the individual's travel mode choice and decision. For instance, that car availability increases the likelihood of using this commuting mode (Dieleman et al., 2002) and events such as strikes lead to major reorganisations of travel plans,

including decisions to use the car, attest to the role of situational factors in determining decisions to use the car. Situational factors, therefore, would qualify as motivation for individual car user behaviour (see Klockner & Friedrichsmeier, 2011).

Unlike psychological-utilitarian factors that focus on the individual and their interpretation of car roles and/or functions, situational motivational factors are often related to non-human occurrences and circumstances that influence the individual from without. Situations such as weather variability affect individual travel choices. However, to view the influences of such factors solely as external influences fails to consider the role of the psychological or affect. For instance, while weather conditions (such as snow or rain) could be interpreted by two individuals as adverse for travel, the eventual decisions to use or not the car under the same conditions might be different for respective individuals. While such weather conditions may deter an individual from travelling at all (not using the car), a different individual might view the same situation as motivation for use of the car, say as providing safety and protection from the harsh weather situation, as against use of a different alternative such as public transport. The implication is that even situational factors and their motivational underpinnings are partly dependent on the psychological, that is, individual subjective interpretation. Therefore, it is important that both individual characteristics and situational influences are taken into consideration when studying or attempting to explain behaviour. This view is consistent with the findings and works of Klockner & Friedrichsmeier (2011).

Klockner & Friedrichsmeier (2011) argue that the majority of studies tend to consider either the person's characteristics (the psychological-utilitarian) or the

situation-specific aspects that determine the individual's use of the car. They also argue that not many studies have attempted combinations of these two broad perspectives, and there is need to understand motivations from both points of view. This line of thought is consistent with views that car user motivators are better conceptualised as “bundles” of attributes and perceptions about possible travel options under different circumstance (Bamberg et al., 2011).

However, perceptions of travel options are not entirely based on individual interpretations. As much as the individual interprets and assigns meaning to the purposes and roles that determine choice of adopted travel modes, study findings also highlight that these (perceptions of role, functions and purposes assigned to travel modes in general and car use specifically) are influenced and dependent on social factors. Many studies in this regard focus majorly on the import of social factors, especially the social norm imperatives that affect the individual's eventual decision to use the car (see Gartman, 2003; Hagman, 2003; Baslington, 2008). Therefore, in addition to psychological, utilitarian, affective, situational and circumstantial factors, the list of motivators for car usage extends to include social factors.

### **2.2.3 Social factors**

Social factors derive from interactional influences from other members of a society or social group (Ritser, 1996). They stem from the social character of the individual; an individual whose subsistence is dependent on shared worldviews that arise from co-existence with others (Ritser, 1996). Social factors could influence an individual's decision to embark upon certain behaviour irrespective of whether the individual is aware of such influences or not (Chartrand, 2005). For example,

objects of consumption such as the car possess socially constructed and accepted meanings (Urry, 2000; Sheller, 2004; Axsen & Kurani, 2012). As such, they could become means of expressing social values and perspectives such as the communicating of affluence and status, impression management, and class distinction. The social influence aspect on car user behaviour is evident in Gartman's (2003) study findings.

A section of Gartman's study is devoted to exploring the perceptions, meanings and roles assigned to car use in 19<sup>th</sup> century America. According to Gartman (2003), car manufacturers capitalised on class divisions to produce expensive and beautiful cars that were affordable only by the richer upper class. Ownership and use of such cars in those years identified and distinguished the rich from the less rich. Similarly, numerous studies and theories confirm Gartman's (2003) claims and theses (see Belk, 1998 on the display of objects of consumption as means of constructing identity and communication of status and identity). Wright & Curtis (2005) make similar arguments to those of Gartman in relation to present day contexts and socially assigned meanings to the car. In the final analysis, the car is more than just a mere object of consumption (Urry, 2000).

Social factor influences on behavioural decisions highlight that car user decisions are motivated by more than just rational utilitarian and individual psychological choices. Sheller's (2004) argument that the decision making process and eventual use of cars are also affected by the socially shared meanings that exist in society attests to the influence of social factors on car user behaviour. The emergence of "car cultures" in most cities across the globe, argued to be a defining characteristic of highly consumptive societies, is largely dependent on social values and norm

imperatives (Purcell, 2000; Anable, 2005). Wright & Curtis (2005: 18) are categorical in their stance on the foregoing regard; they further discuss how the social norms that favour use of the car are internalised to become personal norms that drive and justify car usage. Another interesting discussion that these authors raise relates to the powerful emotional resonance that the car evokes. Individual emotional ties with cars (as objects of consumption) shed light on the interplay of psychological motivations with social ones. For instance, Wright & Curtis (2005) identify the emotional resonance that bonds the owner to the car object as a product of social marketing. These authors argue from a product differentiation and segmentation point of view that producers manufacture cars to suit different personalities or people. These authors exemplify their claims as such: that the style and design of the SUV tell people that users of these “sporty” brands are more active than conventional drivers, or that users of big brands stand out as different from others. Thus, social and media marketing serves the purpose of selling the aesthetic design-language or social class distinction by appealing to the individual’s psyche and social position at the same time.

In addition, study findings also highlight the presence of motivational factors other than those reviewed in the foregoing discussion. There is evidence for further categorisation of the influence of demographic factors on behaviour.

#### **2.2.4 Demographic factors**

Studies show similarities and differences between car user behaviour across different demographics, geographical location, age and gender (Cullinane, 1992; Hensher, 1998; Paully et al., 2006; Abrahamse et al., 2009). In addition, studies also

document the interplay between demographic factors and the other motivational factors discussed in the previous sections.

Cullinane & Cullinane's (2003) study highlights the differences and similarities in car user behaviour in Hong Kong and London. These authors argue that although car dependence is lower in Hong Kong than in London, the traits and patterns of dependence in both cities appear to be similar. However, unlike in London, the presence of a good public transportation system in Hong Kong is noted in this study as responsible for a relatively lower reliance on car use. A plausible explanation for this could be that the availability of efficient and reliable alternatives to car use increases the rate of adoption of these alternative modes. However, given that public transport systems in London are regarded as efficient and reliable (Hensher, 1998) the difference between Hong Kong and London may also be attributable to other perceptions apart from those relating to efficiency of public transport modes.

Other studies have highlighted the similarities that residents in specific European countries share with their counterparts from other OECD countries (Abrahamse et al., 2009). The results of the studies by Pully et al. (2006) show that residents in other European countries (especially western European countries) make similar considerations in their transport mode choices as do UK residents, for instance. It is also interesting to note that residents in developing countries possess similar motivations for their use of the car. In a study conducted in the city of Lagos, Nigeria, respondents' motivations for using the car were similar to those of UK residents (Uba, 2005). This fact supports claims that developing countries are indeed treading the path of unsustainable consumptive patterns, as are their counterparts in developed countries (Brown et al, 1999; World Watch Institute, 2004). This view



suggests that a global approach to car user reduction may be required if we are to achieve the required reductions in global GHG emissions.

Interestingly, actual adoptions of active forms of transport (reducing use of the car) sometimes differ between countries. There are claims that where these active transport modes are dominant, chances are high that car usage will be reduced (Hensher, 1998). For instance, the adoption of cycling is higher in countries such as Denmark and Sweden relative to the UK, with corresponding lower rates of car use in these countries in comparison to the UK (Hensher, 1998). Furthermore, lack of access to the car leads to reductions in car usage; access to use of the car is easier for people in developed countries than those in developing countries, with the latter category experiencing lower rates of car usage (Santos et al., 2010).

On the other hand, differences in car user behaviour are linked to demographics such as age (Lyons et al., 2008); sex (Lorenzoni et al., 2007) and psychographic affiliations of people in the same traveller segments (Anable, 2005). Although Anable's (2005) study focused on the import of segmentation in understanding car user behaviour, findings from this study implicitly highlight the interplay between psychological motivators and group demographics, implying that the needs, beliefs and perceptions of individuals in different social groups will also vary across and according to their respective segments.

The importance of gender on decisions to use the car is also identified in studies. However, findings in this area are not as consistent as those concerning other motivational factors. For instance while Cullinane (1992) found very little difference in attitudes towards driving for women and men, Simma & Axhausen (2001) found that women are more dependent on the use of public transport than

men. In addition, men tend to have greater access to the car in comparison to women (Simma & Axhausen, 2001). That different demographic segments perceive transport options differently (Anable, 2005) might explain the differences in the behaviours of different genders.

An interesting argument that came up in the literature review on segmentation perspectives is the claim that transport researchers and analysts have not paid much attention to teenage travel (Solomon & Atkins, 1995). In the words of these authors, "... published researches concerning young people's travel behaviour have been limited in the context of car dependence, particularly for those of secondary school age upwards" (Lyons & Swinbank, 1998: 91). The implication is that not much is known about the travel behaviour of post-secondary school young people despite reports by this traveller segment that the post-secondary period (especially the period of entry into university) is significant in their lives as young people (Lyons et al., 2008). Solomon & Atkins (1995) highlight some of the barriers that make the use of public transport difficult for teenagers. For example, fare concessions are removed at the age of sixteen when most young people are still at school and unemployed, which makes travel difficult for them. Lyons and Swinbank (1998) further argue that this period of their lives coincides with when they are allowed to learn how to drive or are likely to borrow cars from members of their family or even friends. By implication, young people's desires to use cars are likely to be high at this point of their lives. Fujii's (2007) intervention to "delay" adoption of car usage amongst young teenage segments is underpinned by this assumption. The Fujii (2007) study demonstrates how the provision of bespoke environmental information negatively affects young people's perceived need to obtain drivers' licences. By implication, targeted information is likely to be effective in deconstructing young

people's attitudes and aspirations to car usage. The finding that bespoke information stands better chances of influencing people's travel behaviour in comparison to the popular messages that are often crafted in generic manner has been recommended for intervening for behaviour change (Fujii, 2007; Cialdini, 2003).

Further evidence suggests that young people generally have aspirations towards car ownership; they believe that the car has a positive effect on the owner's self-esteem (Scottish Executive, 2003). Similar findings have been reported in studies that address young peoples' attitude to car use (see Lyons et al., 2008; Lines et al., 2010 for detailed review). Young people view car ownership as playing important symbolic roles in their lives. Particularly, car ownership is viewed as a sign of success. In addition, their choices to use any transport mode are linked to practical considerations such as costs, convenience and travel time (Lyons et al, 2008; Scottish Executive, 2003).

Young people's inclination towards car usage has also been shown to be greatly affected by factors such as an underlying preference for the car and negative views held about public transport (Lyons et al., 2008) and social influences from peer pressure, friends, family members and teachers (Baslington, 2008). Their motivations for using the car have also been found to be a form of conscious behaviour mimicry; their decision(s) to own cars were majorly motivated by the fact that their elder relatives owned or used private cars (Anable et al., 2006). It may be that their nature as young people would demand that they look up to others (especially those close to them) when making decisions and choices. This sort of attitude, whereby significant other(s) influence people's behaviour, has been found to influence the choice of adoption of green vehicles (Axsen & Kurani, 2012).

It is also interesting to note that empirical evidence on the aspirations and practical considerations that young people make regarding transport modal choices are not significantly different from the aspirations and considerations of other age groups (see Hagman, 2003; Bamberg et al., 2007; Guiver, 2007; Beirao & Cabral, 2007). Baslington's (2008) theory of travel behaviour offers a possible explanation for these similarities: that aspirations are learnt or acquired through socialisation since the meanings assigned to the car are constructed in social settings shared by people of all ages. However, it is argued that although the car-usage appeal is applicable across different generations and segments, young people's attitudes to car usage are determined by more specific attitudes that are unique and characteristic of their life stage. Where the determination of dissimilarities have formed the focus of study, motivations for older people have been reported as different from those of younger people in some respects (Smith et al., 2006). The point here is that although the transport choices amongst populations as a whole or even amongst detectable sub-groups may be similar in some respects, they may not be completely homogeneous (Goodwin & Lyons, 2009).

### **2.2.5 The role of habits**

The Cullinane & Cullinane (2003) study mentioned in the opening paragraph of this sub-section also highlights the interplay between demographic motivators and habits. In addition to noting the similarities and differences that exist in the car user behaviour of people in the cities of Hong Kong and London, their study found evidence to suggest that car owners in Hong Kong get more dependent on car use over time, similar to their counterparts in developed European countries. The argument here is that dependency on use of the car leads to habitual use of this

commuting mode. It is argued that when car user behaviour is consistent and stable over a period of time, eventual car user behaviour become automatic and devoid of deliberation (Verplanken & Aarts, 1999). In other words, people are sometimes motivated to keep using the car out of habit. That car user behaviour becomes habitual with continuous involvement suggests that it (car user behaviour) is not always grounded on conscious deliberation and choice of available travel modes. Sometimes, individuals simply enter their cars and drive.

Eriksson et al. (2008) give a succinct overview of how habits have been perceived by other researchers and commentators in the car use overreliance and behaviour debate. They note the various ways in which car use becomes a habitual means of commuting. For instance, car user habits have been noted to be facilitated by a frequent use in a stable context (Verplanken & Aarts, 1999) with habits identified as automatic links between a goal and its corresponding behaviour (Verplanken & Aarts, 1999; Aarts & Dijksterhuis, 2000). They have also been conceived as behavioural scripts existing in the memory in a script-like manner (Fujii & Garling, 2003; Garling, Fujii & Boe, 2001). As such, choices to use the car do not always occur through rational deliberations on a conscious level. Their nature as “behavioural scripts stored in the mind” (Fujii & Garling, 2003) imply that unlike deliberatively controlled behaviour, they demand very little attention. They are more or less replayed in a manner that is characterised by automaticity and an absence of much ratiocination; with minor control over behavioural intentions and the actual behaviour itself.

In contrast, there have been arguments to consider how habitual use of the car may be driven by specific life patterns, such as the daily commute to work or engaging in

school runs (Bamberg et al., 2011). An implication is that use of the car might not be non-deliberate in such routine circumstances. That is, that the consistent and frequent use of the car over stable periods of time might still occur at a conscious level for some routine activities. The user might perceive use of the car for school runs as an indispensable part of their ward's educational process, making its use in such circumstances stable over extended periods of time. In this case, stable use overtime may not imply non-deliberation. Nevertheless, the same individual might interpret using the car for shopping trips differently (not as part of the shopping activity) even though shopping trips occur on similarly stable contexts over time. Therefore, habitual car user behaviour might also display grey areas, and is not unconnected to psychological considerations.

In the following section, I review the dominant theoretical models and approaches that have been applied to studies on car usage and car user behaviour.

### **2.3 THEORETICAL MODELS AND APPROACHES IN UNDERSTANDING CAR USE AND CAR USER BEHAVIOUR**

Studies that focus on car user behaviour are based, implicitly or explicitly, on behavioural theory and/or model(s). Theories and models make assumptions on the nature of behaviour and how it can be understood (Jackson, 2005). In the following sections, I review literature on car user behaviour from the perspective of the dominant theoretical approaches that have been applied to understanding motivations for car usage. I apply Jackson's (2005) categorisation of the theoretical models and approaches that have been adopted by studies on pro-environmental behaviour as a broad frame for understanding the models and theoretical approaches that have been applied to studies on car usage and car user behaviour.

This literature review section adopts Jackson's (2005) categorisation that studies on environmental behaviour adopt any of the five theoretical models: Habits, Rational choice, Expectancy-Value, Adjusted expectancy-value and Sociality perspectives. In addition, I also consider and review other theoretical perspectives that are not subsumed under Jackson's broad categorisation but have been applied in studies on car usage and car user behaviour.

### **2.3.1 Approaches to understanding habitual car use**

Chatrand's (2005) explication of the unconscious drivers of behaviour offers a good perspective for understanding the theoretical approaches that have been applied to understanding the habitual nature of car user behaviour. Chatrand emphasises the non-conscious drivers that influence the consumer's eventual decision to engage with specific objects of consumption. This author applies the concept of non-conscious behavioural mimicry to understanding habits. In non-conscious behavioural mimicry, the choice-decision process to consume is not subject to ratiocination. Rather this process is determined by an unconscious mimicry of a significant other, usually an individual that the subject has respect or regard for. Thus, person "A" might follow person "B" into a shop and (irrationally) end up purchasing objects similar to those purchased by person "B", majorly because "B" purchased them in the first place. Chatrand's (2005) views partly explain how relating with others can affect an individual's consumptive choices on the non-deliberative realm. The import of such non-conscious factors has been related to car usage (see Gartman, 2003; Gardner & Abraham, 2007; Wright & Curtis, 2005). Specifically, non-conscious behavioural mimicry highlights that individual habits might be influenced from without. This approach links the non-deliberative

character of habitual behaviour to social influences and stands out from the dominant conceptualisations of habits.

Habits have been discussed majorly from the individual's car user behaviour point of view. In this case, emphasis is laid on the imports of the individual's non-rational and non-deliberative character as the distinct characteristics of habitual car user behaviour. The majority of studies on habits, e.g. those that have been discussed in the previous section, adopt this approach.

It is this character of "undeliberativeness" that marks the distinction between habit-oriented models for understanding car usage and other theoretical perspectives or models that consider travel behaviour from deliberative and rational points of view. The rational and/or deliberative domains take into account other behavioural determinants such as beliefs, attitudes, intentions, normative imperatives and social factors. Dominant models in this regard are reviewed in the following sections.

#### **2.4 RATIONAL CHOICE, EXPECTANCY VALUE AND ADJUSTED EXPECTANCY-VALUE MODELS**

The majority of studies on car user behaviour (and even pro-environmental behaviour in general) have often adopted a rationality perspective (Timms, 2008). Timms (2008) contends that unlike pre 1970s, where transport modelling was concerned with modelling aggregate systems and not people, current models have been dominated by neoclassical economic concepts, focusing majorly on representations of people as rational choice makers.

Rational choice theory (RCT) is a form of expectancy value theory (Jackson, 2005) since it assumes a rational choice perspective; that individual behaviour is based on



expected outcomes as well as values ascribed to expected outcomes (Ritser, 1996; Friedman & Hechter, 1988; Scott, 2000). Adjusted expectancy-value models attempt a more nuanced approach to the understanding of consumer behaviour. Although they still retain some of the expectancy-value assumptions evident in RCT, they expand on these in different ways. Most especially they seek to account for how attitudes influence behaviour. The Theory of Planned Behaviour - TPB (Ajzen, 1991) is the most popular of such adjusted expectancy models that have been applied to understanding car usage and travel mode choice (Gardner & Abraham, 2008; Stradling et al., 2000). This theory opines that knowledge of a person's attitude is crucial in understanding their likely behaviour; because attitudes are crucial in influencing the intentions that lead to eventual behaviour (Ajzen & Fishbein, 1980; Ajzen, 1991). Intentions to act are assumed to derive from deliberate ratiocination and in accordance with the beliefs and orientations that an individual has about an object (especially perceptions of behavioural control). In line with this explication, actual car user behaviours are seen as the outcome of intentions in that they follow necessarily from, and in accord with, the individual's intentions (Aarts & Dijksterhuis, 2000). Many studies on car usage have found support for the predictive utility of the variables derived from Ajzen's (1991) Theory of Planned Behaviour (see Gardner & Abraham, 2008).

On the other hand, recent studies and arguments have criticised the rational choice approach adopted by models such as the Theory of Planned Behaviour (see Anable et al., 2006; Bamberg et al., 2011). For instance, the link between habits and behaviour is not accounted for by either rational choice or adjusted expectancy models such as the TPB. This has been noted as one of the limitations of this theory in terms of comprehensively accounting for car behaviour. Trandias (1980) has

attempted to bridge this missing link in his theory of interpersonal behaviour and habits. He contends that in predicting behaviour, habits interact with intentions; the stronger the travel mode habit, the weaker the influence of intentions on behaviour. This sort of relationship also works the other way round, that is, that the influence of intention on behaviour will be more if the travel mode habit is not a very strong one (Staats, Harland & Wilke, 2004; Verplanken & Aarts, 1999). As much as these interconnections are plausible, the influence of other factors, especially those that motivate people from without (situational factors, circumstances, social norm imperatives), suggest that choices and decision on car usage may not always be grounded on pure rationality (Anable et al., 2006; Beirao & Cabral, 2007). In addition, individual interpretations may not always be rational as implied in RCT when behaviour mimicry and social norm imperatives underpin them (Scott, 2000).

In as much as rational choice models and theories offer explanations for car usage and behaviour, they are not without limitations. Their limitedness in accounting for habits and the multiplicity of perceptions that the individual may bring when they assign meanings and roles to use of their car imply the need for more studies that focus on uncovering other motivators of behaviour that are not captured by rational choice models. Normative approaches offer alternative insights into modelling and understanding car user behaviour.

## **2.5 NORMATIVE THEORIES**

Normative models attempt to explain how people are likely to behave under certain contexts. Thus, they often focus on outlining or prescribing some kind of moral imperative that is assumed will direct and guide behaviour under certain circumstances. Different normative frameworks have been applied to understanding

car user motivations. Schwartz's (1977) Norm Activation Model (NAM) is perhaps, the most popular normative theory that has been applied to understanding car user behaviour (see Bamberg et al., 2011). This theory assumes that values and environmental beliefs (the awareness of the negative effects of behaviour) will lead to a consciousness of inherent problems or consequences that derive from performing certain behaviour(s). This resultant awareness of consequences is expected to lead to the ascription of responsibilities, by the person, to self; to act in a pro-environmental manner via the activation of personal norms. This argument has been used to account for how car usage may be reduced (see Nordlund & Garvil, 2003). The underlying assumption in this case is that values and environmental beliefs will activate a moral obligation in the individual to reduce car usage. Although normative perspectives such as the Norm Activation Model emphasise the import of personal norms on behaviour, the assumption that the individual will align behaviour with beliefs shows that this perspective (and the majority of normative perspectives) is also grounded on broad rational choice theorizing. However, there are problems with this assumption.

Study findings have shown that environmental values and beliefs do not always lead to corresponding reductions in car usage (Kollmus & Agyemang, 2002). Findings from the meta-analysis discussed in the first section (Gardner & Abraham, 2008) are noteworthy in this regard. Whilst this meta-analysis found support for the role of habits and the predictive utility of the variables derived from Ajzen's (1991) Theory of Planned Behaviour, pro-environmental cognitions were found to have very restricted effects on intentions to drive. Hagman's (2003) qualitative study found that respondents expressed unwillingness to reduce their own car usage even though they expressed possession of pro-environmental values and beliefs. This finding

highlights the limitations of normative models such as the NAM; that their rational choice assumptions fail to account for the behavioural inconsistency of not matching pro-environmental values and beliefs with behaviour. The problem of not matching pro-environmental cognitions is noted in numerous studies that consider barriers to public engagement in pro-environmental behaviour (see Darier & Schule, 1999; Lorenzoni et al, 2007; Lyons et al., 2008). The dissonance that arises from not matching pro-environmental cognitions with pro-environmental behaviour has also been studied (Thorgesén, 2004). Although, studies on car user behaviour align to later studies by linking barriers to non-engagement in reducing car user behaviour, these studies do not appear to gravitate towards more in-depth understanding of how these “barriers” add on to the sort of motivations considered in the foregoing discussion to become justifications for continued use (persistence) of the car user. Neither do these studies appear to focus on how “barriers” (the justifications accounts that allow the individual to resolve any tensions that arise when they fail to match expressed pro-environmental cognitions) underpin persistence in use of the car.

Furthermore, the inability of these models to account for the deep-level understanding of individual perceptions of barriers is linked to their methodological underpinnings and application in studies. First, the fact that these studies adopt positivist-oriented behaviour modelling approaches whereby specific sets of identified variables (in line with the study’s adopted theoretical model) majorly account for their limitedness and inability to gravitate towards the exploration of factors such as individual perceptions, interpretations and assignment of meaning to car usage as an activity. These sorts of factors (individual perceptions and interpretations) are often context- and individual-specific and are often not captured

in detail using modelled quantitative approaches. Secondly, as I have noted numerous in preceding arguments, car user behaviour is influenced by the interplay of different motivators. Specifically, the models considered in the foregoing discussion often focus on the psychological and normative correlates on behaviour and often fail to account comprehensively for the context-determined non-psychological correlates of behaviour, especially, the social and socio-psychological motivational factors. The dynamic interplay of motivations and their interpretations by individuals and groups cannot be captured comprehensively using positivist quantitative modelling approach (Beirao & Cabral, 2007). This implies there is need to go beyond modelling motivations to consider the deeper level behavioural determinants of car user behaviour. For instance, understanding why individual pro-environmental cognitions do not translate into actual reductions in car usage could benefit from exploring the individual justifications that can free individuals from the environmental imperative to reduce use of the car. This approach forms the point of departure for the current study, and will be discussed further in the discussion section.

Interestingly, studies have attempted the combination of the models as a means of addressing the limitations of the dominant theoretical perspectives (e.g. the TPB and NAM) in enhancing understanding of car user behaviour. For instance, Bamberg et al. (2011) have included constructs from both the Theory of Planned Behaviour (TPB) and Norm Activation Model (NAM) in their study's model while Klockner & Blobaum (2010) have attempted a "Comprehensive Action Determination Model" (CADM). The CADM has been applied in the understanding of pro-environmental behaviour (see Klockner & Blobaum, 2010 on travel mode choice and Klockner & Oppedal, 2011 on waste separation). In a more recent study Klockner &

Friedrichsmeier (2011) have attempted a more comprehensive perspective by modelling the psychological perspectives and situational influences that affect commuting choices on the trip and person levels respectively. However, even such attempts at comprehensiveness have limitations.

As previously discussed, the formation of a strong driving habit is likely to hinder change in individuals' travel mode choices while an individual's attitude(s) and/or belief(s) may not always be consistent with related behaviour(s). Different factors could account for these complexities, and there may not be one best way of creating the deep level understandings needed for effective intervention to address overreliance and encourage reductions in use of the car (Beirao & Cabral, 2007). Similar to the limitations discussed in the foregoing paragraph, even studies employing the combination of models focus on testing researcher-selected variables (in line with theoretical models). Beirao & Cabral (2007) argue that because the positivist (quantitative) approach adopted in such studies focuses on isolating and testing just a few researcher-selected variables, the implication is that the insights they yield, even though generalizable, are limited to these variables and the studies. The implication is that studies underpinned by the need for deeper and more comprehensive understanding of car user behaviour would benefit from the adoption of alternative paradigms, especially those that focus on individual interpretations and justifications for adopted car user behaviour. Equally important is the need to approach deeper-level enquiries into car user behaviour from perspectives that highlight the interplay of the motivational factors that influence individual car user behaviour from without.

Sociality perspectives have been argued as providing insight into the interplay of social influences on the individual's car user decisions and overall behaviour (Beirao & Cabral, 2007; Guiver, 2007; Axsen & Kurani, 2012). A key distinction between the other perspectives discussed so far and sociality models is that unlike these other perspectives, sociality theories focus specifically on the import of social factors as against individual-focused approaches to understanding car usage (Jackson, 2005).

## **2.6 SOCIALITY AND SELF PERSPECTIVES**

Baslington's (2008) Theory of Travel Socialisation (TTS) is a good example of a sociality theory. According to Baslington (2008: 91), "the way we think and the orientation we have towards transport modes are embedded in our childhood" (Baslington, 2008: 91). Baslington argues that travel mode choices are not purely dependent on a person's interpretation or assignment of meaning to the use of the car. She argues from sociological and anthropological perspectives; that the eventual travel mode a person decides to choose depends on the extent to which the person has been socialised in favour of that travel mode. Thus, just as a person sees, experiences and learns useful life values through the various agents of socialisation (e.g. as a child in the family, at schools, via media and peer groups), s/he gets "socialised" about the different commuting choices that are available to her/him. It is interesting to note that Baslington's claims are not entirely new.

Meaton & Kingham's (1998) research on image association of children points to the fact that even at tender ages, young people appear to have absorbed some stereotypes that the society they live in associates with different modes of transport. Similar findings have come from Kingham & Donohoe (2002). Further support for

the theory of travel socialisation appears in the works of Cahill et al. (1996) and Sandquist (2002). The former offers evidence suggesting that children brought up in families without ownership of cars had a greater disposition and preference to non-car travel modes than those who used cars on regular basis. In terms of future aspirations to car ownership, children with lesser car user experiences at home showed lower aspirations to car ownership. There is also consistent evidence from research on children's travel behaviour, showing that travel to and from school varied according to household car ownership levels (Robert et al., 1997; Lyons & Swinbank, 1998; Davis, 1998; Mackett, 2002).

The findings of the studies noted above corroborate the theory of travel socialisation. Baslington (2008) also discusses how the meanings and importance attached to the car by young people are picked up at home and then reinforced or changed through interaction with peers, at school or by the media. The underlying claim is that car usage is one of the many cultural practices that people get embedded into as a consequence of being members of a society or social group. Further study findings suggest that the car is as socially desirable as it is accepted. Aligned to sociality models are the imports of other societal or cultural factors that are linked to, and motivate people to use the car. Bourdieu's (1984) theory of consumption as a means of class distinction aptly highlights this contention. Bourdieu (1984) argues that an object of consumption could be used as a status symbol, and that when such objects of consumption acquire socially constructed meanings, they could become signs or testimonies of a social class to which one belongs. The link between this theoretical perspective and car usage is evident in Gartman's (2003) study of car usage as a means of communicating status and class. Gartman's study adopted a social-psychological approach in that the individual's car



user behaviour is explained as motivated by inter-group solidarity ('belonging' with one's social class) and intra-group competition (image management where the self is presented as belonging to an economically superior and dominant class).

This study links the psychological with the sociological underpinnings of behaviour. Whilst these sort of approaches might not comprehensively explain behaviour, (e.g. by not clearly identifying links with motivators such as habits) they offer alternative paradigms that can account for some of the limitations discussed in relation to the rational choice and normative theories. Jackson (2005) argues that social-psychological models that combine the social and the psychological have the greater potentials of unravelling the influences and effects of social and individual embeddedness for environmental behaviour.

So far, the literature review has focused on motivators for car use and the dominant theoretical models and approaches that have been applied to understanding car user behaviour. People are motivated to use the car for several reasons. In fact, the car serves numerous purposes that are related to enhancing the individual's well-being (Klockner & Friedrichsmeier, 2011). The car plays symbolic roles that are vital to the lives of individuals who use them. As is the case with other social objects that possess vital symbolic roles and functions, the use of the car facilitates a range of complex individual and social conversations about class distinctions, social cohesion, norms and identity. In addition is the pursuit of meanings that are both culturally consistent as well as self-consistent (Jackson, 2005). However, the use of the car also gives rise to externalities; individual, social and ecological. The externalities from use of the car have led to calls for reductions in car usage (Anable, 2005; Gardner & Abraham, 2007; ActonCO2, 2008). In most cases, the

call for a reduction in use of the car is justified from environmental (ecological) points of view.

In the following sections, I briefly review studies and arguments that are in line with calls for reductions in use of the car as well as the policy approaches that are aligned to getting people to reduce their use of cars.

## **2.7 THE NEGATIVE EXTERNALITIES OF CAR USAGE**

As noted in the introductory chapter, the link between environmental externalities caused by use of the car and global issues such as climate change is reiterated in the majority of studies on car usage and car user behaviour (Gardner & Abraham, 2007; Beirao & Cabral, 2007; IPCC, 2007; ActoCO2, 2008). The environmental costs of car usage are often cited as the main reasons for car user reduction as against actual use of the car (Bamberg et al., 2011). In addition to environmental externalities, studies and discussions - particularly those that adopt sociality perspectives - have also pointed out the social externalities of car usage.

Urry (2000) notes that excess bonding with the car could draw the user inside the car object; confine the user inside and exclude him/her from important social interactions and contact with others around him/her. Similarly, Barry (1998) also notes the “non-social” impact of car use as a travel mode. According to this author, car travel reduces solidarity amongst people. In addition, it isolates people and creates a scenario whereby pedestrians and car drivers are forced to compete against one another. Whilst the views of Wright & Curtis (2005) are in accord with this view of the car as an object that isolates the user from others (private car users and pedestrians), they go further to claim that the bonding between car and owner can be

so strong as to elicit unpleasant, less-welcoming implications. This, they argue, can be evidenced in situations when the driver perceives threats to the car (as in when a stranger scratches the body of a car) as representations of threats to self. Apart from these sorts of unwelcome relations that car bonding causes to exist between the user and others, the wider effects on society as a whole have also been highlighted. The decline of the “neighbour feeling” and community engagement (measured in terms of crime and social activity) are linked to car use (Putnam, 2000). In addition to social costs, studies have also noted the health implications of overreliance in use of the car.

Evidence from numerous studies in Europe, North America and China show a positive relationship between regular commuting to work by car and increased dispositions to higher likelihoods of obesity (Frank et al., 2004; Wen et al., 2006; Davis et al., 2007; Bassett et al., 2008). The argument is not that driving directly relates to illness, rather that overreliance in use of the car may cause the user to live a sedentary lifestyle; one characterised by physical inactivity. Davis et al. (2007) have argued that in the UK, of the 40% of short commuting distances that are less than two miles, 38% of them are done via use of the car. Conclusively, these authors contend that were the average British resident to cycle or even walk for an extra one hour (replacing short distance trips) a weight increase equivalent of 2 stones over one’s lifetime would be counteracted, implying less illnesses and less government spending on public healthcare costs. Implicit in this argument is that increased car usage is somewhat detrimental to overall GDP (Gross Domestic Product) through loss of man hours and government spending that could be saved if people adopted more active forms of commuting.

Other externalities such as congestion, noise and pollution are caused by car usage (Beirao & Cabral, 2007). These have economic as well as health implications. Congestion leads to loss of labour hours and as such has negative implications for productivity while exposure to high levels of vehicular tailpipe emissions lead to illnesses of various kinds (Miller & Spoolman, 2009).

However, as noted in the preceding sections, the fact of numerous externalities that could rightly be ascribed to use of the car does not imply that the car is devoid of benefits. Respondents in a study conducted by Gardner & Abraham (2007) highlighted the need for some quiet and private space as reasons for using the car. Hodgson & Turner's (2003) example of situations whereby women would not travel at night or to unlit areas for fear of abuse could be a reason why women would be justified to use the car if they decide to travel under such circumstances and times of the day. Similar studies in recent years have highlighted the numerous perceived advantages of car usage (Guiver, 2007).

Whilst recognizing that the car serves different functions for different people, it would appear that the gains from reducing overreliance and use of the car outweigh the gains from overreliance in using the car. This (that the externalities from private car use poses serious threats to the human and natural environment) has been argued to imply need for policies that aim at reducing or changing the way it is used as against total non-use of cars (Fujii & Kitamura, 1998; Garling et al., 2003).

## **2.8 POLICY APPROACHES TO ADDRESS CAR USER EXTERNALITIES**

A popular intervention approach adopted for car user reduction has been to inform people of the environmental externalities that arise from the unsustainable commuting choices that people make (Jackson, 2005; Kollmus & Agyemang, 2002; Axsen & Kurani, 2012). By emphasizing the externalities, it is expected that individuals will make the right choice of translating awareness and cognitions of environmental problems caused by car use into pro-environmental actions and behaviours (Beirao & Cabral, 2007).

A major theme that has been popularly recommended for car user reduction interventions is the appeal to “greenness” (environmentalism and sustainability). The main aim of the green perspective is the reduction of the impacts of car use to limits that are acceptable (Wright & Curtis, 2005; Hensher & Button, 2003). The acceptability of any such limit is argued as dependent on whether the emission levels permitted by such limits will pose no immediate and future problems on the environment. Many studies and arguments that have toed this line have attempted to compare people’s level of awareness of the problems (e.g. climate change caused by vehicular carbon dioxide emissions, noise pollution etc.) associated with emissions from unsustainable transport modes (particularly car use) vis-à-vis their willingness to adopt alternative transport modes with less environmental externalities (Scottish Executive, 2003). Results pointing to the dilemma issue discussed in section 2.2.3 (not matching environmental awareness with actual reductions in car usage) pose limits to the success of policy approaches underpinned by the assumptions of these dominant intervention approaches.

To a very large extent, individuals (car owners and non-car owners alike) have been shown to have a high level of awareness with respect to what they consider to be the

most dominant human activity responsible for environmental problems (Department for Transport, 2009b). Such a level of environmental awareness and knowledge is a positive step in that it does offer a start-off point, in terms of the general need to understand how environmental awareness can be used as tool or mechanism to stimulate a reduction in private car use. However, there seems to be some sort of dissonance between what people actually consider to be inimical externalities of unsustainable lifestyles (car use in this instance) and what they actually do with respect to addressing and reducing such externalities. By implication, interventions based on models that assume people will make rational commuting choices when they are aware of the need to do so may not always work (Jackson, 2005; Axsen & Kurani, 2012). As a matter of fact, evaluations of this approach show that popular policy and practice intervention approaches that focus on infrastructural modifications and dissemination of information on the assumption that people would make the rational choice of reducing car usage are generally unsuccessful (Tertoolen et al., 1997; Kollmus & Agyemang, 2002). A study commissioned by the United Kingdom Department of Transport (DfT) in 2006 strongly attests to this fact.

According to Anable et al., (2006) a good number of people show awareness of the environmental costs of car use. As has been stated in earlier sections of this review, real life situations strongly suggest that they are not willing to give up their cars for other alternatives even though they agree there is grave need for reductions in car use. This justifies the need for intervention to transcend dominant approaches that are based on rational choice and expectancy value models (Jackson, 2005; Axsen & Kurani, 2012). Along this line, few policy recommendations have been made. For example, efforts to make people switch to public transport or car-pooling schemes

have been argued as being more likely to succeed when people share common values and orientations based on a social consensus (Wright & Curtis, 2005).

Transport policies that allow participation of people as communal groups have been argued to reduce traces of exclusion (Hodgson & Turner, 2003). According to these authors, a social group that participates in such policy formulation feels bound by them (Hodgson & Turner, 2003). The argument is consistent with the socio-ethical tenets of the “common good” and reciprocity. Underlining both concepts is the argument that human beings have the propensity to engage in inter-personal and social relationships that have cooperative outcomes (Wilson, B.J, 2008; Van Lange et al., 1997; Garling et al., 2003). The level of such cooperation is a function of the existing patterns of the relationship that the cooperating individuals share. Where individuals share a close social relationship (peer groups, clubs etc.) their level of reciprocity has been shown to be high. Chen, Chen & Portnoy (2009) have opined that individuals are quicker to engage in reciprocal actions with friends than with total strangers. According to these authors, the importance of such reciprocity lies in the fact that it creates a sense of obligation amongst people. In this way, the act of reciprocating becomes a medium through which social rules are shared and maintained and consequently make for social stability (Gouldner, 1960). Arguments such as the above are grounded on a belief in the existence of a social man (*homo sociologicus*) whose existence cannot be comprehensively defined without reference to reliance on the “other” (Ritser, 1996). Thus, irrespective of how selfish individuals may be, they are still concerned about the happiness and welfare of the other (Kangas, 1997; Wilson, 2008).

Governments in some parts of the world have come to realise that there is need for intervention to go beyond information dissemination and the use of environmental messages crafted in generic manners have been noted (House of Lords, 2011). The differences that exist between countries in terms of people's adoption of pro-environmental behaviour has also been noted with countries such as Sweden and Denmark seen as achieving high success rates in getting people to reduce car usage in comparison with countries such as the UK (Pucher & Buehler, 2008). The combination of soft and hard policy approaches was noted by the authors as majorly responsible for the successes attained by these countries. On the other hand, not all governments are willing to adopt hard policy approaches. Whitmarsh & O'Neill (2010) argue that some governments in developed countries with high levels of consumption have not shown enough political will in addressing environmental problems. The lack of political will to address environmental issues stems partly from fear of losing political support and antagonistic reactions from the public (Carter & Little, 2007; Whitmarsh & O'Neill, 2010). Perhaps, it is this attitude that has led to the continuation of disseminating environmental information with the hope that this will motivate people to adopt pro-environmental behaviours across the board. In addition, the adoption of soft cost-effective and socially acceptable policy approaches, e.g. "nudges", that do not restrict consumer choice, is attributable to fear of losing political support. The implication is that governments are implicated in the problem of public non-engagement in pro-environmental behaviour (Carter, 2003; Jackson, 2005).

In the following section I review literature on car usage in the UK. It is important to understand car user behaviour from this perspective for two major reasons. First, the current study focuses on a specific traveller segment within the UK context. In



addition, the fact that travel behaviour is linked with demographics (geographical and socio-economic) implies that the current study will benefit from an understanding of the contexts that might affect the behaviour of the study's chosen sample from a UK perspective. Secondly, evidence points to similarities and dissimilarities as well as success rates in the reduction of car usage between the UK and other countries, implying that an understanding of the events from a defined perspective (the UK in this case) is a good way of contextualizing comparisons and setting the boundaries for the study.

## **2.9 CONTEXTUALIZING REVIEWED LITERATURE – THE UK PERSPECTIVE**

The debates on issues and problems associated with car use and traffic in the UK have been raised recently in the UK (House of Lords, 2011). According to Stradling et al. (2000: 207), the 'traffic problem' was recognised as early as 1930 in the final 'Report of the Royal Commission on Transport'.

As at 1997, car ownership had risen to 25.8 million with more trips being made by households in the UK using private vehicles (The Lex Report on Motoring, 1998). According to Begg (1998) households that own cars in the UK account for more than two and a half times the amount of trips made by those that do not own cars. The use of the car not only increased the amount of trips made by people in the UK, it also led to the introduction of trips that were not made prior to purchase or ownership of cars (Begg, 1998). The need for intervention to reduce externalities from use of the car in the UK is equally, if not more, pressing than in any other developed country.

The car use problems identified and noted in the 1990s have not abated. On the contrary, evidence suggests a continuous increase in car usage. According to the Department for Transport (2009a) the increase in total distances (in terms of average passenger kilometres) travelled by domestic passengers recorded a 66 percent increase between 1980 and 2007. The report attributed the majority of growth in passenger kilometres to increased car usage. Very recent statistics suggest that car culture trends in the UK are as strong as ever.

A recent survey of the most congested cities in Europe shows that six of the twenty most congested cities in Europe are UK cities. Congestion is defined as travelling at only 70 per cent of the posted speed limit in the noted study. This means that a one-hour commute would take at least 20 minutes longer due to delays (Ingham, 2011). With six out of twenty in the whole of Europe, this finding suggests that the UK is a major culprit when it comes to private car use and emissions from use of the car.

The quest to reduce transport-related problems, especially those that come from car use, has been identified as a huge task confronting UK policy makers (Lyons et al., 2008). Although the United Kingdom has been noted as doing well in terms of reductions in greenhouse gas (GHG) emissions via the employment of efficient energy systems, similar positive results have not been witnessed in the transport sector (Leach, 1991). On a positive note, the potential to achieve emission reduction from the transport (from cars in particular) sector exists in the UK (Leach, 1991; Anable et al, 2006). Different arms of government in the UK work independently and/or collectively in the quest to reduce vehicular GHG emissions. Specifically, the Sustainable Development Commission (SDC) is committed to addressing negative impacts from car usage. It is the contention of the Commission that emissions and

other environmental externalities that arise from the transport sector can be reduced if people were to embark on more forms of active transport such as cycling, walking and use of public transport (Sustainable Development Commission, 2007). The logic in this stance is that by embarking on such modes of transport, the use of private cars will be reduced to a reasonable minimum.

However, the unfortunate outcome has been a continuation of the “business as usual” scenarios created as levels of car use continue to rise in the UK despite the introduction of various measures that promote alternatives to car use (ActonCO2, 2008; Sustainable Development Commission, 2007; Department for Transport, 2009a). The case of not matching environmental beliefs with actual car user behaviour is a huge barrier militating against the success of interventions to reduce CO2 emissions from cars in the UK. Summarily, the UK context is not radically different from general findings in exiting literature.

## **2.10 SUMMARY OF LITERATURE REVIEW AND INTRODUCTION OF RESEARCH QUESTIONS AND OBJECTIVES**

Literature identifies the car as one of the culprits responsible for increased GHG emissions. The need to reduce emissions from the transport sector, especially from private cars, now occupies a top place in the sustainability agenda (Klockner & Friedrichsmeier, 2011). If we are to abate the problems of climate, it is imperative that the increasing CO2 emissions from car need to be reduced (Bamberg et al., 2011).

However, getting people to reduce their levels of car use is not a simple matter. This is because motivations for car usage are varied and interpreted differently by

individuals (DeGroot & Steg, 2010). In addition, numerous other factors influence the individual's decisions to use or not use the car from without. Different theoretical perspectives and models have been applied to understand what motivates people to use the car. In addition, different categorisations of these motivators appear in the literature. The current review has categorised five major motivator types that influence individual car user behaviour. Studies highlight that the majority (if not all) of motivators are underpinned by the individual's perceptions and interpretations of the car's attributes and benefits as well as availability of travel options (Bamberg et al., 2011).

Although the current literature and studies focus extensively on motivations for car use, studies also suggest that the same motivators that drive car usage could equally underpin decisions not to use the car. For instance, Guiver (2007) found that car users and non-car users interpret utilitarian benefits of the car differently, with car users arguing that the car is more cost effective than alternatives to car use. Interestingly, non-car users justified non-use of the car on a similar basis, that is, that the use of alternatives is cheaper than actual car use.

On a deliberative basis, individuals could be motivated by psychological, social, utilitarian or situational/circumstantial or morality interpretations, or even a mix or interplay of any of these factors. Furthermore, there is also a thin line between how specific considerations of car roles and functions might have an effect any of the motivations' consideration/perceptions. For instance, a person who uses the car to go to work in the morning might be motivated by utilitarian factors such as travel time or stress. The same individual may become motivated by social factors such as status or identity communication when driving to meet significant others during

lunch or break time at work. On the other hand, there may also be a thin line between what is considered psychological or social since either might be affected or driven by the other. Thus, status could be as much a social consideration as it might be an affective one, e.g. driving an SUV for status (social) where perceptions of status are also interconnected to feelings of power or dominance over others (affective) in addition to serving commuting needs (utilitarian).

Unlike the motivators that influence decisions from deliberative points of view, habits also increase likelihood of car usage, and could motivate the individual from non-deliberative or sometimes deliberative points of view. Habits have often been argued as motivating people from non-deliberative unconscious levels. However the fact that a person might be habituated to using the car by deliberately linking its usage as part of certain lifestyle activity implies that even if car user behaviour occurs in a stable context, habits could be partly deliberative in nature. The overall implications are that perceptions of the roles that the car plays are central in people's interpretation and assignment of meaning to choices of adopted travel modes and options (Bamberg et al., 2011). The interpretation of roles or functions assigned to use of the car or alternative travel modes at any point in time is what largely determines the extent to which a specific behavioural determinant becomes a motivator for the individual to use or not use the car. In addition, the review of literature shows that the individual's interpretations of car functions are internally and externally influenced. Thus, psychological (and some demographic and normative) factors are internal to the individual while social and situational (and some demographic and normative) factors influence the individual from without (external). In other words, the perceptions that drive motivations are underpinned by schema - the broad views that people have about themselves, others, events and the

social world - as well as by how these become embedded in practices and ways of living (Maruna & Mann, 2006).

### **2.10.1 Introducing the current study's focus and research questions**

Numerous studies have noted “barriers” that prevent people from matching environmental cognition with pro-environmental behaviour. Barriers, as discussed in these studies, refer to the rationalisations that are used to justify non-engagement in pro-environmental behaviour. A popular barrier is the claim that an individual's sole behaviour will not make a difference in addressing environmental problems (Carter, 2003). When applied to justifying car user behaviour, these sorts of barriers might become extra justifications for not reducing car usage. Thus, in addition to the motivators discussed in the preceding chapters, the fact that people are able to continue using the car depends on the extent to which they can find extra justifications that allow them to deviate from the pro-environmental cognitions they express. This implies there is need to go beyond motivations as conceptualised in the review of literature to consider the deeper level justifications that can free individuals from the environmental imperative to reduce the car. To use the example of barriers, an individual is not likely to be motivated to own or use the car in the first instance on the basis that their reductions in use of the car makes any environmentally related difference. In fact, when it comes to why people use cars, the motivators discussed in current literature review can explain individual car user behaviour. However, when environmental reasons are factored in or the individual's car user behaviour is called into question, claims that own car user reduction makes no difference may enable them to justify and continue using their cars. This sort of justification reduces the responsibility to engage in reduced car use as even if the

individual agrees there is need for reductions in their use of the car. In other words, when added to other motivational factors identified in the literature review, justification accounts or rationalisations can legitimise continued use of the car (persistence) for the individual. When added to motivators, “barriers” become behavioural justifications for continued use of the car.

The majority of studies on car usage and car user behaviour focus on identifying the motivators for car usage. Some of these studies have also focused on the relationship between pro-environmental cognitions and individuals’ adopted car user behaviour, i.e. to engage or not engage in pro-environmental behaviour. While the problem of not matching expressed pro-environmental cognitions has been noted, no study that I came across (or am aware of) has focused specifically on documenting the deeper level justifications and mechanisms that can free individuals from the environmental imperative to reduce the use of the car. This gap constitutes the initial point of departure for the current study. I opine that a good approach to understanding how individuals are able to reconcile the behavioural discrepancy of not matching pro-environmental behaviour with actual reductions in car usage is by exploring the justification accounts that make persistence in use of the car possible. In line with findings from literature and discussions in the preceding paragraph, current literature on car usage and car user behaviour will benefit from an uncovering of how the justification accounts that drive persistence for car user behaviour are underpinned by individual cognitive representations of self, others, roles and events and how these are embedded in cultural behavioural expectations (schemas). This is in line with the view that schemas are based on prior expectations and social knowledge. They are used to evaluate social stimuli as good or bad, positive or negative (Maio & Augoustinos, 2005).

Furthermore, a comprehensive understanding of car user behaviour, in relation to the identified point of departure for the current study, ought not to focus solely on understanding why people persist in use of the car. Equally important is that studies on car usage are able to gravitate towards understanding how people who match pro-environmental cognitions with actual reductions in car usage are able to justify their adopted car user behaviour. In addition, since the focus is on exploring the justifications that individuals make for adopted car user behaviour, a good study approach would be to uncover and analyse the different self-explicated accounts that are employed in the justifications of car user behaviour from the perspectives of persistence (continued use of the car) or desistance (discontinued or non-use of the car). This is in line with study findings and arguments that analysis of accounts offers insight into understanding behaviour justifications (especially inconsistent behaviour) (see Shotter, 1984; McGregor, 2008; Orbuch, 1997; Gergen, 2009). Finally, focus on accounts allows deeper level analysis of justifications for car persistence or desistance that can address other gaps in the broad literature on car usage and generic studies on pro-environmental behaviour. Pieters et al., (1998) argue that studies on pro-environmental behaviour ought to focus more on uncovering how individuals attribute behaviour to self and others. Bamberg & Moser (2007) also note this view in their meta-analysis of the psychosocial determinants of pro-environmental behaviour.

If the individual can explain his/her behaviour in such a way that it is deemed to justify the behaviour in question, the individual's explanations (attributions) for behaviour would have aided the resolution of any moral dilemma that the individual faces. In other words, attributions play a crucial role in the resolution of the sort of dissonance that occurs in persistence in car usage (Thorgesen, 2004). Succinctly,



attributions span the entire range of justification accounts or rationalisations that are employed by the individual to justify car user behaviour. Cognitive dissonance studies on general pro-environmental behaviour highlight that how an individual perceives acting in a particular manner as consistent or inconsistent with schemas shapes or influences their justification accounts for behaviour (Thorgesén, 2004). In order to maintain consistency between self and schemas, the individual would need to find ways of justifying favoured behaviour when this conflicts with expressed beliefs (Sykes & Matza, 1957; Shotter, 1984; McGregor, 2008). In other words, the attributions or explanations that are made to justify behaviour will have an evaluative character skewed towards enhancing justification of favoured car user behaviour. The evaluative character of schemas suggests that attributions for car user behaviour are dependent on, and shaped, by individual and social cognitive representations, i.e., schemas (Crittenden, 1983; Maio & Augoustinos, 2005).

The implication is that the mechanisms used by individuals to free themselves from the environmental imperative to reduce car usage are linked to the interplay between behavioural justifications, the attributions underpinning justifications and schemas. Similarly, justifications accounts for persistence or desistance are underpinned by the interplay of attributions and schemas; with attributions dependent on schema. As far as I am aware, no study on car usage or car user behaviour has focused explicitly on exploring the interplay between behavioural justifications, attributions and schemas in relation to persistence in or desistance from use of the car. The current study explores this interplay in relation to persistence in desistance from car use.

In line with the identified gap in the literature and the study focus considered in the foregoing discussion, the following constitute the broad research questions for the current study:

1. How are individuals able to free themselves from the environmental imperative to reduce car usage?
2. How do individuals justify continued use or non-use of the car in the face of environmental awareness and belief that car usage ought to be reduced?
3. How are justifying accounts for adopted car user behaviour (persistence or desistance) reflective of the schemas of the study's sample group?
4. What are the implications of the study's findings for intervention(s) aimed at getting people to reduce car usage?

## **2.11 CONCLUSION**

This chapter has reviewed literature on car usage and car user behaviour from numerous perspectives. In line with points of departure identified from the review of literature, I have identified broad research questions that the current study addresses. The study's approach to understanding persistence and desistance can be seen as combining the psychological and socio-psychological aspects implied in individual accounts and sense-making processes with the more social (i.e. the import of collaborative relationships) factors that underpin car usage. This way, the current study adopts an interdisciplinary perspective that accounts for the complexities arising from these different contexts.

In the following section, I develop a theoretical framework that will guide the research process in addressing broad research questions. The theoretical framework

sets the boundaries for the study and subsequently the refinement of the broad objectives outlined above. In addition, it underpins the methodological and methodical approach that I have adopted in addressing the refined research questions and objectives.

## **CHAPTER THREE**

### **3.0 THEORETICAL FRAMEWORK**

#### **3.1 INTRODUCTION**

In this chapter, I develop a theoretical framework that guides the current study. Laughlin's (1995) view that theory guides research is relevant for the development of this study's theoretical framework for several reasons. First, given that the current research seeks to explore how schemas underpin persistence and desistance justifications, the framework contextualises the understanding of both aspects (behavioural justifications and corresponding schema underpinnings) from relevant theoretical perspectives. This approach is consistent with the view that a study's theoretical framework needs to be aligned to the context of the problem to which it is applied (Callinicos, 1999). Secondly, the broad research questions introduced in the concluding sections of chapter two are refined in line with the theoretical framework. Finally, the theoretical framework lays foundations for the methodological and methodical choices that I employ for the research process.

This chapter consists of three major sections. In the first section, I account for how behaviour and conduct are grounded in individuals' cognitive representations, i.e., perceptions, interpretations and assignments of meaning to events and activities. Arguments in this case are grounded in constructionist theoretical perspectives and key study findings on car usage discussed in the preceding chapter. The links between behavioural justifications, attributions and schemas are also explored. The remaining sections narrow down the initial broad constructionist perspectives discussed in the first section, focusing specifically on developing a theoretical model for understanding how individuals account for and justify the behaviours they

favour. The developed model is underpinned by the neutralisation techniques (Sykes & Matza, 1957) and techniques of affirmation (Copes & Williams, 2007). The choice of these theoretical perspectives is underpinned by relevance in addressing the research questions in line with the views of Callinicos' (1999) and Laughlin (1995). Conclusively, the study's broad research questions and objectives from chapter two are refined in line with the developed theoretical framework. In addition, the chapter's discussion section links the theoretical framework and the study's methodology (to be discussed in the following chapter).

### **3.2 INDIVIDUAL AND SOCIAL ORIGINS OF INDIVIDUAL BEHAVIOUR**

The origins of individual perceptions and interpretations of behaviour are linked to discourse on the nature of the relationship between humans and their environment. Two contrasting positions are dominant in this case. The first position assumes that humans respond in mechanistic ways to the situations and circumstances of life they are confronted with (Burrell & Morgan, 1979; Blumer, 1969). While it may be true that people sometimes respond in such a manner, the assumption that human conduct is conditioned by external circumstances undermines the free will which is a major essence of being human (Burrell & Morgan, 1979; Gergen, 2009).

The study findings discussed in the literature review show that car user behaviour is neither mechanistic nor solely dependent on external circumstances. Rather, decisions to use the car are largely dependent on individual perceptions and interpretations of motivational factors (Bamberg et al., 2011). This view is consistent with views that human beings are creators of their social environment; specifically that human conduct and behaviour derive from individual and social constructions of events and circumstances. Charon (2001: 42) argues, "...we are not

like billiard balls responding directly to the impact of other billiard balls, nor are we like rats responding to physical stimuli". Individuals respond to such stimuli by defining the external stimuli. They then go further to assign meaning(s) to the stimuli from specific perspective(s), and their consequent actions are dependent on their perceptions and interpretations of the meanings assigned to the things or events that are experienced or encountered. In other words, behaviour as a response to stimuli is a consequence of the individual's perception and interpretation of the stimuli and the response (Charon, 2001). This view is consistent with findings on pro-environmental behaviour; that behavioural choices are made on an activity-by-activity basis by the individual (Thorgesén, 2004).

In addition, the meanings assigned to objects in the social world are also conceptualised as originating from social processes and interactions (Gergen, 2009; Blumer, 1969; Berger & Luckmann, 1966). In other words, the individual's perceptions, interpretations and assignment of meanings to events or activities are not solely determined by the individual. They are determined, negotiated and constructed via social interactions and in line with societal perspectives. This view is consistent with the social motivators and social norm influences on the constructions of car user behaviour (Baslington, 2008; Gartman, 2003; Wright & Curtis, 2005; Klockner & Friedrichsmeier, 2011; Axen & Kurani, 2012).

The use of language is central in terms of how such constructions are made. Language is the medium in which individual interpretations and social constructions are grounded (Charon, 2001; Guiver, 2007). Thus, understanding how language is used is crucial since language is intricately bound up with the perceptions, interpretations and assignment of meanings that drive actual behaviour. In addition,

“... people organise views of themselves, of others and of their social world” via the use of linguistic accounts (Orbuch, 1997). Therefore, an understanding of how people perceive and interpret their car user behaviour presupposes focus on the different representations that social groups or societies use to construct the world around them (Guiver, 2007).

The theoretical framework that is applied for our study is grounded on this constructionist explanation of social reality. In the next sub sections, I explicate further on relevant explanations for why and how individuals justify behavioural choices and preferences. In line with Gergen’s (2009) view that social construction originates from dominant theoretical perspectives such as Wittgenstein’s (1958) philosophical investigations, Derrida’s (1997) view of language as a system of differences, the social construction of reality (Berger & Luckmann, 1966) and symbolic interactionism (Blumer, 1969; Charon, 2001), the study’s theoretical framework is aligned to these perspectives.

### **3.2.1 The social construction of reality**

The social construction of reality (Berger & Luckmann, 1966) emphasises that the origins and maintenance of social reality are grounded on social processes; social interaction and use of language are central to the constructions of meaning and shared perspectives. Central to Berger & Luckmann’s (1966) arguments are that concepts and representations about social reality arise from individual(s) and group interaction in a social environment. Language is central in everyday life because the concepts and representations that we have and share during interaction about the social world are expressed using language. It is the medium used to make sense of

everyday life. It makes subjectivity real and as such is the primary reference for day-to-day life.

Summarily, reality is perceived as originating from, as well as being maintained by, social processes which, in turn, are made possible via use of language. This implies that any individual's daily life is made possible and reaffirmed via social interaction with others and the use of language. The emphasis here is on the import of social perspectives and norms on the individual's behavioural choices (Berger & Luckmann, 1966). It also implies that social norm considerations underpin how the individual interprets events and activities. The social norm import on behaviour is noted numerously as a key motivation for environmental behaviour (Thorgesen, 1999; Stern, 2000; Whitmarsh & O'Neill, 2010; Thorgesen, 2009). Specifically, the social norm and social perspectives' influence on car user behaviour is documented (see section 2.1.3 of chapter two).

### **3.2.2 Symbolic interactionism**

Symbolic interactionism shares a lot in common with Berger & Luckmann's (1966) "Social construction of reality". However, symbolic interactionism's emphasis is more on the acting individual (Blumer, 1969). The basic premise of symbolic interactionism is that symbolic meanings are attached by individuals to social objects and that such meanings are developed and transmitted via social interactive practices (Blumer, 1969; Charon, 2001; Klunkin & Greenwood, 2006). Social objects include all things perceivable; the totality of reality. People's behaviour towards objects (for instance, the car in this case) does not necessarily occur based on concrete or essential properties of these objects. Rather, they act towards these objects based on the meanings that they assign to such objects (Blumer, 1969).



The views discussed so far are aligned to evidence on car usage and car user behaviour; that individual decisions to use the car depend on the individual's interpretations of the roles that the car serves for them at specific points in time (Wright & Curtis, 2005; Guiver, 2007)<sup>5</sup>. As discussed in the literature review chapter, perceptions and assignment of meaning go a long way to determining eventual decisions to use the car. These are also tied up with the motivators for car use since these (motivators) are also subject to individual and social interpretations. The key issue is that meaning(s) assigned to using the cars at any point are defined by the user, and that such meanings are subject to individual interpretations. As such, the interpretations that favour persistence or desistance might become stable over time. As discussed in the review of literature, interpretations could also change over time in response to contextual perceptions and assigned meanings (Wright & Curtis, 2005; Gartman, 2003) at a different time.

Blumer's (1969) formulation (three premises of symbolic interaction) elaborates on the meaning-making processes that lead to an individual's eventual behaviour. These premises are discussed briefly, and consequently complemented with the views of Berger & Luckmann (1966) to theoretically ground the claim that car usage is underpinned by individual as well as social perspectives and constructions of reality.

Blumer outlines these premises as follows:

The first premise is that human beings act towards things based on the meanings that the things have for them ... The second premise is

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<sup>5</sup> See sections 2.1 and 2.2.4 of chapter two (literature review chapter) for detailed elaboration of this topic area.

that the meaning of such things is derived from, or arises out of, the social interactions that one has with one's fellows. The third premise is that these meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things he encounters (Blumer, 1969: 2).

The first premise about the nature of human action states categorically that human beings are not passive actors. They are actively involved in the meaning-making process that determines their actions. They respond to the things they act towards based on the meanings that they assign to these "things". The assumption that the individual acts towards objects presupposes that these objects exist in an objective world. However, that the individual does not always encounter objects in his social world directly is also worthy of note. The assumptions from the first premise are consistent with the views discussed in the preceding paragraph. It is also linked to the second premise (Charon, 2001).

The second premise suggests that the individual encounters objects, not directly, but from the perspectives that he has learnt through interacting with others (Charon, 2001). Thus, the meanings and definitions he makes of the situations that he encounters in his day to day activities are based on what others around him have passed to him through socialisation. This view resonates with the theory of travel socialisation (Baslington, 2008) discussed in the literature review chapter; that travel mode choices and use of the car are partly determined by the socialisation process that an individual has encountered. It is for this reason that things in the world are "social objects" as their meanings are defined from social perspectives (Charon, 2001). The emphasis of this second premise can be seen as aligned to the views of

Berger & Luckmann (1966) on the import of social influences and perspectives on individual interpretation of reality and corresponding behaviour(s).

Perspectives are central to how the individual sees and understand his world.

According to Shibutani (1955: 564):

A perspective is an ordered view of one's world – which is taken for granted about the attributes of various objects, events and human nature. It is an order of things remembered and expected as well as things actually perceived, an organised conception of what is plausible and what is possible; it constitutes the matrix through which one perceives his environment.

The quote above (Shibutani, 1955) is constructionist and resonates with present day constructionist opinions (see Gergen, 2009). In line with the study's focus on car usage and car user behaviour, Shibutani's (1955) opinion resonates with views that car usage is not just caused or determined by individual choices alone since these choices are made in relation to how the individual sees his world. Since individual perceptions are shaped through interaction, individual choices are therefore reflections of wider societal perspectives.

The third premise is worthy of comment. Building on the previous premises, the third premises highlights that human action extends beyond the mere application of perspectives learnt through social interaction. In addition to being influenced by social perspectives, individual decisions are also underpinned by the fact that the individual "selects, suspends, regroups and transforms the meanings in the light of the situation in which s/he is placed and the direction of his/her action" (Blumer,

1969: 5). Although shared perspectives affect individual choices, individuals are still to some extent responsible for their action as they can choose to subscribe to social perspectives or not.

The possibilities of selecting, suspending, regrouping and transforming of meaning have implications; it is the individual that defines what purposes a social object is meant to serve at a particular point in time. In addition, the individual's ability to select, suspend or even transform assigned meaning implies that decisions regarding how a social object is encountered might be changed to suit specific purposes. This view is consistent with those of studies on individual car user behaviour that find that individuals assign different meanings to the car at specific points in time, and in line with expected roles that the car is meant to play. More importantly, the third premise also implies that the individual may not make rational choices or that choices could conflict with social perspectives or other beliefs. Blumer (1969) contends that such instances of behavioural inconsistency propel the individual to justify behaviour. The view that the individual justifies or accounts for inconsistent behaviour still underlies present day constructionist perspectives (Shotter, 1984; Charon, 2001; Gergen, 2009).

In the following sections, I elaborate on selected themes that draw from the social constructionist theories considered in the foregoing discussion. These themes underpin the theoretical constructionist aspects that inform the study's approach and further refinement of the broad research questions outlined in the previous chapter.<sup>6</sup>

### **3.2.3 Dynamism and individual use of social objects**

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<sup>6</sup> See section 2.3.7 for detailed elaboration of this topic area.

An individual's goals change over time. As these goals change, interpretations and the use of objects used to achieve these goals might also change. In other words, the individual is dynamic (determining and changing) as well as pragmatic in his/her use of objects (Warriner, 1970).

According to Charon (2001), dynamism also implies that uses for any particular object might change depending on how the individual defines the context of usage. We can relate this to the findings from literature where the different motivators for car use can be argued to be indications of the changing interpretations ascribed to the car by the user under different circumstances. Aligned to this is the fact that some objects could be used to represent things other than what they usually stand for as objects. In other words, social objects may become symbols. In almost all instances, the meanings that are assigned to symbols are made arbitrarily and are subject to interpretation at individual or social levels (Charon, 2001).

Many human actions are symbolic in the sense that they stand for something other than that which is directly perceived. Car usage is a good case in point. We see this sort of ascription in Gartman's (2003) analysis of the meanings attributed to the car in American society in the early 1990s, when owning and driving a car was associated with status and affluence. The use of the car became an expression of self- assigned identities. In addition, we can also see a lot of resonance with this view in the findings of literature and studies on car usage (see sections 2.1 and 2.2.4 in chapter two).

Summarily, objects (whether conceived of as symbols or not) are understood based on the purposes they serve (Blumer, 1969; Charon, 2001). The purposes could differ from time to time as well as from individual to individual. The individual applies

their understanding of the various possible uses towards a social object via re-designation, and the knowledge base for re-designation derives from social interactions and shared perspectives. The individual is able to do this (re-designation) because s/he can, and the ability to do this lies in his/her ontological constitution as a being that is aware of his or her own self.

#### **3.2.4 The construction of human identity**

The individual's perception and definition of self follows a pattern similar to that used in knowing what social objects are and how they may be used in different situations. The individual is aware of himself/herself as an individual. This awareness of self is a basis for interacting with others, and interaction, in turn, is a basis for self-awareness and definition. During interaction, the individual relates with others based on their perceptions of self. The individual understands his/her own self in line with others' definitions of self. In other words, the individual often makes such definitions because of how s/he thinks others perceive him/her (Goffman, 1963). Therefore, the individual's understandings and expressions of self or identity are as much an individual activity as they are a social or group one. Put in another way, self and identity constructions are negotiated based on collaborative relations that are inter-subjective (Gergen, 2009). We can relate these assumptions to car usage and to the specific university experience.

In terms of car usage, the study of Gartman (2003) becomes a good case in point; people were able to identify with different social classes because of car usage. Wright & Curtis (2005) also discuss how use of the car is related to different types of identity expression up to the point that the car can be seen by an individual as an

extension of self, whereby threats to the car (e.g. scratching the individual's car) are perceived and interpreted as threats to the individual self<sup>7</sup>.

Specifically, the university experience is relevant given that university students constitute the study's sample. The university experience shapes the choices and decisions students make about future occupation-related issues (Feldman, 1972; Kaufman & Feldman, 2004). Goffman (1963) argues from an interactionism perspective that the student's perceptions of self and felt identity are based on impressions made upon the student by relevant others such as teachers and peers (Goffman, 1963). That is, that perception of self and the perceptions of others are interlinked. He further contends that the more these impressions are made over time, the more the student will see himself/herself the way his/her learning environment and people in it define his/her "studentness". Subsequent actions will be guided by these definitions, or at the very least they will be taken into account in the self/other definitional and behavioural justification project.

Summarily, the theoretical perspectives considered in the foregoing discussion point to the fact that behaviour is guided by the individual's schema, i.e. prior knowledge or expectations about conduct, people, roles, norms and events in their social setting (Maio & Augoustino, 2005). Schemas are functional in that they guide the things that people attend to in their respective social worlds. Noteworthy is the assumption that schema perceptions and allied behaviour are linked, and dependent on collaborative relationships/social perspectives and use of language.

### **3.2.5 The centrality of language**

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<sup>7</sup> These views have been discussed in depth in the literature review chapter. See sections 2.7.

Generally, people are able to understand themselves, their social world and social objects due to their ability to communicate using language (Berger & Luckmann, 1966; Blumer, 1969; Charon, 2001). The meanings and designations that are assigned to social objects by the individual are made possible by use of language. The same goes for social interactions; constructions are assumed to gain significance based on their social utility and these are expressed in language. In other words, language brings schemas or cognitive representations to life. Aligned to this is the fact that the use of language and verbal communication depends on the knowledge of words that constitute the language.

Language has been conceptualised as a mirror of reality (Wittgenstein, 1958) and as a system of differences (Derrida, 1997); of words that are distinct from each other. A formal way of understanding these differences is by understanding them as binaries (Gergen, 2009) whereby the meaning of a word or concept has significance in terms of its binary; e.g. the meaning of black depends on its differentiation from that which is not black (white or green or brown etc.). The meaning of words or expressions depends on that which is present (the expressed) and those that are (often) absent; the binaries of the present (Derrida, 1997). This implies that linguistic devices employed to justify behaviour will have binaries, and a binary approach offers a good way of conceptualizing related concepts. Thus, a binary consideration of persistence and desistance is applied in this study to enhance the study's exploration of car user justifications. It is also reflected in the final theoretical framework that will be discussed in following sections.

In addition, linguistic devices to reflect reality and assign meanings are used in a game-like manner (with agreed rules) whereby they serve specific purposes, and are



used within established utility contexts that are social, recognizable and accepted (Wittgenstein, 1958). For example, the instance of greeting assumes a game-like utility context whereby enquiring how someone is ought to be followed by a corresponding response that is in line with the rules of the game. As Gergen (2009) points out, to cuff another on the head following an enquiry of how one is doing would be acting out of context and inconsistent with the rules of the greeting-game. On these bases, making sense or meaning is, therefore, all about following the rules of the language game. The implication is that the framework for the study should allow the use of methods that can capture the interactional processes that occur when people talk or account for their adopted behaviour in particular ways.

Summarily, the theoretical perspectives considered in the foregoing discussion point to the fact that behaviour is guided by the individual's schema, i.e. prior knowledge or expectations about conduct, people, roles, norms and events in their social setting (Maio & Augoustino, 2005). Schemas are functional in that they guide the things that people attend to in their respective social worlds. Worthy of note is the assumption that schema and their corresponding behaviours are linked, and dependent on collaborative relationships/social perspectives and use of language.

The way we understand our world is not mechanistic or determined by what is out there (objective external world). Social reality is constructed using language, and the way we describe and explain our world originates from social relationships. Subsequently, designations that are made about social objects are done using words; social interaction is possible because people use language and words that they understand. Thus, the significance of constructions arises from their social utility.

Words and language reflect reality. At the same time, the ways they are used are dependent on cognitive representations or schemas.

The theoretical perspectives that we have discussed so far help us to understand the nature of social constructions as underpinning the dynamic relationship between social reality, social interaction, the individual designation/meaning-making process and behaviour. This leads us to the next important theoretical consideration relevant for our study's broad objectives and research questions: outlining specific theoretical groundings for how human beings account for behaviours that are inconsistent or consistent with self-expressed schemas or social perspectives, and the mechanisms (linguistic devices) that they employ in this regard.

### **3.3 CONSTRUCTIONIST MODEL OF BEHAVIOURAL JUSTIFICATIONS**

The point of departure is linked to the view that people are able to define and interpret situations as they encounter them, sometimes making non-rational choices or not conforming to normative expectations (Festinger, 1957; Blumer, 1969; Thaler & Sunstein, 2008). This could lead to sanctions, reproach or even feelings of guilt on the individual's part. In response, the individual may look for ways to alleviate such feelings or find ways of justifying adopted behaviour (Festinger, 1957; Sykes & Matza, 1957; McGregor, 2008). According to Aronson (1997), the fact that people think and are able to encounter social objects based on the interpretations they make is crucial in understanding human behaviour and behavioural inconsistencies. Aronson notes that the individual is not a reinforcing machine. Moreover, because we think, we frequently get entangled in muddles of self-justification, denial and distortion. When faced with such situations (engaging in

inconsistent behaviours and having to justify them) the individual feels the need to explain and account for their behaviour (Orbuch, 1997).

The theoretical framework for the study would therefore be one that is able to account for the linguistic mechanisms that are employed in justifying inconsistent behaviour (persistence). At the same, it would also be able to uncover the linguistic mechanism used to justify consistency between pro-environmental cognitions and actual car user behaviour (desistance). Finally, the link between schema underpinnings for persistence and desistance ought also to be reflected in the theoretical framework.

In the following section, I elaborate on how the foregoing key aspects are realised. I then go on to discuss the theoretical framework that I adopt for the study. I start by briefly discussing the main theories that capture the major points and issues raised in the last paragraph above; specifically how individuals deal with the dilemma of aligning beliefs with actual behaviour. I then develop the study's theoretical framework in line with the techniques of neutralisation (Sykes & Matza, 1957) and affirmation techniques (Copes & Williams, 2007).

### **3.4 THEORIZING NON-CONFORMIST BEHAVIOUR**

One of the most popular theories that address how individuals deal with non-conformist behaviour is Festinger's (1957) theory of cognitive dissonance. Festinger's (1957: 1) background premise is that the individual "strives towards consistency within himself". Festinger argues that normally there exists some sort of consistency "between what a person knows or believes and what he does" and that seeking consistency with regard to the beliefs-behaviour relationship would normally guide the individual's code of conduct. However, this does not always

happen. The individual's behaviour might not be always be consistent with his/her beliefs (dissonance). He invokes the example of smoking to show how the individual might use counter-rationalisations or actual behaviour to justify smoking even though they admit it is damaging to their health. The use of the car could be contextualised in line with Festinger's (1957) views; that a person might agree that cars are prime culprits when it comes to GHG emissions and that there is need to reduce them, but persists in using the car. In line with the views of Festinger (1957), persistence in use of the car would be justified by appealing to counter-rationalisations or actual behaviour(s) that would reduce tension caused by a clash of beliefs. The individual might also respond by corresponding behaviour with these beliefs. These different dissonance resolution strategies serve the same purposes; to rid the tensions that arise from dissonance. Cognitive dissonance is in itself a motivator to action, just like hunger. When dissonance exists, the individual embarks upon activity to quell the ensuing discomfort, just as they would go in search of food when hungry (Festinger, 1957). In the case of car usage, this could be achieved by changing behaviour or working around "knowledge" of car user environmental externalities. The current study would consider that the former resolution approach is akin to desistance (matching pro-environmental cognitions with reductions in car use) while the latter corresponds to persistence in use of the car. A key issue is that dissonance resolution implies a purposeful justification for adopted behaviour. Justifications require that the individual accounts for their adopted behaviour. As such, justifications are different from the five motivators discussed in the literature review section. Any or all of the five motivators could be invoked in the rationalisation process or adoption of behaviours that underpin the justification process.

Festinger argues that the reduction of dissonance is a basic human process. Its implications are wide and observable in a wide variety of contexts. Interestingly, Festinger (1957) also notes the effects that personality differences and individual decision situations have when it comes to attempts to reduce dissonance. Festinger's theory of cognitive dissonance and theorisation of behavioural inconsistency, as discussed above, can explain persistence and desistance to some extent. However, it is limited in the sense that it focuses on the internal drivers (psychological) and makes little reference to the import of social influences on behaviour. Festinger hardly discusses the social interactional processes involved when the individual embarks upon behavioural justifications. The daily interactions and use of talk which are argued as the significant mechanisms employed when people embark on justifications (Orbuch, 1997) are not accounted for by this theoretical perspective. On this basis, I draw on the relevance of Festinger's views for dissonance reduction in the empirical chapters' presentation and discussions. However, alternative theories and approaches on cognitive dissonance that can account for dissonance resolution as well as the interactional aspects and schema underpinnings of behavioural justifications are used specifically in the development of the theoretical framework.

### **3.4.1 Accounts strategies and mechanisms**

A relevant approach that underpins the study's theoretical framework is to focus on people's accounts for behaviour. According to Lyman & Scott (1968: 46) an account is "a linguistic device employed whenever an action is subjected to evaluative inquiry". They are representative of the ways that individuals organise their schema; views of self, of others and of cultures (Orbuch, 1997). Paying attention to the accounts used by the social actor(s) to account for behavioural

inconsistency in interactional setting captures the individual and social motivational influences on behaviour (Orbuch, 1997). Accounts are used in interaction to justify and explain why an individual behaves the way they do. They reflect the motives that underpin behaviour. It is argued that motives are often decipherable from the words and accounts offered by an individual to explain conduct (Mills, 1940; Orbuch, 1997; Gergen, 2009). Mills (1940) goes as far as arguing that motives are words and that they (motives) could be seen as the anticipated answers that follow when the “why” is asked in relation to conduct. By implication, recourse to an understanding of the linguistic devices used by the non-conformist or conformist to justify behaviour is a good approach to understanding the meanings and motivations that underlie conduct or behaviour (Cressey, 1953; Shotter, 1984; Orbuch, 1997; Gergen, 2009). Interestingly, accounts can reveal non-conscious motives (e.g. habits) and meanings (Mishler, 1986) making focus on accounts a good way of uncovering the conscious and non-conscious motives that underpin justifications for persistence and desistance in use of the car.

Accounts serve different purposes for individuals that use them. The purposes correspond to what the user wishes to communicate to others. In justifying adopted behaviour, individuals may use accounts to free themselves from feelings of shame and guilt (Sutherland, 1947). Thus, accounts are self-protective constructions of self, others and cultures. The use of accounts in justifying behaviour serves the purpose of aligning behaviour with cultural language and norm imperatives. The alignment of behaviour with cultures allows the individual to establish links between his/her self with cultures and other social actors (Lyman, 1970; Shotter, 1984). In addition, identities are constructed and maintained when people account for behaviour in

interaction. In other words, accounts help the individual to maintain a consistent sense of self in relation to schemas (Shotter, 1984).

Accounts are also related to other sociological concepts such as attribution theory (Orbuch, 1997). Classical attribution theory focuses on the processes by which people arrive at explanations for their behaviour(s) and events (Crittenden, 1983; Alloy et al., 1984). When individuals account for behaviour, they attempt to explain why they do what they do. Thus, accounts are bundles of attributions (Crittenden, 1983; Harvey et al., 1986). Attributions (explanations of behaviour and events) are ways that individuals use to integrate and organise events around themselves. The individual's attribution style depends on the extent to which the individual explains behaviour based on his/her perceptions of disposition (of self or others) and circumstances or situations (Alloy et al., 1984). In the case of the former, the individual locates the cause of behaviour from within, i.e., his/her own disposition (in which case s/he accepts responsibility for action) or from without (in which case others' disposition or external circumstances). In addition, attribution styles are linked to the individual's explanatory style, that is, their understanding of interpersonal events and activities.

Explanatory styles are habitual patterns of explanations used by the individual when they account for events that are considered good or bad (Schulman et al., 1989). According to these authors, three dominant styles are identified: internal/external, stable/unstable and global/specific. The internal/external style refers to the extent to which individuals feel they have control over events. Internalisation implies locating the cause of events from within while externalisation refers to locating the cause of events outside the individual. The stable/unstable style pertains to whether a

repeated event is interpreted to have similar results in the future. The specific see repeated events as one-off while the stable sees it as being the same for every occurrence. The global versus specific style refers to the extent that a person's explanation about a specific event is generalised to include other events that are beyond the event in question. Explanatory styles say much about how moral issues are interpreted. For example, an individual's explanatory style could reflect how they see and relate with others (Harvey et al., 1986). In other words, schemas underpin attributions and explanatory styles.

The role of attributions as underpinning justification accounts is particularly important given that past studies have noted the need for studies to focus on how individual attributions relate to perceptions of the cause and effects of engagement in pro-environmental behaviour (Pieters et al., 1998; Bamberg & Moser, 2007). However, despite the fact that the potential importance of attributions for the formation and activation of pro-environmental norms and behaviour is numerous noted, the import of attributions for pro-environmental behaviour is still under-researched (Bamberg & Moser, 2007).

Different theoretical perspectives attempt to understand behavioural justifications by focusing on the accounts that are used to justify inconsistent behaviour (see Sutherland, 1947; Cressey, 1953; Shotter, 1984). The majority of studies adopt perspectives that are similar to the constructionist mantra that people define situations from perspectives (the meanings these situations hold for them) and that such meanings and perspectives are learnt from social interaction. In addition, these studies highlight that in acting, the individual defines and interprets situations in line with social perspectives, but may not act according to social perspectives. Finally,



that verbal communication (words) and use of relevant linguistic devices are central for the justification of adopted behaviour - particularly deviant behaviour or behaviours that are inconsistent with social norms - is also noted (Sutherland, 1947; Sykes & Matza, 1957; Festinger, 1957; Shotter, 1984; Orbuch, 1997; Gergen, 2009; Copes & Williams, 2007). Specific theoretical perspectives that address the current study's research questions (discussed in the literature review chapter) underpin the study's theoretical framework. Specifically, the link and/or interplay between accounts for behavioural justifications, attributions as underpinning justification accounts and schemas imports on attributions and justification are taken into consideration in the development of the study's theoretical framework.

In line with the first and second research questions (how individuals free themselves from the environmental imperative to reduce car usage), the framework was built around sociological theories of dissonance reductions. Generally, these theories assume that people offer justifications or rationalisations for their inconsistent behaviour to deflect blame and protect their self-esteem. The third research question focuses on uncovering the schema underpinnings of behavioural justifications, implying that the theoretical framework ought to account for how the rationalisations or linguistic devices are employed to justify either persistence or desistance reflect schemas. In line with these requirements, I consider a combining of the neutralisation theory (Sykes & Matza, 1957) and affirmation techniques (Copes & Williams, 2007) as offering the broadest spectrum that captures persistence and desistance in line with the study's research questions. In the following sections, I discuss these theoretical perspectives in line with the choice claim in the preceding statement.

Specifically, the neutralisation theory contextualises the understanding of behavioural inconsistency in line with the study's approach and research questions; how the individual using specific linguistic devices (neutralisation techniques) negotiates car user justifications. The different techniques of neutralisation also allow for further schema analysis when focusing on the purposes they serve as accounts for justifications. Thus, neutralisation techniques are conceived in line with Maruna & Copes (2005) as accounting mechanisms employed to maintain persistence in adopted behaviour. On the other hand, the techniques of affirmation as outlined by Copes & Williams (2007) are counter-neutralisation techniques. Because they are counter neutralisations, they are conceptualised in this study as linguistic devices employed to justify desistance from use of the car; the binary of persistence.

### **3.4.2 Neutralisation theory and techniques**

Sykes and Matza (1959) originally propounded the neutralisation theory. Their theory was majorly a critique of the then train of thought that assumed delinquents rejected conventional values. It offers a more suitable framework for the current study in its categorisation of the different types of justifications that individuals might use to justify inconsistent behaviour. In addition, the different techniques of neutralisation are reflective of the individual's schemas - views of self, of others and of cultural ways of life deemed as expected.

In discussing the different techniques of neutralisation, Sykes & Matza (1957) sought to explain youth delinquent behaviour. These authors argue that the values held by delinquent youth are not unconventional. In cases where unconventional values are displayed, such values are not unconnected to conventional ones. In other

words, delinquent youths share similar beliefs to those held in their social settings. They too are socialised like other members of society and as such grow up learning the perspectives (cultures and normative imperatives) of their society. Therefore, in using neutralisation techniques the individual who seeks to justify adopted behaviour may use these techniques (as accounts) to achieve different purposes. For instance, Sykes & Matza (1957) argue that delinquent youth are almost as likely as their more conformist counterparts to feel guilt and shame over behaviours that violate the basic norms of their respective societies. However, they are able to work around guilt and shame by employing different types of linguistic devices to justify deviant behaviour. They are able to deviate from what is normative because they and their friends develop rationalisations (neutralisation techniques) that neutralise their potential guilt before they embark on deviant behaviour.

Neutralisation theory emphasises how individuals, to deal with feelings of guilt and to cope with situations when others (McGregor, 2008) call their non-conformist behaviour into question, use rationalisations (i.e. neutralisation techniques). In other to assuage guilt, the individual redefines the situation in such a way that “excuses” (rationalisations) are presented as meaningful and acceptable perspectives to others (Sykes & Matza, 1957; Orbuch, 1997). In using neutralisation techniques, the individual is not only concerned with downplaying the effects of non-conformist behaviour (McGregor, 2008). The individual may also be seeking to reconcile his self-concept or identity with perceived expectations. In line with the earlier discussion of the use of accounts, one would then assume that the use of neutralisation techniques by students to justify car usage will have bearings on perceived senses of identity and selfhood, cultures and corresponding behaviour. In other words, schema perspectives are decipherable from use of neutralisation

techniques. Similar processes would occur when affirmation techniques are used, albeit from counter (binary) points of view.

While the sort of inconsistency that our research considers (that is, non-conformism exhibited when individuals do not match “perspectives” of the need for car user reduction with corresponding reductions in car use) cannot be termed deviance in the strict sense of the word, it is guided by the same principle that makes sociological deviance possible. That is, that an individual does not match expressed beliefs with behaviour. Individual behaviour and actions, especially when these do not conform to norms (personal or social) indicate that such behaviours are not technical context-free phenomena (Laughlin, 1995). In fact, such behaviours are context-dependent and aligned to schemas. As has been discussed, the individual defines and interprets behavioural contexts to serve (a) purpose(s). In this case, the individual posits before himself reasons or justifications for embarking on a particular type of behaviour or mode of conduct. It is this context of understanding neutralisation techniques as justifications for inconsistent behaviour that is applied to use of this theory in the current study.

Sykes and Matza (1957) identified five types of neutralisation techniques used by deviants to justify delinquent behaviour. The table below provides brief discussions on these techniques.<sup>8</sup>

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<sup>8</sup> More detailed discussion of these techniques and how they may be used is made in chapters five and six.

**Table 3.1 Neutralisation Techniques by Sykes & Matza (1957)**

<b>Neutralisation Type</b>	<b>Neutralisation Description</b>	<b>Possible pro car use neutralisations examples</b>
Denial of responsibility	The individual denies responsibility for the behavioural act in question. The person presents themselves as being acted upon rather than being the actor per se.	Governments fail to provide efficient bus services.
Denial of injury	The focus here is on the extent of harm or injury that has been caused. The actor argues that there is no real victim, and therefore there is no harm.	You hardly see any difference in the nature of the environment.
Denial of the victim	The actor does not deny culpability for his actions; rather it is the victim who gets the blame.	Why would anyone in their right minds live in areas with high pollution levels?
Condemnation of the condemner	The focus of attention is shifted to the behaviour of those condemning the individual's behavioural act. Linguistic devices such as the following are used.	Hardly any government officials cycle or use buses; how can they tell us to reduce use of our cars?
Appeal to higher loyalties	The rationalisation behind use of this neutralisation technique is that there is a hierarchy of moral values, such that some are more important than others.	I drive because of my children's safety; the streets are not safe.

A review of literature on neutralisation techniques identified other techniques of neutralisation following the initial five by Sykes & Matza (1957). The following techniques add to the original five and as such offer a broader perspective on possible neutralisation techniques that the individual might employ in justifying

persistence in behaviour. It is important to note that this list of neutralisation techniques may not be exhaustive.

**Table 3.2 Neutralisation techniques after Sykes & Matza (1975)**

<b>Neutralisation</b>	<b>Author</b>	<b>Description</b>	<b>Possible car use justification example</b>
Justification by postponement	Cromwell & Thurman, 2003	The individual claims s/he would rather not contemplate or talk about their action.	I am not in the mood to discuss why I drive right now.
Justification by comparison	Cromwell & Thurman, 2003	The rationalisation is that one might be doing something worse off if they didn't do what they already did.	My only other alternative would be to fly, and this means more GHGS.
Justification of necessity	Benson, 1985	The rationalisation is that necessity was the main motivation for the behavioural act that is called to question.	I would never have made it to school in time if I didn't use the car.
Justification of normalcy	Coleman, 2002	The rationalisation is that specific behaviour is consistent with social norms or that everybody does it.	People who can afford to buy and use cars. Everyone expects you to own a car.
Claim of entitlement	Conklin, 2004	The actor feels he deserves something. Entitlement could be based on claim to rights and privileges or felt identity.	As a manager of a top company, I ought to be driving a Ferrari.
Metaphor of the ledger	Klockars, 1974	The actor claims that a different behaviour compensates for the action that is being considered.	I recycle a lot. Emissions from my 4X4 are compensated for.
Claim of relative acceptability	Henry & Eaton, 1999	The rationalisation is that one's behaviour is acceptable, relative to the behaviour of others.	The major problem is people with SUVs, my car emissions are next to nothing.
The claim of individuality	Henry & Eaton, 1999	The actor employs the use of an "I don't care" attitude to close the door of comparison. The claim is largely founded on	I worked hard and bought my car with my own money; I don't care what anybody

		individualism and a negation of appeals that suggest consideration of the effects of one's behaviours on others.	says.
Denial of the necessity of the law	Coleman, 1994	This considers unfairness of the law in relation to the behaviour in question, and/or claims that said law is not necessary. In addition, there could be claims that the law is inconsistent and unfair.	How can anyone expect us to pay more congestion charges in this recession?

As discussed in preceding paragraphs, given that some individuals actually match pro-environmental behaviour with actual reductions in car use, it is equally important that the theoretical framework should account for this binary aspect of persistence in car usage. The affirmation techniques (Copes & Williams, 2007) fulfil this objective, as discussed in the following section.

### 3.4.3 Techniques of affirmation

Copes & Williams (2007) argue that neutralisation techniques examine how individuals justify behaviour that is considered deviant from mainstream perspectives, and that little is known about how people who go against what are perceived as mainstream normative imperatives are able to justify their subcultural (non-mainstream) behavioural activities. In other words, that there is a need to understand how individuals who do not do what is deemed popular justify the frames of reference that they adopt.

Individuals who adopt non-mainstream perspectives, as Copes & Williams (2007) argue, also develop and justify persistence in their subcultural behaviour. Although car users do not constitute a sub-cultural group similar to the straight-edge

subculture that was studied by Copes & Williams (2007), people who reduce or opt not to use car for environmental reasons can be seen as representing a sub-culture whose non-use of the car is inconsistent with the social norms that favour car use. This view is consistent with study findings that highlight use of the car as favoured by social norms (Urry, 2000; Urry, 2002; Sheller, 2004). Therefore, individuals who justify reductions in car usage will use different types of accounts (in comparison with those that employ use of neutralisation techniques) to justify persistence in non-use of the car due to environmental reasons. In other words, when it comes to the behavioural inconsistency that constitutes the major focus of the present study, we can identify two categories of individuals; those who justify continued use of the car and those who justify reductions in car usage. The former employs neutralisation techniques as means of justifying persistence in use of the car, while the latter employs affirmation techniques to justify desistance from use of the car. This is in line with the previous discussions on the binary aspect of language and use of words or phrases (see Derrida, 1997 and Gergen, 2009 in section 3.1.5)

The techniques of affirmation are structured in manners that are similar to the neutralisation techniques (Copes & Williams, 2007). However, they take on conflicting or opposing arguments. Essentially, affirmation techniques are counter-neutralisations; they are conceptualised in contradistinction to the rationalisations that underpin neutralisation techniques. In other words, affirmation techniques turn neutralisation arguments on their heads. The following table lists and briefly describes the techniques of affirmation by Copes & Williams (2007).



**Table 3.3 Affirmation techniques and non-car use examples**

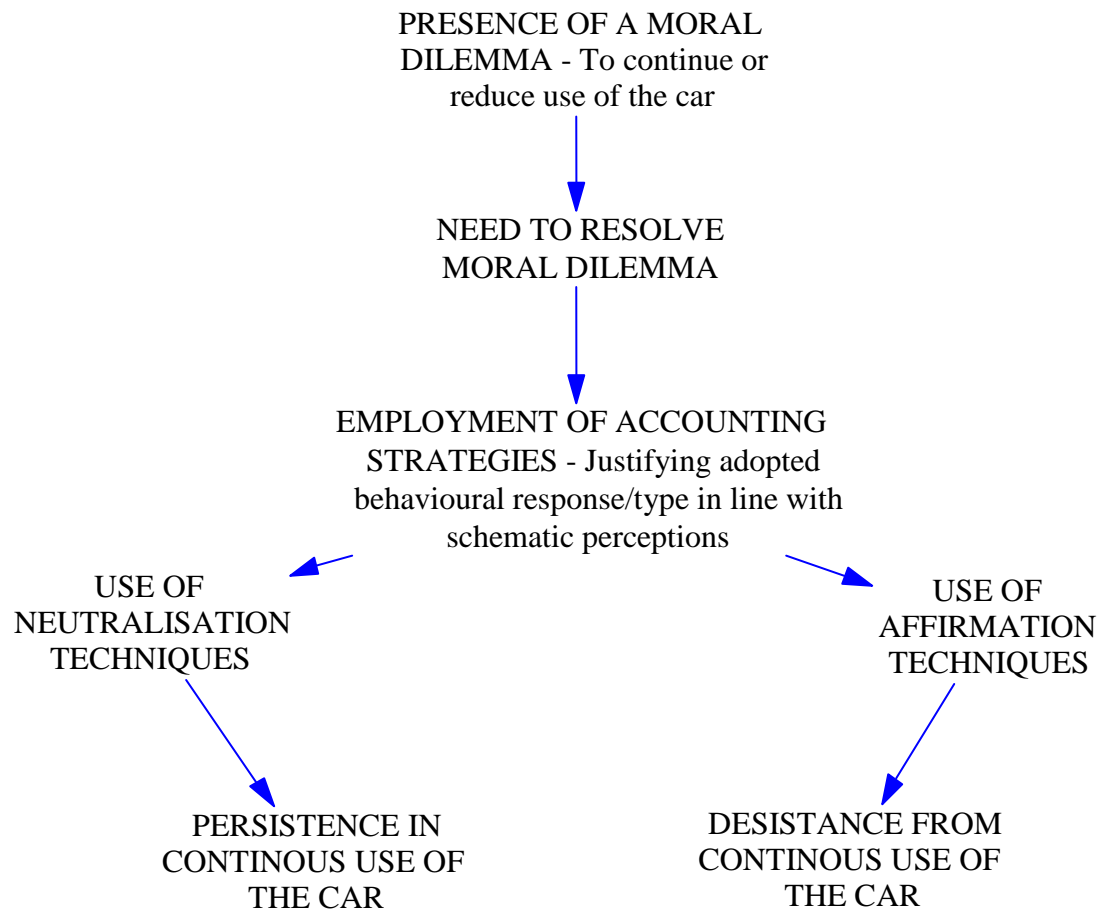
<b>Affirmation</b>	<b>Description</b>	<b>Possible non-car use example</b>
Acknowledgement of responsibility	The actor acknowledges responsibility for their behaviour. They neither blame others for their behaviour nor argue that forces outside of them propelled them to engage in behaviour. Although they may accept that the behaviour they justify is not popular, they do not agree that the behaviours they counter should be excused.	I believe we all are responsible for climate change in different ways.
Acknowledgement of harm	The actor acknowledges the harm that is denied by the corresponding neutralisation technique. S/he often cites the numerous instances and types of harms caused by the behaviour in question as proof that the harm in question is not excusable.	Only those in denial fail to see the scale of harm on the environment and people; natural disaster and loss of rainforest are obvious.
Acknowledgment of the victim	Harm that is caused to an individual because of the behavioural act in question is acknowledged. In addition, the horizon of harm is often extended to include others (especially relatives of the one harmed) who are indirectly related to the one that experiences harm directly.	Polar bears will soon be extinct thanks to climate change caused by overreliance on use of the car.
Discounting condemners	Although the use of this neutralisation technique assumes a rejection of the condemners' behaviour (since they too are assumed as being implicated in the behavioural act) the emphasis is to show that by not doing what condemners do, the one who discounts condemners shows how they are unlike condemners.	Government officials should take a leaf from the books of those of us who do not use cars; they should lead by example.
Reference to priority relationships	This assumes that real concern for the reference group presupposes not engaging in the deviant act, as the consequences would also affect the reference group and people ought not to harm those they claim they love.	If people truly loved their children, then they would reduce car use since climate change puts the future sustenance of their children in jeopardy.

Although Copes & Williams (2007) discuss only five techniques of affirmations (counters to the original five neutralisation techniques propounded by Sykes & Matza (1957)), the fact that other neutralisation techniques have been propounded after Sykes & Matza suggest that counters to their excuse or justification types or rationalisations would also qualify as affirmation techniques. In other words, counters to the additional neutralisations after the original propounded by Sykes & Matza (1957) would be binaries to these neutralisation techniques; hence, they would be affirmation techniques in support of reductions in car usage.

### **3.5 DISCUSSION**

Literature documents that individuals are rational but also inconsistent in their behavioural patterns and choices. At times, the individual may make wrong choices or engage in behaviour that is inconsistent with expressed beliefs. They would then need to justify such choices or inconsistent behaviour. Linguistic devices may be used to justify inconsistent behaviour. In line with this social constructionist perspective, I have developed a theoretical framework underpinned by the neutralisation theory (Sykes & Matza, 1957) and techniques of affirmation (Copes & Williams, 2007) to guide the current study. Both theoretical perspectives aid the understanding of the behavioural inconsistency related to car use; the inconsistency of not matching pro-environmental cognitions with reductions in use of the car (persistence) and that of not subscribing to norm imperatives that favour car use (desistance). In the following diagram, I show how the need to resolve the dilemma of persistence or desistance is linked to use of either justification accounting mechanisms (affirmation/neutralisation techniques).

**Figure 3.1 Study's Theoretical Framework – Moral dilemma resolution**



*Source: Author*

When faced with the need to justify adopted car user behaviour, individuals employ neutralisation or affirmation techniques to justify either persistence in use of the car or desistance from use of the car. The individual's eventual decision to use the car is dependent on the extent to which they feel they are justified in persisting in, or desisting from use of the car.

This study's theoretical framework complements the applicability of the neutralisation techniques by aligning it with affirmation techniques. Essentially, both theoretical perspectives are accounting strategies employed for the justification

of adopted behaviour. On the other hand, that they emphasise justifications for contrasting behavioural types (mainstream versus counter-mainstream or subcultural) suggests that when placed side by side they can offer insight and deep level understandings into desistance and persistence of a specific behaviour type under study or consideration. Both are also applicable to a wide spectrum, especially where behaviour is seen as being determined by complex sociological, psychological and socio-psychological factors that affect choice and behaviour; that is, the schemas that account for individual perceptions of self and others, plus social perceptions and interactions that affect the former. In other words, their central premises make them useful tools for understanding how the individual and group resolve the moral dilemma inherent in persistence and desistance in car usage and how behavioural justifications are linked to schemas.

The techniques of neutralisation and affirmation also facilitate deeper level analysis of behaviour. In line with the views of Maruna & Copes (2005) that the use of neutralisation techniques are accounts presented as justifications and explanations for actual or intended behaviour, the study's theoretical framework facilitates an exploration into individual attributions for engagement or non-engagement in pro-environmental behaviour, adding to knowledge in this under-researched area (Bamberg & Moser, 2007).

Another major importance of using the neutralisation techniques as a frame for the current study is linked to this theory's capacity of helping to identify areas where positive changes of behaviour can be achieved (Maruna & Copes, 2005). The same can be said for affirmation techniques since both techniques are structured in the same manner (Copes & Williams, 2007). For instance, the use of the neutralisation

theory in positive policy formulation and implementation has been noted in numerous works that consider the practical usefulness of the neutralisation theory, that is, how research driven by neutralisation theory can be used to enhance a state of affairs. Copes et al. (2007) note a recent example of how research guided by neutralisation theory has been applied by police in eliciting confessions from guilty suspects. Consequently, the insights both theoretical perspectives provide could assist in the formulation of interventions that aim at getting people to reduce use of the car.

### **3.6 CONCLUSION**

I have used the theoretical standpoints of constructionism to explain the origins of individual and group behaviour. Unlike the dominant perspective that assumes individuals' behaviours are caused, predictable and/or explainable using specified models, social constructionism assumes that behaviour is a function of individual and social perceptions/interactions. In addition, social constructionism contends that individual behaviour is not also rational or consistent; that people sometimes do not match behaviour with expressed beliefs. This behavioural inconsistency is identified as a key barrier to getting people to reduce use of the car and forms the main point of departure for the current study.

I then developed a theoretical framework that seeks to account for how people are able to resolve the dissonance that arises when their behavioural inconsistency (not matching pro-environmental beliefs with actual reductions in car usage) is called into question. The theoretical frame combines the neutralisation and affirmation techniques (Sykes & Matza, 1957; Copes and Williams, 2007). Specifically, the theoretical frame shows that when their car user behaviour is called into question,

the individual or group could justify persistence in use of the car or desistance from use of the car. The more persistence justifications (neutralisation techniques) are used, the more the individual is able to deal with the dissonance of not matching behaviour with expressed pro-environmental beliefs. Consequently, actual car usage would be justified and possibly embarked upon. The reverse occurs if the focus is on desistance justification (use of affirmation techniques).

In line with the theoretical frame discussed above, the following, derived from the broad questions identified in the concluding section of chapter two, constitute the specific research questions that the current study seeks to answer:

1. Why do students' awareness of car user externalities and beliefs that car usage ought to be reduced not translate to reductions in actual and aspired car usage?
2. How are neutralisation and affirmation techniques constructed and used to justify persistence or desistance in car usage by the study's sample population?
3. How are justifications for desistance or persistence reflective of the university students' schemas?
4. How can an understanding of students' justifications for car usage (desistance or persistence) be applied to enhance car user reduction interventions?

In line with the research questions outlined above, the following constitute the study's objectives:

1. To explore the mechanisms used by students to justify persistence in car use (i.e. not reducing car usage by invoking the use of justifications).
2. To explore the mechanisms used by students to justify desistance from use of the car.
3. To analyse how student accounts (accounts for maintaining persistence/desistance) are reflective of their individual and group schemas.
4. To discuss practice interventions that aim at enhancing reductions in car usage.

Conclusively, the theoretical framework discussed in the preceding sections has been used to aid the refinement of the broad research questions that are carried over from the review of literature. Specifically, the theoretical framework delineates the justifications processes for persistence and desistance. It provides a skeletal basis for contextualizing the study's research objectives and questions, in line with my previous claim in the literature section (see section 2.8) that the framework will aid the refinement of the research questions.

The theoretical assumptions inherent in the study's theoretical framework have implications for the methodological as well as methodical approach choices that I make for my study. For example, the theoretical discussion on the origins and foundations of behaviour implies that the methodology should be consistent with the ontology and epistemology of the constructionist research tradition. In addition, the roles of language, social interactions and perspectives have implications for the choice of methods for data collection and analysis that I make for the study. Summarily, the theoretical discussion in this chapter is linked to the study's

methodology and methods; it lays foundations for the study's methodology and methods that are discussed in the next chapter.



## **CHAPTER FOUR**

### **4.0 RESEARCH METHODOLOGY AND METHODS**

#### **4.1 INTRODUCTION**

In this chapter, I elaborate on the methodological choices and methodical choices that underpin the current study. These choices are made in consonance with the research questions and objectives, and the study's theoretical framework. The methodology that I have adopted for the study is underpinned by the ontology and epistemology of the constructionist philosophy. This is in line with the theoretical framework discussed in the preceding chapter.

I start by outlining the ontological and epistemological implications of adopting a constructionist research philosophy. Subsequently, I discuss the overall research design; in line with the ontological (social construction) and epistemological (interpretivist) choices that I adopted to guide the study. An outlining of the research methods (data collection) that were employed in the study follows this. I then proceed to discuss the methodical choices (data collection and analysis) and research strategies and procedures that have been applied in the study. The chapter concludes with a brief elaboration on the presentation and discussion of findings in subsequent empirical chapters.

#### **4.2 RESEARCH METHODOLOGY**

Good research is based on an assumed nature of reality (ontology), assumptions about the nature of what can be known and how it can be known (epistemology), and the role of the researcher in the entire research process (Burrell & Morgan,

1979; Easterby-Smith et al., 1993; Carter & Little, 2007; Hurssel, 2012). However, opinions vary as to the exact number of philosophical positions or paradigms. I adopt the distinction that the major philosophical positions are positivism and phenomenology (Burrell & Morgan, 1979; Easterby-Smith et al., 1993). In line with these authors, I briefly discuss these two and then locate my choice of methodology within the constructionist framework

Positivism assumes the existence of a social world that is external and objective (Easterby-Smith et al., 1993). The central epistemological hypothesis is that knowledge of the objective world is acquired through the employment of objective methods. The positivist approach often seeks to explain and make predictions about an aspect of the social world under study by testing hypothesis, searching for regularities and working out causal relationships (Burrell & Morgan, 1979; Easterby-Smith et al., 1993). To achieve this, large samples are often used. In addition, concepts are operationalised such that they become measurable. The goal is the creation of knowledge that can be generalised to a wider population. Correspondingly, the role of the researcher is to focus on facts, formulate and test relevant hypotheses and work out causal relationships.

On the other hand, phenomenological approaches arose in reaction to the poor applicability of positivism to social science inquiry. Phenomenology assumes different ontological, epistemological and role-of-researcher perspectives. Ontologically, it is idealist in its assumption that social reality is neither external nor objective as assumed by positivist philosophy. However, it is important to note that this idealist perspective is flexible in that some phenomenologists may acknowledge, to a certain extent, the existence of an objective social world (Blaikie,

2007). Irrespective of the extent to which the social world is argued as possessing an objective character, or not, a central phenomenological hypothesis is based on the epistemological assumption that social reality stems from the constructions and meanings assigned to its different aspects by individuals (Blumer, 1969; Lancy, 1993; Blaikie, 2007; Lincoln & Guba, 2000). This phenomenological perspective resonates with the theoretical underpinnings of the framework discussed in the preceding chapter, confirming the views of Burrell & Morgan (1979) that social constructionism is a phenomenological variant.

The link between the constructionist ontology (reality as social construction) epistemology and the role of the researcher is easily deducible. Since reality is socially constructed, the researcher is expected to appreciate and uncover the different constructions and meanings that people attach to their experiences. This is achieved by exploring the use of language in constructing reality, and the inter-subjective and/or collaborative relationships that underpin respective constructed worlds (Gergen, 2009). In other words, the researcher's key role is to understand the phenomenon under study from an interpretivist perspective (Easterby-Smith et al., 1993; Blaikie, 2007). This study's methodology is underpinned by this broad constructionist research tradition. In the following sections, I discuss the specific methodological choices that I have made for the current study.

#### **4.3 RESEARCH APPROACH AND DESIGN**

The study's research questions and objectives revolve around three key aspects. First, the study seeks to explore how a select sample population justify use of the car in the face of environmental awareness and belief that reductions in car user are required to address environmental problems. Secondly, it is concerned with

unravelling how the mechanism(s) of justifying use of the car are reflective of the schemas of the sample groups as individuals and as a group. Finally, it discusses the implication of the study's findings (from the first and second research aspects) for intervention(s) aimed at getting people to reduce car usage. In order to address these research aspects, I contextualised the research questions and objectives within a specified constructionist research methodology. Gergen's (2009) constructionist views provided me with key insights in this regard. These views are consistent with the theoretical frame adopted for the study and are discussed in the following paragraphs.

According to Gergen (2009), the limitations of positivist traditions offer justification and basis for constructionist-oriented enquiries. Constructionist research enquiries, according to him, adopt any of the following three generic approaches. First, those that modify traditional modes of enquiry. These resemble old traditions but adopt new twists (e.g. ethnographic and new history modes of enquiry). Second, those that are stimulated and focus on the constructionist emphasis on discourse. These adopt the traditional empiricist mode of enquiry but with deviations that are new and significantly focused on understanding the import of language content and process or function. Third, those with a major break-away from existing research traditions (e.g. performances as enquiry).

Since this study is about understanding how people account for their adopted car user behaviour using linguistic devices, I adopt the second constructionist approach, which is aligned to uncovering how language functions and what it accomplishes for

the individuals that use it (Gergen, 2009)<sup>9</sup>. In line with this adopted constructionist research approach, my next consideration focused on adopting a corresponding epistemological approach; how best to interpret and make meaning of the study respondents' justification accounts (discourse) for their car user behaviour.

Gergen (2009) discusses the two principle orientations (lines of enquiry) in the study of language in action (discourse). The first is concerned majorly with the content of language in use while the second is concerned with the process or function of discourse. The former is aligned to the narrative research approach. In line with this approach, it is the first-hand accounts of the research participants that are subject to analysis and interpretation. The researcher treats these accounts as voices or messages that s/he then conveys to the public. The implication is that the exploration of life experiences (constructions) is limited to the use of an interpretive approach that focuses on the content of respondent accounts.

In the case of the latter, the emphasis is on discourse process or function; unravelling the functions of discourse in a given situation. Gergen's (2009) analytic example of an account whereby an individual (A) notes in a discourse with another individual (B) that s/he (individual A) is depressed offers a good example of how to distinguish the two principle interpretive orientations (lines of enquiries). It also offers insight and directives on how an account can be interpreted from content and function perspectives by the researcher. According to Gergen (2009) the account that one is depressed is an important content. However, this content could also serve as a request to the recipient to care or show concern. Thus, in the interpretation of

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<sup>9</sup> See chapter three (section 3.1.5) for detailed elaboration on the centrality of language and discourse from a constructionist tradition.

accounts the researcher has two possible options: to focus explicitly on content or function, or to combine the two perspectives. In the instance where the researcher combines both interpretive approaches, Gergen (2009) contends that it becomes imperative to listen twice - first to the content of what people say (listening to their accounts as narratives) and second to the implications of what is being said for subsequent action or other human endeavour. It is this combined interpretive approach that I have adopted for the current study; that is, to interpret and report the study's sample group's accounts from content and function perspectives. Subsequently, I had to choose a research design that is aligned to this constructionist and interpretivist mode of enquiry in a way that properly addresses the research questions and objectives.

The table below is an adaptation from Easterby-Smith et al. (1993) and Gergen (2009). It provides a summary of the methodological and methodical assumptions and choices that I have made to guide the current research's process. It also provides a broad account of my roles as a researcher, as these (roles) relate to the study's methodology and methods (data collection and analysis).

**Table 4.1 Overview of study's research design and research approach**

<b>BASIC ASSUMPTIONS AND BELIEFS</b>	<b>MY ROLE AS RESEARCHER</b>	<b>CHOICE OF METHODS</b>
<p>The world is socially constructed - a shared understanding of what there is.</p> <p>Individual interpretations and perceptions are shaped in interaction, therefore, are influenced by others and cultures.</p>	<p>Try to understand what is happening by focusing on accounts (life constructions); exploring and interpreting them from content as well as function points of view.</p>	<p>Focus groups adopted as appropriate methods to establish different views of phenomena.</p>

As researcher, I am involved in the construction of reality, together with study respondents.	Look at situation(s) from multiple defined ways.  Be aware that knowledge is co-created and as such requires collaborative enquiry. (Research questions and study objectives are linked to theoretical framework and methodology).	Small samples investigated in depth.  Focus groups capture the social interactional underpinnings of individual and group constructions.
As social constructions, behavioural justifications are underpinned by use of language (self-explicated accounts).	Constantly make interpretations and construct meaning from focus group data.	Thematic analysis of data at two levels:  1. Deductive analysis of discourse content.  2. Logical inductive analysis of discourse focus or process.

Adapted from Easterby-Smith et al. (1993) and Gergen (2009)

#### **4.3.1 Basic assumptions and beliefs that underpin the research design and approach**

The first basic assumption that I worked with is the constructionist view that social reality is constructed in interaction using language. This implies that understanding a phenomenon necessitates a study of how language is used in the constructions of the phenomenon under study. This is in line with constructionist perspectives; that reality is constructed and is best understood from interpretivist epistemological perspectives that focus on the individuals' assigned meanings and interpretations of events/actions. (Blumer, 1969; Gergen, 2009). The Berger & Luckmann (1966) perspective discussed in chapter three also highlight the need to consider how social perspectives underpin these interpretations. The implication is that individual redefinitions and interpretations of events are underpinned by shared visions of

reality and collaborative relationships (Gergen, 2009). As such, a middle ground is implied as necessary when making interpretations of social constructions.

This middle ground that I adopt is one which takes into account the different individual and social cognitive representations that shape, and correspondingly influence, individual and group interpretations and assignments of meaning (Callero, 2003; Brown, 1995). Such contexts affect the individual's constructions of self as well as social role interactions (Callero, 2003). Thus, in exploring persistence in and desistance from car user behaviour, I adopted the view that there is need for "deeper appreciations of schemas; perceptions of the different foundations of selfhood, and a more sophisticated understanding of the relationship between the self, others and social action" (Callero, 2003: 128).

Gergen's (2009) discussion on the complexities of moral life shed more light on the implications of schemas. Of particular relevance to the current study is the implication of his explications on social accountability and social positioning for the current study methodology and methods.

According to Gergen, social accountability as discussed by Shotter (1984) implies that correctives are used to give accounts of self. Correctives are used when one needs to account for behaviour. They might also serve the purposes of justifying social positioning, whereby accounts are used to portray or express identities. The implication is that in accounting for persistence or desistance in car user behaviour or when either such behaviour is called to question, one stands "as accused" and is positioned as someone who needs to account for their behaviour. By taking a position, the individual aligns his/her self to specific normative imperatives. S/he identifies with these normative imperatives. In other words, correctives highlight



schemas. Correctives are therefore synonymous with neutralisation or affirmation techniques. As such, Gergen's views are relevant for the current study's approach.

The above assumptions are captured in the theoretical framework discussed in the previous chapter. In this case, the theoretical framework (underpinned by neutralisation and affirmation techniques) is conceptualised as a skeletal frame that serves the purpose of contextualizing and guiding the current study in line with the constructionist methodology and interpretivist epistemology. That the theoretical framework is seen as skeletal frame that guides the research implies that I do not intend to test the frames underpinning theories. Furthermore, I do not set out to determine their predictive utility or use them as exactly as they were used in their initial formulations. They are applied to suit the context of the current study, i.e., according to how they relate to yielding insights into the research questions.

I conceptualise the theoretical framework as a picture of the empirical world that offers a social science description for persistence and desistance justifications. As discussed in the chapter on the theoretical framework, the framework is based on the generic constructionist mantra of how human conduct comes about and gravitates towards accounting for behavioural inconsistency. It provides a description for how persistence and desistance in use of the car are justified and subsequently maintained. It does not necessarily explain why the accounts are presented the way they are. It is on this basis that the inclusion of process/function interpretations of justification accounts for persistence or desistance in use of the car are necessary for a deeper level analysis and understanding of respondents' justifications for adopted car user behaviours and how this is related to schema perspectives.

The overall implication is that the constructionist-oriented interpretation that I make offers insights into individual and group constructions around car user behaviour, albeit from my interpretive reconstruction of respondents' accounts (interpretation underpinned by theoretical perspectives). In line with constructionist views, and as a response to constructionist criticisms that this sort of research approach might not be objective or lead to "truth" (see Gergen, 2009, for details on criticisms of constructionist research enquiries and approaches), I argue that constructionist research enquiries are in themselves "constructions", implying that I do not assume to arrive at "universal objective truths" about car user behaviour per se. Accounts are essentially what they are; points of view. In exploring the accounts that are used to justify persistence in, or desistance from, use of the car from a constructionist point of view, the current study seeks to uncover the different meanings and constructions for adopted car user behaviour from my interpretations of a specific traveller segment point of view. On the other hand, the study findings are (somewhat) objective in the sense that they are aligned to the terms of a (constructionist) defined research paradigm (Kuhn, 1970; Gergen, 2009).

#### **4.3.2 My key role as researcher**

My primary role in the research process is linked to the assumptions and choices noted above. First, I see myself as involved in a collaborative enquiry (Gergen, 2009) whereby knowledge and meaning are sourced primarily from the study respondents' accounts and reality reconstruction; that is, the content and function based interpretations that I make of these accounts. This is in line with the researcher roles that have been recommended for interpretive studies (see Gergen, 2009; Easterby-Smith et al., 1993; Laughlin, 1993; Massey, 2010). Thus, I see myself as part of the social world and the phenomenon that I am investigating

(Carter & Little, 2007). Secondly, the constructionist approach does not imply a random selection of research methods. In line with Gergen (2009; Blumer, 1969; Charon, 2001) I have selected and justified methods for data collection and analysis on the basis that these are aligned to the already discussed methodological choices, research questions and objective aspects outlined in chapter three.

#### **4.4 RESEARCH METHODS**

I had to ensure that choice of method for data collection and data analysis were suited to addressing the research questions and objectives and were aligned to my adopted methodology. In line with the three key aspects of the research questions and objectives (discussed in section 4.2), relevant methods of data collection and analysis were adopted for the study. The data collection and analysis process was conducted in three stages that corresponded with the three main aspects of the study's research questions/objectives (see section 4.3). The methodical choices that I made are outlined in the following sections.

##### **4.4.1 Data collection**

Gergen (2009) recommends that the researcher should ensure that only appropriate methods are used in data collection. The data collection adopted for the study was underpinned by this approach. Focus groups were chosen as the primary source of data collection.

##### **4.4.2 Focus groups versus other data collection methods**

My choice of focus groups as the main data collection method for the study was determined by the nature of the research questions and objectives of the study. Since the focus was on understanding how students use accounts to construct reality (using neutralisation and affirmation techniques to justify and maintain adopted car

user behaviour) there was need and justification for an idiographic approach, that is, getting close to the subject being studied by exploring “detailed background and life history” using subjective insider accounts (Burrell & Morgan, 1979: 6). In addition, there was a corresponding need for a data collection method that captures the individual (inter-subjective) and interactional settings and process within which accounts are used for interpretations and constructions of behavioural justifications for persistence or desistance. Given that these accounts are generated and modified during social interactions (Orbuch, 1997) the method of data collection should also facilitate the exploration of language in action (discourse) from inter-subjective and social interactional perspectives. Data collection methods that meet this requirement would be consistent with the adopted methodology for the current study. On this basis, I considered focus groups as fitting for the study.

I do not assume that data from focus groups are more authentic than data from other methods. I chose focus groups over other data collection methods based on their relative efficiency for the provision of insights into the sources of complex motivations and behaviour (Morgan & Krueger, 1993) as contextualised in the research questions.

The possibility of gaining insight into complex motivations and behaviour is premised on being able to capture “the group effect” (Carey, 1994), i.e., the group interactions and constructions that illuminate the perspectives of the participants on an individual and group basis. The current study’s research questions and objectives are concerned with exploring complex motivations, conceptualised in this study as justifications for persistence or desistance. In line with the research questions, specifically the second research question’s focus on schema underpinnings and the

constructionist methodology, the interactional imports of how respondents construct behavioural justifications implies a need to uncover the individual and group mediated accounts that underpin justifications for either persistence or desistance. The ability to tap into the group effect is facilitated by the interactional nature of focus groups (Carey, 1994). Focus groups allow participants to explore topics or issues as well as to develop analysis of experiences that are common or shared. Kitzinger (1995) argues that the group interaction enables the researcher to identify group norms and cultural values and to understand how opinions are constructed. Individual interviews and questionnaire surveys fall short of delivering the group effect (Kitzinger; 1994; Kitzinger, 1995). Individual interviews would not capture the “group effect”; the interactional aspect of getting respondents to explore and clarify views in relation to their adopted behaviour type (persistence or desistance). Given that this is implied in the study’s research questions and methodology and that this cannot be captured during individual interviews or surveys, these methods of data collection are deemed inappropriate for the current study. Questionnaires would have been appropriate if the current study focus was on quantifying how respondents hold certain (pre-defined) opinions about behavioural justifications. That this is not the focus of the current study implies that the choice of this method would be inappropriate. My choice of focus groups over individual interviews and surveys is consistent with views that focus groups facilitate the exploration and understanding of complex behaviour in a way that questionnaires and surveys do not (Morgan, 1996).

Direct or participant observation (of lived experience) might have been an alternative since these methods too could facilitate exploration of inter-subjective interactional processes in social settings. In fact, given that their settings are more

naturalistic than focus groups, either of these two forms of observation would provide a better option than focus groups for meeting the study's objectives. However, it seemed very unlikely (if impossible) that I would be able to locate and gain access to students who would naturally be discussing issues related to the research questions and objectives of the study. Such instances might occur sporadically. However, the chance of finding the opportunity to observe such instances is unrealistic. Along this line, focus groups are a more realistic data collection method for the current study. My justifications for using focus groups are in line with Morgan's (1997) views on when the use of focus groups is recommended rather than the use of participant observation.

Related arguments and justifications for the employment of focus groups in the way that I have applied them abound in literature. To mention but a few of these arguments: focus groups allow the researcher to gain information at an individual and group level (Hyden & Bullock, 2003). They can offer insights into the nature of shared perspectives (Kitzinger, 1994; Wilkinson, 2004). In addition, they offer a good platform for eliciting discussions on behavioural inconsistency (Wilkinson, 2004) and are particularly relevant when the use of direct observation is not possible (Morgan, 1997). In addition, many studies illustrate the successes of using focus groups for discursive studies on young people's behaviour (see Marrow, 2001; Oates et al., 2003; Stafford et al., 2003; Line, 2008).

#### **4.4.4 Data management and analysis**

Data collected from focus groups and interviews were recorded using a digital tape recorder. Subsequently, they were transcribed verbatim and uploaded on Nvivo for management and analysis.

Analysis of transcribed focus group data was also aligned, primarily, to address the research questions and objectives in line with the study's methodology. Thematic analysis underpinned the analytic approach as it allowed the analysis and interpretation of data from content and function/process perspectives.

#### **4.4.4.1 Thematic analysis**

Braun & Clark (2006) note that Thematic Analysis belongs to one of the two major strands of qualitative analytic methods; those that derive from an adherence to an epistemological or theoretical position on one hand, and those that are not constrained, *per se*, by theoretical or epistemological standpoints. According to these authors, Thematic Analysis belongs to the latter camp of qualitative methods that are “essentially independent of a particular theory and epistemology, and can be applied across a range of theoretical and epistemological approaches” (Braun & Clarke, 2006: 78). Its flexibility allows it to be useful in analysis of data on different levels. The sort of freedom that this approach suggests has potential for providing rich and detailed accounts of data, if clear and concise guidelines are used. Massey (2010) and Braun & Clarke (2006) provide clear and concise guidelines that I have followed and applied for the analysis of focus group data.

The following steps outlined by Braun & Clark (2006) were applied for analysis of focus group data.

1. Familiarisation with data: this involved reading and re-reading the data, transcribing and taking initial notes.
2. Generation of initial codes: I combined coding on Nvivo with manual coding. Manual coding was done by writing notes on the text. This method is recommended by Braun & Clarke (2006) and was used applied majorly in

the analysis. Nvivo was useful for coding data extracts. However, when it came to reading and re-reading respondents' comments, I found it easier to work with printouts of codes generated from Nvivo. Reading, highlighting and taking notes, for me, was easier when done on printouts as against with Nvivo. In other words, Nvivo was good for data management while analysis and interpretation was easier to do on printouts of data extracts from Nvivo.

3. Searching for themes: this involved sorting out the codes into different potential themes. I understand that a theme, as defined by Braun & Clark (2006: 90), "captures something important about the data in relation to the research question, and represents a patterned response or meaning within the data set".
4. Reviewing themes: this involved refining themes and possibly merging related themes into one or breaking up specific themes into more than one theme. This process was guided by how themes are reflective of issues related to research questions and objectives.
5. Defining and naming themes: this involved defining and re-defining the themes that were subject to analysis and reporting.
6. Writing up of thesis: this involved writing up of a full report (presenting findings and discussions on findings).

The application of these steps is elaborated in the next section (4.5), where I discuss the actual analysis approach that I adopted for the research process.

The overall thematic approach (specifically 1 to 5) was guided by Massey's (2010) explication on data treatment. Massey (2010) contends that three kinds of data emerge from the raw data (transcribed text):



1. Articulated data: this is data that “arises in direct response to the questions and prompts provided in the question guide” (Massey, 2010: 23). It offers, in the participants own words, their interpretations, commentaries and descriptions on the topics that are discussed. In line with Massey (2010), the focus group questions consisted of direct questions that were asked across the board, that is, at all focus group sessions. Probes were also used to obtain detailed insights on issues raised in response to direct question.
2. Attributional data: this sort of data “derive from comments and discussions that relate to *a priori* theories, operating hypotheses, or research questions that the evaluator brings to the study”. In addition, Massey (2010: 23) contends that the attributional data incorporates data that are applied to “the search for signals or indicators reflecting theories of interest” (Boyatzi, 1998: 33). Articulated data could also be attributional data if they relate to theories as considered in the foregoing discussion.
3. Emergent data: this refers to “information that contributes to new insights and hypothesis formulation and is the unanticipated product of individual comments and exchanges among groups” (Massey, 2010: 23). Analysis of data on the third level was especially used when analysing comments, especially following probes or aside comments that highlighted themes or interesting issues not captured by the direct questions.

In line with Gergen (2009), data analysis focused on interpreting the content and function of accounts. In other words, I employed a reality reconstruction approach (Flick, 2006) whereby I made claims regarding what respondents’ points of view implied for their adopted car user behaviours (Lindsay & Hubley, 2006; Flick, 2006; Massey, 2010).

I have also applied investigator triangulation in specific cases as a means of enhancing the validity of my interpretation. In line with Guion (2002) I subjected my interpretations to scrutiny from different research colleagues. For instance, I considered how the views of other PhD students corresponded to my interpretation of particular respondent comments. In addition, I also used feedback from my academic supervisors to weigh the merits of my interpretations.

In the following section, I elaborate on the actual steps and procedures that were undertaken in the research process.

#### **4.5 RESEARCH STRATEGY AND PROCEDURE/PROCESS**

In this section, I outline the strategy and procedural steps that were undertaken in the study. Where necessary, I reiterate some of the methodological and methodical assumptions and choices that underpin aspects of the study's research procedure.

##### **4.5.1 Research strategy**

In adopting a research strategy, I considered different logics of reasoning and approaches that could best reflect my methodology and methods, and also adequately cater for addressing the research questions and objectives. Blaikie (2007) discusses the four strategies that are applicable to social science research. Of the four possible strategies (induction, deduction, retroduction and abduction), the inductive and deductive logics of reasoning were employed. A combination of these reasoning processes is useful in cases, such as the current study, where the research approach is exploratory and applies data analysis from different perspectives (Blaikie, 2007).

Copi & Cohen (2002: 43) argue that “every argument makes the claim that its premises provide grounds for the truth of its conclusion”. In deductive arguments, conclusions are supported by initial premises conclusively. In other words, if the premises are true, then the conclusion must be true. Inductive arguments do not assume that their premises, even if they are true, support their conclusions conclusively. In this case, premises are assumed to support their conclusion based on degrees of probability. In other words, inductive arguments do not lay claims to certainty or absolute truth. This distinction between the inductive and deductive logic of enquiry guided my assumptions and thematic analysis of focus group data. Further elaborations on how the deductive and inductive logics of reasoning were employed are made in relevant sections.

In the next sub-section, I outline the research questions (breaking them down according to how they relate to different research questions and objective aspects and corresponding stages). I then elaborate on the actual research process and procedures and how the three stage approach that I employed served to address the different research questions and objectives. I also elaborate on how the logic of reasoning (inductive or deductive) that I applied shaped the procedures and analysis that were undertaken.

1. Why does students’ awareness of car user externalities and beliefs that car usage ought to be reduced not translate into reductions in actual and aspired car usage?
2. How are accounts constructed and used to justify persistence/desistance in car usage by this sample population?

The first two questions constitute the first research aspect. These were addressed in the first stage of the research process. In the first stage, I worked with a student sample to find answers to the questions above. Data was collected using focus groups, and analysis of discourse was conducted majorly from content perspective.

Although it would be expected that the respondents would be aware of environmental issues, I did not wish to take this for granted. Therefore, I deemed it necessary to confirm the implicit assumption in the question, i.e., that respondents were aware of car user environmental externalities and believed that car usage ought to be reduced. Therefore, in addressing the first research question, I started by establishing respondents' awareness of the environmental externalities associated with car use. Subsequently, respondents' accounts for use of the car were analysed to ascertain why awareness might not translate into actual reductions in car use. The neutralisation and affirmation technique constituted the frame for analysis in this regard (addressing the second research question).

Respondents' accounts were coded according to how they corresponded to the definitions of the different types of affirmation or neutralisation techniques. The logic of enquiry used in this case was deduction; comments in line with premises that defined specific neutralisations or affirmations were coded as reflecting the corresponding neutralisation or affirmation technique. Finally, I introduced how justification accounts serve the purposes of maintaining persistence or desistance in use of the car. The results obtained from the first stage addressed corresponding research objectives 1 and 2. They also paved way for the second phase of the research process.

The second stage process sought to find answers to the following research question:

3. How are justifications for either desistance or persistence reflective of the university students' schemas (perceptions of self, others and cultural ways of life that specify and recommend different behaviour types).

The analysis and subsequent discussions in this regard focused exclusively on the function of discourse. I consider the purposes that justifications serve for individual and student groups. In line with Gergen (2009) I interpret discourse processes and functions for individual and student groups using selected theoretical perspectives (neutralisations and affirmations, attributions, drift and identity), specifically to show how justification accounts are underpinned and reflective of schema perspectives. The inductive logic of enquiry guided the analysis and subsequent reality reconstruction that I employed in addressing this second question.

The implications of key findings from these two stages are then linked to intervention that is aimed at getting people to reduce use of the car. Thus, it addresses the fourth (and last) research question:

4. How can an understanding of students' justifications for car usage (desistance or persistence) be applied to enhance car user reduction interventions?

Similar to the preceding stage, a logical inductive approach in line with Copi & Cohen (2002) was employed in my analysis and discussions at this stage. In arguing for the implications of focus group findings for intervention, the claims that I make are inductive since I do not argue for conclusiveness or argue that they are absolute truth. This logico-inductive (derived from logical induction) reasoning approach is

also consistent with the constructionist approach that objective reality is perspectival and not universal (Gergen, 2009).

#### **4.5.2 STUDY POPULATION**

University students were chosen as the population under study. Studies show that the different contexts of understanding and interpretations given to car usage start at early ages through socialisation, and that teenage travel has received relatively little attention (Lyons & Swinbank, 1998). This implies the need for more studies that focus on understanding young people's travel behaviour. Although recent studies have employed university student samples (Klockner & Blobaum, 2010; De Groot & Steg, 2010; Klockner & Freidrichsmeier, 2011), findings were not specifically related to the perceptions and perspectives of the sample as university students. Where we see studies analysing the views of students, it is often the perspectives of primary or secondary school pupils that are reported (see Halden, 2003; Goodwin & Lyons, 2010; Baslington, 2008; Haustein et al., 2009; Line, 2008). This is despite the fact that study evidence also suggests that young people see the period of embarking on university studies as significant to the commuting choices they make (Lyons et al., 2008; Goodwin & Lyons, 2009).

For young people, understanding their travel choices is a good way of understanding their intentional states. Intentional states are the meanings and interpretations that construct a field of action (Richardson et al., 2009); they guide behaviour and can provide insight into present and future perceptions of selfhood. In other words, focusing on the justifications for persistence of a specific young people's traveller segment also facilitates a deeper level understanding of their intentional states and process of becoming. This is because the schemas that underpin their justifications

for use of the car are the same as those that shape their evolving senses of self. Moreover, since car user behaviour is linked to identity expressions and self-construction, their justifications of continued use of the car will highlight their process of becoming as they understand and collectively construct this process.

Specifically, since travel choices reflect schemas and lifestyle choices and the current study focuses on schemas, focusing on university students' schematic perceptions and justifications for car use will also relate to, and offer insight into, their intentional states and perceptions of environmental issues and sustainability. Despite the fact that universities have become sites for teaching sustainability, and universities have led the way in the championing of numerous sustainability initiatives (Thomas, 2004), very few studies have attempted to explore university students' perceptions of sustainability issues. This implies that this very important area has been under-researched (Kagawa, 2007). This is also in line with the view that studies on the lifestyles and cultures of university students have witnessed a dramatic decline following the 1970s (Flacks & Thomas, 2007). Therefore, in addition to addressing the points of departure previously discussed, the current study's findings will help in creating more understanding of present day (21<sup>st</sup> century) university students' and young people's perceptions of pro-environmental behaviour and their evolving senses of self. Finally, findings from the study, it is hoped, will aid interventions to reduce car usage as well as open up areas for further research.

#### **4.5.3 Sample group and units of analysis**

Choices of sample were determined by the nature of the research enquiry (Marshall, 1996). In the case of the current study, the adopted constructionist philosophy

implies that the perceptions and interpretations of values, motivations and perspectives underpinning justification accounts will not be normally distributed. The implication, in line with Marshall's (1996) view, is that probability-sampling approaches are not appropriate. Therefore, a non-probability sampling approach suffices for the current study.

Students at The School of Management, Royal Holloway University of London constituted the sample for the study. A judgemental sampling approach was adopted in selecting the sample for the study. For the purposes of exploratory studies, such as the current study, where the major focus is on gaining an understanding of complex car user behaviour as against arriving at generalizable results, the more important sampling issue was to ensure that respondents are appropriate "informants" (Marshall, 1996). In line with the view of Marshall, the most appropriate sample in this case would have to be constituted of university students, since this sample reflects the population under consideration. The choice of this sample is justified on the basis that university students' perceptions and subcultures reflect various interests and expectations that are shared (Bay, 1962; Flacks & Thomas, 2007). Therefore, I assume that Management students (or students from any other department at Royal Holloway) would reflect the shared perspectives on campus. However, this is not to say that students' perspectives in other universities would be the same as Royal Holloway. This raises the issue of generalizing the study findings to other populations. Given that the focus of the study is exploration as against generalisation, the choice of any university students would suffice.

On the other hand, there is a good argument for focusing specifically on Management students. Evidence from the *Financial Times* Top 50 Global Business



Schools shows a trend towards the inclusion of sustainability-related courses in Management programmes, and suggests that a higher number of students have expressed interest in these topics (Christensen et al., 2007). The idea is to equip potential future managers with knowledge and awareness of key issues such as Corporate Sustainability and Corporate Social Responsibility (Marrewijk & Werre, 2003). This view is consistent with those that argue that the university environment and the interactions it fosters are avenues through which students' identities are moulded or shaped.

Feldman (1972) argues that universities supply students with the skills they need in their future positions. By implication, the student who attends university or college goes through a certification process. Upon graduation, the student is certified as competent to take on certain social and occupational positions in the world (Kaufman & Feldman, 2004). S/he acquires a new and validated social status in a positional sense (Meyer, 1972); managers, in the case of our sample group. Feldman (1972) also discusses how students' identities are shaped. His arguments are relevant for our study because they are in line with the constructionist perspective on social interaction/collaboration. He notes that as the student passes through college, he is incorporated into new social positions and encouraged to imbibe the qualities that these positions demand. Those around him (teachers, peers, parents etc.) define him in terms of the position he hopes to achieve. Such definitions of the student's self are specific to the programme on which he is studying. Thus, Feldman (1972: 13) argues that not only does the student become an "...upperclassman rather than a lower classman or a sociology major rather than a fine-arts major, he is also a would-be lawyer rather than a would-be plumber and so forth". The university experience and relevant others impress this sort of identity-formation upon the

student. In addition, the university offers the student the means to enact and practice the behavioural implications of the social position s/he aspires towards. In the final analysis, the student may well begin to see himself as someone different from what he originally was prior to attending college (Feldman, 1972). Thus, as much as there is a collective shared perspective amongst university students, departmental orientations and influences could affect broader perspectives. Departmental orientations can therefore be seen as being synonymous with the sub-cultural level perspectives that exist in wider societies.

We see the constructionist perspective on the nature of the human being in the above discussion. The role of interaction is also evident. The student interacts with his learning environment (people, teaching and learning resources etc.). He defines himself as he sees himself; he is defined in a particular way by others, and his definition of self is attributable to the definitions other make of him (Goffman, 1963; Kaufman & Feldman; 2004). In addition to this, he is affected by structural, institutional and political economic factors that affect him directly or indirectly within the university environment.

This brief exposition is relevant for several reasons. First, university or college experience is grounded on social interactions that help shape students' identities (Meyer, 1972; Goffman, 1963; Kaufman & Feldman, 2004). The choice of management students is used specifically in this study to explore how the students' perceptions of their identities and assumed roles (as future managers) might affect their accounts for actual, as well as intended, car user behaviour. More specifically, that individuals acquire specific identities that are constructed and defined during university experience implies that management students are likely to have opinions

of themselves in line with their academic orientation. The implications of this felt identity on car user behaviour, amongst others, is a schema aspect that is explored in detail in this study.

The arguments aligned to the judgement sampling approach (i.e. departmental orientation arguments) also suggest that I could have focused on any other department or university. From this perspective, the judgemental sampling approach that I have applied can be argued to overlap with convenience sampling. Obviously, the sampling technique applied for the study has limitations. I acknowledge and discuss the study limitations in the concluding chapter.

#### **4.5.4 Research processes and procedures**

Ethical approval was sought and obtained for the study from the School of Management in June 2009. Students were then invited to participate in the focus groups. In total, thirty-four students were recruited for focus groups. Twelve of the respondents (five females and seven males) were first year undergraduates at the School of Management. The remaining twenty-two respondents (fourteen males and eight females) were Master's students on the Master's Programme in International Management. All focus groups were conducted in December 2009.

A general e-mail<sup>10</sup> was sent to all first year undergraduates at the School of Management using the class e-mail list. Six students replied to this initial request invitation. A second round of e-mails with the same content as the initial e-mail was sent to recruit more students. This procedure increased the number of potential respondents as four more students expressed interest and were included in the

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<sup>10</sup> Content of the e-mail is included in the appendix section (Appendix 3)

respondents' list. Subsequently I obtained permission from the School of Management and a lecturer responsible for teaching a compulsory course agreed for me to attend one of the class lectures and recruit students at the end of the class. The idea was to have access to all first years in the department. This process increased the number of potential respondents by a further six (making sixteen in total).

The students who expressed initial interest in participating in the focus groups were requested to sign up on the same focus group with their friends or those they identified themselves as being familiar with. This would facilitate use of pre-existing groups – clusters of students who already knew each other. I hoped that conducting focus groups with people familiar with each other would make the discussions similar to their normal day-to-day discussions. In their study of AIDS, Middleton & Edwards (1990) argue that such pre-existing groups (flatmates, colleagues, family and friends) would naturally talk about issues related to their topic of study. Such groups make up what they call sites of “collective remembering”. Using people who already knew each other also implied that participants would be able to relate to each other's comments. They would also be able to challenge and debate their opinions just as they likely would in natural situations. In addition, such groups have been argued to facilitate more open and sincere discussions, such as unravelling instances when respondents' actions have gone contrary to their beliefs (Kitzinger, 1994). This use of pre-existing groups was considered suitable for the study's major objective: gaining insights into explanations of respondents' car user adopted behaviour.

In addition, I teach the first year students at the School of Management and thought it was necessary to make the first year respondents as relaxed as possible. I consider

myself as being very approachable and did not assume that the first year students would feel uncomfortable or reluctant to attend sessions that I organised. However, with hindsight, I might have influenced the decisions of some students to participate or not to participate. The fact of me being their teacher might have influenced decisions to attend or not attend focus groups.

Respondents were asked to sign up to one of the three days and times fixed for the focus groups sessions. I agreed upon these dates and times with students after the students notified me of their availability. Wednesday and Thursday evenings were identified as free by the first years. Students who had signed up to participate were sent e-mails and reminders with details of the date, time and venue for their discussion. I anticipated a few withdrawals at the last minute and hoped to have groups with a minimum of four respondents. As anticipated, four students opted out of the focus group discussion. A total of twelve first year undergraduate students participated in two different focus group sessions. Four formed the first group. The remaining eight were assigned to the second group.

A similar approach was used in the recruitment of Masters students (MSc). E-mail contact with the MSc students yielded a similarly low response rate. The first two students who signed up for the focus group sessions identified themselves as friends and were assigned to the same focus group session. As a means of increasing the number of potential respondents, I asked one of the MSc students to assist me in recruiting his fellow classmates. This approach yielded positive results. The co-opted MSc student arranged two informal meetings with some of his classmates at one of the university cafeterias. Six of the students involved in the informal discussions signed up to participate in the formal focus group discussions. In

addition, the MSc assistant took me to meet different MSc students (at the library, pubs and after classes) to recruit other MSc students using word of mouth. This approach yielded positive results as twenty-two (22) students eventually participated in the MSc students' focus group sessions.

I attributed the higher turnout rate of MSc students to the role played by the MSc student that helped me in the recruitment. I recall that ten of the respondents turned up on the day of the focus groups with him. At his request, I arranged a meeting place and hoped they would turn up, and they did. I did not meet or contact these ten students, and he had come with them immediately after lectures. Using a similar approach could have increased the number of respondents from the first years. It could also have been that the MSc students felt more disposed to attend the focus group sessions since, unlike the first years, the student-teacher relationship did not apply.

#### **4.5.5 Focus group sessions**

In total, six different focus group sessions were conducted. A semi-structured question guide<sup>11</sup> was developed for the focus groups. Direct questions (and probe questions) were used to facilitate discussions among participants. In the use of direct questions, I asked the students questions about a specific topic or issue related to their car user behaviour. The direct questions targeted specific issues related to the research questions discussed in section 4.4.2. The direct questions that were asked were the same for all of the focus group sessions.

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<sup>11</sup> See appendix for copy of question guide.

The sessions started with questions that sought to confirm respondents' preference for use or non-use of the car, and awareness of environmental externalities from car use amongst focus group respondents. Subsequently, respondents were requested to discuss their motivations and reasons for car usage from different perspectives. Emphasis was on uncovering the following: the influences and perceived pressures from relevant others to use the car; awareness of the externalities related with car use; felt obligations to respond to addressing the problems associated with car use; and justifications for continued use of the car in the face of possession of pro-environmental cognitions. Where necessary, probes and scenarios were used to gain in-depth understanding about interesting issues that arose during the course of the discussions. Respondents were encouraged, especially with the use of probes, to respond to the questions from different perspectives; as individuals or members of any groups or societies (nationalities) they identify with. This approach is consistent with the collaborative enquiry role (Gergen, 2009) that I adopted for the research process<sup>12</sup>. It was used to “draw out” the different schema perspectives that affect and drive justifications for adopted car user behaviour.

There was a good atmosphere in all sessions. Generally, respondents were very happy to discuss and talk about every issue and question. This is attributable to the focus of the study; discussions about cars. Bay (1962) argues that cars and dates occupy top positions in campus life. Recent studies also note the appeal of cars to young people (Wright & Curtis, 2005). While sensitive topics might not be easily discussed in focus groups (Kitzinger, 1995), appealing ones, such as use of the car, are likely to generate discussions. This was the case in all sessions. Although the

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<sup>12</sup> See section 4.2.2 for elaboration of my role as researcher.

study does not focus specifically on identifying the imports of demographics such as nationality, the sample possessed an international character. The sample consisted of students from the UK, Ukraine, Germany, Spain, Khusestan, Armenia, India, Pakistan, China, Taiwan, U.S.A, Mexico, Nigeria, Poland and Japan. All respondents were registered as full time students at Royal Holloway, University of London. Respondents age range was 18 – 25.

To facilitate the moderation of group sessions and subsequent transcription and coding of focus group data, I grouped respondents according to "Group Sets" and assigned them identification codes.

**Group Set 1** - This group set comprised of two similar groups of first year undergraduates. Two focus group sessions were conducted. The first group (A) was made up of four respondents (3 male and 1 female students) while the second group (B) was made up of eight respondents (4 male and 4 female students).

**Group Set 2** - This group set comprised of MSc students and was made up of two respondent groups (A and B). The first group was evenly split (four male and four female students) while the second was male dominated (eight male and two female students).

The main reason for the choice of MSc students was the assumption that they (MSc students) have demographics (e.g. age, education levels etc.) which are different from those of first year undergraduates. The idea was to increase diversity of characteristics amongst respondents. I did not focus exclusively on comparing any demographic differences.



**Group Set 3** - Group set three was comprised of two focus groups (A and B). Each of these groups was composed of two MSc students (2 male students for group A and 2 female students for group B). Having only two respondents was a result of late withdrawals and cancellation by respondents. I decided to capitalise on the fact that groups of two, although not as effective in highlighting collaborative relationships as larger groups, would allow for more in-depth sharing of ideas between participants. Small groups have the advantage of enhancing participation and allow for expressions of opinions on all focus group questions by participants (Wilkinson, 2004; Line, 2008). In addition, I used these groups as means of delving deeper into the ideas already expressed in previous focus groups.

To enhance identification during transcription and reporting of findings, specific codes were assigned to focus group respondents. Respondents in Group Sets 1 and 2 were assigned codes reflecting their groups (A or B), level of study (S for undergraduate or M for Masters) and gender (M or F). Correspondingly, undergraduate male respondents in group A of Group Set 1 were assigned ASM codes while those in group B were assigned BSM codes. Undergraduate females are identified as ASF or BSF. Male and female Masters students in Group Set 2 are identified as AMM and BMM, and AMF and BMF respectively. The codes for male respondents in Group Set 3 are similar to those for Group Sets 1 and 2 save for that that the groups (A or B) appear last (MMA and MMB). The two female students are assigned FFA and MR for groups 1 and 2 respectively.

I then assigned numbers after the codes to identify specific students. The numbers were assigned during transcription and also used in the reporting of findings. The assignment of numbers was made on a sequence of discussion basis, i.e, when a

respondent makes his/her first comment during the group discussions. For instance, ASM1 or ASF1 was assigned to the respondent who made the first comment in response to the moderator's first question during focus group session for group A of Group Set 1. Correspondingly, BSF2 or BSM2 identifies the respondent whose comment followed that of the first (BSF1 or BSM1) to respond to the moderator's initial question in group B of Group Set 1. The table below is a summary of the respondents' group sets and codes.

**Table 4.2 Focus group respondents' Group Sets and codes**

FOCUS GROUP	MALE STUDENTS' CODE	FEMALE STUDENTS' CODE
GROUP SET 1 – 1 <sup>ST</sup> Focus Group (1st Yr UG: 3Male, 1 Female)	ASM (Group A UG Student, Male)	ASF (Group A UG Student, F)
GROUP SET 1 – 2 <sup>ND</sup> Focus Group (1st Yr UG - 4 Male, 4 Female)	BSM (Group B UG Student, Male)	BSF (Group B UG Student, Female)
GROUP SET 2 – 1 <sup>ST</sup> Focus Group (MSc - 4Male, 4 Female)	AMM (Group A, Masters Male )	AMF (Group A, Masters Female)
GROUP SET 2 – 2 <sup>ND</sup> Focus Group (MSc - 8Male, 2 Female )	BMM (Group B, Masters' Male)	BMF (Group B, Masters Female)
GROUP SET 3 – Focus Groups 1& 2 (MSc - 2 male, 2 female)	MMA and MMB (Masters Male, A and B)	FFA and MR (Abbreviated from respondents' real names)

The principle of data saturation (Rodwell, 1998) was used to determine if there was a need for more focus group sessions to be conducted. In accord with the principle, data that had been collected was assumed to be sufficient when nothing new was being uncovered from the different focus groups. As focus groups did not yield any

radically different results across the board, I assumed that data had reached a point of saturation and that there was no need to arrange for any further focus groups.

The principle was also used to guide the discussion process. Discussions on a particular question involved the moderator making the necessary probes as a means of eliciting further information. The probes and discussions on a particular question ceased when nothing new was being added to already-expressed ideas and opinions regarding the question. Applying the principle of data saturation helped direct the focus groups and ensure that the right level of response was obtained for each question or issue raised and across respective focus group sessions.

#### **4.5.6 Data management and analysis**

The focus group sessions lasted approximately one hour on average. Participants consented to having their opinions recorded after confidentiality and anonymity were assured. The discussions were recorded using a digital recorder. Kitzinger (1994) has argued that one of the best ways of being in touch with proceedings of focus groups is to have researchers present at the focus groups and for them to take part in the transcription of focus group data. I applied this principle and produced a verbatim transcription of proceedings and discussions during the focus groups. The transcribed focus group data was uploaded onto Nvivo for management and further analysis.

Following the recommendations of Braun & Clark (2006) and Massey (2010) discussed in section 4.3.4.1, focus group data was subjected to thematic analysis. The methodical series of steps recommended by these authors was followed in the collection and analysis of data from the focus groups. Similar steps and approaches have been adopted by previous qualitative studies (see Krueger & Cassey, 2000;

Boyatzis, 1998; Bernard & Ryan, 2007; Massey, 2010). These recommendations and strategies are explained in the following sections as they have been applied.

#### **4.5.7 Creation of data set for analysis**

In line with Braun & Clark (2006), data sets were created to address the respective aspects of the research questions and objectives (these three research aspects are outlined in section 4.2).

I started by creating a data set to address the first aspect of the research question/objective. I extracted the entire responses that the thirty-four (34) focus group participants gave when they were asked direct questions relating to their awareness of the environmental externalities related to car use and relationship between CO<sub>2</sub> emissions from cars and climate change. In addition, I extracted opinions on the veracity of claims that CO<sub>2</sub> emissions from cars are largely responsible for climate change, and about felt obligations to reduce car usage based on awareness of environmental consequences. I also included comments not made in response to direct questions or quotes but relevant to the four issues outlined above. This questioning approach is in line with Massey's (2010) question levels (articulated data) and focuses predominantly on analysis of accounts' content.

The data extraction approach was adopted because it provides a generalised view of students' beliefs and opinions based on the accounts they render during the group discussions. The idea is not simply to make an evaluation of any differences or similarities that exist across the different groups. Rather, the analysis is concerned with making what Braun & Clarke (2006) refer to as "a rich thematic description of the entire data set" such that the predominant themes or important themes related to

the topics of interest are identified. This approach implies that the themes that are identified, coded and analysed accurately reflect the contents of the data set.

#### 4.5.8 Initial data coding processes

The second step involved coding all the data items that constitute the initial data set. All thirty-four focus group respondents agreed that using the car has environmental impacts. In this case, it was the different answers that students used in response to the direct questions about their beliefs and opinions about the environmental externalities associated with car usage that were coded. An example is used to show the coding strategy that is used in the study derived from Braun & Clark (2006).

**Table 4.3 Example of initial coding procedure**

DATA EXTRACT	CODED FOR
<p>In my case I am not quite sure. I just read in the newspaper, that err... some researchers in the North Pole err have like err... cheated in their... err, like they tried to analyse how quickly ice melts and they err like, they err..., the researchers, they wrote like data, but, they wrote the wrong data. The ice melts 50cm a day, they wrote 120cm just to get more err, more, err, how I can say that, more prestige, they just want to warn humans quicker, so they influenced the data (FG Respondent – AS3).</p>	<p>-uncertain about veracity of claim</p> <p>-read in newspaper</p> <p>-wrong information disseminated</p> <p>-information used to create sense of urgency and/or threat</p>

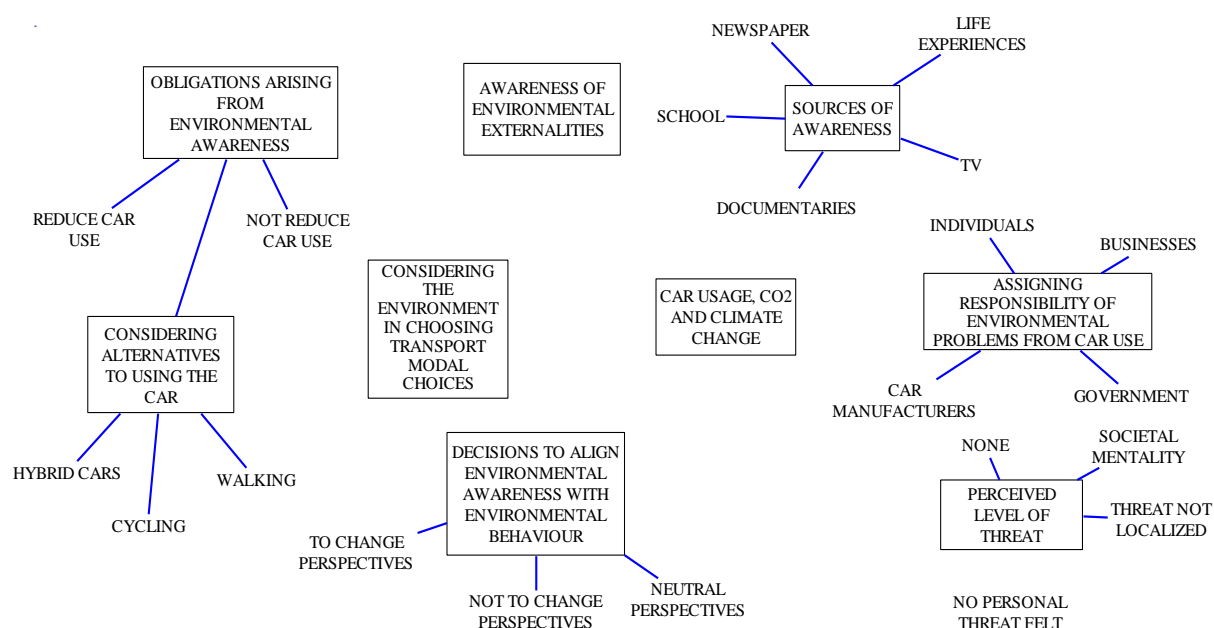
The entire data extracts that make up the data set were coded similarly to the one above. This initial coding process yielded a total of one hundred and sixty four (164) codes. For the purpose of a thematic analysis, the list of codes was refined. The

refining process involved categorising these codes into themes. The resultant themes were used to develop the initial thematic map.

#### 4.5.9 Development of thematic maps

In line with Braun & Wilkinson (2003), the following thematic map was developed from the initial coding stage.

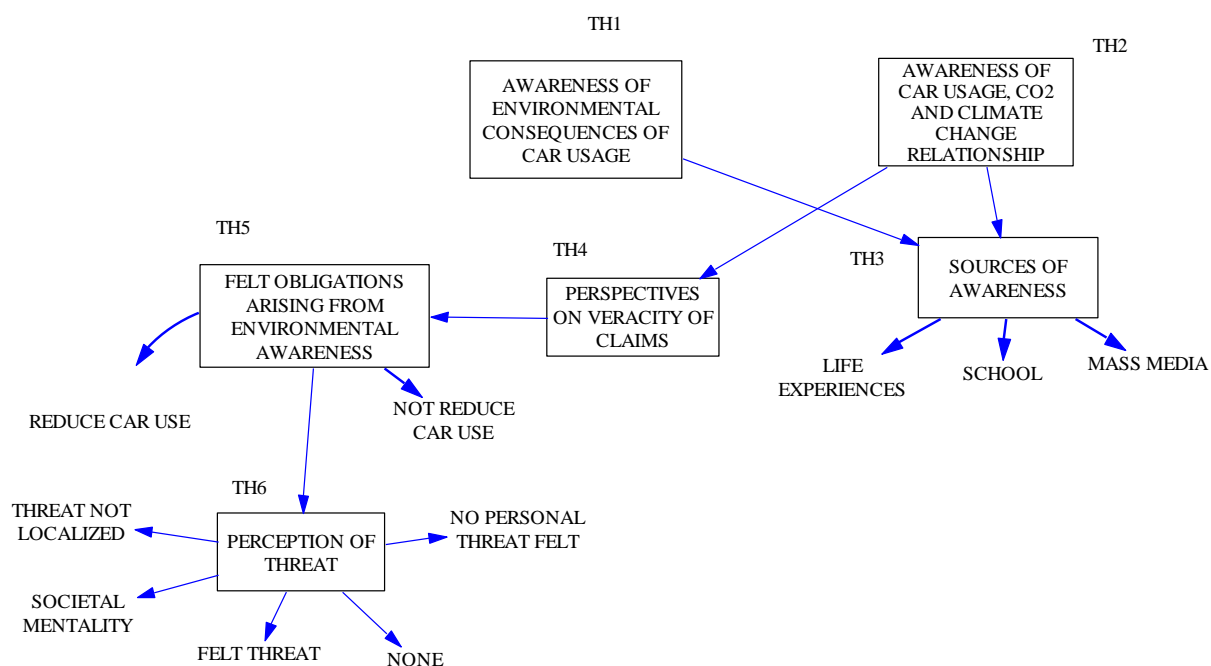
**Figure 4.1** Thematic map of the initial coding process



In the initial thematic map, nine main themes (linked to different sub-themes) were identified from the revised listing of codes. As far as possible, all the codes that emerged at this stage of the analysis were categorised as sub-themes of a major theme. The sub-themes are conceived as elements of overarching or related codes, which, when combined, express the opinions or beliefs of focus groups participants on a theme area. For example, the theme on “sources of awareness” has “*newspaper*”, “*school*”, “*TV*”, “*life experiences*” and “*documentaries*” as sub-themes.

A further review of the initial thematic map was conducted to show the relationship between themes (Braun & Clark, 2006). Arrows were used to express existing relationships between themes. Furthermore, sub-themes that expressed the same or similar opinions were grouped together to form a new sub-theme using a generic caption. For instance, the three sub-themes that capture the different sources through which students obtained information on environmental awareness (namely TV, Newspapers and Documentaries) were categorised as “Mass Media”. The use of generic captions enabled the development of a simpler and more focused thematic map (see figure 4.2).

**Figure 4.2 Final thematic map**



Analysis at this stage focused on the content of respondent accounts. Initial analysis showed that all respondents, without reservation, were aware of the environmental impacts associated with using the car. This and other related findings paved the way for further analysis. The next analytic stage focused on uncovering the links

between respondents' expressed pro-environmental cognitions and respondents' actual or intended car user behaviour.

Further analysis was conducted on focus group data to explore why expressed pro-environmental cognitions do not result in actual reductions in car user behaviour and how respondents account for their actual or intended car user behaviour. The theoretical framework underpinned by neutralisation (Sykes & Matza, 1957) and affirmation (Copes & Williams, 2007) techniques underpinned this extended analysis of focus group data (addressing the second research question).

In the first instance, a thematic analytic approach (Massey, 2010; Braun & Clarke, 2006) was applied to identify and categorise the different neutralisations and affirmations used by focus group respondents to justify their adopted car user behaviour. Similar to the analysis in the previous stage, analysis at this point focused on content of accounts.

I scanned the entire focus group transcripts for extracts that reflected use of specific neutralisation or affirmation techniques. Comments in response to direct questions that requested respondents to account for why they would opt to use cars in the face of awareness of the externalities related to using the car (and consequent belief that there was need to reduce car usage) were extracted. Comments in response to probes that reflected employment of neutralisation or affirmation techniques were also extracted. Summarily, the data set for analysis on justifications for persistence or desistance in use of the car via employment of neutralisation or affirmation techniques consisted of respondents' comments in response to direct questions in this topic area and specific comments that I interpreted deductively as reflecting specific neutralisation or affirmation techniques.



#### 4.5.10 Follow-up coding of data items

The qualitative data analysis software, Nvivo, was used for the coding process. The coding system used in the identification of the neutralisation techniques was deductive. The data set was scanned for attributional data; comments that were interpreted as reflecting the definitions of specific neutralisations or affirmations for persistence in or desistance from use of the car. The following excerpt from coded data items illustrates the strategy that has been used for the coding of data extracts:

Denial of a victim	...there was a girl jogging next to those cars ... she was running and was inhaling a lot of it in her lungs. That's when I realised, yeah, that's an issue. Then I find fault in her, instead of running in a park she is running in a road, so that's her fault (AMM1).
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In the case of this quote, the respondent is interpreted as employing “denial of the victim”. I interpret the respondents as arguing that the girl jogging in the park was responsible for getting exposed to vehicular emissions. This deductive approach focused on content and was applied to the entire set to document the different neutralisations and affirmations.

Since the research question addressed at this stage (question two) was also concerned with how these techniques are used to justify car usage, I went further to interpret respondents' comments in line with Gergen's (2009) perspective, discussed in section 4.2. My interpretation and analysis adopts the perspective of Hagman (2003) whereby the focus is on how respondents present their arguments. Thus, I go beyond the identification of comments that are categorised as specific neutralisation and affirmation techniques to an understanding of how these comments are used to make a case for continued car usage. I argue that it is in understanding how neutralisation and affirmation techniques are presented that we can better

understand how they serve the purpose of justifying car usage in the face of a belief that car usage ought to be reduced. This initial focus on accounts paved the way for more extensive analyses of how justification accounts for persistence (neutralisations) in, or desistance (affirmations) from, use of the car are reflective of respondents' schemas.

#### **4.5.11 Stage Two data analysis**

This stage addresses the second aspect of the research questions and objectives: exploring how justifications of persistence and desistance are reflective of individual and group schemas.

In particular, I focus on the function/process of neutralisation/affirmation techniques; how respondents' justification accounts are employed as strategies to justify either persistence or desistance in use of the car. I employed a reality reconstruction approach along the lines of Gergen's (2009) recommendations, discussed in section 4.2.1. In line with this approach, I also explore the links between justification accounts (neutralisation and affirmations), the attributions that underlie them, and the import of schemas on the first two. Since accounts are bundles of attributions (Crittenden, 1983; Antaki, 1988), attributions and corresponding explanatory styles are analysed as themes that span the whole range of neutralisations and affirmations. In addition, given that these (attributions and explanatory styles) are reflective of schemas (Orbuch, 1997) and schema views (of self-identity, others and cultural ways of living) underpin behavioural justifications, the analytic and interpretive approach along this line is guided by the constructionist view that attributions and explanatory styles go hand in hand with justification

accounts for behaviour. These relationships have been discussed in the theoretical framework chapter (section 3.3.1).

It is worth pointing out at this stage that the analysis also takes into account the extent to which students' claims are made as individuals as well as when claims are made as members of a group. In line with Hyden & Bulow (2003), I also took into account the fact that participants during focus groups may change perspectives during discussions. The implication is that a participant may make comments representing his/her individual opinions at some point, and may make comments as a member of a social group at a different point in time. Furthermore, a participant's comments might be indicative of his perceptions of what others think with respect to a particular issue. The importance of understanding the different perspectives and contexts within which participants' comments were made was also taken into consideration. For instance, the comment below is interpreted and reported as an individual opinion:

The problem is not ice age ... I personally don't think  
that the solution of this problem should be start(ed) in the  
whole society (ASM1).

In this case, the above statement is considered purely as the speaker's representation of their subjective opinions and/or beliefs. However, a student may make a claim that is not interpreted as a personal account. In this case the speaker seeks to represent a larger social group or, at times, the entire population.

For instance, in the statement below:

... and also we see a lot of car industries producing hybrid car or electric cars, trying to introduce new technologies of solar and other energy sources in order to reduce these effects. So it's a standard thing that cars pollute the environment and everybody knows (AMM2).

The participant argues that the opinion s/he posits is not simply subjective. The claim here (that "it is a standard thing...and everybody knows") is a subjective statement that refers to a general perspective or popular opinion.

In addition, my interpretation also considers how respondents' views, accounts and positions are renegotiated in response to response cues, dissent or the need to align opinions to specific frames of reference that justify adopted behavioural stances (social positioning).

#### **4.5.12 Phase Three data collection and analysis**

The focus in the third phase is to address the third research question and objective. In this case I argue for how evidence and findings from the first stage and discussions from the second stage can be used to enhance intervention for sustainable commuting amongst our target group. Although my arguments resonate with behaviour change theories and models (self-perception, social marketing and nudge) it is underpinned by key insights from focus group evidence that are not limited to what we already know about how to intervene for behaviour change. My argumentative approach was underpinned by the logical induction approach discussed in section 4.4.1 (Research Strategy).

#### **4.5.13 Presentation of findings and discussions**

I employ the use of a sequence of discussion approach in the focus group report. Reed & Payton (1997) have used a similar approach in their study of elderly people moving into care. Their sequences focused specifically on highlighting the evolution of consensus amongst focus group respondents as opinions were modified and developed in the course of the group discussions. In reporting focus group findings, I adopt an approach similar to that of Reed & Payton (1997), albeit in a manner that is more specifically reflective of development of ideas and constructions during the focus group discussions. This approach made it easier to address the research questions since opinions and constructions around these questions followed necessarily from the group discussions.

In line with the exploration of the content of accounts in addressing the first two research questions, the first empirical chapter (chapter five) starts with sequential descriptions of focus group findings. In this case, findings revolving around the major themes from the final thematic map (see section 4.4.7) are presented and discussed. The initial descriptions of focus group discussions lay the foundation for the later specific research questions that are addressed in this chapter. This approach helped locate behavioural justifications within the context of relevant issues such as motivation and level of awareness of the environmental externalities related to car use. Other related issues such as respondents' awareness of the specific relationship between CO<sub>2</sub> emissions from cars and climate change, and opinions on the veracity of claims that CO<sub>2</sub> emissions from cars are largely responsible for climate change are also described. Subsequently, opinions about felt obligations to reduce car usage based on awareness of environmental consequences are described. On the basis of the initial description of findings, the presentations then gravitated towards addressing the first two research questions: why respondents' pro-environmental

cognitions do not translate into reductions in actual and aspired car usage, and how justification accounts are constructed and used to justify persistence and desistance in car usage by this sample population. Subsequently, it was easy to focus on and discuss findings on the remaining research questions.

#### **4.6 CONCLUSION**

The study's findings are presented and discussed in three chapters. Chapters five and six report on focus group findings relating to the first three research questions, while chapter seven addresses the fourth research question.

Specifically, chapter five presents findings from focus groups - on how focus group respondents justify use of the car in the face of environmental awareness and belief that car usage ought to be reduced via the employment of neutralisation and affirmation techniques. Research questions 1 and 2, and corresponding study objectives, are addressed in these chapters. In chapter six, I also explore how the mechanism(s) of justifying persistence in or desistance from use of the car are reflective of the schema of the sample groups. Finally, in chapter seven, the implications of the study's findings for intervention(s) aimed at getting people to reduce car usage are logically inferred from findings discussed in chapters five and six. Recommendations that follow necessarily from these inferences and implications are also discussed in chapter seven.

## CHAPTER FIVE

### **5.0 STUDENTS' JUSTIFICATION ACCOUNTS FOR PERSISTENCE AND DESISTANCE: A CONTENT LEVEL DESCRIPTION AND PRESENTATION OF FINDINGS**

#### **5.1 INTRODUCTION**

This chapter reports findings that address the first and second research questions and objectives (see sections 4.2 and 4.4.1). The chapter presentations focus on content of accounts. As such, the findings and discussions presented in the chapter are largely descriptive.

Regarding the first research question (why awareness of externalities from use of the car does not translate into actual reductions in car usage), I start by exploring students' accounts to confirm the possession of pro-environmental cognitions and awareness of externalities from car use. This initial enquiry is important since the first research question assumes that the university student population would be in possession of pro-environmental cognitions in favour of car user reduction. Subsequently, I present findings on respondents' perceptions and beliefs regarding the effects of environmental problems (specifically climate change), and how such beliefs affect their disposition to continue using the car (persistence).

In terms of addressing the second research question and objective, the focus is on uncovering the accounting techniques that are employed by this sample to justify persistence in or desistance from using the car in the face of awareness of car user related externalities, and corresponding beliefs that car usage ought to be reduced to address environmental problems (specifically climate change).

Findings are presented using a thematic sequence of discussions approach. In this case, I present findings thematically, in line with how discussions developed sequentially in the focus groups.

## **5.2 DESCRIPTIONS OF FOCUS GROUP FINDINGS**

The initial focus group questions sought to establish the respondents' primary motivations for actual or aspired car usage amongst respondents. In all cases, the focus group sessions commenced with discussions on motivations for use or non-use of the car.

The majority of respondents indicated intentions to use cars. For current car users, specific sets of motivators were presented as reasons why they currently embark on car usage. For non-car users, similar sets of motivations were used to justify future aspirations to use the car. Only one respondent (MR) indicated a clear and consistent intention not to use the car.

### **5.2.1 Explicated motivations for actual and aspired car usage**

I started out by asking respondents to discuss why they opted to use or not to use the car. At this point, I had not introduced the environmental imperative to reduce CO<sub>2</sub> emissions and car usage correspondingly in the discussions. The table below outlines the major motivations (current car use as well as intended) for car usage amongst focus group respondents.

**Table 5.1 Respondents' main motivations for car usage**

<b>PRO CAR USE</b>	<b>AGAINST CAR USE</b>
Convenience: that use of the car is convenient, especially in comparison to alternatives that are argued as not.	Environmental considerations: whereby the need to reduce car usage is argued as necessary to reduce CO <sub>2</sub> emissions, congestion etc.
Status: that use of the car affords the	Travel time reduction: that alternatives



user possibility to expressing self accordingly (e.g. that specific cars communicate specific statuses; or that cars shows “who the boss really is”.	(e.g. trains) actually take less time to get the user to their destination.
Luxury: that the car affords the user the sort of luxury that is unavailable with other transport modes, e.g. comfy seats and entertainment (listening to music).	Travel cost reduction: that use of alternatives (especially cycling and use of buses) are relatively cheaper than overall motoring costs.
Travel time reductions: that use of the car gets the user to their destination in less time than other alternatives do.	Wise use of time: that not driving, and using alternatives (buses, trains) frees up time for constructive activities such as reflection and reading.
Travel costs’ reduction: that use of the car is actually cheaper than use of alternatives.	
Commuting: that cars get the user to a point of destination, unlike alternatives (trains, buses) where extra effort (walking) is involved following alighting from the public transport mode that is used.	
Pleasure: similar to arguments for luxury. However, emphasis here is on derived pleasure e.g. from listening to music and the thrill/pleasure of the actual driving experience.	

The table above shows that actual and intended car usage are underpinned by different reasons, confirming the influence of different motivators identified in the literature review. Aligned to respondents’ appeal to the different motivators outlined above is that the decision to use the car depends on the meanings that are assigned to car usage; specifically, how the individual interprets the purpose of using the car. The following representative quote is reflective of this contention:

... as for me it (use of the car) depends on what I do. For example

(if)I need a big car that can carry some stuff I’d rather, like, take a

big one but (if) I need a car just to get me from, like, A to B, then

I'd probably get something small, something I can get my friends

and like just get somewhere. I am not so much into any luxury

(ASM4).

The respondent's comments suggest that s/he considers decisions to use the car based on meanings and interpretations s/he assigns to the use of the car. This finding is in line with findings that have noted how car user behaviour is motivated by the individuals' interpretations of the benefits that accrue from using the car (Bergstad et al., 2011). This is also consistent with findings from other studies (discussed in section 2.1 of chapter two).

Following evidence that the majority of respondents subscribe to use of the car, the environmental imperative was subsequently introduced. I started with the assumption that it is important to understand the nature of awareness of environmental consequences of car usage amongst our sample group. This argument is premised on the fact that the use of accounting strategies to justify either persistence or desistance from use of the car implies that respondents are somewhat aware of the environmental externalities associated with car usage and believe that there is a need to address them by engaging in corresponding pro-environmental behaviours. In other words, establishing respondents' dispositions towards acting in accordance with expressed environmental values/beliefs is necessary, otherwise there may be no basis for the use of accounting strategies to justify either persistence or desistance. This approach was adopted because introducing environmental awareness issues in the first instance might have led to making the environmental imperative salient. A possible implication might be that some

respondents might have responded to this salience and aligned themselves to the environmental frame of reference as a consequence. This approach is consistent with the view of LeBoeuf et al. (2010) that question framing could sway respondents' responses to accord with frames of reference that have been made salient.

Following initial exploration of respondents' motivations for use or non-use of the car, focus group questions and discussions focused on exploring how their initially expressed motivations to use the car were linked to environmental awareness and pro-environmental cognitions.

### **5.2.2 Awareness of environmental externalities from car usage**

Findings suggest that respondents perceived awareness of environmental externalities as being synonymous with conventional wisdom. The following excerpt highlights this general perception of environmental awareness as synonymous with conventional wisdom:

Moderator (MD): Are you aware of any environmental impacts that are associated with using the car?

BMM6: CO2 levels rise when you use the car, especially atmospheric CO2 levels, they double, and it's bad for human health.

MD: Where did you get the information from?

BMM6: You grow up and know these things ... it's experience.

MD: Who else is aware of this sort of...?

BMM1: Everybody knows. It is general knowledge kind of thing. They cause pollution, they burn fossil fuels which are limited, and it emits toxic fumes.

This final comment regarding limited fossil fuels suggests conversance with current debates surrounding peak oil<sup>13</sup>. Respondents also referred to road accidents, an externality whose direct consequences are related more to humans than the physical environment. By implication, respondents were also able to identify other non-ecological costs of using the car.

Although all students expressed awareness of environmental problems, some respondents' comments suggested that use of the car was not considered the major cause of environmental problems. Thus, while respondents agreed that use of the car was partly responsible for environmental problems, it is ranked lower on the scale of major anthropogenic activities responsible for environmental damage. For instance, one of the undergraduate students stated that:

... cars are not the only contributors ... I don't think it is the most one, there are other things more to focus on. For example protecting the rainforest, those are very essential to the world. They play a big part in the environment and what's the point of stopping people from using cars if they are still destroying in other ways, in ways that effect more

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<sup>13</sup> Peak oil refers to the point when global oil production reaches an absolute maximum. There have been recent calls and warnings from business and economic experts (UK Industry Taskforce on Peak Oil and Energy Security, 2010) on the need to find alternatives to oil. Local authorities within and outside of the UK have also emphasised the implications of peak oil (see Bristol Green Momentum Group, 2008).

than just cars (BSF6).

This comment resonates with popular perceptions regarding causes of environmental externalities. According to the Department for Transport (2006), the car ranks third, after burning of fossil fuels and cutting down trees, amongst people's perceptions of the major causes of environmental problems. Thus, student respondents' views could be argued as consistent with those of the wider population. However, given that CO<sub>2</sub> emissions from the transport sector have consistently been ranked second behind energy supply between 1990 and 2010, and private car usage accounts for over 70 per cent of CO<sub>2</sub> emissions from the transport sector (DECC, 2010), the effect of cars alone on the environment is likely to be a lot more significant than respondents seem to suggest.

A different student also made allusions to the same fact, claiming that cars are not solely responsible for environmental problems. The respondent's comments are interesting because this respondent argued that environmental problems will occur with or without the effects of human activity.

Yeah, definitely cars affect climate in this way but you see,

it's not only cars, it's the whole nature, and it (climate change) is

something that will happen with or without the cars, although the

cars influence (it) (ASM4).

Overall comments from students suggest that general awareness of the role that cars play with respect to environmental externalities is high. I consider awareness as being generically high (i.e. knowledge of main features rather than specific or

precise details) given that the majority of respondents' claim that the relationship between cars and environmental externalities is common knowledge. From this perspective, respondents' levels of awareness are also consistent with those of a wider UK population; people are generally aware of environmental problems arising from car use (Commission for Integrated Transport, 2002; Anable et al., 2006). However, the quotes above suggest that although respondents show generic awareness of externalities related to use of the car, they might not possess detailed knowledge of established scientific fact in this regard (for instance claiming that climate change is bound to occur with or without anthropogenic influence).

Having established a high generic level of awareness of car user externalities, subsequent focus group questions and discussions focused on exploring the extent to which respondents were able to make connections between car user externalities and specific environmental problems. The focus in this case was on the relationship between carbon dioxide emissions from cars and their relationship with climate change.

### **5.2.3 Awareness of relationship between CO<sub>2</sub> from cars and climate change**

Similar to possessing a generally high level of awareness of the environmental impacts of car usage, respondents were generally aware of the relationships between car usage, CO<sub>2</sub> emissions and climate change. The previous quote from ASM4 that cars affect the climate is one of numerous respondents' quotes highlighting awareness of the car-CO<sub>2</sub> relationship. The following focus group excerpt suggests this to be the case from a collective/shared perspective point of view:

MD: Does anyone know of a link between cars, CO<sub>2</sub> and climate change?

BMM6: If you have a lot of cars, the CO<sub>2</sub> level in the atmosphere will rise, so if the CO<sub>2</sub> levels in the atmosphere rise, sunlight coming from space enters the earth's atmosphere, hits the crust but cannot come back. It gets trapped and warms the earth.

MD: Splendid. Is everyone aware of this link between CO<sub>2</sub> level and climate change?

(Murmurs of yes and nodding of heads)

BMM1: I do but not in that detail (causing laughter).

Generally, respondents appear to be aware of the connections between car user externalities, carbon dioxide and climate change. It is important to note how the claim of knowing from experience is emphasised by focus group respondents in the above excerpt. Interestingly, the sources of acquisition of knowledge relating to environmental externalities were not restricted to appeals to common knowledge or experience. BMM6's account suggests that some respondents do have detailed knowledge of the relationship between CO<sub>2</sub> from cars and climate change. The implication would be that my initial description of respondents' level of awareness as generic (and not detailed) does not relate to all respondents. Given that this study did not focus specifically on ascertaining respondents' levels of awareness, at this point it sufficed to work with the claim of a generic level of awareness, while accepting that the extent of detailed knowledge of established scientific claims differed amongst respondents. Another interesting issue is the final comment. The final comment is an acknowledgement of lack of detailed knowledge. This acknowledgement is a self-consciousness raising effect that arises from interactional

activity. As will be noted in subsequent discussions (in this, and the next empirical chapter), the interactional nature of focus groups, i.e., the sharing of experiences, allowed members to gain insights about their schemas and experiences by reflecting on the comments of other group members.

Respondents linked knowledge of the relationship between CO<sub>2</sub> emissions from car usage and climate change to numerous sources (e.g. media sources, interpretations of weather variability over time etc.). Subsequently, respondents were requested to comment on the different sources through which they have come to be aware of the relationship between car usage, CO<sub>2</sub> emissions and climate change.

#### **5.2.4 Sources of awareness and knowledge of environmental externalities related to car use**

Respondents' comments about how they had become aware of the car usage and climate change relationship revealed that the members of this group of respondents had been exposed to different knowledge sources. Respondents cited numerous instances and sources through which they had become aware of the environmental externalities that arise from use of the car. An interesting issue relates to how respondents collectively construct and build on each other's views to arrive at a conclusion; that environmental knowledge is a common knowledge:

MD: I am going to ask, where did you get the idea from, that cars cause pollution?

AMM1: I watched Al Gore's film, *An Inconvenient Truth*, and it says that cars are one of the big polluters, one of the big factors.

AMM5: They have different adverts every day, about CO<sub>2</sub> emissions, and most of it comes from cars.



MD: So who has seen these adverts?

AMM1: Not the advert. I was stuck in traffic one day and there was like a long queue and every car was running ... there was a lot of CO2 coming from those cars.

In addition to the sources noted above, further evidence shows that the university was also a major source of creating environmental awareness amongst students. The university experience was noted specifically as having offered respondents the opportunities to engage with debates around environmental issues as evidenced in the following excerpt from the same focus group session:

MD: So it's something you have seen in adverts, and you in a film, and you have had, like, an everyday first-hand experience. What other sources of awareness have you..?

AMF3: (cutting in sharply) Discussion from lectures, like, what's like the issue? What mainly are the issues, yeah?

MD: What issues do you mean?

AMF3: Like pollution and those sorts of things and what causes the pollution.

MD: Was it a class proper lecture or was it a discussion with your peers?

AMF3: Actually I can't really remember but I am definitely sure we discussed this issue several times in university.

AMM7: Sustainability management, when we studied that course, we needed to do a dissertation. For example I am doing British Airways. Yeah, so environmental

issue because, err, the aviation industry, it produces 2 to 3 per cent of global CO2 emissions. So when we are talking transportation, we will think about pollution.

AMF8: I saw a documentary, a film documentary, *Home*.

MD: Home?

AMF8: Yeah, it like describes like many types of pollution, the causes, like the main kinds of pollution.

MD: Okay, summarily would I be correct to say that we have awareness of the environmental problems that come from car usage and that this awareness we have got from different sources like classroom discussions, adverts, is that right?

There was a general affirmative response (yeah) from other respondents.

The excerpt aptly captures the sources of awareness that were mentioned in other focus groups. This suggests that respondents are exposed to different knowledge-sources of environmental issues. In addition to mentioning generic sources such as mass media, respondents were able to link their knowledge sources to the fact of being university students. Thus, course work as well as discussions in the university were mentioned numerous in the majority of focus group sessions as a major source of knowledge regarding environmental issues. This suggests that academic as well social experiences in the university are prominent sources of awareness for this group of young people. This is in line with numerous studies that have shown that universities (curriculum and lived experiences) offer extra opportunities for students' acquisition of in-depth environmental knowledge and awareness (e.g. Cosgrove & Thomas, 1996; Wolfe, 2001; Kagawa, 2007).

It is interesting to note how students collectively construct the claim that one does not need to go far to encounter sources of information relating to car use and environmental problems. Environmental awareness is assumed common knowledge. Worthy of note is how each student mentions a different source of information, gradually building up the list of information sources. No sources of information are repeated twice; collectively groups build an extensive list of awareness sources. In this way, respondents jointly construct the perspective of environmental knowledge and awareness as conventional wisdom.

Interestingly, the issue of how knowledge translates to belief and felt obligations were also noted during the course of the majority of focus group sessions. The following excerpt sheds more light in this area:

AMM2: ... and also we see a lot of car industries producing hybrid cars or electric cars, trying to introduce new technologies of solar and other energy sources in order to reduce these effects. So it's a standard thing that cars pollute the environment and everybody knows.

MD: Everybody knows? Do you think that everybody knows?

AMM1: I won't be surprised that everybody knows.

AMM2: Everybody knows but...

AMF3: ... still buying them cars ...

AMM2: Not everybody have the same...want to believe this or is conscientious about the fact.

The final comment is important in the context of understanding why awareness is perceived as not enough to make people reduce car usage; people are aware of car user externalities but may not believe that the claims that link car user emissions to issues such as climate change are true. Trains of thought or beliefs such as this one are in line with studies that have argued that awareness alone is not sufficient to make people adopt sustainable lifestyles. This is because the extent to which people perceive environmentally related claims as factual largely determines the extent to which they would subscribe to behavioural recommendations contained in the information (Kempton et al., 1995; Kollmuss & Agyemang, 2002).

AMM2's comments also raise questions concerning respondents' perception and interpretations of climatologists' claims; that of a warming planet caused by anthropogenic factors (Thompson, 2010). One would expect that the more people perceive claims that cars cause environmental problems as true, the more the likelihood that they develop positive attitudes towards pro-environmental behaviour (whether this attitude translates to actual behaviour is a different issue). This would be in line with the normative theoretical perspectives discussed in the literature review chapter (section 2.2.3). However, if people do not believe that cars cause environmental damage or if they are of the opinion that such claims are not completely true, it is not likely they would see the need to reduce car usage. Correspondingly, it was important to ascertain respondents' views on the veracity of the claims that cars cause environmental problems.

### **5.2.5 Perspectives on the veracity of claims regarding externalities from car usage**

Findings revealed three different categories that focus group participants subscribed to:

1. Those that argued that claims are true;
2. Those that argued that claims are true but exaggerated;
3. Those that expressed uncertainty about the veracity of claims.

#### **5.2.5.1 Agreements that claims are true**

The majority of participants agreed that the claims about environmental problems caused by using the car are true. Focus group participants who subscribed to this train of thought often based their arguments on scientific evidence and data. For instance, some of these students were quick to point out that the sources of such scientific evidence were reliable, implying that the truthfulness of the claims is unquestionable. In addition, appeals to catastrophes such as Tsunamis, earthquakes and other real life events etc., were also used to support their claims.

Two related representative quotes from focus group are presented here:

Yeah, it's true because I've seen a documentary and it's quite a respectable force. Mhm, scientists, they went to this ice shelf in Antarctica, and you know under the ice shelves there are like layers. These layers, there are some which are thousands of million years old... they measured the CO<sub>2</sub> level back in those times... and its true because they like created a chart, so CO<sub>2</sub> levels have risen in the last twenty years ... (ASM3).

The above quote also suggests that some sources of information are regarded as being more credible than others. Whilst this is not explicitly mentioned by respondents, the above quote could be interpreted as implying that for this respondent, the noted film or activity of scientists might be considered a more credible or higher authority than, say, a lecture. Thus, some sources of information could be perceived as having more credibility than others.

In addition, weather variability and the occurrences of natural disasters were also used to support claims that climate change is real:

... and now the ice is melting faster and faster every single day, and we see how many natural disasters are happening, how many tsunamis and how many ... are going throughout Asia, these (cars and manufacturers) are the main reasons why these things are happening, they should not happen (ASM1).

Whilst respondents cite these occurrences (tsunamis etc.) to back up claims that climate change is real, it is not likely that all respondents who made such quotes witnessed the noted occurrences directly. Knowledge of these occurrences would have been acquired from other sources; implying that respondents internalised and subsequently recounted information received from a source. Thus, the extent to which the individual perceives that environmental claims are valid depends on the individual's interpretation of the source as well as the strength of the claim. In the case of the above, experiences that one can relate to offer strong grounds for belief in climatologists claims.

Analysis of data from other focus groups produced comments similar to the ones quoted above. In many instances, participants cite the activities of scientists as support for their claims.

#### **5.2.5.2 Agreement that claim is true, but over-emphasised for certain reasons**

Compared to those that argue that claims are true (discussed in the preceding section – 5.1.5.1) fewer respondents claimed that claims were true but overemphasised for certain reasons. Respondents in this category expressed uncertainty about the extent to which cars cause environmental externalities. The majority in this camp agreed that the claims (car usage-environmental externalities) were true, but over-emphasised. In instances where respondents mentioned the claims were over-emphasised, they used different arguments to back up their claims. In these cases respondents do not doubt the veracity of claims; what they do is argue that claims were exaggerated for different reasons. The following quote reflects such views:

I do believe it is true. I was going through this article about Arthur F...  
he was awarded the Nobel Prize for, like, climate change. He predicted  
something, but recently he was criticised because he had given some  
calculation and that calculation was based on wrong data. It's true but  
not to the extent that scientists are saying; that in ten years all the ices  
will be melted and this and that. It's true but not to that extent (BMM2).

By using a similar approach (appealing to scientists' activity) this student expresses a slightly different view from that of the previous speaker's (BMM6) comments. By

emphasizing that a Nobel Laureate's claims have been put to question, the student assumes to have established good grounds to support his stance; that while the claims made by scientists about cars and climate are true, the extent to which such claims are valid in absolute terms remains questionable. A different student picked up from his comments, adding the following:

It's true, but like he said it is kind of blown out of proportion.

...it's like he said for many other reasons. Like businesses; everybody is trying to milk the whole climate change issue. But it is absolutely true. But kind of like what he said, ice reserve records from millions years ago. It's also observable, like back home if you drive from the city to less habited areas, you can tell the difference like in the air for example, less emissions and so on (BMF5).

The above speaker adds to and expands on a common ground shared by the previous speaker. He contends, like speakers before him, that the claims are true. However, in addition to appealing to scientific knowledge, he also appeals to observable occurrences of everyday life.

Like those who presented information to support the veracity of claims that cars cause environmental damage, the students who had reservations also tended to use a similar line of argument (scientific evidence) to back up their arguments. A similar sort of reasoning was also used by the one student who claimed it was uncertain to



vouch for the veracity of the claim that cars cause environmental damage. This counter view is discussed in the following sub-section.

### **5.2.5.3 Uncertainty about veracity of claims**

In this case, the respondent questioned the validity of claims that link car user externalities to climate change. According to this student, researchers had provided wrong information purposefully to create some sense of urgency in terms of responding to environmental damage. He expressed his uncertainty in the following words:

... in my case I am not quite sure. I just read in the newspapers  
 that err... some researchers in the North Pole err, have like,  
 err cheated in their... err, like they tried to analyse how quickly  
 ice melts and they (the researchers) ... wrote the wrong data.  
 The ice melts 50cm a day, they wrote 120cm just to get more ...  
 how I can say that, more prestige. They just want to warn  
 humans quicker, so they influenced the data (ASM3).

This student uses similar arguments used by other students to lay his claims. He appeals to evidence from the scientific community. However, unlike the others who agree, this student presents arguments to question the veracity of climatologist claims. Implicit in this respondent's view is the assumption that scientific evidence regarding the climate change phenomenon is skewed; essentially presented to create

a sense of urgency for action. This view is consistent with the sceptic claims that climate change views are exaggerated (Giddens, 2008).

I also find it interesting that this specific comment coincides with the period when “Climategate” was making news headlines. The purported Climategate scandal occurred in the late months of 2009 after hacked e-mails from the University of East Anglia’s Climatic Research Unit (CRU) led to the accusation that leading British scientists at the CRU had manipulated climate change data (The Telegraph, 2009). The respondents’ comment that he had just read the stories suggests reference to news about Climategate. Although the academics involved (those whose e-mails were hacked) were eventually cleared of any intent to deceive or manipulate figures, the implication is that issues such as Climategate could significantly affect individuals’ perceptions of climatologists’ claims and consequently pro-environmental behaviour.

The foregoing discussions on the veracity of climatologists’ claims regarding climate change is linked sequentially to the following thematic presentation of findings - perceptions of threat and obligations to act in response to environmental externalities that arise from use of the car.

#### **5.2.6 Perceptions of threat and obligation to act in response to environmental externalities arising from car usage**

Focus group evidence suggests a disparity between what I term “expressed” and “real” senses of obligations. The expressed versus real dichotomy refers to what respondents perceive they ought to do as against what they actually do respectively.

Felt obligation to adopt pro-environmental behaviour (car user reduction in this instance) was low for the majority of respondents in real terms. In numerous

instances, the majority of respondents argued that they felt little or no real obligation to reduce car usage. This fact is important to note since the majority of respondents believed that environmental externalities arising from using the car need to be reduced. Thus, in expressed terms, there was a general sense of felt obligations to reduce emissions from car usage. However, this did not translate into corresponding behaviour in real terms. The following excerpt from one of the focus groups shows how perceived and real senses of obligations are negotiated amongst respondents:

BSF6: I think we are damaging the world, I do believe that. It's really hard for you to do everything and at the end of the day to think about the future, and you just kind of forget it during your everyday life, like "Oh my God", you used a car. But, at the end of the day you have to use the car, and you can forget about it. And it's kept being said in fifty years, but if it's said like tomorrow, and it really was, I know, or I think, everybody would stop using cars. But, if like into the future, people are kind of "Oh well, yeah, whatever. It's in the future, it's not yet here".

MD: So you think it's about urgency in terms of how the message is being communicated?

BSF6: It's just they keep telling us about cars and err, err...

BSM7: (cutting in) Nothing has happened. I am aware of it and you do want to change it but at the same time I don't know if I can stop using the cars. People try to find the easy way out. It's easier to use the car than try to use trains and taxis.

BSF5: Exactly.

The excerpt highlights interesting arguments worthy of note. First, respondents are aware that cars cause environmental externalities. Secondly, there is a clear expression of a belief that this claim is true. In addition, there is an expression of the need to act in accordance with expressed obligations to reduce car usage. This perceived sense of felt obligation is in line with Schwartz's (1977) view that knowledge of threat would trigger off a felt self-responsibility obligation to act. In other words, there is a movement from recognition of threat to ascription of responsibility to address the recognised threat. However, while Schwartz (1977) contends that actual behaviour responses follow the perception of threat and ascribed responsibility to address felt threat, focus group evidence shows that this does not obtain in all cases.

In line with the foregoing discussion, respondents' views suggest two divergent perspectives in relation to how ascribed responsibility corresponds with felt obligation(s) to reduce car usage. On one hand, there is the minority who express obligation and match this with "real" decisions not to use the car. On the other hand, there is the majority; those whose "real" intended and/or actual behaviour does not correspond with expressed beliefs on the need to reduce car usage. The resolution of this apparent inconsistency exhibited by the latter camp highlights the presence of a moral dilemma; how to reconcile not matching car user behaviour with expressed felt obligations and beliefs to reduce car usage for the sake of the environment. Focus group evidence highlights how respondents use justification accounts to resolve this moral dilemma. The accounting mechanisms employed by respondents to justify these respective behavioural choices are explored in the following sections.

### **5.2.7 Justifications for persistence and/or desistance in car usage**

In line with the assumptions of neutralisation theory that people employ rationalisations (accounting techniques) to provide relief from the moral constraints that arises from non-conformist behaviour (McGregor, 2008; Sykes & Matza, 1957), this section uncovers the different techniques that are used by respondents to justify persistence in car usage. However, given that a few focus group respondents expressed “real” obligations that translated to actual reductions in car usage, it is equally important to explore the justifications that were used by this category of respondent to support desistance from actual and intended car usage. The neutralisation techniques (Sykes & Matza, 1957) are applied as a framework to uncover respondents’ accounts and justifications for persistence, while the affirmative techniques (Copes & Williams, 2007) are applied in the case of uncovering respondents’ justification for desistance from use of the car. The specific neutralisation and affirmation types have been discussed in detail in chapter three (theoretical framework chapter)<sup>14</sup>. Respondents are referred to as desisters or persisters accordingly as they justify desistance or persistence respectively. This persister-desister dichotomy is reflective of the binary aspect of linguistic expression discussed in the theoretical framework (see section 3.1.5 of chapter three).

In the following sections, respondents’ accounts and justifications for persistence in use of the car are presented.

#### **5.2.7.1 Denial of responsibility**

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<sup>14</sup> See section 3.4 of chapter 3 for detailed elaboration of each neutralisation and affirmation technique.

Generally, respondent(s) who used this neutralisation technique deny responsibility for embarking on car usage (Sykes & Matza, 1957). In most cases the burden of blame for their use of the car was placed on others (people, situations, dispositions etc). They often presented themselves as victims of circumstance; as being pushed or pulled by circumstances beyond their control, and as such being left with no choice than to persist in car usage. Users of this technique often justified persistence by arguing that situational factors (cost considerations, availability and affordability of alternatives to using the car), the dispositions of others (governments, employers and companies) and their own perceptions which are in accord with social perspectives (e.g. of green cars as unconventional) leave them no choice than to continue using the car.

In many instances, the denial of responsibility focuses on blaming governments and “big companies” for not wanting to encourage sustainable behavioural change. For example, respondents who favoured persistence in use of the car often argued that governments would not want to encourage such transitions (e.g. encouraging use of green cars such as hybrid vehicles) as this would imply less revenue from taxes on oil, congestion charges etc. Regarding the role of companies, a female student, who blamed her car user behaviour on employers’ behaviour, narrated her experience as a job seeker at her university’s student union. She argued she was not offered the job because she did not have a car, noting that such requirements imply that even people who might desire to use alternatives to the car are forced by firms to own and use cars. The argument here is that people could get pressured to use the car; and it is no fault of theirs if they use the car.

Furthermore, responsibility for persisting in car usage (as against transition to use of greener vehicles) is attributed to technological and cost barriers (situational barriers) as evidenced in the following representative comment:

For example all those cars (electric cars) ... the batteries wear off so fast and you have to recharge them every five hours or whatever and you spend a lot of electricity, trust me. And they are not as efficient as they could be. If it was beneficial and people won't spend all that much money, they would just buy (it) (ASM3).

Similar comments were also made in other focus groups, as evidenced in the following quote:

I think what is stopping more people buying these fuel-efficient cars are because they are expensive. They are more expensive than normal cars, so why should you be paying more for electric car (AMM3).

Cost considerations were prominent in all focus group sessions, highlighting the importance that this category of respondents (university students) attach to economic or cost related considerations (Hossler & Schmit, 1999). Another interesting issue that arises from the second comment is the distinction made between green cars (EFCs) and "normal cars". The following extensive excerpt

from one of the focus group sessions sheds more light on the noted conceptions and constructions that are built around “normalcy” and hybrid cars:

BMM1: Who goes on a date in a hybrid car, man? Get a taxi.

BMM5: At the end of the day, she will eat the food, hire a taxi and leave.

MD: What’s in the other car that is not in the hybrid car?

BMM1: Status.

BMM2: Performance and style, too.

BMM5: Yeah, green cars, just like that Roadster, the designs are just bland.

BMM4: They (manufacturers and government) expect that because it is hybrid they don’t have to put anything, any effort in the design because people just take it because it is hybrid.

BMM6: I would take it because I think about my pocket.

BMM2: It’s not cheap, it is more expensive.

BMM1: I would rather hire a cab or something else. Personally I would never go on a date in a hybrid car, that’s it. I don’t mind owning it, like keeping it in my garage.

BMM6: Why man, why won’t you go a date on a hybrid car?

BMM1: Because it is different.



BMM4: Yeah! (causing laughter from others) Hybrid car? It's too controversial for a date. It shows that you are too extreme (causing laughter and "yeahs" of agreement).

What is interesting to note is how the students constructively list the disadvantages and qualities lacking in hybrid cars (bland design, lacks status and performance). The same qualities were the predominant qualities (advantages) that they ascribed to the "normal" car, implying that for the majority of respondents, hybrids (and EFCs in general) may not necessarily qualify as viable alternatives to conventional cars. Economic and social factor considerations are, in this case, used to justify non-adoption of this specific alternative to conventional cars. Yet another interesting issue is the dissent expressed by the one respondent who favoured use of hybrids. This respondent argues for use of hybrid on a costs-related basis, and that hybrids are not as bad as the majority make them out to be. This respondent was laughed at, especially when a counter-perspective labelling hybrid users as extremist was made. That the use of hybrid vehicles was defined as extremism suggests that persisters do not wish to associate themselves with what they construct (use of hybrids) as societally non-normal. The respondent who argued for the use of hybrids was silent for some part of the discussion following the labelling of hybrid users as non-normal. Perhaps this was due to an interpretation of being considered different by others. However, the said respondent later opened up and contributed in subsequent discussions. My opinion is that this might be because he was conversant with other group members, making it easier for him to re-join the group discussions. Therefore, had the group been comprised of people he did not know, the respondent's voice might have been suppressed by the dominant views that were not consistent with his. Conclusively, the comments from the excerpt above can be interpreted as

reflective of the sort of power relationships and perceptions that sometimes exist in real life situations.

The perception of hybrid vehicles as not normal suggests that respondents tend to align themselves to what they consider as normal; a preference of conventional cars over green cars (EFCs). Thus, in denying responsibility, respondents also link their arguments to justifications that are grounded on their interpretations of normalcy.

#### **5.2.7.2 Claim of normalcy**

Respondents who employ this technique generally appeal to the fact that everyone else engages in car usage (for numerous reasons). This is consistent with Coleman (2002), who notes that the rationalisation behind the use of this technique is that acting in a particular way is normal; that is, that every other person does it (Coleman, 2002). The appeal to a normative imperative defined as generally acceptable is in line with Baslington's (2008) theory of travel socialisation and is evidenced in representative comments such as the following:

BMM3: I think it (car use) is also a culture.

BMM2: It is a way of life, like I said (reiterating a previously expressed view).

BMF2: When I was small I travelled by car and when I grow up I want to have a car.

BMM2: It's behaviour, right? Like something you grow up liking. Like if you grow up liking to eat fish, you still like to eat fish.

The underlying argument was that using the car was acceptable, and as such those who use cars simply align themselves to what is acceptable and normal. Furthermore, when using this neutralisation technique, respondents appeal to social perceptions that deem the use of alternatives to the car as non-normal. For instance, cycling and use of the other alternatives was argued to be unpopular or not as normalised as car usage. According to ASF1 “actually, there are not so many people doing that (cycling). Not that many people using bikes, not so many people using public transport”. In addition, some respondents argued that people who use alternatives such as cycling or use of buses and trains are perceived as poor.

An interesting aspect of how normalizing car usage is viewed by this category of young people can be seen in the discussion below:

BMM6: I can do a link between people and the car they have. For example people who are businessmen who are over 40 or over 35 may like Mercedes but people who are younger like 25, 20 who are rich, they prefer BMW, and people who do not want to pay a lot who are well off, they buy Audi A3. People who are middle class, they would go for a Volkswagen Golf.

MD: What’s the basis for this categorisation?

BMM6: It’s my own life experience (causing a lot of laughter). This experience comes from the University of Life.

MD: Who believes in this University of Life?

BMM5: Everyone believes in it.

(Affirmations of ‘yeah’ from others)

Aligned to this normalcy justification is the claim that since use of the car is normal (and expected), then it is also necessary that one uses a specific type of car. Evidence also confirms the assumptions of the theory of travel behaviour (Baslington, 2008), as in the following excerpt:

MD: How many people remember when they were young, what roles did the car play in your life ... school runs. Who used to be dropped to school in a car? Who had access to a car when they were young?

AMM1: Everyone.

MD: How do you relate your constant exposure to the car and the continued aspirations to own a car? Do you think there is a link, that there is a continuation of the fact that you were brought up like this and now you think this is what you want and have to do, owning and using a car?

AMF8: I think yeah. I was brought up with the car, err, yeah, because my family had a car, I grew up with a car, travelling with a car. Yeah, it affects you because you get used to it. You get used to comfort, driving everywhere.

The above excerpt supports the claim that getting habituated to using the car is largely related to prior experiences of using the car (Baslington, 2008). Thus, for these respondents who already see use of the car as normal, it may be easier for them to perceive it as necessary, since it is likely to be seen as part of life. In fact, evidence appears to confirm this view, as will be discussed in relation to the respondents' claims of necessity.

### **5.2.7.3 Justification of necessity**

In line with Benson (1985), respondents who used this neutralisation technique claimed that car usage was a necessity. This type of neutralisation technique was very dominant amongst focus group respondents. The underlying assumption is that even if car usage is accepted as causing environmental damage, the perception that it is necessary makes it okay or permissible. Necessity was defined and considered in different contexts by focus group respondents as evidenced in the following focus group excerpt:

BSF6: I think that we all want to get a driving licence and we all want to drive. I think that getting a car is like a kind of status. If you get the car then you are, like, better than the other person who gets a bus to school, you know what I mean, I think?

MD: (cutting in addressing the rest of the group amidst laughter) Is it?

(Spontaneous response of “Yes” and laughter)

BSF9: It’s the reason why people buy different cars.

BSF7: But also in my case, I often go to the countryside, I am living at the border of the city. I often go to the countryside. *There is just no public transport* (emphasis on italicised), so I don’t even have a choice. I take my bike or I go by car and mostly I go for the car, just because there is no public transport.

MD: So what you mean is that it is absolutely necessary?

BSF7: Yes.

First, the car is argued as necessary for image management as students; wanting to appeal to peers. However, whilst this view was shared by the majority of the group, BSF7, whilst not countering this view, interpreted necessity and justification for using the car on the basis of situational factors, such as the lack of alternatives, especially when one lives in areas with limited access to public transport. Similar views were shared in other group discussions. For instance, a different student argued that "... if you go to a place where there are no options, then car transport is a need ... it depends on the location" (AMM2).

The car was also justified based on instrumental advantages: security reasons, shopping trips, status, reducing travel time and so on. The above types of motivations for use of the car have been identified in literature on car usage, reflecting the different individual and social interpretations that people have about use of the car (see Hagman, 2003; Bergstad et al., 2011).

Interestingly, a few students interpreted necessity in almost absolute terms. In this case interpreting use of the car as a basic necessity of life:

Because we can't live without them (cars) (ASM3)

I will definitely use a car. It's (car) like a part of my life.

It's like the way we have to dress to go out; otherwise it is not the way it should be (ASF6).

I think everyone is aware of that (environmental externalities caused by car usage), but what can you do?

You have to get a car (AMF2).

There is no other product such as a car (MMA).

The connection to normalcy noted in the previous sub-section becomes apparent here; that an individual would normally strive towards the attainment and use of a basic necessity.

Respondents also appealed to the use of other types of rationalisations in justifying persistence. These neutralisations are discussed in the following sub-headings.

#### **5.2.7.4 Denial of injury**

In line with Sykes & Matza (1957), respondents who used this neutralisation did not categorically deny the fact that environmental externalities arise from using the car. What they did was to rationalise car use by emphasizing the extent of harm caused when they or others used cars. Since respondents had already expressed awareness of the externalities associated with car use, what they did in denial of injury was to claim that the harm caused from use of the car was insignificant, minimal or not readily experienced. This way, they were able to justify persistence by downplaying the effects of car user externalities.

The majority of respondents who employed this type of rationalisation claimed that harm caused by using the car was minimal, insignificant or even non-perceivable (threat trivialisation). When referring to environmental externalities caused by using the car, respondents employed “threat trivialisation” as is evidenced in the following focus group excerpt:

AMM1: It’s just individually we don’t see it.

AMF3: Yeah, it's insignificant to us.

AMM2: It's so small.

Perceiving harm as insignificant was dominantly used by the majority of respondents who argued for persistence in use of the car. By emphasizing the insignificance of environmental externalities, respondents who used this technique found it easy to account for why not matching expressed obligation to reduce use of the car with actual behaviour was justified. The main premise on which this justification for persistence is based (that of trivializing threat) can be seen as a deconstruction of the key assumption of the norm activation model (Schwartz, 1977). In this case, trivializing acknowledged threat reduces the ascription of responsibility to act in reduction of perceived threat.

Whilst respondents who used this neutralisation technique acknowledged harm caused from their car user behaviour, a few respondents who argued for continued use of the car employed a different technique (denial of the victim) whereby they argued that people who are harmed by their car user behaviour deserve what they get.

#### **5.2.7.5 Denial of the victim**

In line with Sykes & Matza (1957), the dominant argument in this case was that people who are affected by environmental externalities resulting from car use are responsible for harm that befalls them. The argument here is that "the victim ought to have known better and as such deserve what they get".



This type of neutralisation was sparingly used by respondents (used consistently by a single respondent). The following comment is representative of the respondent's use of this neutralisation technique:

I was stuck in traffic one day and there was like long queue and every car was running. There was a girl doing jogging next to those cars and I was thinking, not a good place of running 'cos there was a lot of CO2 coming from those cars and she was running and was inhaling a lot of it in her lungs. That's when I realised, yeah, that's an issue. Then I find fault in her, instead of running in a park she is running in a road, so that's her fault (AMM1).

Interestingly, the respondent whose comments are quoted above also used the claim of individuality. Users of this type of neutralisation technique posit an "I don't care" rationalisation as reason for embarking on a specific type of behaviour.

#### **5.2.7.6 The claim of individuality**

In line with Henry and Eaton (1999), focus group respondents who used the claim of individuality emphasise the "I don't care" attitude. In the middle of a discussion about cars and environmental impacts, AMM1 extorted "I am not bothered". At a later point he was asked the reason he had claimed he didn't care and what he was referring to. His response was, "I am gonna drive and I want everyone else to drive. I don't care about the environment".

The claim of individuality was used similarly by a different respondent who claimed that "...you (referring to anyone) will use the car because it is more comfortable. If

you have the opportunity to use the car, you will use the car. You will use it, you don't care about the environment" (ASM3).

This neutralisation technique was sparingly used. Interestingly, it was used by the student who denied the victim (AMM1) and the one who expressed uncertainty about the veracity of climatologists' claim that emissions are responsible for climate change (ASM3). The use of these two neutralisation techniques by AMM1 and ASM3 appear to confirm McGregor's (2008) claim that people who use these types of neutralisation are likely to bother less about others. McGregor further contends that the use of these neutralisations constitutes the most offensive types of denial because they imply some sort of prejudice and corresponding action(s) that are likely to be based on discrimination. This is reflected in the comment whereby the jogger is blamed for jogging and car users exonerated from any harm caused to the jogger from their cars' emissions.

#### **5.2.7.7 Condemnation of the condemners**

In line with Sykes & Matza (1957), respondents who use this neutralisation technique sought to deflect attention directed to them back to the one whom they perceived as calling their car user behaviour or aspirations into question. In other words, they paint anyone who calls their car user behaviour into question in a negative image (McGregor, 2008). Comments aligned to the use of this technique focus majorly on the defamation of government, as evidenced in the excerpt below:

AMF3: They (government) just say, "we gonna charge you tax, charge you, charge you and get money from you", expecting we raise the money. And if you can't pay the money you don't drive. All they do is they get money!

AMM2: Yeah.

AMF2: Together with the companies who sell the cars to us. If they don't want us to drive cars by having all this CO2 tax then why don't they just shut down the companies so they stop producing cars?

AMF3: What they do is, they charge us and they charge the car producers. They just get all the money. And when they charge the car producers, the car producers charge us and who is affected the most? Us!

The carbon dioxide tax is interpreted as the government calling their car user behaviour into question. What respondents who use this neutralisation technique do is reverse the argument; they find reasons to deflect attention from their behaviour by defaming and placing the burden of blame on those they perceive as calling their behaviour to question (in this case, governments).

However, while they rejected the views and standpoints of those they consider condemners, respondents subscribed to the ideals of different reference groups. Respondents' justifications for continued use of the car rationalised the ideals and needs of these reference groups (higher loyalties). This is in line with the appeal to higher loyalties (Sykes & Matza, 1957).

#### **5.2.7.8 Appeal to higher loyalties**

Focus group respondents who employed this neutralisation technique argued that meeting the mobility needs of their small group of friends or family took precedence over any other considerations. Underlying the use of this neutralisation technique is

the assumption that there is a hierarchy of moral values and that some values are more important than others are (Sykes & Matza, 1957).

Respondents who appealed to higher loyalties did not deny that their car usage caused environmental damage. However, they claimed that the needs of relevant others came first in their hierarchy of duties and obligations. Thus, their use of the car is argued to be underpinned by the need to meet the needs of relevant others. A few representative comments are outlined below:

BSM2: ... my friends want me to drive so they can get lifts anywhere.

MMB: ... they (friends and relatives) expect you to drive a good car.

A particular student claimed that taking his mum shopping was the main reason he drove when at home. This respondent claimed not to drive on campus, implying that save for the need to drive his parent he would not normally be driving. The key issue here is that the user of this neutralisation technique not only aligns himself or herself with the identified group, s/he goes further to suggest that such alignments are socially permissible and normative; it is socially accepted to help out others as well as to take the views of family members into consideration. This is line with Chartrand (2005) and Baslington's (2008) study findings that highlight the effects of relevant others on people's choices and behaviour.

Findings also revealed the employment of other types of neutralisation techniques. These are discussed below.

#### **5.2.7.9 The claim of entitlement**

In line with Conklin's (2004) arguments, respondents who employed the claim of entitlement argued that the use of the car was the entitlement of certain categories of people. They justified use of the car on the basis of perceived rights or privileges of certain classes of individuals. The dominant conception in the use of this technique was that certain people, such as managers, are entitled to use cars befitting their status. The following representative excerpt from a focus group session is taken from a session where respondents were requested to comment on their aspired car user behaviour as future managers:

BMM2: Me? Err, it's a status thing. Err, maybe, I don't want to travel with someone I fired (laughter everywhere).

BMM1: True, true.

BMM4: You are right...

BMM2: Because at the end of the day you go and take the same bus.

BMM5: Me, first of all, I need to have a car. And then, it's a belief and I kind of agree with it. I mean, if you are the boss something has to show you are the boss, you know. For me that's where the status thing comes. I will get a good car, I mean considering many other things, if I can afford it. That 'afford it' phrase or sentence has many things including the environmental part. If I can afford to, yes.

BMM4: Can I just add, when you are a manager you have a lot more responsibilities and you do not want to be constrained by times or most of the traffic ... you want to be kind of independent. I think having your own car is err, important (for managers).

From the above representative perspective, managers are perceived as being entitled to use the car. According to BMM5, "... it (car usage as fitting for bosses) is a belief and I kind of agree with it". The key issue here is that when respondents position themselves as potential managers, they ascribe to claim to be entitled to use cars on the basis of this position. This finding is consistent with the sampling justification. It suggests that the claims that students see themselves in the light of potential professionals in line with their departmental orientation are justified.

Further comments by other focus groups highlight perceived links between car types and categories of people who are expected to use specific types of cars. For instance, that certain types of cars were befitting of young people as against elderly people, and that less wealthy people had car brands and types that were consistent with their identities. These views are consistent with those of Wright & Curtis (2005) and Gartman (2003). Succinctly, the "many other things" to be considered, as noted by BMM5, included being able to afford environmental considerations (use of green vehicles). Implicit in this quote is that the respondent might be willing to adopt reductions in car usage if this is aligned to the sense of self s/he would like to communicate.

#### **5.2.7.10 Metaphor of the ledger**

Very few students employed the use of this technique. In line with Klockars (1974) the female student who explicitly used this technique argued that prompt payments of congestion charges (argued as an environmental behaviour) justified her use of the car.

#### **5.2.7.11 Claim of relative acceptability**

In line with Henry & Eaton's (1999) focus group, respondents who employed use of this technique claimed that their car user behaviour was acceptable, relative to that of others. A comparative approach was often applied, implicitly or explicitly, to show how own car user behaviour is permissible or excusable when compared to the car user behaviour of others.

On one hand, respondents compare their use of the car with their interpretations of what would be the immodest car user behaviour of others. Ultimately, they argue that blame and responsibility reside more in the behaviour of others, and that their car user behaviour is excusable. For instance, a respondent claimed the following:

Fair enough, I use it (the car) mainly to university, but  
for some people it's their livelihood. It informs whatever  
kind of jobs they do and things like that (MMA).

The key issue here is that this respondent argues that their use of the car is "fair enough" implying that the car user behaviour of others may not be as fair as his, since "it (others' car user behaviour) informs whatever kinds of jobs they do and things like that". To start the sentence with "fair enough" is a clear indication of wanting to present own behaviour as acceptable in comparison with other people's behaviour.

On the other hand, relative acceptability was applied to compare effects of car user behaviour on the environment from two perspectives. First, harm caused by car usage was compared to harm caused by other environmental externality sources. In this case, respondents claimed that harm caused from car usage was minimal in

comparison to harm from other externality sources. Secondly, environmental problems were compared to economic problems which were argued as demanding more attention. The excerpt below captures how this neutralisation technique was used in this regard:

BSF8: There are other machines (other than cars) that cause a lot more environmental problems such as climate change and pollution.

BSF6: [Cutting in sharply] “and cars are not the only contributors...I don’t think it is the most one (source of emission). There are other things more important to focus on; for example, protecting the rainforest. What is the point stopping people from using cars if they are destroying in other ways; in ways that destroy more than just cars?”

BSM1: It (car usage)’s a problem, but there are lots of problems in the world.

BSM7: [cutting in sharply] More important ones, like the financial crisis.

Summarily, respondents’ rationalisations were used to justify persistence in using the car using different relative comparison, e.g. by trivializing harm from own car usage and magnifying harms from “others”’ usage. Similarly, environmental damage from car usage is argued as minimal while harm from other sources is emphasised as relatively maximal. Finally, environmental problems are trivialised when compared to the state of the economy.

The neutralisation techniques discussed above have been identified and applied in different studies. However, respondents also employed a rationalisation technique



that, to the best of my knowledge, has not been discussed in literature as a neutralisation technique.

#### **5.2.7.12 The change-locus of control argument**

Evidence from focus groups depicted the use of a neutralisation technique that is not among the existing fourteen technique types that formed the study's theoretical frame. Similar to the denial of responsibility, this technique is based on an interpretation of respondents' perceptions of the extent to which they can control the course of events (locus of control). The underlying assumption of this mode of neutralisation is that a single individual's behaviour does not make a difference. This neutralisation technique differs from denial of responsibility in that the emphasis is not on the control of the considered "unethical" behavioural act (car usage) itself. Rather, it is based on the perception that correcting or changing the "unethical behaviour" has no effect and as such is not worth embarking upon. In this case, the corrective act (desisting from using the car) is considered as having no consequence; hence, it is argued as not being worthwhile.

Many student respondents used justifications that reflect this type of reasoning. An excerpt from the data set is presented to highlight the different ways this reasoning was used to justify car usage:

BSF6: You may stop but every other people won't ...

MD: You feel like you alone will not make a difference.

BSF6: Exactly, exactly! It's very difficult seeing you alone making a difference (agreement of "yeah" from majority of other respondents).

This type of rationalisation was often attributed to the perception that people in general were selfish, expecting others to act first before they too can follow. The following excerpt sheds more light on this sort of perception:

AMF3: They (people in general) don't think an individual will do something. It's like global issues, if everyone else has to do it, then I will do it.

AMM7: I agree with her.

AMF3 It's kind of being selfish.

AMM2: Well naturally I think people don't really bother. Everyone is waiting for the next person to say "Oh look, you do this first before I do it, you know...".

The two comments above show how particular individuals use change-locus of control arguments as a means of justifying persistence in car use. This technique, like all the others, is a good way of weakening the moral imperative to engage in pro-environmental behaviour, especially reductions in car usage.

However, given the nature of this type of neutralisation, this technique may be applicable only to cases such as environmental behaviour (specifically use of the car) where there are no clear-cut rules that specify how people should behave. Lack of sanctions and normative imperatives to reduce car user behaviour make this technique easier to employ.

Not all respondents claimed they would continue using cars. A few respondents justified not using cars. This category of respondents used rationalisations that countered the neutralisation techniques (counter neutralisations) to justify desistance from use of the car. Their main views and rationalisations are discussed below.

### **5.3 COUNTER NEUTRALISATION TECHNIQUES IN FAVOUR OF DESISTANCE AND/OR REDUCTION IN CAR USAGE**

Findings from the initial analysis of accounts' content highlights that few respondents were not in favour of car usage. This category of respondents justified desistance from use of the car using arguments that countered the views of those that justified persistence in car usage. Essentially, the accounts from this category of respondents adopted pro-environmental frames of reference. Evidence from focus group sessions points to these respondents' use of different affirmation techniques (Copes & Williams, 2007) and counter neutralisations to justify desistance from use of the car.

Affirmation techniques are discursive techniques that people employ in expressing alternative orientations that aim at resisting the temptations of "doing" what others generally do. They enable people outside the dominant culture to actively resist engaging in behaviours they see as morally reprehensible (Copes & Williams, 2007). In this case, respondents who argued for desistance from use of the car used different arguments to turn the arguments of persisters on their heads, supporting the view of Copes & Williams (2007) that the use of affirmation techniques are employed to justify desistance from a particular type of behaviour.

The affirmation techniques as employed by this category of respondents are discussed in the following subsections.

#### **5.3.1 Use of affirmative techniques**

The five affirmative techniques identified by Copes & Williams (2007) were employed by desisters. In the acknowledgment of responsibility (Copes & Williams,

2007) they acknowledged responsibility for use of the car. Like persisters, they acknowledged that governments and companies are not doing enough in encouraging the adoption of alternative travel modes. However, unlike persisters, they accepted responsibility for their own car user choice and behaviour and did not blame others for the choices they made. Along the same line, they acknowledged harm (Copes & Williams, 2007) caused to the environment and to others from use of the car. Their decisions not to use cars or to reduce car usage was premised on the acknowledgment of responsibility and harm. In other words, desisters' non-use of the car derived from accepting responsibility for use of the car as well as acknowledgement of the harm caused by use of the car. The following comment highlights the representative desister stance on persistence:

MD: When do you think you became very, very interested in the environment? What made you interested? Have you always been like this since you were born?

MR: ...When I spent time in Italy in Milan. Well, Milan is actually worse than Madrid. You could actually see the smog, the pollution and they had to forbid cars because the pollution is too high ... and living in a place like that is like uncomfortable. And I started working there and there were like long queues and I realised people had to not use their cars and use the train. These kind of day-by-day situations.

The respondent ascribed environmental responsibility to self. For this respondent, willingness to act and actual environmentally responsible behaviour arose from perceptions of threat. This process of ascription of responsibility based on perceived threat is consistent with the norm activation theory (Schwartz, 1977), suggesting

that this theoretical perspective has (even if limited in the case of use or non-use of the car) predictive applicability.

The acknowledgment of the victim (Copes & Williams, 2007) was also implicit in desister claims. Aligned to the view that people ought not to use cars was the extended argument that persisters' justifications for use of the car are grounded on selfishness. Here the claim is that people who use cars and cause harm to others fail to acknowledge their victims because they are selfish:

MD: Yeah. What do you think are the main reasons why people don't think the way you think?

MR: Yeah, because we are in greed (laughing). Yeah, I mean we don't care about others. We don't care about the environment, we just care about ourselves.

This argument is implicitly aligned to the reference to priority relationships (Copes & Williams, 2007). The desister claims that true concern for significant others as rationalised by persisters when they appeal to higher loyalties (for instance that their use of the car was motivated by the need to assist others e.g. parents or friends) should imply desisting as against persisting in use of the car. The logic here is that desistance ensures not causing harm to the natural environment on which the existence of significant others depends. A female respondent who argued for desistance highlights the logic behind this train of thought:

...I just started reading and thinking about, oh well, it's not about me or it's for my kids, if someone wants to get kids. So thinking about them or their kids, I don't know.

Maybe it's something also because I am a woman and maybe

that's kind of such things that you care, I mean will be more

in your thoughts (FFA).

The quote above highlights a consideration of the potential impacts of present consumption trend for future generations. This is not to say that such considerations are not implicit in other persist or desist arguments or that persisters do not implicitly acknowledge that current environmental problems have future implications. The above quote is one of the very few respondents' comments or quote that explicitly linked the potential impact of externalities from own car user behaviour to future generations. Although the sustainability hallmark of ensuring that current consumptive patterns do not impact or impede future generations' ability to meet their own needs, very few respondents (save for the respondents whose quote is presented above and MR – the respondent who expressed no willingness to use cars) personalised the potential impacts of their car user behaviour as explicitly as FFA.

Desisters also appeared to be aware of popular perceptions and opinions held about people who adopt alternatives to the use of the car, as the following excerpt depicts:

MD: How do people around you - your friends, and your family - how do they expect you to behave towards the car? Do they expect maybe you come back, make more money, that you own a car?

MR: ... in first encounter they expect you to get a job and then buy a car because sometimes in my place, and in certain times, public transport is linked with low

income. Like, if you are rich, you don't use the underground. In fact, you can see this, like this difference; Spaniards using the car and immigrants and other minorities using public transport and you can actually see this. So, yeah, many people don't want to use the public transport also because of social status.

The interesting aspect is that despite awareness of what is "normal" and expected, this respondent does not succumb to popular views. Generally, desister accounts suggest that they are able to do this by aligning themselves to frames of reference that are counter to those adopted by persisters. This view is consistent with those of Copes & Williams (2007) regarding the purpose that affirmation techniques serve for people who do not subscribe to the dominant or mainstream normative imperatives.

In addition to use of these affirmation techniques, desisters also justified desistance by countering other neutralisation techniques. Representative counter neutralisations are discussed in the following section(s).

### **5.3.2 Counter neutralisation techniques (recourse to alternate necessity and normalcy)**

In addition to use of the five affirmation techniques discussed by Copes & Williams (2007) respondents who argued for desistance from use of the car employed the use of arguments that countered the justifications for persistence. Specifically, I refer to claims of alternate necessity whereby desisters' interpretation of necessity contrasts with that of persisters. This contrasting interpretation is grounded on the distinct manner used by desisters to define necessity (in relation to normalcy). While persisters argued that use of the car was normal and necessary in terms of offering distinct advantages that alternatives to use of the car cannot offer, desisters offered

different interpretations for necessity and normalcy. This is evident in the desister claims below:

MD: How do you think social status will affect you?

MR: Well, I don't think it will affect me. Like I said, I consider my time more important, and I have never had any problem using public transport.

The key issue here is that the respondent does not align herself to the view that use of the car is normal and necessary. Interestingly, she uses similar arguments as persists; focusing on perceived advantages of favoured modes of commuting. However, she argues that use of alternatives such as buses and trains actually save more time than use of the private car. This view is used to justify non-alignment of individual perspectives and behaviour to the dominant social perspective that assumes use of the car reduces travel time. The following desister justification for non-use of the car highlights the logic underlining this rationalisation:

And also it (car usage) is a waste of time. I mean, even if it seems contradictory, maybe you take 10 minutes with the car but then you are stuck in traffic doing nothing, while if you use train or bus you will use the time for relaxing or reading or studying. I use the train to come here from Madrid but I am studying in the train, so it is not a waste of time if you find something useful. In the car you can only listen to radio (MR).



However, desisters also acknowledged dominant cultural motivations to use the car, e.g. the symbolic aspect of car usage as a tool of promoting self-image is acknowledged. In addition, they also expressed awareness of the social perceptions and constructions about alternatives to car usage. Desisters acknowledged that such perceptions underpin the constructions of desisters as extremist or poor. These views are in line with discussions in the literature review section that social influences underpin the motivators for car usage. Their justifications for desistance are grounded on countering neutralisations and emphasizing interpretations that contrast those that underpin persistence. These interpretations highlight a subscription to the environmental frames of reference and a correspondence of expressed pro-environmental cognitions with actual reductions in car usage.

#### **5.4 DISCUSSION**

Findings from focus groups show how the use of techniques of neutralisation and affirmation by respondents justifies persistence and desistance from use of the car. In addition to the original five techniques formulated by Sykes & Matza (1957), focus group respondents, in justifying persistence, employed eight other techniques of neutralisation.

Evidence on the frequency of use of the different accounting techniques (neutralisation techniques and affirmation techniques) is consistent with views that neutralisation techniques may not be equally represented (Grove et al., 1989). Findings suggest that some techniques were dominantly used while some were sparingly used, and a few were not at all used. The denial of responsibility, claim of normalcy, defence of necessity and the claim of relative acceptability techniques appeared to be the most dominantly used neutralisations. Denial of victim, claim of

individuality, appeal to higher loyalties, the claim of entitlement, metaphor of the ledger and condemnation of the condemners were less dominant while justifications by comparison were not used at all. In terms of affirmations, counter-neutralisations to Sykes & Matza's (1957) neutralisation techniques appeared more dominant.

In the following section, I focus on discussing how the employment of neutralisation or affirmation techniques addresses the first two research questions.

#### **5.4.1. The first two research questions: the role of accounting techniques in justifying adopted car user behaviour (persistence or desistance)**

Regarding the first research question (why students' awareness of car user externalities and beliefs that car usage ought to be reduced does not translate to reductions in actual and aspired car usage), findings show that respondents who favour persistence are able to neutralise the environmental imperative via the employment of rationalisations that free them from the environmental imperative to reduce car usage. The role and use of neutralisation techniques is significant in that they (neutralisation techniques) offer the individual avenues to disengage from the behaviour (reductions in car use) that ought to follow necessarily with expressed pro-environmental cognitions. The employment of accounting techniques is also significant in addressing the second research question.

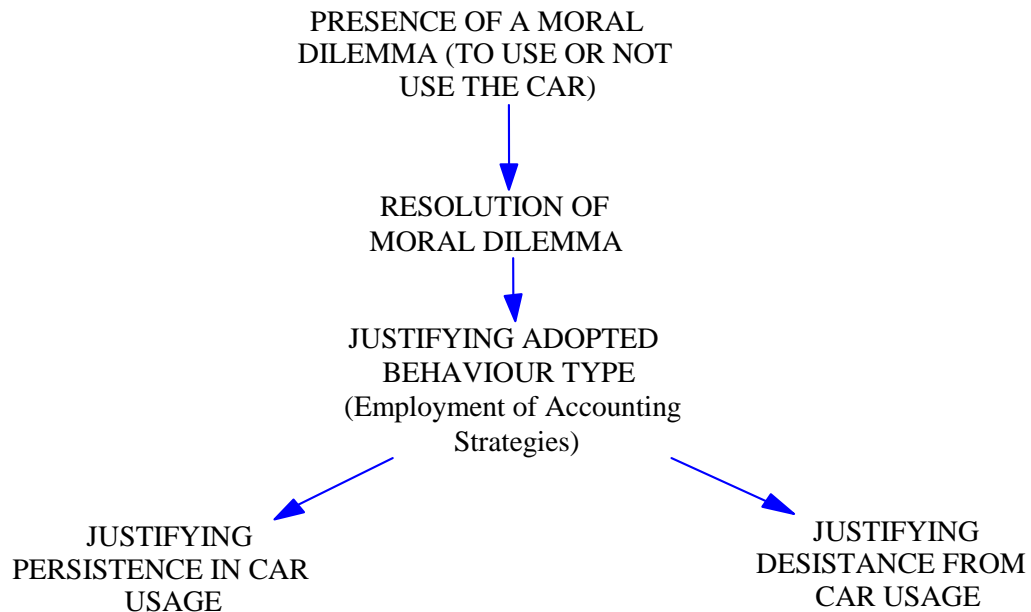
In terms of the second research question (how accounts are constructed and used to justify persistence or desistance in car usage by the study's sample population), focus group findings suggest that it is the manner in which justification accounts are constructed that underpins use of specific neutralisation or affirmation techniques. Persistence is maintained on the basis that the use of neutralisation techniques aids the resolution of the dissonance that arises when persisters feel their car user

behaviour is implicitly or explicitly called into question. Neutralisation techniques “neutralise” expressed pro-environmental cognitions and allow the individual to feel justified in engaging in continued use of the car.

On the other hand, desistance is maintained by countering neutralisations. Given that affirmation techniques aid alignment of pro-environmental cognitions with actual reduction in car usage the moral dilemma that is experienced by desisters is different from those of persisters. Focus group evidence shows that for desisters, the moral dilemma stems from the apparent inconsistency between desistance and dominant social norm imperatives, especially those that favour car usage. A good instance would be the view of the desister (MR) that friends and relatives expect her to buy and use the car. In addition, desisters are constructed as non-normal, as evidenced in focus group discussions where they are assigned different labels: extreme, poor or “without style”. Therefore, the pressure or dissonance experienced by desisters comes from not aligning behaviour with dominant social perspectives. Along this line, we can understand why desisters employ affirmation techniques and how they construct their justifications for desistance. By countering the rationalisations in favour of car usage, the employment of affirmation techniques frees desisters from the dominant social perspectives and norm imperatives that construct car users and car usage as normal. Thus, for desisters and persisters, there is need to resolve or work around the moral dilemma that they experience.

In line with the foregoing discussions, the process of the resolution of the moral dilemma is summarised in the figure below.

**Figure 5.1 Moral dilemma resolution; accounting for persistence or desistance (car usage)**



*Source: Author*

The moral dilemma resolution process broadly addresses the first two research questions as follows. Respondents in justifying adopted car user behaviour employed two types of techniques: neutralisation techniques (Sykes & Matza, 1957) and affirmation techniques (Copes & Williams, 2007). Neutralisation techniques were used to downplay the effects of expressed obligations to reduce use of the car for the sake of the environment while affirmation techniques were used from counter perspectives to affirm the environmental imperatives to reduce car usage. The employment of linguistic techniques in justifying adopted behaviour makes persistence or desistance possible. This is consistent with the view that accounts underpin behavioural justifications and, correspondingly, make actual behaviour possible (Orbuch, 1997).

Focus group evidence highlights the employment of a different neutralisation technique (change-locus control argument) and extends the scope of affirmation techniques to include recourse to alternate necessity and normalcy. While these accounting techniques could be applicable in the justification of any sort of behaviour, the nature of how they are used by respondents suggests that their usage might be limited to contexts that depict similar characteristics as car user behaviour. Another implication is that the employment of neutralisation techniques is context-specific. The same is applicable to affirmation techniques. The more there is need to justify behaviour, the more the individual is likely to employ use of available neutralisations or affirmations. This partly explains the formulation of more neutralisation techniques post the initial Sykes & Matza (1957) formulation. This also means that the list of neutralisations and affirmations employed by the current study's respondents are neither exhaustive nor comprehensive. Different individuals or traveller segments may employ the use of neutralisation techniques differently from how the study's sample has employed them.

The discussions above highlight the link between how justifications are constructed and the individual or group value orientations that underpin them. In other words, the construction of accounts to justify either persistence or desistance depends on value orientation. This view is noted numerously in studies on car usage (Baslington, 2008; Line, 2008) and the broader literature on pro-environmental behaviour. It is argued that egoistic, pro-social and biospheric value orientations motivate people to act in pro-environmental ways, and that individuals with egoistic values possess the most negative relationship with pro-environmental behaviour (De Groot & Steg, 2010) while people with pro-social and biospheric orientations are more likely to engage in pro-environmental behaviour. Focus group findings appear

consistent with these views. For example, the respondent who claims to be environmentally friendly could be argued as possessing either biospheric and/or social as against egoistic value orientations or all value orientations. On the other hand, the respondent who employed the claim of individuality (I don't care about the environment) and claims of entitlement could be argued as exhibiting egoistic as against pro-social or biospheric values. The remainder could fall anywhere in between. Evidence also suggests a correspondence between personality and value orientations. Respondents who expressed scepticism about the veracity of climatologists' claim and those that denied the victim appeared to favour persistence. The general attitude and disposition of such respondents is an outright denial of injury (as ASM3 does when he claims that climate change will occur with or without GHGs from use of cars) and a denial of victim (as in when AMM1 blames the individual exposed to harmful vehicular emissions).

Findings also suggest that the more threat from the externalities associated with car usage are trivialised as insignificant or not immediate, the less is the likelihood of acting to redress the problem. The opposite is also the case; the more threat is affirmed, the more environmental value orientations could be lived out. The typical example in support of this counter view is the student who claimed to have adopted environmental value orientations based on direct experiences. The said respondent (MR) described her experiences in Milan, noting how the sights of congestion and fog in the city led to her realisation that cars were indeed a major cause of environmental damage. Following this direct experience, the noted respondent (MR) has not used a car since then, preferring to use trains and other alternatives. Her statements and decision to act is based on environmental threat that is perceived as significant and immediate. This is consistent with Anable's (2005) view that

environmental concerns may be substantially related to the individual's action. These findings discussed so far are consistent with evidence reviewed in chapter two; that decisions to use or not use the car are subject to perceptions and interpretations of events by the individual.

Previous studies have made similar attempts at categorizing individuals based on attitudes towards sustainable lifestyles in general and to car usage specifically (Anable, 2005; Barr et al., 2011; Barr, 2007). For example, Barr et al. (2011) categorise sustainable lifestyle patterns as Committed, Mainstream, Occasional and Non-environmentalists. Respondents ASM3 and AMM1 would fall in the category of non-environmentalists; they clearly expressed unconcern for the environment and were the only ones who employed the claim of individuality ("I don't care") and denial of the victim. In contradistinction, MR's viewpoint is the exact opposite. She is a good instance of Barr et al.'s (2011) "committed" category and Anable's (2005) "car-less crusader".

By implication, people who adopt the environmental frame of reference are likely to engage in environmental behaviour. However, focus group findings also suggest that this may not always be the case. People who subscribe to the environmental frame of reference may favour behaviour that runs contrary to the frames of reference they claim to subscribe to. An implication is that there is difference between expressed value orientations and value orientations that are "lived-out". In the case of the former, the employment of neutralisation techniques could be used as a means of working around expressed environmental value orientations.

In addition, findings confirm the initial arguments that constitute part of the study's point of departure and focus. Along this line, there appeared to be a difference

between expressed role-motivators for use of the car and the justifications that maintain persistence or desistance in use of the car. When respondents initially accounted for why they would opt to use cars, they emphasised purposes and roles that the car serves them. When they were required to justify use of the car in the face of expressed pro-environmental cognitions, their justifications took into account the initially expressed motivations. In addition, their behavioural justifications also gravitated towards making explanations that went beyond focusing on car purposes or roles. Their constructions also highlighted their perceptions of self, others and what they considered ideal and normatively consistent. In fact, these constructions around views of self, others and cultures are significant for justifying and maintaining persistence or desistance. For example, the typical persister did not initially account for why they favoured use of the car in relation to the dispositions of others (e.g. governments or companies not wanting to provide alternatives to use of the car). Such considerations only arose when the moral dilemma was made salient; that is, when respondents sought to justify persistence. In other words, when people account for their car user behavioural inconsistency, justifications (e.g. that everybody uses the car or others do not care about the environment) are added on to the list of car purpose motivators<sup>15</sup> to strengthen and/or maintain actual or intended decisions to use the car. This accounting strategy is significant for understanding how accounts are constructed to justify persistence (the second research question).

A similar approach is employed by desisters, albeit, the focus in this case is countering the dominant rationalisations that justify persistence. However,

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<sup>15</sup> The literature review chapter identifies the different types of motivations that drive car user behaviour. See chapter two (section 2.2).



affirmation techniques could also be seen as performing similar roles as neutralizing techniques when they focus on “neutralizing” the social norm imperatives that justify car usage.

Based on the foregoing discussion, the use of accounting techniques can be seen as useful in uncovering the complex dynamics (extended interpretations and understandings) that drive persistence or desistance in the use of the car. The use of neutralisation techniques and affirmation techniques tells us more than just what is said to justify adopted behaviour type. In other words, understanding justification accounts for persistence and desistance as neutralisations and affirmations can uncover deeper level underpinnings of behavioural justifications.

In the following section, I briefly discuss some key issues that are implied in how accounts are constructed. I elaborate on how accounts constructions are related to respondents’ personalities.

#### **5.4.2 Schema underpinnings of findings**

Focus group findings are consistent with the view that neutralisation techniques are not discrete (Maruna & Mann, 2005). For example, when persisters argue that use of the car is necessary, they also link this argument to normalcy claims. This implies that accounting techniques are more than justifications and excuses; they are bundles of rationalisations that serve different purposes. Schemas, i.e., respondents’ cognitive representations of knowledge and expectations about self, other selves, events, roles and norms, underpin them.

Focus group evidence suggests that respondents’ accounting techniques are used to align themselves to different contexts. For example, the representative desister

appears to be aligned to a less dominant environmental context that favours reductions in use of the car. On the other hand, persisters appear to align self to a dominant mainstream context that favours car use. In addition to trivializing threat, persisters often made comments to suggest they focus on the normative imperative of the mainstream views that supports persistence in use of the car. This view is consistent with a lot of studies that have noted the influence of social norms on human behaviour (see Biel & Thorgesen, 2007; Anable, 2005; De Groot & Steg, 2010 for details and review of studies in this regard).

Furthermore, when respondents claim that certain car types are meant for certain categories of individuals, or that managers are entitled to use cars, they make identity-related arguments. Views that poor people cycle or that people who use hybrids (or other types of EFCs) are extreme are also aligned to identity arguments as well as social perceptions and constructions of difference. The implication is that accounting techniques reflect the underlying schemas that drive persistence or desistance. This sheds more light on the second research question in that the manner(s) in which accounts are constructed for justifying persistence or desistance depend on schema perceptions. The implication is that multi-layered understandings of persistence or desistance are obtainable if schema considerations form the focus on extended analysis of how neutralisations and affirmations are employed. This latter line of argument has been recommended as a means of uncovering the complex drivers that underpin behaviour when people employ use of accounting techniques (Maruna & Copes, 2005). It is this approach that I have adopted for a deeper level analysis that is presented in the following chapter.

## 5.5 CONCLUSION

This chapter has explored students' perception of environmental sustainability and corresponding PEB. Evidence from focus groups with students was used to explore respondents' perceptions of the relationships between environmental problems (specifically climate change) and pro-environmental behaviour (car usage).

Respondents who argued for persistence in use of the car (persisters) employed different neutralisation techniques to work around the moral dilemma inherent in not matching actual and aspired car user behaviour with environmental beliefs. On the other hand, the few that argued for reductions in use of the car (desisters) had to find means of working around the imperatives of a dominant mainstream context that considers car use to be normal and necessary. Thus, the different techniques employed by either group were strategically used to serve different purposes. The use of accounting techniques underpin answers to the first two research questions as follows: the use neutralisations frees the individual from the environmental imperative to reduce car usage while the use of neutralisations and affirmations underpins justifications for adopted car user behaviour.

In the following chapter I review evidence and findings discussed in this chapter from a schema perspective, to uncover how views of self (personality and identity), others and ways of life (cultures and contexts) are grounded in respondents' accounts for persistence in and desistance from use of the car.

## CHAPTER SIX

### 6.0 A FUNCTIONS APPROACH TO UNCOVERING SCHEMA UNDERPINNINGS FOR CAR USER BEHAVIOURAL JUSTIFICATIONS

#### 6.1 INTRODUCTION

In this chapter, I explore how the mechanism(s) of justifying persistence in or desistance from use of the car described in the previous chapter are reflective of the sample group's schemas. My discussions in this case address the third research question, and thus explore how justification accounts for persistence in or desistance from use of the car are underpinned by, and reflective of, schema perspectives<sup>16</sup>. In addition, the discussions derive from an extended analysis of the accounting strategies for persistence and desistance at a function or process level.

The analysis and discussions in this regard build on the descriptions from the previous chapter of how the justification accounts for persistence or desistance are underpinned by schema consideration. In line with this view, the analysis and discussions gravitate towards a deeper level consideration of how the use of specific accounting mechanisms serves specific purposes that are reflective of, and underpinned by, respondents' schemas and schema perceptions. In line with the research strategy (discussed in section 4.4 of chapter four), I interpret the discourse processes and functions of neutralisation and affirmation techniques for individual and student groups' justifications for persistence and desistance. Furthermore, the theoretical perspectives that I linked to use of accounts and neutralisation techniques (see section 3.3.1) are used to guide my interpretations and discussions in line with

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<sup>16</sup> See sections 4.4.1 and 4.5 of the study's research methodology/methods (chapter four) for further in-depth elaboration on this research strategy and analytic procedure for this aspect.

the interpretivist tradition (Gergen, 2009<sup>17</sup>). In the following paragraphs, I revisit these theoretical perspectives, their connections and their relevance as applied to discussions in the current chapter.

Discussions in this chapter are presented in three main sections. The first section reviews the different accounting mechanisms that are used by focus group respondents to justify persistence or desistance in relation to car usage. Since accounts are used to serve different purposes (Bochner et al., 1997; Maruna & Mann, 2006), the exploration of how different individual and group accounts are used to justify persistence/desistance in use of the car is justified. Specifically, this section uncovers “how” the techniques of neutralisation (Sykes & Matza, 1957) and affirmation (Copes & Williams, 2007) are employed by students as strategies to justify car user persistence and desistance respectively. In addition, I explore the attributions and explanatory styles that underlie respondents’ use of specific accounting techniques in justifying persistence or desistance in car usage. This latter exploration is based on the fact that accounts are communicated attributions (Harvey et al., 1992; Crittenden, 1983) offered as explanations for behaviour; they are also used to display knowledge of perceived ideal ways of acting (Orbuch, 1997). Implicitly, attributions and corresponding explanatory styles are explored as themes that span the whole range and use of neutralisations and affirmations.

Respondents’ justifications for either persistence or desistance are aligned to different moral imperatives; the pro-environmental that favours reductions in car use and the dominant conventional social norm that favours car use respectively. The different moral imperatives were considered by respondents as ideal ways of acting

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<sup>17</sup> In-depth elaboration available in section 4.4 of chapter four.

in line with justifications for favoured behaviour (persistence or desistance, as the case may be). Findings suggest the different normative imperatives are often in conflict. By employing different coping strategies<sup>18</sup> (specifically, re-arrangement) respondents were able to work around the conflicting moralities and imperatives. In re-arrangement, respondents find ways to work around different moral imperatives in manners that serve the ultimate aim of justifying either persistence or desistance.

A key issue in this case is that the “re-arrangement” mechanism becomes reflective of the different, sometimes contradictory, normative imperatives underpinning the moral dilemma that individuals seek to resolve when they justify either persistence or desistance. The foregoing assertion is in line with the view that accounts reflect normative explanations that are culturally embedded (Orbuch, 1997). In section two, I explore the different normative contexts and how their specific characteristics underpin the moral dilemma inherent in use or non-use of the car. In addition, this section explores how respondents’ accounting and coping strategies (re-arrangement) for persistence and desistance are grounded on the quest to work around conflicting moral imperatives of the different normative contexts.

The third section explores how respondents’ accounting strategies and coping mechanisms (specifically re-arrangement) become the substrate upon which identity negotiations are grounded. The discussion in this regard is developed from the preceding section, and builds the idea that the alignment of self to the frames of reference of specific normative contexts implies identification with the values of

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<sup>18</sup> Numerous coping strategies have been identified in literature (see Lazarus & Folkman, 1984; Weiten et al., 2009). However, in this thesis, the term “coping” refers to the process of dealing with stressful events or behaviour. It involves the mastery, tolerance, reduction or minimisation of stress by the individual. The term “coping strategies” refers to the specific efforts (behavioural and psychological) that individuals employ in coping.

these normative contexts. This view resonates with Worth's (2009) explications that accounts or narratives are sources of personal identity formation (self-views) and ways of relating with others. In addition, they are driven by values and perceptions of time (past, present and future), and as such underpin constructed identities over time. The emphasis in this case is on uncovering how the different normative contexts and subsequent coping strategies (especially re-arrangement) as negotiated by respondents reflect identity and self-constructions. Perceptions of self and identity are considered, amongst others, in terms of how they intersect with adopted ethical standards (responses to different moral and normative imperatives) as well as how they relate to respondents' processes of becoming; that is, the individual's evolving sense of self (Allport, 1955).

## **6.2 ACCOUNTING FOR PERSISTENCE AND DESISTANCE IN CAR USAGE**

This section reviews how accounts are used to justify persistence in car usage by this traveller segment. However, given that not all respondents favoured persistence in car usage, a consideration is also made of how counter neutralisation techniques (techniques of affirmation) are used to justify alternative frames of references that are underpinned by orientations towards car user reduction.

### **6.2.1 Justifying persistence in using the car (employment of neutralisation techniques)**

Findings suggest that the majority of students use varieties of neutralisation techniques to account for their actual (present) and aspired (future) car user behaviour. A key issue that arises relates to the extent to which the different neutralisation techniques were used as well as the purposes that neutralisations serve for respondents who employ them.

Focus group findings show a high level of general awareness of the environmental externalities associated with use of the car<sup>19</sup>. Since respondents were aware of car user externalities and consented that car usage ought to be reduced, persistence in terms of continued or aspired use of the car had to be justified. The use of neutralisation techniques can be located in the context of resolving this moral dilemma, i.e. by not matching expressed pro-environmental cognitions with actual reductions in use of the car.

On one hand, the uses of neutralisation techniques serve the purpose of lowering the moral imperative to reduce car usage. An interesting theoretical import relates to how neutralisation techniques were used to justify actual and intended car user behaviour. Findings in this regard show that neutralisations could be used prior to or after a behavioural act, that is, to justify intended as well as current car user behaviour. Whilst this finding helps to clarify the debates on whether neutralisations come before or after the act (Sykes & Matza, 1957; Hirschi, 1969; Minor, 1984; Cromwell & Thurman, 2003), it also shows that for specific behaviours (e.g. justifying car user persistence) the direction (pre- or post-use) may not be relevant insofar as the end (persistence in use of the car) is justified. Thus, people who are committed to using the car, or who currently use the car, will find no problem in justifying its usage in the face of a moral dilemma. The employment of neutralisations serves this purpose; it makes persistence possible.

Actual car users are likely to downplay the moral imperative to reduce car usage by employing neutralisation techniques post-usage, while intended car users may use similar neutralisations for pre-usage justifications. In addition, chances are high that

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<sup>19</sup> Detailed discussions of this finding are presented in the previous chapter (chapter five).



intended users will continue employing these techniques post-usage. Thus, the extended use of any neutralisation technique (pre- or post-usage) for justifying car usage is likely to lead to a hardening process (Hirschi, 1969; Minor, 1984), in this case “strong” persistence. This is applicable in the use of all neutralisation techniques. However, the study findings suggest that the more the dominant techniques<sup>20</sup> are used, the more likely that this will be the case.

In addition, respondents who favour continued use of the car justified persistence by disengaging themselves from any moral imperative to reduce car usage. This form of disengagement occurs when respondents employ different types of technique, implying that irrespective of which technique is used, the purpose remains the same. For example, when respondents claim they do not care about car user externalities and will continue driving, or when they claim that use of the car is normal or necessary, the employment of any of these techniques serves the same purpose; to close the door to further considerations of alternative behaviour. It is likely that the more neutralisations are employed successfully to justify persistence, the greater the chance that the individual who uses them consistently will become deeply embedded or habituated into using the car. In this case, the continued use of some specific neutralisations to justify persistence in use might enable the user to become embedded in use of the car up to the point that any possible considerations of alternatives are eliminated. This view resonates with those of Sykes & Matza (1957) that some delinquents may not employ use of neutralisation techniques if they become so disengaged from conventional societal norms. The resonance with Sykes

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<sup>20</sup> See chapter five (sections 5.1.7.1 to 5.1.7.12) for an extended discussion on the identified dominant neutralisation techniques for persistence (denial of responsibility, defence of necessity, claim of relative acceptability, claim of normalcy, denial of injury, change locus control argument and condemnation of the condemners).

& Matza (1957) lies on the assumption that the user of neutralisation techniques seeks to neutralise norm imperatives that conflict with those of the behaviour they favour. However, in this case, persisters' attempts at disengagement are not from conventional social norms, as argued by Sykes & Matza (1957), but from the environmental norm imperative that they acknowledge and seek to neutralise. Persisters disengage from the wider (conventional) environmental normative imperatives by aligning themselves to an alternative mainstream normative frame, i.e., the social norm imperative in favour of car usage. Given that actual car usage cannot be considered delinquent or anti-societal, the use of neutralisations as employed by persisters is, broadly speaking, a dissonance reduction strategy that arises from the need to justify non-alignment of car user behaviour with expressed pro-environmental cognitions. Persisters' alignment to mainstream social normative imperatives is more in line with the view that people who are strongly committed to them are not likely to employ neutralisations (Copes & Williams, 2007).

It may be that certain neutralisations depict degrees of embeddedness or alignment to different frames of reference. The use of certain neutralisations such as the claim of individuality (the "I don't care" attitude) suggests high-level embeddedness in mainstream culture and alignment with conventional social norms that favour use of the car. The foreclosing of further discussions or considerations of alternatives that underpin use of this technique suggests a deep level embeddedness in persistence or disengagement with environmental values. The few respondents (ASM3 and AMM1) who used this technique exhibited this deep-level embeddedness to the conventional social norms and complete disengagement from the wider environmental frames of reference.

In line with the above explication, we can categorise persisters as being “hardliners” or “strong” (when they completely disengage themselves from any moral imperative to reduce using the car) or “non-hardliner” or “weak” when they appear to lower the moral imperative to reduce car usage, but do not completely disengage themselves from this moral imperative. The latter category of persisters often accept responsibility for the externalities that arise (or would arise) from their car user behaviour. However, they work around this via use of accounting strategies that allow them to negotiate and work around pro-environmental frames of references. In line with this train of thought, the majority of persisters in the study sample would be classified as non-hardliners. This categorisation is also consistent with respondents’ high-level awareness of car user externalities and agreement with climatologists’ claims on the effects of car usage to the natural environment.

Generally, hardliner persisters claimed that use of the car was inevitable. They outrightly claimed not to care about the environment and claimed that they would continue to use car. Whilst this category of respondents majorly employed the claim of individuality and denial of the victim, they also employed the use of other neutralisation techniques by arguing from extreme perspectives. For example, while non-hardliner respondents argued that the car was not a necessity when compared to the basic necessities of life (food, shelter and clothing), hardliner persisters argued that the car was almost, if not exactly, on the same level as these basic necessities of life. A typical example of such a hardliner view is ASM3’s comment that “... we can’t live without them (cars)”.

The distinction between hardliners and non-hardliners can be conceptualised as residing primarily in the extent to which extremist neutralisation techniques and

justifications are employed. The table below summarises how the neutralisation techniques were employed by the persister category.

**Figure 6.1 Persisters' use of neutralisation techniques according to categories<sup>21</sup>**

CATEGORY	NEUTRALISATION TECHNIQUES EMPLOYED	JUSTIFICATION STRATEGY
HARDLINER (STRONG PERSISTERS)	<ol style="list-style-type: none"> <li>1. Denial of Injury</li> <li>2. Claim of Individuality</li> </ol> <p>Plus any other neutralisation, but <b>ONLY</b> when justifications are accounted for from an extremist perspective.</p>	<p>Assume extremist positions when employing use of neutralisation techniques.</p> <p>Tend to disengage completely from wider environmental norms, e.g.:</p> <p>“We can't live without cars”;</p> <p>“I don't care about the environment...I will keep using the car”.</p>
NON-HARDLINER (WEAK PERSISTERS)	<p>All other neutralisation techniques except the following:</p> <ol style="list-style-type: none"> <li>1. Denial of Injury</li> <li>2. Claim of Individuality</li> </ol> <p>Justifications do not adopt extremist perspectives.</p>	<p>Assume non-extremist positions when justifying persistence.</p> <p>Tend to disengage by lowering the moral imperative of environmental norms:</p> <p>“I agree we are harming the environment, but what can you do? You have to use the car”.</p>

The case of how necessity was constructed shed more light on the accounting strategy employed for justifying persistence amongst these two categories. For non-

<sup>21</sup> The terms “hardliner” and “strong”, and “non-hardliner” and “weak” are used interchangeably in this thesis.

hardliners, the necessity aspect of using the car was considered majorly from utility or instrumental points of view, to serve purposes such as shopping. In arguing for the necessity of the car, this category of persisters often emphasised the utilitarian gains or benefits of using the car. In doing so, alternatives such as using the bus, train or cycling were constructed as not offering similar benefits. This process of constructing car usage as offering benefits that are lacking in the use of alternative means of commuting has been noted in studies (e.g. Hagman, 2003). By emphasizing the necessity of using the car, non-hardliners (weak persisters) are able to downplay felt obligations to reduce car usage based on environmental awareness. Thus, they are able to find justifications to continue in actual or aspired car user behaviour (persistence). On the other hand, hardliners (strong persisters) simply close the door on any further discussion or consideration. They make strong arguments for persistence, and are categorical and extreme in their arguments.

In contradistinction, a few respondents argued for reductions in car user behaviour. For this category of respondents, accounts were used in a different way; to justify desistance from car usage.

### **6.2.2 Accounting for desistance from using the car (employment of affirmation techniques)**

In line with Copes & Williams (2007), findings suggest that the process of desistance from actual and aspired car user behaviour is facilitated by the use of affirmation techniques. Affirmation techniques are discursive techniques that people employ in expressing alternative orientations that aim at resisting the temptations of “doing” what others generally do. They “enable people outside the dominant culture to actively resist engaging in behaviours they see as morally reprehensible” (Copes & Williams, 2007). The counter neutralisations employed by respondents who

favour reductions in use of the car are consistent with Copes & Williams' (2007) explication; they used counter rationalisations to reinforce the environmentalist view that there is need to reduce car usage.

In justifying reductions in car user behaviour, this category of respondents rejected some of the arguments that underpin neutralisation techniques by positing counter arguments. Generally, desisters accepted responsibility for reducing car usage. Unlike persisters, they responded to the felt obligations that arose from their awareness of car user externalities by affirming actual or intended reductions in car usage. On this basis, we see a clear distinction between persisters and desisters; one that resonates with the binary-type relationship that is evident when accounts are used to construct reality<sup>22</sup>.

As in the case of persisters, desisters can also be sub-categorised into two groups: hardliner and non-hardliner. Furthermore, similar to hardliner persisters, hardliner desisters tended to be in the minority. However, unlike persisters, desisters' orientations are aligned towards reducing car usage. In other words, their uses of affirmation techniques serve the purpose of justifying their desistance from conventional car user behaviour. Like persisters, they accept that certain neutralisations are cogent; for example that governments are largely to blame for car user persistence and that car usage is societally accepted and expected. While they agree that such rationalisations may offer justifications for car user persistence, their affirmation techniques serve the purpose of justifying their counter orientation of not aligning themselves to the dominant car culture. The frames of references they

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<sup>22</sup> Discussed in the theoretical framework chapter (See section 3.1.5 of chapter three) and methodology and methods chapter (section 4.2).

emphasise oppose typical neutralisation techniques. In other words, desisters' accounts are geared towards justifying disengagement with car usage on the basis that this mode of commuting is unsustainable and consequently morally reprehensible. The key arguments outlined in the foregoing discussion are in line with Copes & Williams' (2007) findings that some techniques of affirmation might be seen to complement traditional neutralisations while others might oppose typical neutralisations.

In terms of their justification strategy, a categorisation similar to that of persisters can also be inferred for desisters. Like strong persisters, strong desisters employ strong and extremist rationalisations. However, they employ use of affirmation techniques instead of neutralisation techniques. They tend to disengage completely from conventional normative imperatives that support use of the car. On this basis, only one respondent (MR) would qualify as a hardliner.

On the other hand, weak desisters tend not to assume a radical distance in abstaining from use of the car. They argue for reductions in use of conventional vehicles and increased use of alternatives (green cars). Thus, for the desister category, the demarcating line is also on the extent to which either sub-category (hardliner versus non-hardliner) uses strong or weak rationalisations to emphasise either total non-car use (hardliner) or more subtle reductions in environmental externalities from use of the car via use of greener vehicles (non-hardliner). The table below summarises how the affirmation techniques were employed by the desister category.

**Figure 6.2 Desisters' use of neutralisation techniques according to categories**

CATEGORY	AFFIRMATION TECHNIQUES EMPLOYED	JUSTIFICATION STRATEGY
HARDLINER (STRONG DESISTER)	ALL	Assume extremist positions when employing use of affirmative techniques.  Tend to disengage completely from wider pro-market or social norms in favour of car use  Justifications are strict in terms of car use; arguing for non-car use as means of reducing CO2 emissions
NON-HARDLINER (WEAK DESISTERS)	ALL	Assume non-extremist positions when justifying desistance.  Tend to disengage slightly from wider pro-market or social norms in favour of car use  Justifications encourage the use of alternatives (EFCs) over conventional cars as a means of reducing CO2 emissions

Further distinctions between the underlying self-understandings, motivations and implicit beliefs of persisters and desisters are evidenced in the respective attributions and explanations they offer for persistence or desistance. In the following section, I discuss key issues arising from respondents' attributions and explanatory styles. Subsequently, I elaborate further on the different normative contexts that affect persistence-desistance and how these underpin identities' constructions; and how complexities and dynamics inherent in justifying persistence or desistance are negotiated by persisters and desisters in line with corresponding schemas.



### **6.2.3 Attributions and explanations of persistence/desistance: accounting for environmental motivation, ability and responsibility to self and others**

As discussed in the theoretical framework chapter (section 3.3.1), attributions arise from people's propensity to explain why they do the things that they do (Alloy et al., 1984; Gedeon & Rubin, 1999; Maruna & Mann, 2006). Thus, when focus group respondents account for car user behaviour, their accounts are used to explain behavioural persistence or desistance from use of the car. This is in line with the view of Harvey et al. (1992) that accounts are packages of attributions. As such, attributions span the whole range of neutralisation and affirmation techniques that are employed in persistence or desistance justifications.

Focus group findings reveal that the explanatory styles adopted by persisters and desisters were different. These differences relate to the nature and focus of their attributions and explanations for either desistance or persistence. The respective attributions and explanatory styles are discussed in the following sub-sections.

#### **6.2.3.1 Persisters' attributions and explanations for persistence**

Generally, persisters (hardliners and non-hardliners) tended to explain their actual and aspired car user behaviour using externalisations. Externalisations locate cause for behaviour from without; that is, outside the individual accounting for own or other(s)' behaviour (Alloy et al., 1984). Externalisations highlight persistence justifications from two perspectives. On one hand, the use of externalisations served the purposes of downplaying obligations and normative imperatives to reduce car usage. The interesting point here is that persisters often ascribe environmental motivation and responsibility to self and others. In other words, they too subscribe to wider environmental values. However, when they account for actual or aspired car user behaviour they often downplay the normative imperative to desist from car

usage by relocating environmental blame and responsibility to others. Thus, they argue that their use of the car is caused (and consequently justified) by dispositional and situational factors that leave them no choice than to continue using the car. This is evident in the denials of responsibility and condemnation of the condemners where governments, employers and companies' activities are argued as limiting their ability to reduce car usage. This sort of attribution makes it possible to water down (for non-hardliners) or close any further discussions (for hardliners) on their expressed willingness (motivation) to translate assigned environmental responsibility to self into actual or aspired reductions in car usage. This key finding is consistent with the findings of Pieters et al. (1998); that positive influences arising from expected cooperation between consumers and social actors (governments and industry) are limited.

According to these authors' research findings, the behaviour of societal actors (governments and industry) had no effect on consumers' own behaviour. In other words, just like focus group respondents, consumers in the cited study did not view these societal actors' activities in a positive light. Focus group findings confirm findings of this questionnaire-based study (Pieters et al., 1998); that people may not perceive their environmental behaviour as directly influenced by expected cooperation between themselves and societal actors (governments and companies). In addition, it goes further to show how a persister's perceptions of others' attitudes and behaviour can be used as justification for the persister's own behaviour.

Although hardliners and non-hardliners both externalised blame, their externalisations highlighted the different justification strategies and neutralisation

techniques that they employ for persistence. This key difference is evident in the manner in which they ascribe environmental responsibility for using the car to self.

Non-hardliner perspectives are evident in the denials of responsibility and condemnation of the condemners,<sup>23</sup> where governments', employers' and companies' activities are argued as limiting car users' ability to reduce car usage. This train of thought makes it possible to water down respondents' already expressed willingness (motivation) to translate assigned environmental responsibility to self into actual or intended reductions in car usage. On the other hand, hardliners adopted perspectives where their explanations for persistence closed the case for further discussions. In addition to their externalisation of blame from extremist perspectives (i.e. using strong rationalisations), a distinctive hardliner perspective is seen in their attribution of car user behaviour to dispositional internalisations - i.e. claiming that they do not care. A typical comment reflecting an internalised disposition is captured in this brief excerpt:

MD: You said at a point that you are not bothered.

AMM1 (cutting in sharply) Yeah.

MD: Can you highlight further why you...

AMM1: Oh, I am gonna drive and I want everyone else to drive. I do not care about the environment.

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<sup>23</sup> The accounting strategy used by individuals to deflect attention directed to them back to the one whom they perceive as calling their car user behavioural inclinations into question.

Further considerations are closed as evidenced in the above hardliner persister comment. In the case of non-hardliner persisters, a non-hardliner position suggests that the process of accounting and justifying persistence in car usage assumes a more complex process. Given that they expressed attributions of environmental motivation and responsibility to self, there was extra pressure to neutralise the moral imperative that goes with this position. For example, while a hardliner's outright claim of not being bothered or caring about the environment was enough to define and justify their stance regarding persistence, non-hardliner persisters had the extra task of neutralizing ascribed environmental motivations and responsibility. In other words, this category of respondents needed to employ the use of neutralisation techniques the most.

#### **6.2.3.2 Desisters' attributions and explanations for desistance**

For desisters, the explanatory styles and attributions were in accord with the affirmation techniques and justification strategies that they adopted. Similar to persisters, hardliner (strong) and non-hardliner (weak) desisters were identified. The major difference between these categories of desisters is evident in the different approaches they had regarding desistance from car user behaviour. Non-hardliners were not against the use of cars. Like persisters, they saw the car as serving useful purposes. They also externalised blame for persistence, e.g. that governments and companies are not doing enough to champion the environmental cause in relation to getting people to reduce their use of the car. However, they tended to encourage the use of alternatives (EFCs) over conventional cars as a means of reducing carbon dioxide emissions. This category of respondents claimed that they would willingly purchase and use EFCs instead of conventional vehicles. In other words, they internalised environmental responsibility to self.

On the other hand, hardliner desisters appeared to be stricter in terms of their approach to desistance. The one student (MR) who was identified in this category argued that environmental responsibility demanded a shift from use of cars to use of non-car alternatives, specifically trains. This shift was argued for based on a perceived environmental threat that required immediate environmental response. The following interview excerpt shows how a desister respondent applied affirmation techniques to oppose the neutralisation techniques employed by persisters:

MD: When do you think you became very, very interested in the environment? What made you interested? Have you always been like this since you were born?

MR: ... When I spent time in Italy, in Milan. Well, Milan is actually worse than Madrid. You could actually see the smog, the pollution and they had to forbid cars because the pollution is too high ... and living in a place like that is like, uncomfortable. And I started working there and there were like, long queues, and I realised people had to not use their cars, and use the train.

MR employed the use of affirmation techniques (Copes & Williams, 2007) to acknowledge responsibility, the victim and harm (threat trivialisation). Her further comments (e.g. that use of the car "... is a waste of time") contrasted with those of both persister types as well as with those of non-hardliner desisters - that the car has benefits that alternatives do not. The key issue is that she does not align herself to the prevailing social order (claim of necessity and normalcy) that encourages use of cars. Summarily, she uses similar attributions to persisters but in a manner that turns the dominant neutralisation techniques used by persisters on their head.

However, desisters did not oppose or counter all of the claims that were used as justifications for persistence by persisters. Desisters also affirmed the presence of cultural motivations that are attributable for people's persistence in use of the car; the symbolic aspect of car usage as a tool of promoting self-image (image management) as well as the social perceptions and constructions about alternatives to car usage. The following quote from a hardliner desister highlights this point:

... they (significant others) expect you to get a job and then buy a car because sometimes in my place and in certain times public transport is linked with low income. Like, if you are rich, you don't use the underground. In fact you can see this, like this difference; Spaniards using the car and immigrants and other minorities using public transport and you can actually see this. So, yeah, many people don't want to use the public transport also because of social status (MR).

Interestingly, desisters (both hardliner and non-hardliner) countered persisters' attributions of persistence to costs (situational attributions, e.g., arguments that EFCs were unaffordable). In considering costs, this category of respondents appeared more accurate in their costs calculations. Specifically, they considered a range of motoring costs. Thus while persisters often tended to focus on the initial purchase costs of EFCs which they argued as being too high and as such unaffordable, desisters countered this claim by comparing the motoring costs (e.g.

fuel, maintenance, insurance, congestion and parking charges) of EFCs and conventional cars. They noted that EFCs were more cost effective in the long and short term due to their fuel-efficiency and exemption from most other taxes that conventional car users had to pay (e.g. congestion, parking etc.). On one hand, this could be interpreted as an indication that desisters appear to be better informed about the full costs of motoring than persisters. On the other hand, it could be the case that persisters are aware of these extra costs of motoring but choose not to consider them, since such considerations are likely to weaken their cost-related justifications for use of conventional vehicles, i.e. that EFCs are costlier than conventional cars. This claim is likely to be the case; that is, that desisters might have embarked on information manipulation (Staw, 1980) whereby they select or choose supportive information to justify specific behaviours. In this case, desisters' arguments are in line with studies that suggest that individuals and households spend more on mobility charges than they do on one-off car purchase costs (Froud et al., 1998).

This selective process can be seen as being underpinned by attributions and explanatory styles aimed at justifying behaviour. While persisters often used externalisations (both dispositional and situational) to locate blame for car usage outside the self, desisters emphasised internalised dispositions. Unlike persisters, desisters explained justifications for desistance based on internalised moral imperatives that derived from the environmental frame of reference. While both categories of respondents attempted to resolve the moral dilemma of using or not using the car from different perspectives and using different accounting strategies, they also found ways to cope with the tensions and conflicts inherent in the car usage dilemma.

A similar approach to coping was employed by desisters and persisters. The coping mechanism used by both desisters and persisters was underpinned by what I term “re-arrangement”. This coping mechanism highlights an important fact: that attributions and use of accounting strategies are not causal explanations or justifications - they also underpin coping mechanisms. “Re-arrangement” is discussed in more detail in the following sub-section.

#### **6.2.4 Re-arrangement as coping strategy<sup>24</sup>**

The presence of a moral dilemma leads to internal tensions that individuals need to address (Jones, 1991). Along this line, respondents’ accounting strategies in terms of coping highlight the process of re-arrangement. Re-arrangement is a process whereby respondents work around conflicting moral imperatives by selection and re-negotiation of relevant persistence-oriented or desistance-oriented values. These values are internalised such that they become morally acceptable justifications for either persistence or desistance. This process is necessary not just because it aids the justification for either persistence or desistance. Its significance lies in the fact that it seeks to justify the chosen line of action (persistence or desistance) as good and morally consistent. This coping mechanism takes the justification process further in that the individual does not stop at justifying behaviour; the end goal is to situate justified behaviour in “goodness” and sound morality. This process occurs in two stages for persisters as well as desisters.

For persisters, the first stage starts with an externalisation of cause for behaviour; for instance, that others generally expect them to use cars. For example, in the claim

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<sup>24</sup> See glossary (and footnote 17) for definitions of “coping” and “coping strategy” as used in the thesis.



of normalcy, appeal to higher loyalties and defence of necessity respondents' persist arguments centre majorly on the fact that people expect them to use cars. This argument is consistent with studies that suggest young people tend to see use of the car as normal (Line, 2008). It is further supported by respondents' claims that such expectations are normal since it is what everyone else does. Subsequently, respondents implicitly back such expectations by emphasizing social values such as assisting others (parents, friends, etc.) that are in need by offering rides in their cars. In other words, they highlight the social values that are considered social goods (care or assistance etc., as the case may be) and then relate these to their car user behaviour. The establishment of these claims (externalised dispositions) then become a basis for the second stage.

In the second stage, respondents internalise "good" social values, and argue that their car user behaviour follows necessarily from the moral imperatives of the noted social values and norms. At this point, they are able to present themselves as "conformists" to social values that are morally sound and "good". Using this re-arrangement process, persisters are able to cope with the moral dilemma inherent in car usage. It allows them to eliminate any feelings of guilt that may arise from not subscribing to the environmental imperative that they profess. Nevertheless, this is not just about eliminating guilt as in the case of neutralisation employment. It is more about positioning themselves as the "good guys" - being able to claim subscription to a universal or common good - something similar to people who subscribe to environmental behaviour. By selectively aligning themselves to moral imperatives that are conventionally perceived as common goods, they too work around the moral dilemma of using or not using the car by constructing themselves as "good guys" who care about others.

This re-arrangement process appears to go contrary to the view that people are not likely to internalise personal responsibility when using neutralisation techniques to justify behaviour that is contrary to their beliefs (Maruna & Mann, 2006). On the contrary, this finding suggests that respondents may be able to do this if they can “re-arrange” the moral character of the behaviour in question. In this case, instead of aligning themselves to environmental imperatives to reduce car usage, what they do is to align themselves to a conventional social imperative that presupposes the opposite. In line with Jones (1991), this ability to deflect and substitute the moral character of the behaviour in question (“re-arrangement”) may occur more in behaviours with flexible and weak moral intensity (e.g. environmentally responsible behaviour) than it would in cases where the moral intensity of the behaviour is high (e.g. crimes such as murder and fraud). Ultimately, the key issue is that the behaviour being justified can be re-arranged such that it becomes “good” and can be presented as worthy of being embarked upon.

The desisters’ re-arrangement process starts with an outright condemnation of unsustainable lifestyles. In the words of a desister, environmental problems arise because “... we are in greed (laughing). Yeah, I mean we don’t care about others. We don’t care about the environment; we just care about ourselves” (MR). Here the emphasis is on a defined anti-social value, which is related to car usage. Rather than internalise this anti-social value (lack of care for others), the desister rejects them. The desister’s central counter argument is that caring about others, as also argued for by desisters, involves working towards shunning selfishness (as evidenced in car usage and not caring for the environment) by showing concern for a greater common good (the environment). Similar to persisters who appeal to the normative imperatives of social values (assisting or caring for others), desisters appeal to the

same set of social values (care) by using different attributions and neutralisations to argue for desistance. In this case, the affirmative techniques employed are the ones that can “neutralise” the neutralisation techniques that are applied to establish “goodness” by persisters. For example, the reference to priority relationships is used as a counter neutralisation to the “goodness” claim; if car users really loved the people they claim their car usage benefits, then they would strive not to hurt them or the environment on which their sustainable existence depends by reducing their use of the car. Hence, desisters argue that car users are selfish (and not altruistic as they claim) and are unconcerned about the greater common good. Subsequently, environmental responsibility and action is internalised as the guiding maxim for socially responsible behaviour and reductions in car usage. Thus, like persisters, desisters also seek to arrive at an end whereby they are able to construct themselves as “the good guys”. Re-arrangement is, therefore, about resolving the moral dilemma and presenting oneself as morally consistent and “good”. In other words, it is a specific way of coping and working around tensions that arise from moral imperatives.

Re-arrangement as used by persisters and desisters highlights the different normative perspectives that respondents make salient, depending on which normative imperatives they focus on, and what sense of self they wish to communicate. Since rearrangement (as used to cope and resolve the moral dilemma inherent in car usage) is about what normative context is made salient (persistence or desistance), it can also be seen as a means of adopting identities. This is because the alignment of self to value sets, roles and expectations of a frame of reference is tantamount to identifying with this frame of reference (Stets & Biga, 2003). On this basis, re-arrangement (as a coping strategy) can be rightly conceptualised as the

substrate upon which respondents are able to constructively negotiate between competing normative imperatives and corresponding identities.

In the following section I discuss the different normative contexts that respondents have to deal with, and how specific characteristics of these contexts underpin the moral dilemma inherent in use or non-use of the car.

### **6.3 COMPLEXITIES OF NORMATIVE FOCUS AND RELATED CONTEXTS**

Drawing on discussions in previous sections, it is notable that focus group respondents alluded to two mainstream (conventional) normative contexts. On one hand, there is the pro-market (pro-consumption) normative context. On the other hand, there is the conventional environmental context. The latter is the wider mainstream environmental context where people generally acknowledge environmental problems and the need to address them.

In addition, there is the subcultural context; the student subculture which is a subset of the conventional contexts. The specific characteristics of these contexts are discussed, taking into account how respondents' alignment to specific normative imperatives is based on salience and focus on these normative imperatives.

#### **6.3.1 Mainstream – globalised pro-market contexts**

The market forces that define a post-traditionalist globalised world (Giddens, 1984; Giddens, 1991; Lash, 1999) drive the normative imperative of this context. This context is characterised by consumption, fluidity and multiplicity of demands. People have to negotiate and make choices to meet these demands. In this context, individuals are confronted with a dizzying array of signs and symbolic resources dislodged from traditional moorings. Thus, they are propelled to “shop” for various

reasons. Bauman (2000) notes that people “shop” for as many things as possible in this world. People shop for love, affection, recognition, job satisfaction as much as they shop for clothes, cars etc. Shopping lists are endless in our current globalisation (high modernity) era, where the restrictive traditional regulations and restrictions that characterised previous eras have become dismantled (Castells, 1997). Some objects enhance the ability to “shop” for others. Such objects are likely to be interpreted as indispensable in a consumerist world due to the multiplicity of “shopping” purposes they serve. The car is identified as one of such items (Gartman, 2003).

Focus group findings highlight the multiplicity of roles that are assigned to use of the car: enhancing self-image, commuting etc. The car not only fulfils these instrumental, utilitarian and social roles, it has also become, for some people, an extension of self. Wright & Curtis (2005) have argued that such extensions can be seen where people interpret damage done to their cars as harm inflicted on them as individuals. Additionally, focus group evidence suggests that persists majorly attribute their actual and aspired car user behaviour to the moral codes of this mainstream culture; that using the car is normal and serves a multiplicity of functions. Generally, the different neutralisation techniques employed by this category are mainly used to highlight how their behaviour is consistent with group and social expectations in a globalised society.

However, this mainstream pro-market cultural world has also witnessed the rise of global problems. One such global problem is the rise of concerns over the externalities that follow from the consumption (“shopping”) lifestyles of high modernity (Bendle, 2002). These discourses about environmental problems are often

framed as being in conflict with the economic interest that is central to activities (“shopping”) in a pro-market globalised world. In other words, the normative imperatives of this cultural context clash with those of the wider environmental context.

### **6.3.2 Mainstream - environmental context**

This context can be seen as a counter-culture of the pro-market mainstream. Whilst the pro-market demands and propels people towards consuming, the normative imperative of this context advocates differently; that people consume less. Specifically, it proposes that current consumption trends are unsustainable and need to reduce; that individuals need to re-orient themselves to nature in manners that undermine the core driver of the pro-market context. It is this clash of moral and normative imperatives that leads to the dilemma of how and when to consume, or whether to not consume at all. In relation to this study, it is the clash of behavioural and cultural alignments to specific contexts (pro-market versus pro-environmental) that leads to the use of accounting and coping strategies to justify either persistence or desistance.

Desisters and persisters acknowledge the frames of reference of the wider environmental context. This is evidenced in the general belief that car usage needs to be reduced. However, given that they also acknowledge the presence and influence of the frames of reference of the pro-market (highly modern consumptive) context, the fact of having to live out both normative contexts leads to tensions that need to be resolved. In other words, they have to find ways to resolve this conflict. It is this resolution of conflict that they attempt to achieve using accounting and coping mechanisms.

### 6.3.3 Student subculture

When focus group respondents argue for persistence or desistance, they focus on finding ways of resolving the dilemma of living in a world with conflicting normative imperatives. However, they do this in an environment that is specific and reflective of their way of life; a student sub-cultural context which can be seen as a subset of the mainstream contexts.

The student subculture pertains to the way of life of students that is specific to them. This subculture exists within the larger mainstream contexts discussed above. This is the frame of reference adopted by respondents when they attribute car user behaviour to the fact of their nature as students. According to Clark & Trow (1966: 20) the student culture is "... the world of football ... dates, cars and campus fun". This definition was posited in the 1960s when the environmental debates were almost non-existent. In more recent times, universities have become sites of sustainability education (Cosgrove & Thomas, 1996; Wolfe, 2001; Flacks & Thomas, 2007) implying that the tension of having to resolve conflicts between the high modern and environmental contexts is likely to exist more in the present day university than it was at the time of Clark & Trow (1966).

The imperative that propels a university student to act in relation to using or not using the car can be considered from different perspectives. In this case I elaborate on how negotiations and coping around specific norm types and their imperatives are linked to different normative contexts. In accounting for car user behaviour, respondents' justifications for car user persistence or desistance can be seen as dependent on their alignment and focus on normative imperatives that are made salient. Thus, a hardliner persister will focus on the imperatives of the pro-market

context, which emphasises use of the car, while the hardliner desister will focus on the normative of the environmental context. This is in line with the view that the adoption of a behavioural position depends on the extent to which the individual focuses on specific normative imperatives. In line with Schultz et al. (2007), the more the environmental imperative is made salient, the more the chances of it being considered and lived out in real terms by the individual. A vice versa scenario would occur for a focus on the pro-market context.

It is important to note that salience does not necessarily imply that behaviour will be aligned to the imperatives of a norm type that is made salient. For example, focus group findings show that respondents are able to “dis-align” themselves from environmental imperatives (even when these are made salient) using coping strategies that allow them to refocus and make alternative imperatives salient. Re-arrangement is used to achieve this sort of “dis-alignment”. The re-arrangement strategy implies that persisters are able to define alternative normative imperatives in such a way that they (alternative imperatives) focus on similar values as the initially salient environmental norms. Thus, accounting strategies and coping mechanisms allow respondents to work around different normative imperatives by focusing or refocusing attention on normative imperatives that justify their adopted car user behaviour.

Schultz et al. (2007) discuss the two types of normative imperative that guide behaviour. In the following sub-section I discuss how persisters and desisters focus on these two types of norm imperatives, the descriptive and injunctive, and how these are reflective of the normative imperatives of the mainstream pro-market and environmental contexts.



### **6.3.4 Respondents' normative focus on mainstream contexts**

Respondents' focus could be on descriptive or injunctive norm imperatives. Descriptive norms refer to what is commonly done in given situations (Schultz et al., 2007; Cialdini, 2003). Whereas descriptive norms are about perceptions of behaviours that are typically performed, injunctive norms focus on behaviours that are typically approved or disapproved (Cialdini et al., 1991; Cialdini, 2003; Schultz et al., 2007).

#### **6.3.4.1 Descriptive normative focus and respondents' accounting and coping strategies**

That the use of private cars is considered the primary mode of commuting, especially for people living in developed parts of the world (Bergstad et al., 2011) confirms its (car usage) character as possessing a descriptive imperative (that of being typically performed). Focus group respondents' justifications for persistence are consistent with this assumption that use of the car is viewed as conventional and normal. For example, it is on the basis of aligning themselves to what is commonly done (the descriptive normative imperative to keep using cars) that persisters employ the claim of normalcy and necessity in justifying persistence. Given that these two neutralisation techniques were dominantly used, alignment to this prevalent social order and perceived "normal" way of acting (in relation to car usage) can be seen as dependent on the use of these techniques. Thus, when respondents argue for persistence they align themselves to this dominant normative context; by focusing on the descriptive normative aspect of using the car (as what is normal and expected).

In addition, aligning themselves to this descriptive normative context serves the purpose of self-justification and impression management. Persisters' accounts show

how self-justification and impression management occurred and are negotiated. The following brief excerpt from focus group sessions shows the connection between the duo (self-justification and impression, and labelling):

BMM6: Why man, why won't you go a date on a hybrid car?

BMM1: Because it is different.

BMM4: Yeah! (Laughter from others.) Hybrid car? It's too controversial for a date. It shows that you are too extreme (causing laughter and "yeahs" of agreement).

Persisters (in this case MM6 and MM4) not only set out to justify persistence from the perspective of already discussed disadvantages of hybrids (such as costs); in this case, they label users of hybrids as extremist. The process of labelling desisters as extreme can be seen as an impression management technique by persisters wanting to present themselves as non-extremists. Labelling and stereotyping of users of alternatives to conventional cars were often employed by persisters to justify persistence.

Summarily, the accounting strategy of persisters is in line with the view that the extent to which individuals focus on a particular norm type determines the extent to which they respond to the imperatives of that particular norm (Cialdini et al., 1991). In this case, persisters (especially hardliners) appear heavily focused on descriptive normative perspectives. Respondents' heavy alignments to descriptive normative imperatives confirm views that descriptive norms often provide mainstream standards and that those aligned to such standards often do not wish to deviate from them (Schultz et al., 2007). In this case, use of the car is perceived as exceptionally suited to performing the fluid and multiple "shopping" roles that characterise the

high modernity mainstream context. The multiple roles are emphasised when justifying persistence, thereby making it easy to uphold. On the other hand, the nature of desistance (reduction of car use) as “anti-shopping” explains why it has not gained as much of a following (in actual behavioural terms) as car usage, despite the fact that the majority of respondents (and people in general) agree that there is need for desistance from car usage.

#### **6.3.4.2 Injunctive normative focus and respondents’ accounting and coping strategies**

The moral dilemma to use or not use the car is captured better when the focus is on injunctive norms. Evidence from respondents’ accounts shows how focus on the injunctive imperative highlights two different (contrasting) normative contexts. From the injunctive perspective (of what is typically approved) both persistence and desistance are approved. Herein lies the conflict: how to deal with approved ethical standards (pro-environmental) that propose people adopt contrasting behaviours (desistance from use of the car) to those they perceive as normal (persistence in use of the car). These two normative focuses are discussed in the following section based on how they are negotiated by persisters and desisters.

This negotiation process is reflected in the process of re-arrangement. In re-arrangement, persisters implicitly allude to socially approved values that encourage use of the car. Such values are captured when they appeal to higher authorities. For example, claims that the car is necessary, to take kids to school or to help others by offering lifts, are grounded on the social values of care and rendering assistance. By arguing on the basis of typically approved social values, persisters construct and present themselves as altruistic as against selfish. They implicitly deal with the key criticism that desisters ascribe to them. In addition, by appealing to values (altruism)

of high social standing, persistence in car usage is elevated and justified. Thus, re-arrangement as a key accounting strategy serves the purpose of extending the horizon of normative focus considerations to behavioural evaluations.

The key issue for desisters would be how to negotiate and work against the highly dominant pro-market contexts that support car usage. Faced with an apparent daunting task, desisters appeal to values considered as more valuable than those inherent in the pro-market context. In other words, they appeal to counter-persistence evaluations of behaviour. For example, the accounting strategy of countering neutralisation techniques was employed by desisters to support the environmental frames that they favoured. A representative quote from a hardliner desister highlights how counter neutralisations are used by this category:

... And also it (using cars) is a waste of time. I mean  
  
even if it seems contradictory, maybe you take 10 minutes  
  
with the car but then you are stuck in traffic doing nothing. If  
  
you use a train or bus you will use this time for relaxing or reading  
  
or studying. I use the train to come here from Madrid but I am  
  
studying in the train, so it is not a waste of time if you find  
  
something useful to do. In the car you can only listen to radio (MR).

The desister argument is based on justifying the injunctive imperative to act for the sake of the environment even though her arguments focus on outlining the utilitarian benefits of desistance. Succinctly, whilst persisters find way to work around the

environmental frames of reference by justifying persistence in the face of expressed pro-environmental cognitions, desisters (especially hardliner desisters) more easily align themselves to the imperatives of the injunctive environmental norm by affirmation.

In terms of re-arrangement, while persisters employ the appeal to higher loyalties (Sykes & Matza, 1957) when they attribute cause for their car user behaviour to helping relevant others (e.g. taking kids to school), desisters explain desistance from car usage by refocusing the interpretation of care. The argument in this case is that care for relevant others or reference groups would imply abstaining from behaviour that would harm them. An example of refocusing occurred when a desister noted that car user reduction was necessary as a means of ensuring a sustainable future for her kids (intergenerational sustainability). This justification strategy is consistent with the “reference to priority relationships” affirmation technique (Copes & Williams, 2007). It also highlights that desisters’ arguments consider the intergenerational aspect of sustainability, that is, considerations of how current consumptive patterns impact on the ability of future generations to meet their own needs. An interesting observation from focus groups is that female respondents made the comments or quotes highlighting the intergenerational implications of persistence. Although studies (see Mayer & Frantz, 2004) have found no significant difference across gender on the Connectedness to Nature Scale (CNS)<sup>25</sup>, it may be that females tend to express such emotional connections more than males. As the current study was not about identifying specific gender differences, this area was not

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<sup>25</sup> The CNS measures individuals’ feelings in community with nature.

explored future. However, this interesting insight highlights the need for further research in this area.

Summarily, desisters justify reductions in car usage by arguing from a perceived “greater common good” perspective. Although they (desisters) emphasise common good (environmentalism) as typically approved, the fact that persisters often label desisters as “poor” and “extremist” implies that in real terms the environmental frames of reference that desisters are aligned to can be considered sub-cultural. This is consistent with the view “that ‘subculturalists’ behave in ways that the mainstream deems abnormal” (Copes & Williams, 2007: 268). The view of the hardliner desister (“maybe I am the only one concerned about the environment ...”) also suggests that desisters are likely to see themselves as belonging to the minority, a sub-culture. The implication would be that, although the majority acknowledge environmental imperatives as mainstream, the actual lived-out aspect of the wider environmental context occurs on subcultural levels.

In line with the foregoing discussion, focus group findings reflect the presence of two student subcultures; a dominant pro-market student subculture and a less dominant pro-environmental student subculture.

In the following section, we review how the student-specific sub-cultural normative context is negotiated such that it becomes consistent with respondents’ adopted ethical standards and the frames of references of either of the two sub-cultural contexts (persistence-oriented or desistance-oriented).

#### **6.4 STUDENT SPECIFIC ACCOUNTING TECHNIQUES AND STRATEGIES**

Evidence from focus group sessions suggests that the use of the car is seen as normative from a student perspective. Both persisters and desisters attest to this fact. This implies an alignment to the pro-market high modernity context. In line with the normative imperatives of this context, both persisters and desisters allude to the different “shopping” roles that the car plays for individuals; with all persisters and some non-hardliner desisters justifying these car roles in terms of their specific student context. Some of the key roles assigned to car usage are reviewed in the following discussions.

In numerous instances, respondents who favoured use of the car highlighted how owning a car was important for creating the sort of impression that students consider ideal. Cars were majorly linked to impression management in the student world; self-promotion was the major impression management type that was highlighted. Specifically, ownership and use of cars were constructed as offering advantages such as easy access to dates, feelings of superiority and appearing as “better off” in comparison with other students who do not own or use cars.

The following quote from a male student is representative of views that car owners have distinctive advantage over other students who do not own/use cars. Speaking of his undergraduate university experience, this MSc respondent remarked that:

I mean most of the guys that had cars, they could afford to just wear  
T-shirts and shorts and slippers and drive around. If you are walking  
with a girl and he drives by, I mean that's it, she is gone. It's that  
whole status thing ... when you don't drive then you have to make up

for it (MM5).

A likely implication is that this belief will put more pressure on students, particularly male students, to drive. Similar views were also discussed amongst other students in different focus group sessions. In addition, respondents often talked about the ideal cars for young people. Ferraris and Lamborghinis topped the list of ideal cars. In addition to brands, respondents also attached importance to car design. It was based on considering these attributes that green cars were constructed as not ideal for the majority of students who favoured use of conventional car, i.e. persisters.

An interesting issue relates to gender constructions: specifically, how male and female respondents talked about cars. The following focus group excerpt in a male-dominated session highlights how constructions around the attributions of characteristics to different vehicle types were used to locate the ideal student car:

BMM1: So you say to her, “I have got a hybrid car, baby (causing more laughter). I care about the environment and that’s why I got this hybrid car (more laughter)”. I don’t think she is going to stay that long (more laughter)”.

BMM5: Honestly.

BMM4: You get it, you get it! (so much laughter)

MD: Why? Why do you think she would leave?

BMM1: Who goes on a date in a hybrid car man? Get a taxi!

BMM5: At the end of the day, she will eat the food, hire a taxi and leave.



MD: What's in the other car that is not in the hybrid car?

BMM1: Status.

BMM2: Performance and style too.

BMM5: Yeah, green cars, just like that Roadster, the designs are just bland.

BMM4: They expect that because it is hybrid they don't have to put anything, any effort into the design because people just take it because it is hybrid.

Interesting issues arise from the foregoing "boy talk" discussions such as the one in the excerpt above. In line with the above excerpt, hybrids could be interpreted as collectively constructed by this group as lacking appealing attributes that resonate with their tastes as young people (implied in the last quote - BMM4) and the sense of self that they would like to communicate to others. Another interesting issue that came up in relation to impression management was how ownership of specific cars compensated for dressing, which can also be conceived as another impression management technique:

If you drive a Ferrari and park and come out in your boxers, even  
if the guy beside you is wearing ten grand's worth of designers, man  
(laughter everywhere at this point), nobody cares about the guy.

Man, you are the king with the Ferrari! (BMM5)

In the former excerpt, the emphasis was on impression management targeting the opposite sex (appeal) while the latter quote highlights impression management

targeting member of the same sex (competition). The argument here (above quote) is that cars such as Ferraris enhance self-worth. Implicitly, choices of particular cars serve the purpose of enhancing esteem for some students. However, for one student, owning and using a car was not so much for getting dates as it was for the “thrill” experienced when driving into campus:

BSM1: I am in love with cars (all burst out laughing). I love them more than girls (thunderous laughter in the room) ... when I am driving I can't think of holding something else.

MD: You love them more than girls?

BSM1: Yeah?

MD: What would make you not own a car?

BSM2: Four girls, five girls? (Roar of laughter again)

BSM1: (laughing) No way, no way (causing laughter all over).

While it appeared that the majority of male students favouring car use emphasised self-promotion and image, this quote suggests that the pleasure derived from the driving experience could also be a stronger motivator for some. In addition, the use of the car for self-promotion purposes may not be restricted to a specific gender (although comments relating to image management occurred most with males respondents). Female students would be implicated in the claims that use of the car aids self-promotion if they subscribed (via the possibility of selectively dating male students in flashy cars) to male students' car-user promotions of self. In essence, even if the car might play different sorts of role for specific genders, such

constructed roles can be seen as student-shared perspectives if they can be rightly seen as defined cultural ways of life and worldviews of students. Interestingly, focus group findings are consistent with this assumption.

That female students also subscribed to the use of the car for self-promotion and image management is reflected in the following comment by an undergraduate female respondent:

BSF6: You know when you said you wanted to understand why people really like cars and stuff? I think that we all want to get a driving licence and we all want to drive. I think that getting a car is like a kind of status. If you get the car then you are like better than the other person who gets a bus to school, you know what I mean, I think?

MD: (cutting in amidst laughter). Is it?

(Spontaneous response of “Yes” and laughter)

BSF8: It’s the reason why people buy different cars.

The above excerpt suggests a generic consonance amongst students; that car usage is more about enhancing self-promotion than facilitating commuting. That this female student claims that “all” students would like to drive was confirmed by other focus group participants, confirming that such views are shared student perspectives. Interestingly, a female respondent noted, immediately after BSF6’s claim, that her choice and use of the car was caused essentially by absolute necessity (the lack of alternatives to the car) as against self-promotion.

BSF7: But also in my case, I often go to the countryside, I am living at the border of the city. I often go to the countryside. *There is just no public transport* (emphasis added), so I don't even have a choice. I take my bike or I go by car and mostly I go for the car, just because there is no public transport.

MD: So what you mean is that it is absolutely necessary?

BSF7: Yes.

MD: What do others think? (Throwing question back to group)

BSM5: Great question (all laugh).

MD: Does anyone agree with this sort of thought? I want us to share experiences about these things (unusual silence).

The respondent also noted that females, unlike males, did not place so much emphasis on the brand and type of cars they used. Whilst the majority of female students supported this view, a male respondent countered, arguing that his sister was particular about the car brand she used. Equally interesting is that the views of this particular female respondent did not categorically counter those that claim use of the car serves self-image and self-promotion purposes. The respondent's views could be interpreted as suggesting that situational factors (residing in areas with unreliable public transport systems) could be assigned a higher place in an individual's hierarchy of motivations to use the car. This further confirms the constructionist view that the roles assigned to social objects are individually interpreted (Blumer, 1969; Charon, 2001; Gergen, 2009). On the other hand, it is also possible that were the same respondent (BSF7) to reside in an area where there

was access to reliable transport modes, the prime necessity role she ascribed to her decisions to use the car might be replaced by different motivator(s). In other words, as much as individuals assign meanings to their use of social objects, these meanings could also be influenced by circumstances that affect the individual's assignment of meaning or interpretations for choices from without.

The subsequent reaction from other students following this respondent's dissonance with the generic perspective on car usage as the ideal student self-promotion object is particularly interesting. Following her response, other respondents made no further comments, prompting me to encourage more participation by probing on the same issue using a more subtle approach, i.e by asking respondents to justify again why they aspired to drive. Following this prompt, the responses moved away from impression management to considerations of situational factors in line with the dissonant claims of BSF7.

The key issue here is how this specific response frame cued alternative considerations from other respondents. This does not imply the rejection of already-expressed views. What it does is to make alternative issues more salient based on the availability of fresh information (or perspectives). Here we see the advantage of interaction and use of focus groups. The respondent's (BSF7) dissent and the unusual quiet that ensued offered other respondents the opportunity to reflect more deeply on their own experiences. Consequently, they were able to renegotiate and respond differently to discussions based on the "consciousness-raising effect" (Webb & Kevern, 2001) they had experienced. This process of renegotiation has implications for understanding the intersections of respondents' views with alternative persistence or desistance positions.

The first issue relates to persister and desister categorisations. Following the dissent from BSF7, some students who initially subscribed to hardline persistence weakened their perspectives on persistence. This weakening of persistence reference frames occurred in response to cues that made other frames of reference more salient. For instance, the same female respondent who argued that students would love to drive in order to present themselves as being “better off” than non-drivers subsequently wondered why people use 4x4s and “gas guzzlers”. She then remarked that she would always opt for low emission vehicles; a choice not particularly consistent with the views that specific cars such as Ferraris serve the impression management and self-promotion roles that she initially favoured. Similarly, other respondents’ strong alignment of car user behaviour in different focus groups fluctuated, often weakening, in response to different situation cues and question frames, in line with the contention of LeBoeuf et al. (2010) that respondents’ views could change in response to alternative points of views that are made salient in a discourse process.

When the environmental frame of reference became salient, persisters often tended to use more justifications to strengthen their desistance-justification claims. It is in cases such as this that rationalisations such as the claim of relative acceptability were used. Since they acknowledge the normative imperatives of the environmental context, this accounting technique is employed to focus attention on a different environmental problem that is argued as requiring immediate attention. Thus, respondents often noted that cars are not the major cause of environmental problems, and that the emphasis should be on these more pressing problems (e.g. preserving the rainforest). This finding is consistent with the views of LeBoeuf et al.

(2010), who argue that individuals are likely to make such fluctuations as a means of managing their image when alternative frames of references are cued.

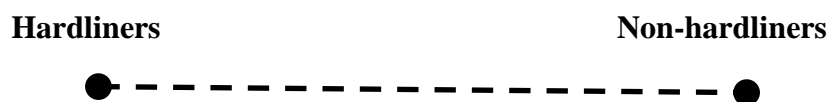
Although they did not at any point adopt the perspectives of hardliner desisters, non-hardliner persisters sometimes expressed non-hardliner desister views; for example when lead non-hardliner persisters were cued to claim that they would reduce carbon dioxide emissions from car usage for environmental reasons by using EFCs. However, when cued differently (e.g. when the moderator asked what their car user choices would be if they became wealthy and or managers of firms in the future) their subsequent comments drifted from previously expressed non-hardliner desister perspectives towards persister frames of reference, e.g. as in the claim of entitlement that managers deserve to own cars that show “who the boss really is”.

In addition, a particular respondent’s alteration of views was extreme, reflecting a shift from non-hardliner desistance to hardliner persistence. This respondent claimed that he would not care about the environment if he was very wealthy, suggesting that subscriptions to either persistence or desistance could be influenced by changes in individual circumstances. For some other respondents, the degree of alteration was not as extreme.

In line with the preceding discussions, the manner of respondents’ fluctuations in response to cues implies that circumstances could lead hardliners or non-hardliners to “drift”. By drift, I refer to possibilities of altering their normative focus; moving from being hardliner to non-hardliner and vice versa. Thus, it important to note that in relation to justifying car usage, respondents’ drift in relation to cues implies that individuals’ categorisations e.g., as hardliner (strong) and non-hardliner (weak) need to factor in the import of drift.

The initial broad categorisation as hardliner or non-hardliner still holds. However, the implication of drift essentially implies a refinement of this broad hardliner/non-hardliner categorisation. A continuum captures the possibility of altering normative focus. As such, it can depict the “drifting” of respondents from one category to the other. The following diagrams are used to illustrate the refinement of the broad hardliner and non-hardliner categories in line with “drift” effect.

**Figure 6.3** Persister categories from a continuum perspective (Type 1)



This major categorisation would also hold true for desisters.

**Fig 6.4** Desister categories from a continuum perspective (Type 2)



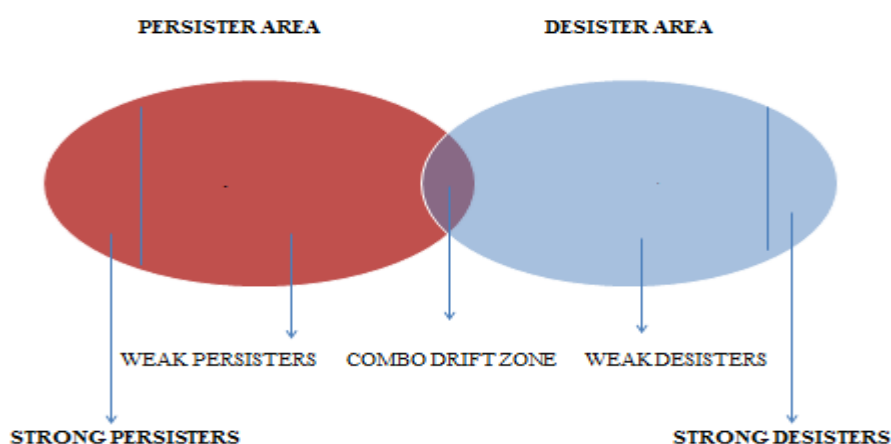
At one extreme of the continuum are hardliners (strong persisters or strong desisters) who employ neutralisation or affirmation techniques using strong or extreme arguments to justify either persistence or desistance. The opposite extreme would be the realm of non-hardliners. Non-hardliners, that is weak persisters or weak desisters, justify persistence or desistance via use of weak or non-extreme arguments.

Responses to cues allow for drift, with persisters or desisters being able to fluctuate (slide) along their respective continuums. Furthermore, the possibilities of drifting from one category to the other imply a more complex type of drift (Combo Drift). This is depicted in the diagram below. The diagram highlights how focus on salient



normative imperatives could lead to drift across persistence and desistance continuums, consistent with the discussions on how salience (response cues and dissent from other focus group members) leads to re-negotiation of justifications for behaviour.

**Figure 6.5 Persister-desister drift areas**



The extremist views adopted by either strong desisters or strong persisters imply that these categories of respondents are not likely to experience as much drift as weak desisters or persisters. This is because the employment of extremist rationalisations for persistence or desistance negates the need to employ neutralisation or affirmation techniques in justifying either persistence or desistance, as the case may be. This view is in line with perspectives on drift such as Hirschi's (1969) and McCarthy & Stewart's (1998) graduated desensitisation.

The hardening process as discussed by Hirschi (1969) specifies that continuous involvement with (deviant) behavioural acts enables individuals to drift to more enduring commitments to a (deviant) behavioural value system. By implication, the

stronger the level of involvement with the behavioural act in question, the stronger the individual's level of commitment to the (deviant) behavioural values, and consequently, the less the need to employ neutralisation techniques to justify the behavioural act in question. A similar perspective is advocated in the graduated desensitisation thesis (McCarthy & Stewart, 1998); that continuous involvement in a (deviant) behavioural act would eventually lead to less need for employing techniques of neutralisation (or affirmation) to justify behaviour. However, in graduated desensitisation, drifting towards deep level involvement (hardening) and the consequent non-need for the employment of neutralisation techniques is argued as arising from actual subscription(s) to the frames of reference of the (deviant) behavioural act itself and not just commitment (as implied in the hardening process). In other words, the individual actually "believes" in the value systems that underpin the (deviant) behaviour. In line with these theoretical perspectives, we can draw logical inferences that account for how and why particular persisters or desisters might adopt the employment of neutralisation and affirmation techniques.

The continuous and deep levels of commitment to either persistence or desistance imply that strong persisters and desisters have reached behavioural stages where their levels of involvement in either desistance or persistence can be attributed to deep levels of commitment or actual subscription to the value systems that underpin persistence or desistance behaviour in use of the car. Since the use of neutralisation or affirmation techniques diminishes in line with more behavioural involvement, the greater the level of involvement in use or non-use of the car by strong persisters and desisters, the less drift. In addition, the more hardened or gradually desensitised the individual becomes, up to the point where they strongly approve or disapprove of car usage, the less they need to use neutralisation or affirmation techniques. This

largely explains why strong or extreme comments are employed by hardliners to close the door of further considerations regarding their behaviour while weaker comments are used by non-hardliners.

The high levels of involvement that lead to hardening or desensitisation occur in similar fashions as those that lead to eventual habituation in use or non-use of the car. Therefore, understanding the drift process is likely to enhance what we know about the car user habituation process<sup>26</sup>. In line with study findings on how habits affect car usage (discussed in section 2.2.1 of chapter two), habituation in use of the car occurs similarly to the hardening process or graduated desensitisation. This is because the more the individual engages in car user behaviour, the more they get closer to, or drift towards, the point where there is less deliberation about viable alternatives to the car (Ericksson et al., 2008).

This key finding is central to further discussions on how students' accounts for persistence or desistance relate to their senses of self and identity. In addition, it is an area that has implications for intervention strategies that aim at getting people to reduce their use of the car. In the following section, I discuss how focus on normative imperatives and the accounting strategies discussed in the foregoing sections are linked to respondents, perceptions of self and reflections of identity schemas.

## **6.5 RESPONDENTS' PERCEPTIONS OF SELF AND IDENTITY**

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<sup>26</sup> Habituation in use of the car has been discussed extensively in the literature chapter (section 2.2.1 of chapter 2).

When persisters align themselves to a specific normative context, what they do is to identify with this context. However, identity tensions arise when adopted normative imperatives conflict with those of other contexts. In the case of focus group respondents, the pro-market imperative clashes with the pro-environmental. This leads to tensions about self-perceptions. What this implies is that the resolution of the moral dilemma inherent in car usage is also a resolution of the conflict of multiplicity of identities.

In addition, when a different context is made salient and respondents want to identify with the corresponding identity that is made salient, drift occurs. Thus, drift as response to cueing can be seen as an identity reconciliation strategy. This view is consistent with LeBoeuf et al. (2010), who argue that responses to cueing (e.g. drift from persistence or desistance as discussed above) often highlight the individual's quest to manage images of self and identity.

In addition, self-views are tied up with the individual's intentional state – the meanings and interpretations that construct a field for action (Richardson et al., 2009). Intentional states can highlight present and future constructions of self and others in relation to persistence or desistance, and are reflected in accounting and coping strategies. For example, the drift instance whereby non-hardliner desisters drifted towards non-hardliner persistence when their future car user behaviour was considered from the perspective of being wealthy or managers is a reflection of how perceptions of self and identity are negotiated in response to scenarios or contexts that are made salient. Given the weak economic positions of students (Hossler & Schmit, 1999; Bourn, 2008), it might be that the current situation of not being able to afford the sort of things they would want is what drives some respondents to

identify with the non-hardliner desister frame. This may account for why when the context required them to assume possession of material wealth (a key requirement for being able to “shop” in a high modern society) or status as manager, they drifted towards more hardliner positions. This drift could be a way of identifying with actual (students) and potential identities. In other words, drift is also a means of maintaining perceived behavioural consistency with actual and potential identities, e.g., being a student versus being a manager or wealthy individual.

This issue of how views are changed in response to cues is consistent with Allport's (1955) explication on the individual's evolving sense of self as a process of becoming. The evolving sense of self is linked to intentional states, highlighting respondents' constructions of self and views of others from a temporality perspective. Since self-views are tied up with intentional states that are fluid and changing, understanding how intentional states (present and future) are negotiated using accounts offers further insight into the individuals' evolving senses of self and identity. The student experience and justifications for persistence and desistance are discussed in the following section, in line with Allport's (1955) process of becoming. Allport (1955) discusses three perspectives to becoming that I apply in the following subsections to elaborate further on students' intentional states and processes of becoming. Specifically I note how these relate to their schemas and justifications for persistence and/or desistance.

**Self-extension** deals with the extension of what the individual considers as belonging to self. It deals with identification with groups, neighbourhoods and nations and extends to possessions (clothes, homes and cars). For student persisters, these different aspects of extended selves apply.

The key issue in this case is that persisters identify with various social groups that emphasise mainstream car user culture. They identified with the global mainstream society and the university subculture as well as with relevant others (families, friends, etc.). All of these social groups expect and encourage persistence. The implications of identifying with these normative contexts play out differently for persisters and desisters.

For persisters, there exists little tension in negotiating the extended self since the different contexts they are aligned to support and favour car usage. However, identification with the frames of reference of several social orders suggest that these respondents possess multiple identities and that these identities may create tensions when identity expectations conflict. This is because even though the different contexts (familial, student subculture, etc.) all favour use of the car, one might expect that the individual will perform conflicting roles or functions. For example, reconciling familial needs such as taking one's parent shopping might conflict with going out with friends or on a date. This is in line with recent studies that show how multiple identities imply multiple role identities that may conflict and create tensions for the individual<sup>27</sup> (Stets, 2002; Stets, 2010). This sort of conflict is likely to be resolved easily because the broad moral imperatives of the contexts (familial versus friendship) which make subtle, conflicting demands on how to use the car are grounded on the same wider context that supports car use. In other words, such conflicts would be easily reconciled, unlike in situations when a student has to deal

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<sup>27</sup> The same individual could be parent to one, child to another and friend of the other, implying multiple identities with contrasting roles even if all members of this extended relationship subscribe to a wider pro-market or pro-car normative imperatives.

with reconciling the conflicts between the wider environmental and pro-market imperatives.

Unlike persisters, desisters (especially strong desisters) are not likely to be associated with the tensions that arise from having to align the self to different normative contexts' multiple identities and roles. This is because their allegiances are limited to the ideal sets and reference frames of a singular morality (pro-environmentalism). Furthermore, unlike persisters whose identities are multiple based on affiliations to different cultures that favour car usage, desisters (especially strong desisters) have fewer affiliations with other cultural groups. A probable explanation is that the moral intensity to behave in accordance with the ethical standards of environmental norms is straightforward and very high for strong persisters. This makes strong desisters very committed to their subcultural frames of reference as is suggested in the strong desister's comment:

MD: What will make you change your opinions?

MR: I don't think anything will make me change my opinions. Unless I am forced to use the car (laughing). Like I said, if I don't have any other alternative. I will know anyway that this is not the best solution. If I buy a car I will buy like a hybrid car, like Prius.

Generally, strong desisters appear to deal easily with issues relating to self-extension since their positions are limited to the pro-environmental context. On the contrary, weak desisters and both types of persisters need to negotiate and work around the different cultural imperatives that they align themselves to. For weak desisters and weak persisters, more tension arises from the multiplicity of contexts

and cultures that derive from drift possibilities. Strong desisters (and some weak desisters depending on where they lie along the desister continuum), on the other hand, would experience less of the tension that arises from multiple identities and extension(s) of self.

**Self-image** as explicated by Allport (1955) relates to perceptions of self in relation to ability and place in society. In addition, it also relates to the individual's aspirations for self. It relates to how the individual sees himself in terms of the past, present and future. In line with this view, car usage was perceived by student persisters as very important for managing student image from all three perspectives. However, it appears that persisters' conceptualisations of temporality are limited to self-timelines. For example, strong persister arguments that focus on individuality and self suggest that this category hardly relates to the sustainability hallmark of factoring in effects of current behaviour on future generations. In fact, the intergenerational import of sustainability was only acknowledged explicitly by desisters. Persisters who implicitly acknowledged the intergenerational aspect worked around it using the denial of injury (that harm to the environment is insignificant). In other words, although temporality for the majority of respondents was considered from past, present and future perspectives, considerations of the future are interpreted as revolving around the individual and did not gravitate towards extensions of self to future generations. This is highlighted in the following persister comment:

I think we are damaging the world, I do believe that.

It's really hard for you to do everything and at the end



of the day to think about the future, and you just kind of forget it during your everyday life, like “Oh my God”, you used a car. But, at the end of the day you have to use the car, and you can forget about it. And it’s kept being said in fifty years, but if it’s said like tomorrow, and it really was, I know, or I think, everybody would stop using cars (BSF6).

For most persisters, issues of time, especially futurity, were understood from the perspective of the near future. The majority of respondents found it hard to relate to extended or distant futures. The future for them was the immediate future, linked closely to the present.

Furthermore, the explications on students’ subculture in previous sections highlight how the car is perceived from image management and self-promotion perspectives. An interesting student self-image related issue is related to the demographics of age. First year respondents’ accounts that linked car usage and persistence to the age of eighteen, the age when one can acquire a driver’s licence, is worthy of note. The following quote highlights the importance associated with this rite of passage:

You know, it’s like if you are not that age you can’t do it. Everyone knows, like, when you are 21 you can drink, so when you turn 18 you can drive a car. I think it’s that feeling of not being able to do it, that you are

forbidden, and then being free, able to do it. I think that

kind of like helps motivate (BSF5).

This suggests that turning eighteen and being able to drive may be considered an important rite of passage; an initiation into adulthood and the expressions of identification with, and progression to, adulthood. The desire to go through this rite of passage is also likely to be influenced and dependent on external influences, for example, the extent to which respondents such as BSF4 have been socialised to viewing the car as normal. In this case, respondents' comments where they acknowledge the effect of growing up in households where use of the car was normal become relevant. Succinctly, for the majority of respondents, turning eighteen marks the point of entry, so to speak, for aligning oneself with adulthood. The acquisition of a driving license thus becomes the ritual heralding this important transition. Implicitly, the extent to which future intentional states for persistence in using the car remain positive may be largely dependent on whether students go through this rite of passage. In addition, an intervention implication would be that for students about to turn eighteen, delaying or stopping this rite of passage is likely to have a significant effect on students' travel modal choices.

**Propriate striving** relates to an individual's ability to plan into the future. It is a unification of goals and values with real successes in life (Allport, 1955). In terms of how this relates to respondents' future aspirations, respondents' projected attributions and rationalisations for car usage suggest the majority of persisters associate present and future success with car usage. It is important to recall that some respondents linked car usage to the managers' identity, as depicted in the

excerpt below. Cars were also noted as objects that construct different versions of individuals' personalities and identities.

The foregoing discussion offers more insight into how the understanding of self could be negotiated from spatio-temporal and change perspectives. Propriate striving is related to self-image in that such striving is a conscious move towards the attainment of a desired image of self. In addition, the negotiations of identity (via drift) with adopted ethical standards that occurred in the course of focus group discussions are in line with these assumptions. For instance, some respondents initially argued that they aspired to own small vehicles because these are cheap. They also remarked that they felt no need to communicate status. However, at later points when the moderator changed the context by requesting that respondents consider how being rich managers might affect their choices, some of these respondents' comments fluctuated; they now claimed they would buy really expensive cars.

Summarily, perceptions of self and identity are linked. Whilst respondents' present views might suggest they are largely in favour of using the car, evidence suggests that future trends could be different. This is majorly due to the possibility of drifting and other events that follow necessarily from the process of becoming.

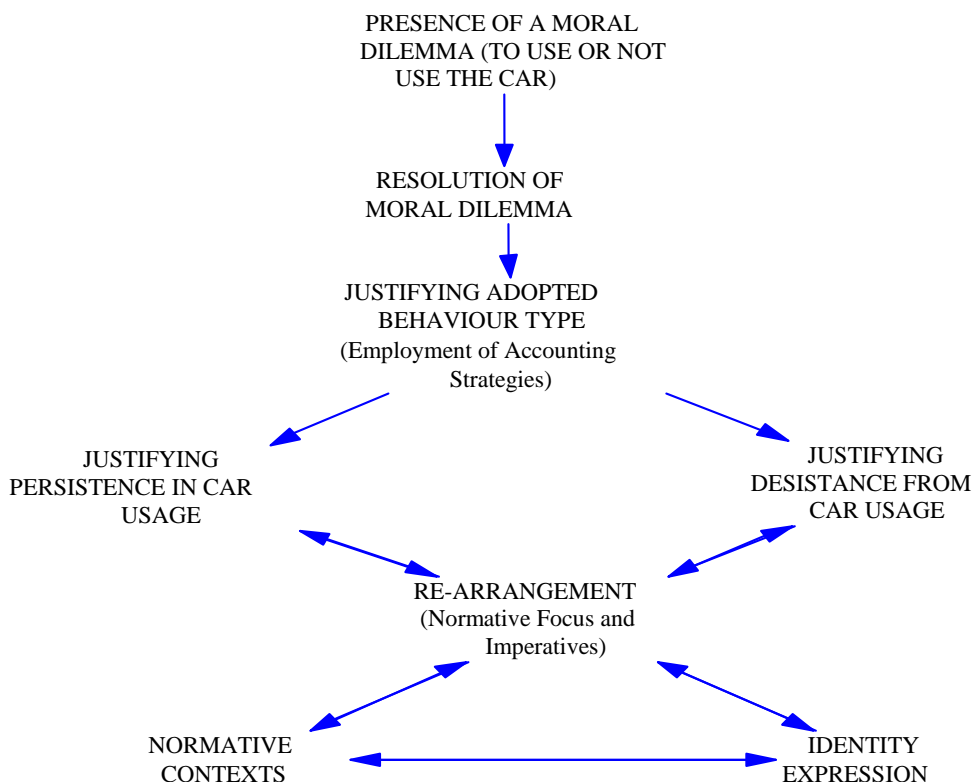
## **6.6 DISCUSSIONS**

The chapter has extensively discussed how persistence and desistance justifications are related to schemas. Schemas influence attributions and justifications for car user behaviour. Schema underpinnings of behavioural justifications also influence perceptions of self in relation to other and different social frameworks. Social

frameworks are the contexts within which the self is developed (Stryker, 2008). Also, individuals have perceptions of themselves as agents responsible for their intentional acts (Stets, 2010). An implication is that the sort of schemas that are implicit in respondents' accounting and coping strategies as well as how they seek to align themselves to mainstream or sub-cultural frames of reference are indicative of their evolving perceptions of self and identity.

Findings related to the use of different accounting strategies show how information was managed by the different respondent categories for the purpose of resolving the conflicts that arise from the moral dilemma inherent in car use. This conflict resolution process is summarised in the diagram below:

**Figure 6.6 Resolution of the car usage moral dilemma**



*Source: Author*

The model above is an extension of the model from chapter five (section 5.3.1, Figure 5.1). In that section, I discussed how the need to resolve the dilemma inherent in use of the car leads individuals to justify their adopted car user choices/behaviour using neutralisation or affirmation techniques. The process up to the stage of employing neutralisation and affirmation techniques is explored in detail in the noted chapter five section. This chapter builds on the description of findings from chapter five. Specifically, this chapter has reviewed in detail how the use of justification and accounting mechanisms are reflective of schemas.

The really interesting finding from the review in this chapter relates to how accounting strategies are employed for the purposes of working around and resolving schema-related conflicts; of conflicting normative contexts, self-views and identities. This is represented as the triangular addition to the model from chapter five. Perhaps the most important aspect of the diagram is the centrality of the re-arrangement strategy.

Justification for a particular choice perspective (desistance or persistence) requires the undermining of alternative approaches or perspectives that might have been considered. This in turn requires the use of coping strategies. The key coping strategy in this regard is re-arrangement, which requires that persisters or desisters work around normative contexts. They do this by focusing on the normative contexts that best justify adopted behaviour types as being morally consistent. Furthermore, the adoption of a particular choice perspective also implies the alignment of self to the normative imperatives that underpin the chosen perspective. Hence, working around normative contexts is ultimately a means of identity and self-expression, and is underpinned by the process of re-arrangement. It also takes

into account perceptions of others and cultural ways of life that are deemed normative. When conceptualised as such, the use of accounting techniques and coping strategies as employed by focus group respondents are in line with views that highlight the presence of multiple identities that are characterised by fluidity and the pressures of living in a globalised, high-modernity world (see Giddens, 1991; Castells, 1997; Bauman, 2000).

In line with the foregoing discussion, Giddens' (1991) view is that the globalised world demands that individuals reflexively organise and plan their lives. Giddens argues this to be dialectic; a tension between the local and the global. However, Giddens - and indeed the majority of writers who argue for fluid and multiple identities - have failed to locate the substrate on which such reflexive life organisations could be made (Bendle, 2002).

This study has located the dialectics of a specific environmental behaviour (car usage reduction in the context of expressed pro-environmental cognitions) as a tension between reconciling conflicting normative imperatives of the pro-market and the environmental contexts. However, it goes further to locate specific coping strategies (re-arrangement and drift) as the substrate that underpins such reflexive dialectics inherent in the resolution of environmental and pro-market normative imperatives. This key finding, although specific to car usage, offers insight into how multiple and fluid identities are negotiated and reconciled. On the other hand, this study's findings build on, as well as adding to, what we know about the mechanisms and strategies that individuals use to deal with the pressures of a globalised world characterised by consumption. Specifically, findings show that although the 2<sup>1st</sup> century university experience retains the characteristics of being "... a world of

football ... dates, cars and campus fun” (Clark & Trow, 1966: 20), the nature and pressures of a globalised world heighten these tensions and increase need for behavioural justifications and self and identity re-negotiations.

The present day university student is “pushed forward” by a pro-market society that favours consumption and the same time “pulled backwards” by pro-environmental norm imperatives. The fact of not having a fixed sense of identity implies that for this category of young people, the university experience, which can be seen as their introduction to the wider world (Cosgrove & Thomas, 1996) and a key moment in their becoming process (Feldman, 1972), is crucial in shaping their individual and collective identities. Depending on how this experience is interpreted, it could open up avenues for further crisis of identity, e.g. if the student fails to reconcile or work around the conflicting imperatives of behaviours such as desistance and persistence in his or her quest for maintaining consistency with schemas.

## **6.7 CONCLUSION**

Findings confirm that university students are generally aware of environmental issues. They acknowledge externalities from use of the car and express beliefs that there is need to reduce car usage. The extent to which such beliefs translate to corresponding reductions in actual or future car usage depends on a multiplicity of factors that are grounded on schema views. This chapter has identified and discussed some of the complex relationships and dynamics of these factors. Thus, this chapter adds to previous discussions from chapter five in addressing how justifications are constructed in justifying persistence or desistance by uncovering some of the complexities that underpin and drive behavioural justifications for car usage.

Insights from the discussions so far are relevant for intervention(s) that aim at getting people to reduce use of their cars. For example, practice interventions that aim at deconstructing persistence re-arrangement processes are likely to be successful if they address the key schemas that drive this unsustainable mode of consumption. However, the ability to achieve such a deconstruction process depends on the extent to which the schema constructions are taken into consideration in the design of interventions (practice or policy) aimed at achieving car user reduction. In the next chapter, I elaborate further along these lines as I discuss the implications of key findings and arguments from the study's empirical chapters (five and six) for interventions aimed at enhancing behaviour change for reductions in car usage.



## CHAPTER SEVEN

### 7.0 DISCUSSION OF INTERVENTION IMPLICATIONS AND APPROACHES DERIVED FROM THE STUDY'S FINDINGS

#### 7.1 INTRODUCTION

In this chapter, I discuss the implications of key focus group findings for intervention approaches aimed at getting people to reduce car usage. My analysis and arguments are logically induced<sup>28</sup> and developed in line with findings discussed in chapters five and six.

I start by discussing persistence and desistance intervention-related insights from the perspectives of what I term malleability (susceptibility for change). Specifically, I discuss the implication of drift<sup>29</sup> for malleability and how malleability relates to different persisters and desisters' employment of neutralisation or affirmation techniques. The main thrust of my argument in this case is that weak persisters' and weak desisters' propensity for drift implies that they, in comparison to strong persisters and strong desisters, are more malleable and as such are more likely to alter their car user behaviour. Succinctly, they are more likely to be influenced by intervention(s). This line of argument is underpinned by the views of

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<sup>28</sup> This logical inductive approach is in line with the views of Copi & Cohen (2002) and has been discussed in detail in section 4.4.1 of chapter four.

<sup>29</sup> Drift in this case refers to the propensity to slide along the persister-desister continuum. It occurs majorly as a response to normative imperatives that are interpreted as salient by the individual. Drift and its import for persisters/desisters is discussed in detail in section 6.3 of chapter six – with a diagrammatic representation (Fig. 6.4).

Anable (2005) and Gilgun (2004) that targeted intervention would benefit from classifications or categorisations of specific traveller segments. This train of thought lays foundations for subsequent arguments on the implications of the roles of re-arrangement and use of neutralisation and affirmations in justifying persistence in and desistance from car usage. Finally, I relate these implications to practice intervention approaches.

### **7.1.1 The implications of drift and malleability for car-user reduction intervention**

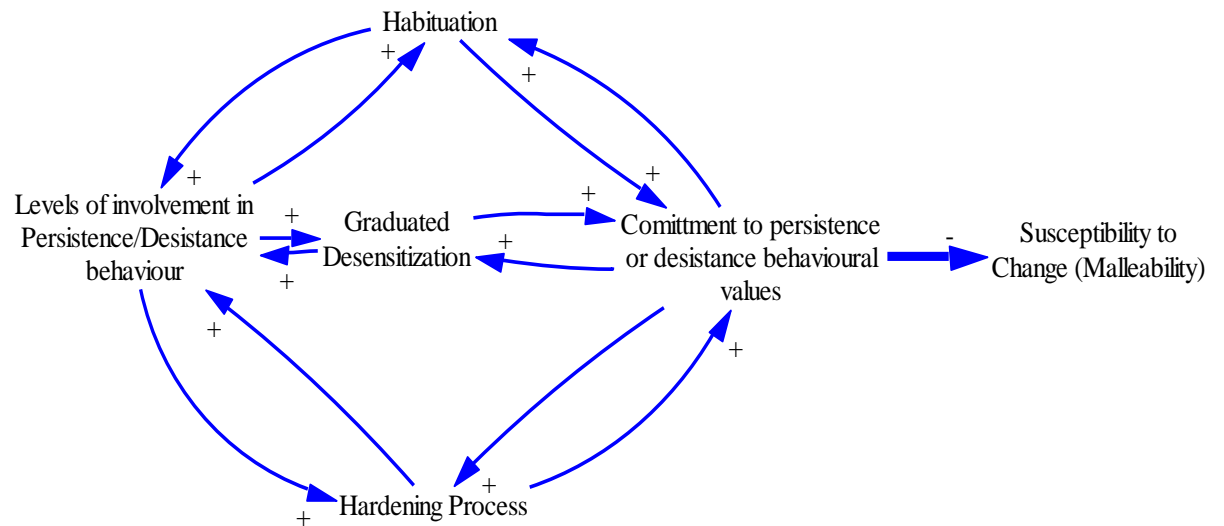
Generally, focus group evidence and respondents' accounts show that persisters and desisters think and react differently to the environmental imperative to reduce car usage. This is consistent with the view that individuals perceive available travel options differently (Bamberg et al., 2011). Specifically, focus group findings suggest that when it comes to reducing car usage for the sake of the environment, strong persisters and strong desisters take extremist positions (pro-car use or anti-car use)<sup>30</sup>. As discussed in section 6.3, the extremist views adopted by either strong desisters or strong persisters imply that these categories of respondents are not likely to experience as much drift as weak desisters or persisters.

The greater the presence of drift factors (e.g. hardening, graduated desensitisation and habituation), the greater is the individual's involvement with, or commitment to, the behavioural values that underpin (deviant) behaviour (Eriksson et al., 2008; Hirschi, 1969). This relationship between drift factors and malleability is depicted in the following diagram.

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<sup>30</sup> See sections 6.1.1 and 6.1.2 of chapter six.

**Figure 7.1 Lock-in factors and import for malleability**



*Source: Author*

An important issue depicted in the model relates to the nature of the feedback loops that exist between drift factors and levels of behavioural involvement in persistence or desistance. A similar feedback loop occurs between the lock-in factors and commitment to the values that underpin persistence or desistance. These feedback loops are reinforcing in that the levels of involvement or commitment with behavioural values increase with the presence and effects of the lock-in factors, and vice versa.

Hardliners are strongly locked-into the respective frames of reference that define them as strongly aligned to either persistence or desistance in car user behaviour. As such they experience less drift. On the other hand, non-hardliners exhibit lesser lock-in characteristics. The main thrust of my argument in this regard is that weak non-hardliners (weak persisters and weak desisters) are more susceptible to change

(malleable) in comparison with strong persisters or desisters. In line with the drift perspectives, they can be seen as less habituated, desensitised and hardened; they experience more drift and are literally more “malleable” in comparison to strong persisters and desisters. Therefore, it is logically consistent to assume, on the face of this study’s focus group findings, that car user reduction interventions stand greater chances of altering the behaviour of non-hardliners than of hardliners.

In addition, focus group findings suggest that a greater majority of respondents are weak desisters or persisters.<sup>31</sup> This numerical disparity between hardliners on one hand and non-hardliners on the other also has implications for intervention focus. The implication is that focus on weak persisters and weak desisters will benefit from tapping into this numerical advantage that the non-hardliner category offers. An important implication is that interventions can benefit from a wide range of prospective converts to car reductionist behaviour for weak persisters and maintaining any already car reductionist behaviour that exists for weak desisters.

In line with the foregoing discussion, two key intervention implications arise. First, there is a need to identify and focus on individuals who are more likely to change. Second, given that weak desisters experience drifts similarly to weak persisters, there is also a need for interventions to cater for this category of respondents lest they get pressurised to adopt counter-desistance frames of reference. In other words, the possibility of drift and susceptibility to change that characterise weak desisters imply that they too need to be factored into intervention approaches to avoid them drifting back to persistence. This is particularly important given the pressures from the mainstream pro-market context and chances that they (weak desisters) might be

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<sup>31</sup> See section 6.2.3 of chapter six.

pulled towards adopting the frames of the pro-market norm imperatives. In addition, the drift experience implies if we can continuously engage them (persisters) in car reduction behaviour they could end up adopting and believing in the environmental frames of reference via commitment to desistance values.

The above discussions/assumptions underpin discussions in subsequent sections. Specifically, I argue on the basis of focus group findings that the deconstruction of persisters' persistence-oriented re-arrangement, and the employment of neutralisation techniques and strengthening of existing desistance-orientations for desisters, offer a good strategic approach to reduce persistence and strengthen desistance respectively.

### **7.1.2 The implications of re-arrangement and techniques of neutralisation/affirmation for interventions aimed at reduction in car usage**

In this section, I explicate on some key implications of coping mechanisms and techniques of neutralisation and affirmation for intervention to reduce car usage.

The role of re-arrangement is central for intervention since it is the key mechanism employed by persisters and desisters in neutralizing the conflicting normative imperatives; the environmental imperative that advocates reductions in car use versus the conventional pro-market imperative that supports car usage. As discussed in detail in chapter six (section 6.2.4), respondents are able to neutralise this clash by focusing on the normative imperatives of the frames of reference that they favour. When conflicting normative imperatives are made salient, re-arrangement is employed as a means of ensuring that focus is consistent with favoured frames of reference. An intervention implication for car user reduction would be to find ways

of introducing and strengthening the salience of the environmental frames of reference (counter neutralisations) amongst populations targeted for intervention.

Re-arrangement is also linked to levels of involvement and commitment with persistence. In line with the discussions from the preceding section, weak persisters' and weak desisters' relatively lower levels of commitment and involvement with persistence imply that for these categories there would be more need to justify the frames of reference they align themselves to when their car user behaviour is called into question. Thus, they would need to employ re-arrangement to deal with drift possibilities as well as to work around any conflicting frames of reference that have been made to become salient. This is consistent with the view that less involvement and commitment to (deviant) behaviour imply that adopted behaviour and values need to be justified (Sykes & Matza, 1957; McCarthy & Stewart, 1998; Hirshi, 1969) and/or accounted for (Orbuch, 1999). Therefore, finding ways of making the environmental frames of reference salient in a way that is consistent with the target group's schemas would be a good way to work around persister and desister frames of reference.

However, as noted in chapter six (see section 6.4.0), the employment of neutralisation and affirmation techniques and corresponding re-arrangement strategies was argued to be grounded on respondents' quest to maintain consistency with schema views. In accounting for continued use of the car, persisters strive to maintain consistency with their schema perspectives. Individuals strive to maintain consistency between beliefs and shared values on one hand, and perceptions of self, identity, others and cultures (schemas) on the other hand (Robins & John, 1997; Swann, 1990). The implication is that the more their involvement in car user

behaviour and commitment to persistence frames of reference, the more this behavioural act is likely to be tied up with senses of self and identity. A similar approach occurs for desisters, albeit, from an opposite perspective. The implication is that in addition to resolving the moral dilemma inherent in use of the car, re-arrangement serves another purpose: maintenance of consistency between self and schema views. In other words, while rearrangement served the purpose of maintaining consistency between schema perceptions (of self, others and worldviews) and beliefs, dissonance reduction underpinned its employment. This view is in line with theories of consistency (Lecky, 1945) and cognitive dissonance (Festinger, 1957). In fact, Robins & John (1997) discuss how perceptions and experiences of inconsistency (in belief) lead to states of aversion that the individual will seek to reconcile.

In line with the above discussions, if we are to persuade persisters to translate belief in or focus on the environmental imperative to reduce car usage into actual reductions in use of their cars, this would entail working around the self-expressed schema and perceptions and self-interests that underpin persistence and weak desistance orientations. However, given that the schema perspectives that drive persistence in use of the car are closely tied or allied to perceptions of self and identity, and given that individuals continuously seek to maintain consistency of self over time (Lecky, 1945), the deconstruction of persistence and weak desistance oriented schema perceptions might not be easy to accomplish. For one, attempting to get people to alter or change their schema-based worldviews is tantamount to trying to make them assume different self-views and identities. Since the employment of techniques of neutralisation or affirmation serves the purpose of maintaining consistency with self-perceptions and adopted frames of reference

(Copes et al., 2007), the adoption of alternative frames of reference and corresponding behaviour (e.g. desistance from use of the car) is likely to be met with resistance if these are perceived as being inconsistent with overall schema views. In fact, this view is confirmed from the study findings; persisters identify with the pro-market frames of references while desisters identify with the pro-environmental.

However, this does not imply that persistence in use of the car cannot be addressed. Rather, it points to the need for intervention to identify and work around the self-interests of the group whose behaviour is targeted for change. There is a need to find ways of maintaining consistency between intervention approaches and the self-interests and schemas of the target group. This approach appears to be lacking in most environmental campaigns where the emphasis has solely been on creating awareness and informing people of the need to engage with pro-environmental behaviour. Many times, such campaigns have focused on highlighting environmental problems and fail to gravitate towards cueing and making the environmental frame of reference salient in such a way that it can lead to behaviour change. As findings from this study show, persisters can neutralise the environmental content of such messages. This is a major reason why the marginal impact of further campaigns that focus solely on creating awareness of environmental problems is not likely to be substantial.

On the other hand, findings show that weak persisters are willing to adopt desistance frames of reference on certain conditions; e.g. if EFCs (specifically, hybrids) were not expensive or had better designs that could serve similar impression management purposes as conventional cars. These findings highlight specific areas for



intervention (e.g. the need to redesign the car). That the success of interventions would increase if approaches take into account the individual's self-interests and cue this in line with environmental message content is a major intervention implication. This could be approached via focus on two perspectives: 1) the individual and group schema perspectives, and 2) the emotional (dissonance reduction perspectives) points of view.

In the case of the former intervention, approaches will need to find ways of enhancing behaviour change while remaining consistent with the targeted groups' schema perspectives and expressed self-interests. Regarding the latter, intervention approaches would need to be able to address the cognitive dissonance that arises from the dilemma of not matching expressed desistance-oriented values with actual behaviour. Correspondingly, I argue that intervention approaches will need to be appealing (to the target groups' expressed self-interests and schemas) and emotionally persuasive, such that they can lead to the re-arrangement of persistence-oriented schemas in line with desistance-oriented frames of reference. At the same time, approaches ought to cater for desisters by focusing on strengthening their desistance frames of references. Thus, for persisters, emphasis ought to be on neutralizing their re-arrangement strategies and deconstructing their dominant neutralisation techniques while for desisters, emphasis would be on strengthening (as against neutralizing) their dominant re-arrangement and affirmation approaches and techniques. Further intervention implications of these views are explicated further in the following sections. Specifically, I contextualise these implications in practical terms.

## **7.2 CAR USER REDUCTION INTERVENTION APPROACH**

An important assumption implicit in the discussions in this, and preceding chapters, is that getting people to reduce their use of the car needs to go beyond the traditional approach of mass dissemination of environmental information. This is because environmental awareness creation does not guarantee corresponding reductions in car user behaviour. As discussed in the literature review section (chapter two, section 2.2.3), study evidence shows that interventions that adopt the traditional approach of creating environmental awareness have largely been unsuccessful in getting people to reduce car usage (Jackson, 2005; Axen & Kurani, 2012). Correspondingly, this study's evidence has highlighted how this occurs in the case of car usage; that people cope with the cognitive dissonance arising from not translating environmental attitudes to reductions in car usage by embarking on rearrangement. In addition, they also justify their car usage behavioural inconsistency via the employment of neutralisation techniques.

Although the possession of pro-environmental cognitions might not be enough to make individuals reduce car usage, Fujii (2007) has found that behaviour change is possible and that the success of achieving reductions in car use is increased when bespoke environmental messages are employed. In addition, Cialdini (2003) has noted the import of crafting bespoke normative messages as a means of enhancing behaviour change. According to Cialdini (2003), individuals are more likely to adopt specific behaviour types if the injunctive and descriptive normative imperatives relating to the behaviour are consistent. In chapter six (section 6.2.0), I discussed how the dilemma of not matching pro-environmental beliefs with reductions in car usage arises from a complexity of normative contexts, specifically, a conflict between the injunctive norm imperatives of the environmental context and

the descriptive norm imperative of the pro-market context. In line with these views, I argue, therefore, that paying more attention to environmental messages' style and content is necessary if we are to intervene successfully for reduction in car use. Crafting environmental messages in ways that align them to the individual's self-interest ensures that consistency is maintained between the injunctive and descriptive norm aspects. Therefore, rather than the continued adopting of traditional approaches that create environmental awareness and inform people on why they need to reduce car usage, I argue for environmental messages that nudge people and get them to actually engage in car user behaviour without appearing to conflict with the individual's self-interests.

In line with the foregoing discussions, I argue that approaches that adopt a (de)constructive transformative approach can enhance reductions in car usage. (De)constructive transformative approaches employ use of bespoke messages to deconstruct persistence-oriented justification rationalisations (neutralisations) and coping mechanism (re-arrangement) whilst strengthening rationalisations and coping mechanisms for desistance. They also take schema perceptions and corresponding quests for consistency into perspective and aim at transforming persistence orientations into desistance orientations. As noted in the preceding paragraphs, messages are crafted in ways that are consistent with the schemas of the target group or individual.

Specifically, the study evidence and findings discussed in the preceding sections imply the following need to be put into consideration for (de)constructive transformative strategies:

1. There is a need for identification of, and focus on, traveller segment members who are likely to be most susceptible to change. The advantage of such an approach is that time and effort will be put to optimal use. However, it is important to note that the most malleable in other specific traveller group might not be the same as those identified in this study, since the perceptions and schematic views of other travellers may be different.

Malleability considerations also imply that intervention is not restricted to getting persisters to adopt desistance frames of reference. There is also a need to ensure that weak desisters continue in desistance behaviour. This is because like weak persisters, weak desisters also experience drift, implying they could shun desistance behaviour for persistence under certain circumstances, e.g., pressure from peers and/or the need for impression management.

2. For persisters, intervention should focus on deconstructing or neutralizing the dominant construction that drives persistence. This can be achieved using bespoke messages that counter dominant neutralisations and re-arrangement rationalisations. In line with previous discussions, dominant neutralisations and attributions would form the target of bespoke messages. For desisters (focusing on weak desisters) focus ought to be on strengthening dominant affirmations and re-arrangement processes. In both instances, intervention ought to take schemas into account and focus on ways to work around the quest for consistency with schemas by desisters and persisters.
3. The messaging style ought to address social and personal norm imperatives. Specifically, there is need for maintaining consistency between message content and the target individual's or group's self-interests. The assumption

that environmental messages will appeal to all categories of car users is false. Rather than work on such assumptions, message content should be aligned primarily to address self-views and interests of the target group. For instance, findings from focus groups suggest that persisters are more likely to use green cars if they are seen as cheap and ideal for impression management than because they are useful for addressing environmental problems.

4. There is a need for joined-up thinking in designing and implementing intervention(s) to reduce car usage. Specifically, there may be a need for the employment of a mix of techniques to work around expressed schematic perceptions and cognitive processes.
5. Interventions to reduce car usage need to extend or relate to wider sustainable behaviour and not be limited to car user behaviour.

The complexities of car user behaviour suggest that there may not be one best (de)constructive transformation strategy to intervene for reductions in car usage. Irrespective of what strategy is adopted, the need for bespoke intervention approaches is essential when emphasis is on a specific target group.

The (de)constructive transformation strategy resonates with community-based social marketing techniques. According to Jackson (2005), community-based social marketing approaches are based around four consecutive steps:

1. The selection of behaviours and identification of barriers, e.g. why people do not use alternatives to the car;
2. Programme design to address these barriers, e.g. what we can do to get people to adopt a specific alternative to the car;

3. Pilot of the programme;
4. Evaluation of the programme.

The steps provide a good basis for (de)constructive transformation approaches. The key issue here is that (de)constructive approaches outline how to identify barriers by focusing on schemas and self-interests. They also address what approaches get people to adopt a type of behaviour. In this case, the implications of (de)constructive transformation discussed in the preceding chapter are applicable in programme design. This brings me to the interesting discussion of how this is applicable in a real life setting to address car user behaviour.

In line with focus group findings and intervention implications discussed in the last two preceding sections, I apply a (de)constructive transformation approach to consider how this intervention approach could apply in a university setting as a means of intervening to reduce usage. The specific (de)constructive strategy that I apply is what I have termed Retrofitted Environmental Nudge (REN). The REN, as discussed in the following section, is a prototypical (de)constructive transformation strategy that resonates with community-based social marketing approaches. However, it adds to the community-based social marketing approach by emphasizing the (de)constructive transformation approaches to problem identification and programme design.

### **7.3 RETROFITTED ENVIRONMENTAL NUDGING (REN)**

For practicality purposes, I discuss cycling as the specific pro-environmental behaviour that is introduced to attain reductions in car use amongst a university students' population. In line with (de)constructive transformation, two strategic approaches are advocated in the REN approach. The first deals with getting

individuals to engage in the targeted pro-environmental behaviour, i.e. adopting cycling and reducing use of the car. This entails identifying the barriers impeding the adoption of cycling as well as those impeding reductions in use of the car. The second approach deals with the employment of (de)constructive transformation strategies; specifically the use of different sets of bespoke messages whose content and style seek to achieve two main aims: 1) aiding trialling of the car substitute - “re-arranging” persistence-driven re-arrangement; and 2) the deconstruction of dominant neutralisation techniques. This second stage is also about strengthening desistance schemas in line with the intervention implications discussed in preceding sections. As noted earlier, the success of intervention approaches or strategies such as the REN approach is dependent on message content and framing style. Unlike traditional approaches whereby a fixed message with the same content is disseminated over time, REN emphasises the need for bespoke messages with different contents: one to accompany initial roll out or pilot of the cycling programme, and another post-piloting to focus on deconstructing persistence-driven re-arrangement and strengthening of desistance-orientations. The messages for both stages are crafted such that they achieve the purpose of deconstructing dominant neutralisations and strengthen dominant affirmations. Along this line, I contend that there is no need to stick to just one message if we can show that a mix of messages will yield better results.

It is important to note that the REN intervention approach is best conceptualised and operationalised as a complementary approach; one that builds on more holistic or comprehensive strategies for behaviour change intervention. It has abstract and practical underpinnings. Practically, it resonates with community-based social marketing interventions (Jackson, 2005). Conceptually, socio-psychological

theoretical perspectives that explain how changes are likely to occur from individual and group perspectives underpin it. In other words, it is a theory-driven approach in response to recent calls for interventions to be underpinned by theory (Bamberg et al., 2011). In the following section, I outline the practical and theoretical underpinnings of the REN approach.

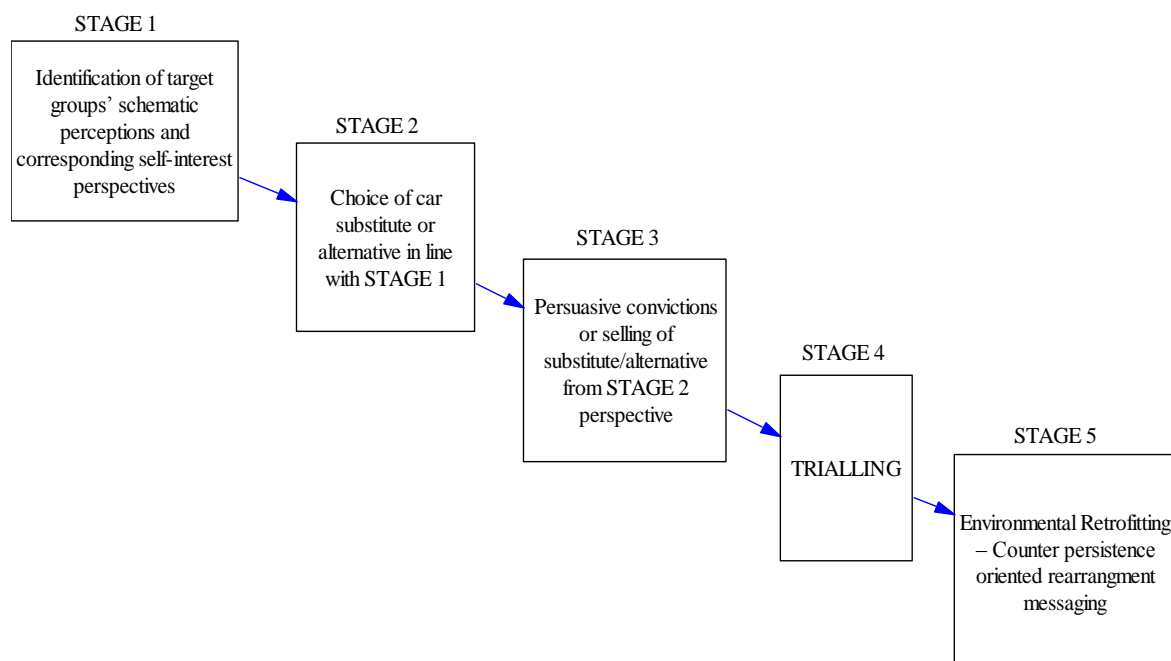
### **7.3.1 Practical underpinnings of the REN intervention approach**

In the following section, I discuss the prototypical REN intervention approach. The discussed prototypical intervention approach is considered here in five stages. As much as I have outlined the REN prototype in five stages, it is important to note that it is the nature and objectives of the intervention approach plus the characteristics of the target group that will determine how best to domesticate any adopted behaviour change strategy (Anable, 2005). Moreover these stages are neither fixed nor exhaustive. They could be collapsed into lesser stages or extended into more stages. This is in line with my initial arguments that the application of (de)constructive transformation approaches ought to be context-specific, and that behavioural justifications are often perspectival, i.e., subject to individual and shared group perspectives.

The following diagram highlights the five stages and key strategic approaches for each stage. This is followed by a more detailed explication of the different stages.



**Figure 7.2 Retrofitted Environmental Nudges (REN): A trans-disciplinary approach to behaviour change**



*Source: Author*

### Stage 1

This stage's approach would be concerned with understanding the target group's schematic perspectives and expressed self-interest points of view in relation to the target behaviour. Focus would be on identifying barriers to reducing car usage amongst the student population. Surveys and studies such as the empirical aspect of the current study can help identify barriers to reductions in car usage. In this case, focus group findings highlight barriers, i.e., justifications for persistence, to reductions in use of the car amongst the student community.

For instance, in the case of the focus group respondents, key barriers would relate to how the car serves specific impression management roles for the individual. In

addition, group views on car usage, e.g., that others use cars and expect them to behave likewise (social norms), the key advantages and benefits ascribed to use of the car (utilitarian, psychological, social and environmental motivations) and the expressed demerits of using alternatives to the car would also be barriers to reducing car usage. In addition, the barriers to adopting cycling would also be identified. The identified key motivators and barriers form the basis for the second stage approach.

## **Stage 2**

The extent to which cycling would serve as a viable alternative would largely depend on whether the target group members perceive it as possessing attributes that can compete favourably with those ascribed to the car. The identified barriers to cycling adoption and barriers impeding reduction in car use become important. These barriers would need to be “taken out” of cycling. For example, the approach might be to sell cycling as possessing bundles of benefits that resonate with, and cater for, the targeted groups’ expressed self-interests if it is to compete favourably with the car. This is in line with the views of Jobber, (2004), who argue that the inclusion of extra appealing features is likely to enhance the adoption of substitute products. It would also need to be devoid of the demerits that the group ascribes to alternatives to car usage. There would be a need to take into account two important aspects.

First, since consumers’ choices are often made on the basis of the perceived attributes of the goods and products, and not necessarily the physical object themselves (Lancaster, 1966), cycling stands a chance of acting as a successful substitute to the car if it is perceived as offering more benefits than those perceived as being offered by the car. For this traveller segment (unlike, say, very elderly

people) arguments that cycling reduces travel time and saves money are attributes that are likely to appeal to this category of respondents. Secondly, positioning cycling as an alternative with attributes that appeal strongly to a university student's self-interest point of view is a start-off point for deconstructing some of the neutralisations used to justify car usage. Strong necessity justifications such as the representative persisters claim that "there is no product such as the car" (MMA) could be countered if persisters are "enticed" to perceive cycling as possessing appealing attributes.

The actualisation of the processes outlined for the first and second stages depend on the application of marketing techniques that are convincing enough, and emotionally charged to get individuals to consider adoption of the car substitute. In other words, cycling would need to be "sold" in way(s) that enhance the target group's willingness to accept. This is addressed in stage three.

### **Stage 3**

A good way to proceed would be to organise a pilot, preferably at the beginning of academic sessions. Prior to the pilot, bespoke messages and other marketing techniques are usable in creating awareness and readiness for the pilot.

Since the essence of the REN approach is to get people to refocus and alter behaviour such that the focus is "re-arranged" from persistence to desistance, the marketing technique advocated above (and for REN) is synonymous with "nudging" people to change their behaviour. People are more likely to change their behaviour if they believe that the behavioural choices that they make are theirs as against believing that they were coerced to make such choices from without (Thaler &

Sustein, 2008). This is also in line with the view that the extent to which individuals are willing to try out new behaviour depends on the extent to which they are persuaded to embark on such trials (Jobber, 2004). In line with Jobber's (2004) view, the transformative aspect of (de)constructive transformation that advocates use of bespoke marketing messages is also applied. The REN emphasis in this case is on message content and framing style in line with findings that the way messages are crafted determines the extent to which they appeal to intended recipients (Jobber, 2004; Cialdini, 2003).

Specifically, the message content at this stage is underpinned by the need to align students' self-interest (persistence and desistance) with cycling. It is also about appealing to the personal and social norm imperatives. In line with the findings from the current study, the deconstructions of dominant neutralisations and strengthening of affirmations would constitute a key area of focus in line with the individual and social schema perceptions. In other words, the manner of crafting these messages should appeal to the individual on a personal level; focusing for instance on what the individual stands to gain (and lose) by adopting or not adopting the car substitute. Focus on the social norm aspect implies that cycling be presented as something that is currently being used by significant others.

At this point, it may not be necessary to include environmental concerns in messages since the majority of persisters claim that environmental concerns do not motivate them to reduce actual and intended car usage. Therefore, message content ought to focus less on the environment and more on gains (and losses) at this stage. For instance, messages targeting weak persisters to adopt cycling would emphasise their dominant self-interest such as costs, reductions in travel time and health gains.

The message tone should be personalised so it says something directly to the individual. For example, a poster on campus could read:

“Active people live longer; people who cycle are active

and healthy. They save money and time. Join the many

others who have gained from the cycling revolution!

Improve your employment prospects by including cycling

in your CV and show prospective employers that you will

never call in sick to work”.

A poster such as this would benefit from the inclusion of a photo of a popular artist or celebrity. This is more likely to get students to stop and think about cycling more than a lecture on sustainable travel. In addition, a message such as this would give the impression that cycling is “normal” and used by “cool” people. In addition, it also deconstructs dominant persistence arguments, e.g. views that cycling is for poor or extremist individuals. Directives could then follow this on how to join a cycling scheme, with a date for the pilot or roll out of a cycle scheme, or the introduction of extra incentives (e.g. green vouchers redeemable at college shops) for fresh adopters or those who sign up to the cycling scheme. In addition, the curriculum (lectures, course work etc.) also offer avenues for spreading the word. Along this line, it is important to note that course work was identified by students as one of the sources

of their awareness of externalities related to car use<sup>32</sup> and as such qualifies as a medium of effective messaging.

Subsequently, messages are changed to attract more people to sign up to the scheme. Messages could then be framed in direct manner to entice more students to adopt cycling. Message content would still emphasise personal gains and losses accruable to those who have signed up. This would be a good way of countering some of the dominant social norm justifications for persistence. For instance, follow-up messages that mention that many people have signed up for the pilot would counter the claim of normalcy evidenced in representative persister quotes such as the following: "... actually, there are not so many people doing that (cycling). Not that many people using bikes, not so many people using public transport" (ASM1). In addition, it addresses respondents' accounts such as the following:

AMM3: I think it (car use) is also a culture.

AMM2: It is a way of life, like I said (reiterating a previously expressed view).

AMF2: When I was small I travelled by car and when I grow up I want to have a car.

The descriptive norm imperative that favours persistence would also be called into question, since cycling is presented as the new culture and way of life.

Another important reason for crafting messages in this way is that it focuses on desisters. Messages highlighting gains from cycling reassure desisters of the gains

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<sup>32</sup> See section 5.1.4 for discussions on respondents' sources of awareness of the link between car usage and the externalities that arise from use of the car.

and benefits of continuing with adopted desistance frames of reference and behaviour. This is in line with the intervention implication that it is equally important to motivate weak desisters to continue with desistance frames of reference. The implication is that the same messages could be used to address persisters and desisters as long as message content is crafted to be able to say something to both categories.

#### **Stage 4**

The fourth stage deals with the pilot of the scheme, i.e. the actual campaign to get people to trial the car substitute. There is essentially no difference between this stage and the previous one, as both are interlinked or even collapsed into one. In this case, I continue to lay major emphasis on the specific university context in line with the study's sample and discussions from stage 3.

For university students, the organisation of events aimed at introducing cycling would be a good approach at the pilot stage. Not only would such events introduce cycling, they would make cycling visible and normal. Thus, actual events, if properly organised, can become joined-up and complementary with bespoke crafted messages. In this case, messages that invite people to join others who have already adopted use of the car substitute are complemented by events that justify the message content; that others have already adopted the car substitute. The dominant schematic neutralisations, that car user behaviour is normal, expected and necessary (Baslington, 2008; Whitmarsh & O'Neil, 2010; Line, 2008) stand better chances of being deconstructed via this sort of joined-up approach to intervention. In addition, pilot events offer good opportunities for the introduction of extra incentives to increase and maintain initial trialling. In a university setting, for example, free

cycling training and a cycle scheme that offers leasing of bikes (to reduce costs of purchase) would be a good way of working students' emphasis on costs identified in the focus groups.

However, rewards to embark on the adoption of products or goods (Rothschild & Gaidis, 1981) have the disadvantage that the individual's behaviour might become tied to the rewards or incentives. A recent study by Thorgesen (2009) found that a free month travel card led car users to adopt use of public transport. However, individuals went back to using the car six months after the free travel cards were withdrawn. Thus, it is not enough to nudge students towards the adoption of cycling using rewards or to focus merely on deconstructing re-arrangement and neutralisation using bespoke messages, since individuals could revert to persistence modes. More importantly, there is a need to ensure that the convert is motivated to continue cycling for desistance-oriented reasons post-trial. This raises the question of how to ensure that persisters and desisters continue involvement from environmental-oriented points of view. This requirement is addressed in the fifth stage.

### **Stage 5**

The fifth stage is specifically oriented towards the maintenance and continuous involvement of trialled persisters and strengthened desisters in line with desister frames of reference (pro-environmentalism). If this is not achieved, individuals who initially adopt the car substitute may relapse back to persistence in use of the car, especially if motivators - e.g. incentives or significant others that constitute the individual's main reasons for adopting cycling - become unavailable or withdrawn at a later point.



In a previous section of this chapter (section 7.1.2) I have used evidence from focus groups to discuss how the employment of neutralisation techniques and re-arrangement are dissonance reduction strategies that also serve the purpose of self-consistency maintenance. From a dissonance perspective, when a persistor chooses to adopt or trial a car substitute (such as cycling), especially for little compensation or with no choice restriction, s/he embarks on a counter-attitudinal behaviour. The persistor would normally experience dissonance since this counter-attitudinal behaviour would be inconsistent with previous persistence-oriented attitudes, beliefs, self-views and frames of reference. However, this dissonance can be reduced if the individual interprets their adoption of the counter-attitudinal behaviour (use of the car substitute) as being consistent with the counter-attitudinal behaviour's frames of reference (Bem, 1972; Bem & McConnel, 1970; Ross & Shulman, 1973), that is, desistance-orientations of environmental frames of reference.

This view relates to previous explications on drift as being grounded on continuous involvement with specific behavioural acts. Just as continuous involvement and commitment to persistent car usage may lead to hardening, habituation and desensitisation from a persistence point of view, the adoption of a counter-attitudinal behaviour could eventually lead to commitment and subscription to the values and frames of reference of the counter attitudinal behaviour, that is, behavioural desistance from car usage.

Therefore, continued involvement in use of the bike instead of driving can lead to a reversal of interpretation and subsequent alignment with the counter-attitudinal behavioural frames of reference (desistance in use of the car). This would occur in

the same way that individuals seek to maintain self-consistency by using neutralisation techniques to justify persistence in car usage, and the employment of rearrangement to cope with the emotional stress (dissonance) of not matching pro-environmental cognitions with desistance.

REN assumes that people need to be “nudged” towards embarking on this sort of counter (persistence) attitudinal cognitive process. Specifically, the fifth stage seeks to achieve this neutralisation of persistence via the introduction of messages with bespoke environmental content. This is achieved by retrofitting environmental content into initial message content argued for in stages three and four. The implication is that whilst initial messages, prior and during trialling, were aligned to the target group’s schemas and also served as a means of countering dominant neutralisation techniques, post-trialling messages will include and emphasise pro-environmental concerns. Note that I have argued that such messages may not need to be introduced at the outset, since initial emphasis at the cycling introductory stages was to maintain schema consistency with cycling. At that point, environmental messages are not likely to affect behaviour. However, post-trial or adoption of cycling, the use of bespoke messages with environmental content is then introduced as a means of enhancing the salience of environmental norm imperatives. This diversionary tactic serves the purpose of maintaining consistency between the injunctive norm (environmental) and the mainstream social norm. Students who trialled cycling for rewards or incentives could then add the environmental concerns to the list of motivators for cycling.

Typical retrofitted messages at this point could start in the same manner and tone as the original message (for consistency reasons): that more people have adopted the

car substitute; that this adoption has led these people to achieve the gains noted in earlier messages; but more importantly, that they have contributed towards addressing environmental issues. These sorts of messages still address dominant neutralisations such as claims of responsibility. However, they also cater for the more environmentally related neutralisations such as the typical “I alone won’t make a difference” that dominated justifications for persistence (see chapter five, sections 5.1.7.1, 5.1.7.6, 5.1.7.11). Thus, including, at this point, that individuals who cycle have also contributed to addressing environmental problems allows individuals to affirm that they accept responsibility and do something for the environment. For persisters, this is a good way of introducing the environmental frame of reference as a motivator for behaviour, while for desisters, this sort of message content justifies and strengthens their focus on the environmental imperative. Importantly, messages crafted in this manner nudge people towards “doing” for the sake of the environment. An implication is that the deconstruction of some neutralisation is also a way of neutralizing persistence-oriented re-arrangement.

The neutralisations whose deconstructions neutralise persistence-orientation are those that focus on not accepting environmental responsibility or perceptions that individual efforts do not make a difference. These would be the denial of responsibility and the change-locus control argument. In addition to affirming responsibility, messages crafted as such nudge the individual towards focusing on the normative imperative of the environmental context. Once acquired, acceptance and subscription to the environmental frames of reference as justifications for adoption of cycling (and use of any other car substitute) could possibly extend and motivate other pro-environmental behaviour types. This is because identification

with the environmental frame of reference could propel the individual towards engaging in other forms of pro-environmental behaviour. The broader literature on pro-environmental behaviour is inconclusive on the extent to which engaging in one pro-environmental behaviour could motivate engagement in other behaviours (Thorgesen, 2004). However, given that the adoption of a green identity tends to motivate generic pro-environmental behaviour, there are possibilities that this could happen in this case.

Summarily, this implies that the pilot needs to be evaluated towards the end of the academic year to ascertain success levels. Similar surveys or studies as used in the beginning could be conducted with a representative sample of students who participated in the initial study to identify barriers to cycling and engagement in car user reduction as well as the cycling scheme pilot. The evaluation of the pilot would also help identify changes to be applied to the (de)constructive transformation strategy.

#### **7.4 DISCUSSIONS AND CONCLUSION**

This chapter has identified intervention implications from focus group findings discussed in chapters five and six. Focusing on intervention related issues inferred from the current study's focus group findings, I have argued for the (de)constructive transformation approach to intervention. This approach builds on the intervention implications identified from the empirical chapters (five and six). I then went ahead to discuss REN as a prototype of an intervention adopting a (de)construction transformation approach aimed at introducing cycling and reducing car usage in a university environment.

As a (de)constructive transformation intervention approach, REN is an attempt at reconciling the conflict of normative imperatives; to use or not to use the car in the face of environmental awareness that suggests reduction in car usage. First, by initially identifying the barriers to reducing car use, REN proceeds to aligning cycling to the individuals' expressed schemas and self-interests. There is no attempt to "force" persisters to alter their persistence-oriented frames of reference. Thus, the individual's felt-consistency with any adopted frames of reference (persistence or desistance in use of the car) is not altered per se. Subsequently, the individual is nudged gradually to refocus on the injunctive norm imperative of the environmental context (in line with the five-stage intervention strategy).

The conflict between the pro-environmental and pro-market imperatives is that of a social norm clash; of what is socially approved (reducing car use) and what is popularly performed (persistence in use of the car). Thus, REN is a social norm intervention, amongst others. The REN strategy, amongst others, complements the social norm intervention with a personal norm intervention approach; implying that it is also a personal norm intervention. This approach works around individual perceptions and attributions of environmental responsibility to self. The arguments for personal norm content in the REN message are also underpinned by a need to deconstruct the ethics of care arguments that underpin persistence re-arrangement, i.e. when persisters appeal to social values of care to present themselves as "good guys".

The practical ideals of care as an "activity" underpinned by the primacy of relationships (Gilligan, 1982; Tronto, 1993) is assumed in the REN message approach as an activity whereby the prime relationship is conceptualised as an

activity performed for self, and then subsequently extended to others. Hence, message content includes personal gains (e.g. health and longevity gains from active travel, economic gains etc.) for the individual when they adopt cycling. Thus, for persisters who claim not to care for themselves, the REN approach entices them to care for themselves in the first instance. In the final analysis, this extends to others in the retrofitted messages, whereby gains to self are extended to others when environmental messages are later sold to students as retrofit .i.e. as a public good. Since desistance re-arrangement focuses on this counter argument - that real care of others implies not harming the environment upon which their livelihood depends - the retrofitted messages become diversionary tactics employed to work around neutralisation and persistence re-arrangement. In other words, REN is a diversionary tactic that re-arranges persistence “re-arrangement”.

A major contribution of the REN approach is the (de)constructive transformation attempt at addressing persistence in car use by taking into account the complex nature of car user behaviour from a specific traveller segment point of view. The (de)constructive transformation approach is therefore a response to calls for intervention to target specific target groups’ self-interests, perceptions and aspiration (schemas) in relation to their travel mode choices (Anable, 2005).

Although the REN approach has been discussed in this chapter from university students’ points of view, it is also applicable to other target groups since the assumptions and presuppositions of the REN approach can be adapted to suit other traveller segments. However, it is equally important to note that the applicability of the REN intervention approach in itself does not necessarily imply a successful re-arrangement of persistence in every case. There is a need to recognise that the

successful trialling of a car substitute would also be largely dependent on other factors (e.g. structural or physical environmental factors) that are not accounted for in the REN approach discussion. For instance, the adoption of a car substitute might imply additional costs that may make the car substitute project non-viable for individuals or service providers. On the other hand, the introduction of cycling might not be successful if corresponding cycling infrastructures are non-existent or do not encourage people to use them. For instance, during the course of my data collection process, focus group respondents pointed out that cycling in London felt unsafe; hence, people would not adopt this cycling alternative in a city such as London. I therefore attempted to use one of the Barclays Hire Scheme bikes in London and actually felt unsafe. As an ardent cyclist (having cycled in Sweden, Denmark and Nigeria), I attributed my feelings of insecurity about cycling in London to poor infrastructure, specifically, poor cycling routes and lack of dedicated cycle lanes in the heart of the city of London. I decided to try cycling in Bristol, an area renowned for high cycling adoption rates. Interestingly, I felt safe cycling in this city, and attributed my feelings of security majorly to better dedicated cycle paths and lanes. Thus, the role of complementing car substitutes with complementary services, such as infrastructure, is equally as important as going through all of the outlined REN stages.

In addition, the assumption that people will embark on the sort of re-arrangement or persistence “re-arrangement” proposed in REN may not always hold true. Considering that people might interpret events relatively, it is possible that continuous involvement will not necessarily lead to the sort of re-arrangement assumed in the foregoing discussion. This is in addition to my previous argument that deconstruction of persistence-oriented schemas and neutralisations or

strengthened desistance-oriented affirmations (for weak persisters) may not be sufficient if schema perceptions are not aligned to the environmental frames of reference.

However, no behaviour change model or approach is perfect. Behaviour change is subject to individual perceptions and interpretation of multiple factors and the role of models or intervention approaches is to work towards altering behaviour in a certain direction. (De)constructive transformation is an approach to behaviour; it builds on what we already know about behaviour change and gravitates towards providing new insights for intervention.



## **CHAPTER EIGHT**

### **8.0 CONCLUSION AND CLOSING COMMENTS**

#### **8.1 INTRODUCTION**

People are motivated to use the car for numerous reasons. The motivations for use of the car largely depend on individual and group interpretations of the roles and purposes that the car serves for individuals (Hagman, 2003; Guiver, 2007; Bamberg et al., 2011). On the other hand, carbon emissions from car usage are responsible for environmental problems. The potential impacts of these problems presuppose reductions in carbon emissions from the car. Evidence suggests people acknowledge the need to reduce car usage based on their awareness of externalities associated with using the car (Commission for Integrated Transport, 2002; Gardner & Abraham, 2008). By consenting that there is need to reduce use of the car, individuals imply that a continued use of the car does not make for the overall common (societal) good. However, evidence also shows that these beliefs do not always translate to actual reductions in car usage; people continue to use their cars despite expressing pro-environmental cognitions on the need to reduce car usage. The current study attempted, amongst other related issues, to uncover the different accounting mechanisms that are employed by individuals to free themselves from the environmental imperative to reduce car usage. The employment of accounting techniques was found to enable individuals to resolve the moral dilemma of not matching environmental beliefs with corresponding reductions in car usage amongst a student sample. The study also considered how individuals who match their pro-environmental cognitions with beliefs justify their adopted car user behaviour. In

addition, the study explored how justifications are reflective of the schemas of focus group respondents.

The current study's focus and approach builds on what we already know about the motivations that people have for using the car. Particularly, the study's focus on persistence and desistance provided a deeper level understanding of car user behaviour. The study provides a deep-level understanding of the multiplicity of factors that motivate continued use or non-use of the car vis-à-vis environmental imperatives. Specifically, findings uncovered how and why specific accounts are employed as justifications and maintenance for persistence and desistance in use of the car and how these are related to schemas. Intervention implications from the focus group sessions with the study's sample (university students) have also been used to show how more effective car user reduction interventions can be developed.

In the following section, I summarise key findings from the study in relation to the research questions.

## **8.2 SUMMARY OF FINDINGS AND ARGUMENTS IN RELATION TO THE RESEARCH QUESTIONS**

Regarding the first research question (on why students' awareness of car user externalities and beliefs that car usage ought to be reduced do not translate to reductions in actual and aspired car usage), findings highlight that the possession of pro-environmental cognitions is not a sufficient reason for reduction in car usage. This finding is consistent with those of numerous other studies that have found that environmental awareness or the possession of pro-environmental cognition does not always lead to corresponding pro-environmental behaviour (Axsen & Kurani, 2012; Jackson, 2005). This is because people are able to work around the environmental

imperative to reduce car usage by justifying continued use of the car (persistence). The possibility of justifying continued use of the car aids the resolution of the moral dilemma of not matching pro-environmental cognitions with actual behaviour, i.e., reductions in car use.

In terms of the second research question (on how accounts for persistence and desistance are constructed and used to justify persistence or desistance in car usage by this sample population), findings from focus groups document the different neutralisation techniques (Sykes & Matza, 1957) and affirmation techniques (Copes & Williams, 2007) that are used by persisters and desisters respectively.

For persisters, employment of neutralisation techniques serves the purpose of justifying persistence by neutralizing felt obligations and responsibilities to adopt the environmental normative imperative to reduce car usage. On the other hand, the desister category accounted for their adopted behavioural choice using affirmation techniques (Copes & Williams, 2007) to justify desistance from using the car. They achieved this by aligning their car user behaviour to expressed felt obligations and responsibility to the environmental normative imperative to reduce car usage. Desisters' car user behaviours are in line with the norm activation theory (Schwarz, 1977); that recognition of environmental threats will lead to individuals' ascription of responsibility to address the environmental threats to self, and consequently to engagement in corresponding pro-environmental behaviour. For persisters, the assumptions of the norm activation theory stop at the point of ascriptions of responsibility, since they do not match expressed responsibility or environmental obligations to self with corresponding pro-environmental behaviour(s). Summarily,

respondents' employment of neutralisation or affirmation techniques depended on whether they favoured continued use (persistence) or non-use (desistance).

Regarding the third research question (on how justifications for either desistance or persistence are reflective of respondents' schemas), the employment of neutralisation and affirmation techniques was found to be reflective of respondents' schemas. The attributions underlying the use of these techniques highlighted that desistance and persistence justifications are determined by views of self, of others and of respondents' embeddedness in the normative imperatives of the pro-environmental (for desisters) and pro-market (for persisters) frames of reference.

Generally, persisters and desisters think and react differently when it comes to car user behaviour; their schema representations and perceptions differed. Their different schema perspectives and perceptions reflected the conflict between the pro-market context that favours car usage and the environmental context that favours reductions of car usage for the sake of the environment. Both persisters and desisters were able to work around and negotiate the normative imperatives of these different conflicting contexts by justifying their adopted choices. Specifically they did this via the employment of re-arrangement, a cognitive coping mechanism used by both categories to present themselves as morally consistent – what I term “good guys”. In addition, the employment of neutralisation and affirmation techniques was also linked to perceptions of self and shared group perspectives. For this student sample, the use of the car was perceived as serving impression management and self-promotion purposes. Also, it was notable that student persisters as well as desisters identified with the frames of reference that they favoured; persistence (pro-market) or desistance (environmental) was found to be based on how they focused

on the descriptive norm imperative (for pro-market) or injunctive norm imperative (environmental), in line with Schultz et al., 2007.

Question framing affected respondents' identity and self-construction. Depending on which frames of reference were made salient, respondents' accounts were affected by salience in line with the views of LaBoeuf (2010) that individuals work around their social identities in response to question framing. This implied that some respondents could alternate between persistence and desistance depending on how embedded they were in desistance/persistence-orientations. The impacts of this phenomenon on university students' identity and self-constructions were considered in terms of their evolving senses of self (becoming) in line with Allport (1955).

Finally, the fourth research question (on how the findings from the study are applicable to enhance interventions) was addressed by linking intervention implications from the study's findings to intervention approaches aimed at getting people to reduce use of the car. Along this line, I argued for (de)constructive transformation approaches. These approaches are grounded on the main intervention implication derived from drift implications, and resonate with social marketing behaviour change techniques (Jackson, 2005).

That weak persisters and weak desisters experience drift suggest they are both malleable (susceptible to change) and as such constitute a crucial target group for intervention. Correspondingly, I argue that intervention approaches will benefit from focusing on the deconstruction of persistence-oriented neutralisation. In addition, I argue that intervention approaches adopting (de)constructive transformation should focus on strengthening existing persisters' environmental frames of reference to prevent them from drifting and adopting persistence frames

of reference. Subsequently, I explain how a (de)constructive transformation prototype (REN) could be useful in introducing cycling in a university context. Conclusively, I note some theoretical underpinnings of the intervention approach that I argue for, as well as conditions for its successful application and its contributions to knowledge.

### **8.3 THE STUDY'S CONTRIBUTION TO THE LITERATURE**

The study has numerous contributions to existing literature. The significant ones are discussed briefly in the following sections.

In many instances, the study's findings confirm those reviewed in the literature review chapter; e.g. the role of perceptions and interpretations of the roles and purposes of the car are confirmed throughout the study. This study has focused on exploring and documenting the individual and group self-explicated accounts that drive persistence in use of the car from a segmentation perspective. As much as individuals are motivated to use the car for various reasons, this study's findings suggest that the individual's continued use (persistence) or non-use (desistance) of the car does not depend solely on their perceptions and interpretations of car use roles and purposes. Findings show that justifications for use of the car go beyond perceptions and interpretations or car roles and functions. The study's exploration of the link between the justification mechanisms that are employed to justify car use and schema perceptions is a novel approach to understanding car user behaviour. Along this line, I have used a theoretical framework that considers how the moral dilemma of not matching pro-environmental cognitions with actual reductions in car usage to highlight how schemas underpin persistence in use of the car. Specifically, the combination of affirmation techniques and neutralisation techniques was applied

in this study to shed more light on individual attributions. This approach is a significant contribution given that the role of individual attributions on pro-environmental behaviour is still an understudied area (Bamberg & Moser, 2007). Moreover, the study's linking of attributions and schemas to the self-explicated accounts used to justify persistence provides fresh insights into, and understanding of, the complexities of car user behaviour.

The conceptualisation of persistence and desistance as continued and discontinued or non-use of the car is a fresh way of understanding what motivates people to adopt or disengage from the environmental imperative to reduce car usage. This finding is also relevant for the individual's engagement or disengagement in other pro-environmental behaviours. In relation to car user behaviour, little is documented about desistance and how people who adopt pro-environmental behaviour are able to maintain this mode of behaviour. In addition to this deeper level approach to understanding how persistence is underpinned by schema representations, this study considered persistence justifications alongside desistance justifications. Hardly any studies have focused on uncovering how both perspectives are connected (i.e. as binaries) and how insights from a combined consideration of desistance/persistence orientations' implications could aid interventions aimed at getting people to reduce car usage.

A key intervention implication from the study findings is that persisters and desisters think differently and are motivated differently. The implication is the need to factor in the different perspectives of persisters and desisters in intervention. The study's findings are novel in the identification of drift implications for intervention approaches aimed at car user reduction. Specifically, the findings' implication that

interventions need to focus on desisters as much as on persisters is an area that has received little, if any, attention. In line with this and other identified implications, I have argued for how specific intervention approaches could respond in line with the insights from the study's findings. Perhaps the greatest contribution of the discussion on intervention is that of REN as a prototypical (de)constructive transformation approach. REN contributes to the recent calls for theory-driven intervention (Bartholomew et al., 2011; Bamberg et al., 2011). Specifically, the REN emphasis on bespoke messages' crafting and style, as used in the example of cycling introduction in a university context, is a diversionary tactic that shows how we can address the limitations of the traditional approaches that focus on the creation of environmental awareness via information dissemination.

The study also makes significant contributions to the theories that underpinned the study's theoretical framework. In line with the study findings, I have also argued for the inclusion of an extra neutralisation to the existing list of neutralisation techniques. Although, the change-locus argument may not qualify as neutralisation for all types of behaviour (especially crime or delinquency), its employment in justifying car user persistence implies that it is applicable as a neutralisation for most environmental behavioural inconsistencies. The study findings also show that the affirmation techniques as formulated by Copes & Williams (2007) are not exhaustive. The employment of Recourse to Alternate Necessity and Normalcy add to the list of affirmation techniques. These findings suggest that for both theories (affirmations and neutralisations), the scope for extensions remains open.

Another major contribution of the study relates to the identification of re-arrangement as a substrate upon which identity and self-constructions are



reflexively negotiated and organised. This finding complements theories and views that have highlighted the fluidity and multiplicity of selves and identities. This is in addition to highlighting how individuals reflexively organise selves and identities in response to the demands of a globalised world (see Giddens, 1991; Castells, 1997; Bauman, 2000). It is argued that although Giddens and others rightly argue for self-reflexive life organisations, they fail to identify the substrate(s) upon which such organisations could be made. In line with arguments for self-reflexive organisations (as explicated by Giddens, 1984; Giddens, 1991; Castells, 1997; Bauman, 2000 etc.), this study has located the dialectics of a specific environmental behaviour aspect (car usage reductions in the face of expressed pro-environmental cognition) as a tension arising from individuals' self-consistency strivings and the corresponding need to reconcile these with conflicting normative imperatives. In addition, the study findings go further to locate re-arrangement (and drifting in response to salience) as the substrate that underpins the resolution of the environmental and pro-market normative imperatives' dialectics. Furthermore, the applicability of re-arrangement is likely to extend to the individual's resolution of other instances of behavioural inconsistency, i.e. attitude-behaviour discrepancies where behaviours clash or are characterised by the presence of conflicting normative imperatives that need to be self-reflexively negotiated. This area requires further studies. For instance, it would be interesting to ascertain the scope and applicability of re-arrangement to other moral dilemmas. Finally, re-arrangement, as employed by persisters and desisters, shows that neutralisations and affirmations do not just serve the purpose of behavioural justification or freeing the individual from blame. In addition to this, re-arrangement is a strategy that highlights how the use of neutralisations or affirmations could be employed by individuals to position

themselves as morally consistent and “good”. This view is not captured in previous formulations and explications on neutralisations. However, it is also important to note that re-arrangement may not be relevant for the more serious delinquent behaviours such as murder or arson.

#### **8.4 LIMITATIONS OF THE STUDY**

Despite the numerous contributions made by this study, like all qualitative studies, it is not without limitations. First, the qualitative nature of the study does not permit any generalisations of its findings. However, since our study is qualitative, the emphasis was not so much on generalisation as it was on engaging with data to create a deeper understanding of the phenomenon under study (Johnson, 1995; Golafshani, 2003). In line with Gergen (2009), the constructionist approach that I have adopted was meant to explore issues from a particular perspective, to provide insights and to open up dialogues around the study’s findings.

Another limitation relates to the use of focus groups as the study’s main data collection method. This limitation is not specific to this study alone. Although focus groups were justified for the study on the basis of efficiency in capturing the group interactional effect, problems arose in relation to its practical application. One problem that arose was the fact that a few comments and words from participants were not reflected in the transcripts. This was caused by either poor speech level or accents that made the transcription of recorded focus group sessions difficult. This might have led to the loss of significant words used in the discussion. However, this occurred in only a few instances. As such, I do not feel that this affected the overall quality or richness of transcribed focus group data. In addition, the different dynamics of the different focus groups made it difficult to make comparisons. Thus,

I cannot claim that specific issues or topics were discussed on the same level during the different focus groups. Despite my use of prompts, participants did not comment equally on all the topics. I anticipated these problems and tried to address them as proactively as possible. Regarding the former, the study's analytic approach to focus group findings is exploratory and not comparative (based on the chosen methodology); it does not attempt to make comparisons across the various groups. This has been discussed in the body of the reporting on findings. On the other hand, the use of a question guide, probes and prompts helped to facilitate discussions. It also increased further discussions around the study's topic/focus during focus groups.

Furthermore, the use of focus groups relates to the first limitation discussed above; it does not allow for generalisations, especially as the sample size was small. However, my choice of this data collection method was suited to addressing the overall research focus and methodology.

At this point, it is important to note that I am not unaware of the debates that have surrounded the use of students as samples in social research. There have been claims about the impropriety of using students as subjects in social research. This debate can be found in a lot of disciplines over the last few decades (especially following McNemar, 1946). Central to the debate is the extent to which students' samples can be representative of people in general. Peterson (2001) discusses the nature of this debate extensively. His review of literature and past studies suggests that there have not been resolutions in this regard. Whilst many authors have argued against the use of student samples, the percentage of published studies that have used student samples has continued to rise (Peterson, 2001). The implication is that use of

university students may or may not appropriate in all instances and is dependent on the fit between research question and study design (Bello et al., 2009). When considered in terms of the fit between research questions and study design, the choice of student samples as used in this study is justified.

This study considered university students as individuals in their own right. If there are to be questions as to the validity of the study's results, in terms of any findings and generalisations, I think that these ought to focus on the extent to which this study meets the criteria of what is considered good research (as would apply to any research project). I have attempted justifications for my methodological and methodical choices in line with recognised research traditions, just as any research is supposed to justify choice of methodology and methods. The debate surrounding the use of student samples is raised here to show that I am aware of the nature of this debate, and that I see a need to justify my position in the light of this crucial debate.

Perhaps the major limitation of the study relates to the logic of reasoning that is applied. Given that the study's findings and arguments for these intervention approaches derive from logical induction (Copi & Cohen's 2002 approach<sup>33</sup>), findings are at best generalizable only to the study sample. The implication is that the study's findings, including the intervention insights and arguments, are not conclusive. Furthermore, the use of a theoretical framework in understanding behaviour limits findings to theory. Thus, the deeper level understandings that I have argued for are perspectival and do not exhaustively explain car user behaviour.

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<sup>33</sup> This is discussed in detail in the last paragraph of section 4.4.1 of the methodology and methods chapter (chapter four).

Summarily, this study has numerous limitations, just like any other study. These limitations are acknowledged, and open up areas for further research. For example, there is a need for more studies, especially those that adopt a quantitative approach that can yield generalisations. Working from generalizable findings will enhance the applicability of the intervention approach that I have argued for in the preceding chapter. This is in line with the limitations considered in the foregoing discussion. This, in turn, implies the need for further related studies that focus on other traveller segments. In addition, further studies could also focus on determining the extent to which the schema perceptions and representations that underpin specific justifications are dependent on demographic factors, e.g., age, sex, nationalities etc. Although some demographic factor issues have been raised in this study's findings (e.g. the rite of passage implied in turning eighteen and wanting to acquire a driver's licence), specific consideration of, and focus on, demographic factors fall outside the scope of the current study. It would be interesting to see how university students or other specific traveller segments in other countries, e.g., developing countries with different cultures and perceptions of environmental issues, construct justifications for use of the car. Finally, the intervention insights from the study open up areas for further research; especially for studies aimed at testing the applicability of my intervention recommendations in real life scenarios and those based on more generalizable findings.

## **8.5 REFLECTION ON THEORETICAL FRAMEWORK**

The original explications on neutralisation techniques focused on how they are used to account for behavioural inconsistency. The emphasis was on delinquent acts that are contrary to social norms (Sykes & Matza, 1957). However, findings from this study show that neutralisations offer insights into more than just peoples' accounts for inconsistent or deviant behaviour. In line with Maruna & Copes (2005) they offer a good framework for understanding persistence as has been applied in this study. That neutralisations offer a framework for persistence implies that they are compatible with alternative theoretical perspectives that can offer insight into the nature of contrasting forms of behavioural justification. Along this line, the constructionist perspective of understanding linguistic accounts as binaries is relevant. In line with the constructionist perspective that I adopted for the study, the need for understanding the binary aspect of persistence led me to combine affirmation techniques (Copes & Williams, 2007) with neutralisation techniques to form a more holistic framework that takes into account binary implications. It is important to note that whilst no study has questioned the applicability of the neutralisation technique in the understanding of behavioural inconsistency, especially crime, none that I came across have attempted the combination of neutralisation theory with a binary perspective. This is despite the fact that studies that have applied this theory note the need for expanding as well as contextualizing this theory to suit the nature of behavioural inconsistency under study. Thus, complementing neutralisation techniques with affirmation techniques was a good way of extending insights from a complementary and binary theoretically grounded perspective. Topalli's (2005) study sheds more light on the need for this sort of expansion of the neutralisation theory.

Topalli (2005) argues that the values of hard-core criminals are disconnected from conventional ones. Topalli claims that this set of criminals are able to go against conventional values because they do not relate to conventional values and as such do not experience any feelings of guilt. Similar findings have been noted by Jacobs (2000) and Wright & Decker (1997). However, the original neutralisation explication is that deviants actually subscribe to conventional values, but are able to justify deviant behaviour by working around these values, i.e., by neutralizing the normative imperatives of the conventional values. A plausible explanation that was not considered by Topalli is the role of affirmation techniques; that these criminals could employ the use of affirmations to justify their sub-cultural beliefs in line with Copes & Williams (2007) explication on the use of affirmation techniques. On the other hand, findings from the current study highlight the influence of continuous engagement for hardline behaviour. Therefore, it could also be that the degree of lock-in or deep level embeddedness (discussed in sections 7.1.1 and 7.1.2 of chapter seven) that arises from commitment to, and belief in, their deviant behaviour permits the respondents in Topalli's study to justify their behaviour as they did. The issue here is not to discuss Topalli's findings per se. Rather, it is to show that there is scope for extending the applicability of neutralisation and affirmation theories in ways that enhance deeper-level understanding of behaviour. The current study has made, I believe, a good attempt at such expansion using a combined framework of affirmation and neutralisation theories. The import of the study's theoretical framework is also linked to the traditional manner of understanding inconsistency where neutralisation theory has been applied.

A common denominator that runs through studies where the neutralisation techniques have been applied is the quest to understand behavioural inconsistency

(Maruna & Copes, 2005). Succinctly put, the traditional enquiry approach considers what people say to account for the inconsistencies inherent in their value-belief system vis-à-vis their covert behaviour. The start-off point into these traditional sorts of enquiry is that people claim to believe that a particular form of action is normative or makes for the common good. However, in real life scenarios, they do not always adhere to such perspectives. This sort of ethical inconsistency has attracted a lot of concern (Maruna & Copes, 2005). However, what this traditional approach misses or fails to put into perspective is the binary aspect of neutralisations, i.e., that persistence in behaviour ought also to consider desistance if a holistic understanding of the behavioural act is to be achieved.

Secondly, neutralisation techniques have been applied over the years in the understanding of very many sorts of ethical inconsistency and are no longer restricted to juvenile delinquency alone. The theory has undergone expansion in terms of applicability; the study's approach of complementing it with affirmation techniques is one of such applicability extensions. The techniques of neutralisation have been applied to numerous studies that cut across a huge variety of disciplines. These include, and are not restricted to, the following: rape; Sunday shopping amongst Mormons; the entry of pre-teens into beauty pageants; German youths and the avoidance of stigma related to the Holocaust; and coping with domestic violence by victims (Hanzani, 1991; Maruna & Copes, 2005). The theory has also been applied to the study of less unethical behaviours such as playing bingo (Chapple and Nofziger, 2000) as well as issues of stronger ethical concern such as genocide (Alvarez, 1997). In addition, a more recent study has applied it to understanding recycling behaviour (Hansmann et al., 2005). It is this wide applicability of the neutralisation techniques theory that has been acclaimed to be the "greatest



testament of the importance of the neutralisation techniques ...” (Maruna & Copes, 2005 :7).

A major importance of the neutralisation techniques theory is linked to its capacity to help to identify areas where positive changes of behaviour can be achieved (Maruna & Copes, 2005). The use of this theoretical approach in positive policy formulation and implementation has been noted in numerous works that consider the practical usefulness of the neutralisation theory; that is, how research driven by neutralisation theory can be used to enhance states of affairs. Copes et al. (2007) offer a recent example of how research guided by neutralisation theory has improved some of the interrogation techniques used by police to better elicit confessions from guilty suspects. The current study’s findings have shown that complementing neutralisation techniques with a binary perspective allows for even greater possibilities of identifying areas that enhance intervention. The novel finding that weak desisters also need to be considered in intervention approaches was achieved because the theoretical framework adopted a complementary approach (neutralisations and affirmations) that factored in desistance orientations and implications for intervention.

Furthermore, the theoretical framework offered an interdisciplinary perspective to understanding how justification accounts are related to schemas. The sociological perspective (i.e., how perceptions of others and descriptive norm imperatives guide behaviour) of neutralisations and affirmations makes them applicable to wide spectrums, especially where behaviour can be seen to have consequences that affect the social order or work against the common good. This is evidenced from the study sample’s considerations of the externality import of car usage. Specifically, the

central premises of both theories, when combined, make them a useful tool for understanding the inconsistencies that exist between an individual's beliefs and his/her actions, and how this relates to schemas. In addition, the psychological (and socio-psychological) perspective that focuses on the individual's evolving senses of self and the self-reflexive organisations that accompany negotiations of self and identities attests to the interdisciplinary insights that can be achieved from a combination of these theoretical perspectives. This is consistent with the study's findings that the styles in which accounts are framed tell us more than how persistence or desistance is maintained. In addition, that accounts for behaviour are indicative of the psychology of people who employ them (Bruner, 2002) become evident.

Findings from the study reveal an interesting issue regarding the neutralisation and affirmation techniques; that these techniques are not discreet. I noticed that there is a thin line, and sometimes no line at all, in terms of how quotes could reflect more than one neutralisation technique. Take as an example the instance where a respondent rationalises that their use of the car is justified on the basis that government taxes them heavily for using the car and still does nothing to make alternatives to the car available. This quote could be considered a denial of responsibility if interpreted as implying that the respondent feels forces beyond their control (government irresponsibility) make them persist in using the car. On the other hand, one could argue that this quote is also reflective of the condemnation of the condemner (if taxes are considered as implying that governments call the respondent's car user behaviour into question, and the respondent's quote is interpreted as condemning government's behaviour or portraying government in a negative light). In addition, claims of normalcy could also be interpreted as claims

of individuality or entitlement in cases where the rationalisation is that the fact that everyone uses cars entitles one to use their own car. Thus, there could be different interpretations and categorisations of respondents' comments depending on how quotes are content-matched with the specific techniques they are interpreted as representing or reflecting. The implication is that the creation of a good framework is not enough. Equally important is the application of relevant analytic methods when using theoretical frameworks such as neutralisation and/or affirmation techniques.

The theoretical framework served its main purpose of guiding the study. However, it is important to note that the theoretical framework offered a perspective to understanding persistence or desistance. It is therefore limited in this way.

## **8.6 CONCLUDING COMMENTS**

This study has explored accounts for justifications of adopted car user behaviour (persistence and desistance) using a university students' sample. It has also uncovered how schemas underpin respondents' justification accounts for favoured behaviour. The study has contributed to the existing literature on car usage and car user behaviour. Specifically, it found evidence to show there is a need to extend understanding from what motivates people to use the car to what drives persistence in use of the car. In addition, findings have been applied to show how insights from the study findings could enhance interventions aimed at getting people to reduce their use of the car. The exploratory nature of the study plus its constructionist underpinning imply that findings and arguments made in this study are perspectival; I neither make claims as to the generalizability of the study's findings nor assume that the study's findings are truth in absolute terms. In line with the constructionist

tradition, this study provides rich and detailed insight into the issues that have been explored. Thus, I recognise that the study has limitations (discussed in previous sections). These limitations notwithstanding, the study's insights introduce areas for further research, in addition to the contributions it has made to knowledge. In line with Gergen (2009), the key contribution of this study lies in the fact that it has introduced transformative dialogue, specifically on how to extend knowledge of car usage and car user behaviour, as well as how to enhance the efficiency of intervention.

## EPILOGUE

This epilogue reports my final reflection on the findings and arguments in the thesis. Specifically, I focus on three main themes; 1) the relevance of the current study's findings in the light of recent trends in travel behaviour in the UK (and other developed countries) that have seen car use plateau particularly among young people; 2) the extent that the current study adequately captures "desistance"; 3) the extent that the methods/sampling adopted for the study allows for detailed exploration of non-car use.

### **Relevance of the current study's findings in the light of peak car and young people**

Recent study findings reveal a saturation in per capita travel distances of individuals (peak travel) and an overall saturation in car use (peak car) in many developed countries (Davis et al., 2012; Goodwin, 2012; Metz, 2010; Metz, 2012). Interestingly, these trends occur particularly among young people (Goodwin, 2012; Metz, 2012; Davis et al, 2012). Given that the specific reasons for peak car are not known for certain and the current study focuses on young people, it is important to consider how the study's findings can offer insight into peak car and the wider trend of young people's travel behaviour.

The need to understand the travel behaviour of young people in the light of their schema views and their process of becoming is one of the central theses of the current study. A key import of the current study's findings to peak car and young people is that young people's car user behaviours are tied to their overall schemas and circumstances that define their process of becoming. The study findings on

young people's " process of becoming"<sup>34</sup> is relevant for contextualising their current car user behaviour within peak car and peak travel arguments. As reported in the study, participants' projections of potential identities (as future managers) highlight that their intentions to use cars are fluid i.e. susceptible to identity changes and in favour of car use. The dominant justifications for persistence (claims of normalcy and necessity) suggest that the majority of young people in this study will continue to favour car use. Specifically, young people's identity projections can help explain data highlighting that the greater reductions in acquisition of licenses for young people have occurred during the recession years (Peck, 2012). A plausible explanation is that reductions in car use by young people are largely tied to their weak economic position and reflective of circumstances defining their senses of self and being in the 21st century. These views are consistent with studies that have found that actual and intended car use is dependent on socio-economic status (Metz, 2010; Frandberg & Wilhelmson, 2011). The discussions on "drift"<sup>35</sup> can shed more light on this.

Drift resonates with recent findings on "catch-up"<sup>36</sup>. An implication is that levels of non-car car use amongst young people may not persist as cohorts transit to more stable identities overtime. Peak car and peak travel, if sustained, have the potential of reducing the detrimental impacts of CO2 emissions from the overall transport sector. These phenomena present opportunities for intervention aimed at getting

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<sup>34</sup> Discussed in section 6.5 using Allport's (1955) theory of becoming

<sup>35</sup> Drift refers to possibilities of altering normative focus by the individual, and being able to alternate or drift from persistence to desistence mode. "drift" is discussed in detail in section of chapter 6 (section 6.4, pp 270 - 274)

<sup>36</sup> Catch up refers to the tendency of cohorts to approach similar levels of license holding over time. Thus, younger people tend to catch up (by way of increase) with previous cohorts' high levels of license holding when they are approximately 30 - 35 years old (Frandberg & Vilhemson, 2011)

young people to continue desisting from car use. Along this line, the intervention strategy discussed in chapter seven is specifically relevant. In relation to peak travel, (de)constructive transformation strategies<sup>37</sup> can aid intervention aimed at reducing car use from two perspectives; 1) ensuring that young people who have already adopted alternatives to car use continue to "persist"; 2) militating against the actualising of "catch up" using prototypical deconstructive transformation approaches such as the REN<sup>38</sup> approach discussed in chapter seven. Despite this relevance, there is need to caveat some of the arguments in the thesis.

### **Desistance in the light of peak car**

The study focused on uncovering the group- and self-explicated justifications underpinning persistence in and desistance from car use. Specific focus was on exploring the extent that justifications for persistence in or desistance from car use are determined by pro-environmental cognitions. The adoption of this specific approach implies that the import of travel-related issues such as peak travel and peak car did not constitute the study's major focus.

Furthermore, the study's focus on the role of pro-environmental cognitions for persistence or desistance implies that the study did not gravitate towards exploring the extent that other determinants of desistance might or could have determined justifications for persistence in or desistance from car use. Also, desistance from car use is dependent on factors that are non pro-environmental, e.g., the proximity to workplaces and/or social amenities, the reduction barriers to using active modes, residence in car free developments, presence or absence of infrastructure such as

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<sup>37</sup> See chapter seven (section 7.2)

<sup>38</sup> See chapter seven (section 7.3) for discussion on Retrofitted Environmental Nudges (REN)

road access, etc. (Reutter & Reutter, 1996; Guiver, 2007; Shannon et al., 2006; Frandberg & Wilhelmson, 2011; Eriksson & Garling, 2008; Melia et al, 2011). In this context, this study cannot claim to have adequately captured the phenomenon of desistance in its entirety. This limitation is largely attributable to the study's focus. Correspondingly, methodological issues tied to the non-comprehensive exploration of non-car use are worthy of note.

### **Methodological issues related to exploration of non-car use**

First, there is the issue of the relative small number of hardline desisters in the sample. The unequal representation of hardline desistors is largely attributable to the sampling technique (non-probability) that I adopted. However, it could also be that the representation of hardliner desisters and persisters in the sample is a true reflection of the wider population given that desistance from car use for environmental reasons occur for a minute percentage of individuals (Jain, 1998; Jain & Guiver, 2001; Whitmarsh, 2009; Frandberg & Vilhemson, 2011). Irrespective of which is the case, the detailed arguments built around one hardliner desister might not adequately account for desistance justifications in its entirety. Although this does not disqualify the arguments made for the hardliner-desister category, it suggests the need to be cautious since the arguments and claims made for this category are restricted.

Secondly, factors such as the extent to which justification accounts for persistence or desistance are underpinned by levels of engagement with car use suggest we also have to caveat findings and discussions in other areas. My interpretation that "the majority of students use varieties of techniques to account for their actual (present) and aspired (future) car user behaviour" (first paragraph of section 6.2.1, p.230) is



central to the caveating of discussions. Although this argument is consistent with the logical inductive interpretative approach applied in analysis, it is wanting in terms of specifics. It does not adequately account for the effect(s) of factors such as how intentions of car owners versus non-car owners, affect respondents' justification accounts and accounting mechanisms. Correspondingly, given that the extent to which "re-arrangement" is employed depends largely on schemas as well as how the individual wishes to present his/her self, it is possible that justifications could have been re-arranged to deal with other impression management issues that are not explored in the study. For instance, some weak desisters, and possibly some hardline desisters could have re-arranged their justifications to cope with the pressure of wanting but not being able to afford ownership and use of a car. In other words, justifications and accounting mechanisms (e.g. re-arrangement) could be influenced by factors such as ownership and use of the car, not owning a car, using but not owning etc. That the extent to which such factors affect justification accounts are not explored in detail in the study highlight limitations of the study's method and sampling technique. They also highlight the need for studies, specifically those that can adequately address the gaps noted above, e.g. by correlating the relationships between factors and/or variables (intentions, ownership, actual usage etc). Focus on these areas will complement the deeper level understanding and constructive dialogue that the current study has introduced.

With hindsight, I acknowledge that the study would have benefitted from the use of a more representative sample. My aim was to open a transformative dialogue on a topic where all the answers are neither known nor exhaustive (Gergen, 2009). As an exploratory study, the methods and techniques that I have applied are justified.

In conclusion, it is important to highlight that the study's objective was not to understand persistence or desistance in their entirety. It is worth reiterating the conceptual explication and focus that I applied to the study.<sup>39</sup> The focus of the study was to understand the import of pro-environmental cognitions for persistence in and desistance from car use from university students' perspective; a perspective argued in the thesis as important<sup>40</sup>. Specific emphasis was on exploring why persistence occurs despite the possession of pro-environmental cognitions and a consideration of desistance as a binary of persistence. The research questions were formulated around this context. The study has addressed these questions. The study has made significant contributions<sup>41</sup>. The discussed limitations are areas requiring further studies. Time constraints<sup>42</sup> would not have allowed for a second or follow up study aimed at a detailed exploration of the limitations noted above. I intend to address the identified limitations in my future academic studies and projects.

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<sup>39</sup> See chapter 1 (section 1.4.1)

<sup>40</sup> See chapter 1 (sections 1.2, 1.3, 1.4.1 and 1.4.4)

<sup>41</sup> See chapter 8 (section 8.3)

<sup>42</sup> I was in my fourth and final year of my PhD programme at the time of analysis and writing-up.

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## APPENDICES

### APPENDIX 1: FOCUS GROUPS' QUESTION GUIDE

1. Do you drive or intend to drive in the future?
2. How do people around you (family, friends, school authorities, RHUL Sustainability Group) expect you to behave regarding car use (Probe in line with responses)? Do you feel encouraged or obliged to use cars due to perceived expectations, convictions and support from these people?
3. Are you aware of the environmental impact of motoring (car use)? (Probe on awareness sources – NO LEADING QUESTIONS)
4. (a) Due to values important to you, do you feel obliged to use alternatives such as cycling, walking or other means of public transport  
  
(b) Do you have personal obligations to have environmental impacts in mind when you choose a travel mode?  
  
(c) How are the personal obligations and values mentioned above related to your decision to use the car?
5. When you drive, your car emits CO<sub>2</sub> and contributes to pollution, congestion and even climate change. Why would you drive in the face of such knowledge? (look out especially for consistently used neutralisation techniques and statements - probe on different justifications)

**APPENDIX 2: FOCUS GROUPS' PROTOCOL (QUESTION LEVELS)**

Question Level	Agent	Focus	Context	Target For Response
One	Focus Group	Individual/Other(S)	Personal Norms and Orientations	Personal Norms, Values, Beliefs, Intentions To Drive & Environmental Awareness Levels
Two	Focus Group	Self and External Others	Social norms plus normative contexts	External other, Influences, Perceptions of expected, behaviour(norms, beliefs, etc)
Three	Focus Group	Individual	Personal norms plus environmental awareness	Awareness of consequences & level of
Four	Focus Group	Individual/Events/Others	Justifications for PEB and Non-PEB Behaviour	Justifications (neutralisations and affirmations)
Five	Focus Group	Individual/Events/others	Cognitive Representations	Justifications and attributions - schema underpinnings

**APPENDIX 1: FOCUS GROUPS INVITE**

Dear Student,

I invite you to participate in my PhD Focus Group Discussions. I need you to confirm and suggest any day or time that suits you, one that will ensure that you do participate in the discussions.

The essence of the Focus Group discussion is to get your opinions on different reasons and justifications that support car usage. You do not necessarily need to own a car to join in the discussion, it is your opinions about cars and how they are used that we will be discussing. The issues that you will be required to respond to are made against the backdrop of the fact that cars produce emissions responsible for environmental problems such as climate change, pollution etc. In the face of such knowledge, your candid opinion is what we seek to get. Your opinions and the comments you make will be treated confidentially and will be used for academic purposes ONLY. To ensure confidentiality, you are not required in any way to reveal your identity at any point in time during the course of the discussion.

We intend that the discussion should not last more than an hour. Refreshments will be served and you will stand a chance of winning a special gift item during a raffle draw at the end of all the group discussions. I look forward to getting your response and suggestion as per day and time. I recommend choice Wednesday or Saturday next week. I look forward to getting your opinion and suggestion

Warm regards,

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