University of Groningen

Mean or green?

Groot, Judith Irene Maria de

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2008

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA):
Groot, J. I. M. D. (2008). *Mean or green? value orientations, morality and prosocial behaviour*. [Thesis fully internal (DIV), University of Groningen]. [s.n.].

Copyright
Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment.

Take-down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): http://www.rug.nl/research/portal. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Download date: 15-08-2024

Chapter 1

General Introduction

> “Perhaps the most widespread misunderstanding of economics is that it applies solely to financial transactions. Frequently this leads to statements that "there are noneconomic values" to consider. There are, of course, noneconomic values. Indeed, there are *only* noneconomic values. Economics is not a value itself but merely a method of trading off one value against another.” - Quote Thomas Sowell *(economist and columnist)*

1. 1 Prosocial behaviour

Volunteering time to an environmental organisation, donating blood, giving money to homeless people, or collecting cloths and blankets for countries hit by natural disasters are all considered to be examples of prosocial behaviour. Prosocial behaviour is referred to as any act that benefits another person or other persons (Aronson, Wilson, & Akert, 2005). It concerns a broad range of behaviours, such as helping, sharing and cooperation (Batson, 1998). The motivations for individuals to act prosocially are benefiting others or themselves (e.g., Batson & Powell, 2003; Cialdini, 1991; Staub, 1978; Swap, 1991). The understanding of prosocial behaviour and its’ motivations can be seen as one of the key factors to harmonious interpersonal and group relationships. Therefore, studying prosocial behaviours and its psychological determinants are relevant in numerous fields, including education, social work, and criminal justice.

Also in the field of environmental psychology, the significance of prosocial behaviours and their psychological motivations become of interest. Environmental significant behaviour (ESB) is believed to be a special case of prosocial behaviour, because these types of behaviours entail that people benefit others, whereas often, no direct individual benefits are received by engaging in these behaviours. Moreover, prosocial as well as ESB are viewed as a moral issues (Allen & Ferrand, 1999; Baron, 1997; Vandenbergh, 2005). Stern (2000) defines ESB as behaviour that changes the availability of materials or energy from the environment or alters the structure and dynamics of ecosystems or the biosphere.[1] Because there is a growing awareness that human behaviour contributes to environmental problems such as the greenhouse effect, depletion of the ozone layer, water pollution, decline of biodiversity, and desertification (Intergovernmental Panel on Climate Change [IPCC], 2007), it is relevant to study determinants that influence ESB as a

special type of prosocial behaviour. Therefore, this thesis will mainly focus on factors related to prosocial behaviours in an environmental context. However, I focus on other types of prosocial behaviours as well to be able to generalise results to other contexts.

Many scholars have emphasized the importance of studying human values when explaining prosocial behaviours (Allport, 1961; Dunlap, Grieneeks, & Rokeach, 1983; Fransson & Gärling, 1999; Naess, 1989; Staub, 1989; Schwartz, 1992). Values are difficult to study and persistent questions arise about whether they are "real", which values play a role in different types of prosocial behaviours, and whether and how they are related to these behaviours. Psychological theories and research still not have unifying answers to these questions. This thesis deals with questions such as these.

In this chapter, I first propose some general definitions, features and theories of values (Section 1.2). Then, I show which values are important when studying prosocial beliefs, intentions and behaviours, especially in an environmental context (Section 1.3). Finally, I postulate two different theoretical models that posit how these values are related to prosocial behaviour (Section 1.4).

1.2 Values

Definitions of values are plentiful. In the social psychological field alone, values are referred to as broad attitudes (McGuire, 1969, p.151), conceptions of the desirable (Kluckhohn, 1951, p.395), beliefs about desirable or undesirable ways of behaving or desirable end states (Feather, 1995, p.1135), cognitive constructs that explain individual preferences (Renner, 2003, p.127), preferences for certain outcomes or end states (Staub, 1989, p.45), and fundamental inputs to most conscious, deliberative decision making (Fischhoff et al., 1983, p.40). What is lacking or underemphasized in most of these definitions is the notion that individuals and societies can prioritize the importance of values. Individuals can weigh and arrange each value resulting in value hierarchies. Although the number of values that individuals possess is relatively limited, endless combinations of values may affect a variety of attitudes and behaviours. Psychological theories and studies on values that emphasize the importance of this ordering of values are based in the work of

Rokeach (1973) and more recently, Schwartz (1992). I will elaborate on the work of these researchers below.

1.2.1 Definition and features of values

Rokeach defines a value as "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existences". This definition of a value is highly compatible with definitions proposed by other theorists, such as Schwartz, who defines a value as: "a desirable transsituational goal varying in importance, which serves as a guiding principle in the life of a person or other social entity (1992, p.21)." An important difference between the two definitions is that Schwartz formulates values as *goals*. Rokeach also stresses the motivational function of values and refers to *supergoals* or *ultimate goals* (1973, p.14). However, he does not explicitly include this function in his definition.

The definition of Schwartz includes most of the agreed upon key features of values in value literature. First, like most other value researchers, Schwartz argues that a value is a belief on the desirability or undesirability of a certain end-state. Or, as Allport (1963, p.454) puts it: "A value is a belief upon which a man acts by preference." Second, values are seen as rather abstract and therefore they transcend specific situations. Third, values serve as a guiding principle for the selection or evaluation of behaviour, people and events. And finally, values are ordered in a system of value priorities. This system is an enduring structure of beliefs concerning preferable ways of behaving or end-states of existence along a continuum of relative importance (Rokeach, 1973). This feature implies that when different competing values are activated in a certain situation, choices are based on the values that are considered to be most important to act upon.

The characteristics of values illustrate why it is important to study values. First, it has been theoretically reasoned as well as empirically validated, that values play an important role in explaining attitudes, intentions and behaviour (e.g., Batson & Powell, 2003; Oskamp, 1991; Stern & Dietz, 1994). Values may affect beliefs about the consequences of attitude objects for things an individual values and thus have consequences for an individual's attitudes and

behaviour. More specifically, Stern and colleagues (Stern, Dietz, Kalof & Guagnano, 1995) argue that "the link to values is important because attitudes towards new objects must be built on something more stable and relatively enduring. Value orientations might provide this foundation" (p.1615). Second, relative to other antecedents of behaviour (e.g., attitudes), there are only few values to consider (e.g., Rokeach & Ball-Rokeach, 1989). And, only few values are activated in specific situations. Thus, values can provide an economic efficient instrument for describing and explaining similarities and differences between persons, groups, nations, and cultures (Rokeach, 1973, p.157 and 158). Third, the value concept is central across different kinds of scientific disciplines. It transcends the discipline of psychology and, consequently, it makes interdisciplinary collaboration possible (Rokeach, 1973, p.158).

1.2.2 Value theories

In psychology, various studies have been conducted to examine the relationship between values, general and specific beliefs, intentions and prosocial behaviour. A large amount of these studies were based on Rokeach's value survey (e.g., Dunlap et al., 1983; Neuman, 1986; Tetlock, 1986; Rankin, 1983; Stevick & Addleman, 1995) or, more recently, Schwartz's value inventory (e.g., Feather, 2002; Grunert & Juhl, 1995; Hoogland, 2006; Karp, 1996; Lindeman & Sirelius, 2001). In this section, I discuss these theoretical frameworks.

Rokeach's value theory

Rokeach (1973; 1979) defined a universal value system or hierarchy that enables to compare societies and individuals in terms of specific values and in terms of value priorities. He suggested a value theory based on different classifications that were prevalent at that time: "Rather than burden the reader with yet another classification of values, I prefer to ask instead whether there might be some compelling theoretical basis for suggesting a systematic classification of values (1973, p.24)." Rokeach examined the relative importance of values, because he assumed that it is not the absolute presence or absence of a value that is of interest, but their relative importance. A list of

36 values was proposed, divided into 18 instrumental and 18 terminal values. Instrumental values refer to beliefs concerning desirable *modes of conduct* or, in other words, *means*. Terminal values represent preferable *end-states* of *existence*. The distinction of instrumental and terminal values was believed to be important, because it was assumed that there was a separate yet functionally interconnected relationship between the two.

Rokeach's theoretical reasoning about distinctions of values went further. He identified two kinds of instrumental and two kinds of terminal values. Instrumental values could be divided into moral and competence values. Whereas moral values refer to instrumental values that have an interpersonal focus which arouse regret of conscience or feelings of guilt when violating these values, competence values have a personal focus. Feelings of shame about personal incompetence instead of feelings of guilt for wrongdoing are at stake when desecrating this type of values. Terminal values were divided into personal versus social values, or intrapersonal versus interpersonal ones. Individuals could vary in the degree to which they valued personal values, such as *self-respect* or *an exciting life*, and social values, such as *world at peace* and *world of beauty*.

In a study among 1,409 adult American people, respondents were asked to rank the instrumental and terminal values separately with respect to their relative importance. Based on the correlations between the values it was argued that the 36 values could not be reduced to a smaller number of factors. Rokeach concluded that the 36 values were "reasonable comprehensive and universally applicable," but more research was needed to further validate this proposition (Rokeach, 1973, p.44). Furthermore, factor analyses showed some support for the distinction between instrumental (moral versus competence) and terminal (personal versus social) values. However, three important considerations should be taken into account when interpreting these results. First, it has been argued that the evidence for the distinction between instrumental and terminal values was merely due to the fact that the two types of values were ranked separately (Schwartz, 1994; Schwartz & Bilsky, 1990). For example, Schwartz (1994) could not validate this distinction empirically when evaluating both values together. He demonstrated that all types of values could be expressed as both instrumental and terminal values and that the motivational significance was minimally affected by this change in expression.

This suggests that the distinction between instrumental and terminal values may not be relevant. Second, although Rokeach concluded that the 36 values could not reasonably bereduced into a smaller number of values, he questioned whether the list should be extended by more values. And third, the data was ipsative in nature by following a rangordening procedure. Factor analysis of ipsative data sometimes leads to a loss of information because the first general component is left out (Clemans, 1966; In: Ten Berge, 1999). Although the information that is lost does not necessary has to be useful (Ten Berge, 1999), one should take this in mind when interpreting the results. These considerations provided a reason for Schwartz (1992; 1994) to extend the work of Rokeach to come to a universal value system or hierarchy.

Schwartz's value theory

Schwartz aimed to examine differences in value priorities in order to make comparisons between societies and individuals. He also proposed a general classification of values. He developed a general taxonomy of fifty-six values. Respondents had to rate each of these values on a 9-point scale reflecting the importance of these values as "a guiding principle in one's life." From data collected in 44 countries, with a total of 97 samples and 25,863 respondents, ten motivational types of values were found that were based on an individual-level analysis (see Table 1.1). These ten value types can be plotted into a two dimensional space, that form four separate value clusters or orientations (see Figure 1.1). The more the values are close to each other in this two dimensional space, the more compatible they are with one another. For example, *universalism* values (e.g., broadminded, equality, a world of beauty) proved to be compatible with *benevolence* values, such as helpful, forgiving or honest. However, values included in the value type *universalism* are mostly in contradiction with values that express *achievement* (e.g., successful, capable, and ambitious). Thus, values do not stand on their own, but their prioritization are related to each other to form value clusters or value orientations (Fransson & Gärling, 1999; Stern & Dietz, 1994).

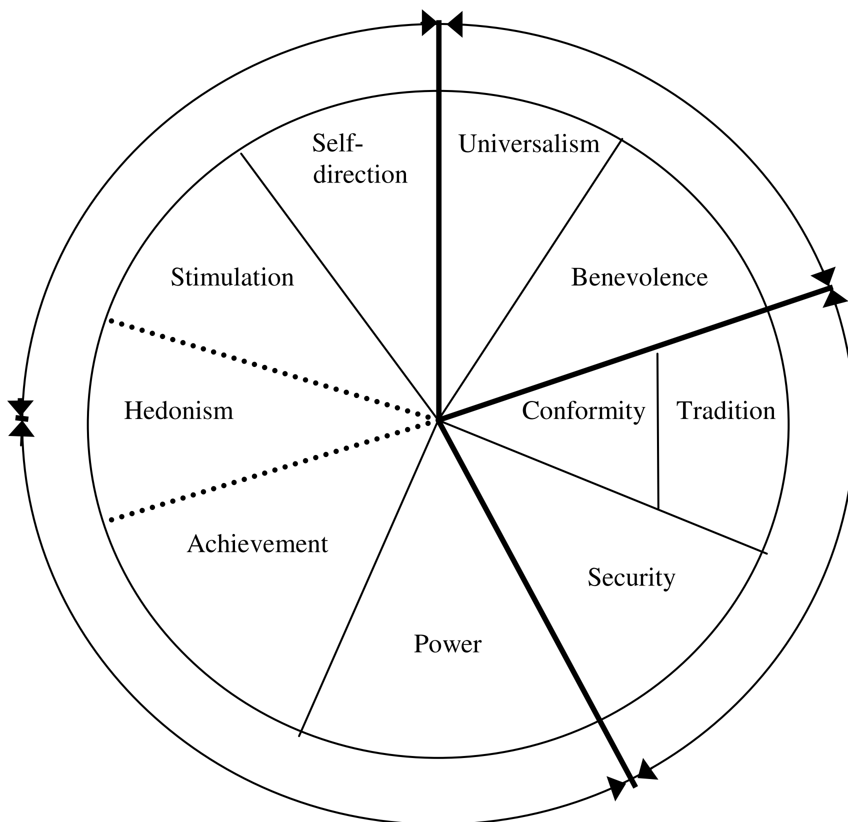

Figure 1.1. The motivational types of values placed into a two dimensional space (Bilsky & Schwartz, 1994).

Table 1.1

Definitions of the motivational types of values including examples that express each type (adapted from Bilsky & Schwartz, 1994).

Value type	Definition	Examples of values
Power	social status and prestige, control or dominance over people and resources	– social power – wealth – authority
Achievement	personal success through demonstrating competence according to social standards	– successful – capable – ambitious
Hedonism	pleasure or sensuous gratification for oneself	– pleasure – enjoying life
Stimulation	excitement, novelty, and challenge in life	– daring – a varied life – an exciting life
Self-direction	independent thought and action-choosing, creating, exploring	– creativity – freedom – independent
Universalism	understanding, appreciation, tolerance, and protection for the welfare of all people and for nature	– social justice – broadminded – protecting the environment – equality
Benevolence	preservation and enhancement of the welfare of people with whom one is in frequent personal contact	– helpful – forgiving – honest
Tradition	respect, commitment, and acceptance of the customs and ideas that traditional culture or religion impose on the self	– accepting my portion in life – devout – respect for tradition
Conformity	restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms	– obedient – self-discipline – politeness
Security	safety, harmony, and stability of society, of relationships, and of self	– national security – social order – sense of belonging

Schwartz's value theory consists of two dimensions. The first dimension, openness to change versus conservation, distinguishes values that stress independence, such as self-direction and stimulation, from values that emphasise tradition and conformity. The second dimension distinguishes values that stress collective interests, such as universalism and benevolence, from those that pursue personal interests, such as power and achievement. This dimension is labelled as the self-transcendence versus self-enhancement dimension. The self-transcendence versus self-enhancement dimension is comparable to the distinction between personal versus social values proposed by Rokeach (1973). Theories on prosocial behaviour indicate that especially this dimension is important when explaining prosocial behaviour, because the most important reasons for behaving prosocially are benefiting yourself, benefiting others or a combination of both (see Section 1.3 and 1.4; e.g., Batson & Powell, 2003; Cialdini, 1991; Staub, 1978; Swap, 1991). Throughout this thesis, I will focus on this dimension only and ignore the openness to change versus conservation dimension, because the self-enhancement/self-transcendent dimension is most relevant for prosocial behaviour and people consider only few values when making behavioural choices.

Schwartz concluded from his large international study that no major motivational aspects were missing from the theory. Moreover, he showed empirically that the postulated value clusters were universally applicable in a diversity of research fields and behaviours (e.g., Caprara, Schwartz, Capanna, Vecchione, & Barbaranelli, 2006; Devos, Spini, & Schwartz, 2002; Sagiv & Schwartz, 2004; Schwartz & Boehnke, 2004). Therefore, the theory used by Schwartz holds promise for research into prosocial behaviour and ESB. However, questions arise whether a general value theory, such as Schwartz', is sufficient when studying prosocial behaviours in an environmental domain, because environmental values are hardly represented in this theory.

1.3 Value orientations to explain ESB

As I described in Section 1.2.2, the majority of scholars argue that self-transcending and self-enhancing values are most important when studying prosocial behaviours among which ESB. However, literature on environmental

ethics raises the question whether specific biospheric values should be examined when studying prosocial behaviour in an environmental context as well. The following quote provides an example of this assumption:

> "By 1800 the confident anthropocentrism of Tudor England had given way to an altogether more confused state of mind. The world could no longer be regarded as having been made for man alone, and the rigid barriers between humanity and other forms of life had been much weakened..." (Thomas, 1983, p. 301).

Thomas (1983) describes a growing consciousness toward the natural world that came up in England around the eighteenth century. He concludes in his book *Man and the natural world* that during this period people value nature in itself. Aldo Leopold (1949) also advocated the ethical correctness of a "land ethic" in order to prevent environmental destruction. This "land ethic" has been interpreted by other scholars as an ecocentric or biospheric ethic (e.g., Bjerke & Kaltenborn, 1999; Grendstad & Wollebaek, 1998; Kortenkamp & Moore, 2001; McFarlane & Hunt, 2006; Thompson & Barton, 1994). This ethic holds that people have direct moral obligations to protect all living things, ecosystems, and the land, due to the value of these things (e.g., Callicott, 1986). In other literature on environmental ethics, for example, Reid's *The Sociology of Nature* (1962) or Peter Singer's *Animal Liberation* (1973), this value of nature, or an ecological frame of reference, is used to describe different environmental ethical dilemmas. Therefore, I shed some light on the question which values are most relevant to include when explaining prosocial behaviour in an environmental domain. Is it possible to distinct biospheric values from self-transcendent values?

1.3.1 Biospheric value orientation

In literature on environmental ethics, various scholars argued that besides a self-enhancement versus self-transcendent value orientation, a third value orientation should be distinguished that emphasizes the intrinsic value of nature (Leopold, 1949; Naess, 1989; Reid, 1962; Singer, 1973). For example, in *Radical Ecology* (1992), Merchant describes a distinction into three ethics involved in land and natural resource dilemmas, namely an egocentric, a homocentric and an ecocentric ethic. An egocentric ethic is based on an

individual ground It implies that individuals are entitled to extract and use natural resources to enhance their own lives and those of other members of society. A homocentric, or anthropocentric, ethic is grounded in society and implies that the social good should be maximized and human evil minimized. An ecocentric ethic is based in the ecosystem or cosmos, and implies that all things in the ecosystem have intrinsic value and deserve moral consideration. These ethics show in their definitions a close link to values.

Other scholars have proposed a similar distinction into three value orientations (Axelrod, 1994; Clark, Kotchen, & Moore, 2003; Stern & Dietz, 1994). For example, Stern (2000; Stern & Dietz, 1994; Stern, Dietz, & Kalof, 1993) argues that three different value orientations may affect beliefs and behaviour related to the environment: an egoistic, an altruistic and a biospheric value orientation. People with an egoistic value orientation will especially consider costs and benefits of ESB for them personally: when the perceived benefits exceed the perceived costs they will have an environmentally friendly intention and vice versa. People with an altruistic value orientation will base their decision to behave proenvironmentally or not on perceived costs and benefits for other people. Finally, people with a biospheric value orientation will mainly base their decision to act proenvironmentally or not on the perceived costs and benefits for the ecosystem and biosphere as a whole. All three value orientations may provide a distinct basis for ESB. For example, a person may reduce car use because the costs are too high (egoistic), because it endangers the health of people (altruistic), or because it harms plants and animal species (biospheric). Therefore, in theory, people with an altruistic or biospheric value orientation are not necessarily more ecologically sound than people with a predominating egoistic value orientation. However, in general proenvironmental beliefs, intentions and behaviour appear to be positively related to self-transcendent (i.e., altruistic and biospheric) values and negatively to self-enhancement or egoistic values (e.g., Honkanen & Verplanken, 2004; Karp, 1996; McFarlane & Boxall, 2003; Steg, Drijerink, & Abrahamse, 2005; Stern & Dietz, 1994; Stern, Dietz & Guagnano, 1998; Van Vugt, et al., 1995), probably because ESB is often associated with direct individual disadvantages.

Based on the above, one may assume that there is at least a theoretical ground for a separate biospheric value orientation. Empirically however, in many studies this value orientation could not be distinguished from the altruistic value orientation as will become clear in the next section.

1.3.2 Empirical validation of a separate biospheric value orientation

Most studies failed to show a distinction between an altruistic and a biospheric value orientation (e.g., Bardi & Schwartz, 2003; Corraliza & Berenguer, 2000; McCarty & Shrum, 1994; Nordlund & Garvill, 2002; Stern & Dietz, 1994). Only a distinction between individual (i.e., egoistic, proself or self-enhancement) and social (i.e., altruistic, prosocial or self-transcendent) value orientations is found in these studies (Stern, et al., 1998). In an attempt to distinguish a biospheric value orientation from generally socially oriented values, Stern & Dietz (1994) conducted a study based on Schwartz's value scale. They argued that within the 56 value items there are only three items that seem to reflect the biospheric value orientation: unity with nature, a world of beauty and protecting the environment. These values are related to the self-transcendence dimension and thus belong, according to Schwartz, in one single cluster, together with altruistic values. When including three biospheric values in a total list of 56 values only, it will be statistically hard to distinguish a separate factor reflecting biospheric values through explorative factor analyses. Therefore, Stern and Dietz selected 32 items from Rokeach's and Schwartz's value scales and added two biospheric items (viz. preventing pollution and respecting the earth). They believed that this procedure would enable them to indeed empirically distinguish the biospheric value orientation from the altruistic value orientation in a general population sample. Factor analysis, however, failed to distinct the biospheric value orientation from the altruistic one. This result was later replicated in another study by Stern and colleagues (Stern et al., 1998). This result might be due to the fact that the number of biospheric items was still underrepresented in a list of 34 items.

A few empirical studies did reveal a distinction between biospheric and altruistic values through exploratory principal component analyses (PCA) (García Mira, Real Deus, Durán Rodríguez, & Romay Martínez, 2003; Karp, 1996; Nilsson, Von Borgstede, & Biel, 2004) or by constructing value scales

through reliability analyses (Stern, et al., 1998). However, these studies did not employ confirmatory factor analyses (CFA) to validate this distinction. CFA isgenerally used to validate a distinction based on theoretical grounds. Furthermore, studies that did reveal a distinction between biospheric and altruistic values failed to show a unique contribution of both altruistic and biospheric value orientations in explaining environmental beliefs, intentions and ESB. Therefore, it is hard to draw conclusions on whether or not it is useful to distinguish three value orientations instead of two when studying prosocial behaviour in an environmental context.

When three value orientations may not be distinguished empirically, why bother considering three instead of two value orientations? I think this could be useful for at least three reasons. First, theoretically it seems clear and useful to distinguish a value orientation that emphasizes the intrinsic value of nature, as suggested by various people in the field of environmental ethics, sociology and psychology. Second, empirically there is only little and often contradictory support for a distinction between biospheric and altruistic value orientations. This may be due to the selection of values included. For example, in most studies based on Schwartz's value theory only few biospheric value items are included. Consequently, it will be difficult to find a separate biospheric value orientation through factor analyses. And third, knowing whether and how egoistic, altruistic and biospheric value orientations are related to (prosocial or environmental) beliefs, intentions and behaviour may enhance efficient promotion of proenvironmental behaviour. For example, policies would be relatively more successful if they maximized the salience of values that are related strongly and positively with proenvironmental behaviour or when they minimized the salience of values that are related weakly and negatively with proenvironmental behaviour (e.g., Seligman, Syme, & Gilchrist, 1994; De Groot & Steg, 2007a).

1.4 Relationship between values and prosocial behaviour

In social and environmental psychology, many studies have been conducted to examine the relationship between values and prosocial behaviour. Often, values seem to have an indirect rather than a direct effect on prosocial behaviour, through behaviour specific beliefs, norms and intentions (Feather,

1990). Value orientations have considerable leverage, but they have modest direct influence on prosocial behaviour. Therefore, the focus of this thesis will be on relationships between value orientations and general and specific beliefs as well as on relationships between value orientations and ESB.

In general, there are two types of models to explain how values are related to beliefs and prosocial behaviours, namely rational choice models and normative models. In this section, I will first argue why I choose a normative framework to examine values in relation to prosocial behaviours. Then, I will explain two normative models that function as the basis of this thesis, namely the norm activation model (NAM) and the value belief norm (VBN) model.

1.4.1 Rational choice models versus normative models

Different models have been suggested to examine how values affect general and specific beliefs and prosocial behaviour. Empirical research has mainly focused on either rational choice models or normative models. Rational choice models assume that individuals are typically motivated by self-interests. This implies that if a benefit is added when acting in a certain way, everything else being equal, potential actors' attitudes toward the behaviour will be more positive. Consequently, people decide on the basis of thorough rationalizing of costs and benefits of choosing behavioural alternatives. The theory of reasoned action (Ajzen & Fishbein, 1980) and its' extension the theory of planned behaviour (TPB, Ajzen, 1985) provide the most popular and widely used rational choice models in social psychology.

Normative models on the other hand propose that behaviours are a function of moral beliefs, that is, beliefs in what is the right or wrong thing to do (e.g., Thøgersen, 1996). Thus, explaining prosocial behaviour from a normative perspective generally implies acting prosocially without close attention to personal costs and benefits. Normative models do not necessarily suggest that egoistic motives do not influence behaviour. However, self-interested motives are not the only ones considered in the decision-making process. Both egoistic and altruistic motives can play an important role in moral behaviour, but the moral obligation associated with the behaviour mainly depends on how strongly it is believed that the specific type of behaviour will result in public benefits (e.g., Thøgersen, 1994, 1996; Bagozzi & Dabholkar, 1994). If the

costs of acting prosocially are perceived to be very high, many individuals will just refuse to meet them. In this case, people are able to set aside or disengage moral standards (Bandura, 1999) by convincing themselves for example that there is no reason to provide help (Bersoff, 1999). Moral dilemma studies indeed confirm that if personal costs of altruism are perceived to be too high, actors post-rationalize the situation in order to neutralize the moral norm (Schwartz, 1977). The norm activation model (Schwartz, 1977) is the most common example of a normative model.

Although rational choice models are able to explain a large number of human activities (see for example Armitage & Conner, 2001, for a meta-analysis of the TPB), empirical evidence suggests that prosocial behaviours are indeed at least partly a function of normative considerations (e.g., Chu & Chiu, 2003; Godin, Conner, Sheeran, 2005; Harland, Staats & Wilke, 1999; Harrison, 1995; Kaiser, 2006; Kaiser & Scheuthle, 2003; Sparks & Shepherd, 2002; Thøgersen, 1999). Ajzen (1991, p.199) also assumed that the TPB and thus rational choice models are too limited to explain all behaviours. Since prosocial behaviours imply by definition those acts that are motivated to benefit others *or* to benefit themselves (Baron, 1997; Batson, Thompsom, & Chen, 2002; Kohlberg, 1976; Staub, 1978), prosocial behaviours are typically seen as moral behaviours, that is, people do not mainly behave prosocially because they are maximizing utility but also because they want to act based on what is best for other people. During this thesis, I will therefore focus on prosocial behaviour as moral behaviour. Because normative models specifically deal with prosocial behaviour, I believe normative models are an appropriate way to test how values are related to these types of behaviour. Therefore, I will describe two models that consider normative considerations explicitly in the next section, that is, the norm activation model and the value belief norm model. The main assumptions of these models concerning how values are related to prosocial behaviours (and ESB) will function as the basis for this thesis.

1.4.2 Norm activation model

> "You go into a community and they will vote 80 percent to 20 percent in favor of a tougher Clean Air Act, but if you ask them to devote 20 minutes a year to having their car emissions inspected, they will vote 80 to 20 against it. We are a long way in this country from taking individual responsibility for the environmental problem." - Quote William D. Ruckelshaus, *New York Times*, 30 November 1988

A commonly used model that deals with morals and prosocial behaviour is the norm activation model (NAM; Schwartz, 1977; Schwartz & Howard, 1981). Schwartz assumes that the choice to behave prosocially results from the activation of internalized values that are perceived as relevant in a certain situation. The implications of possible actions are weighted against this set of relevant values. This process results in the activation of personal norms which are directly linked to engaging in prosocial behaviour. Personal norms are defined as "feelings of moral obligation to perform or refrain from specific actions" (Schwartz & Howard, 1981, p.191). The NAM postulates that personal norms are activated when someone acknowledges that not acting prosocially will lead to negative consequences for others or for other things one values (Awareness of Consequences; AC) and when someone feels responsible for these negative consequences (Ascription of Responsibility; AR). If the actor fails to activate personal norms, no actions will be recognized as appropriate and no prosocial action will follow.

The NAM has been successfully applied in predicting a diversity of prosocial intentions and behaviours, such as bone marrow donations (Schwartz, 1970; 1973), donating blood (Zuckerman & Reis, 1978), volunteering work (Schwartz, 1974; Schwartz & Fleishman, 1982; Schwartz & Howard, 1980), and helping in emergency situations (Schwartz & David, 1976; Schwartz & Clausen, 1970). The NAM had also been used to explain prosocial behaviour in an environmental context, including energy conservation (Osterhus, 1997; Tyler, Orwin & Schurer, 1982), willingness to pay for environmental protection(Guagnano, 2001; Guagnano, Dietz & Stern, 1994), yard burning (Van Liere & Dunlap, 1978), and recycling (Bratt, 1999; Hopper & Nielsen, 1991; Vining & Ebreo, 1992). In these latter studies, the constructs included in the NAM have not been defined consistently. While in some studies AC and

AR beliefs focus on generalenvironmental conditions (Gärling et al., 2003; Guagnano, 2001; Stern et al., 1999), other studies focus on behaviour specific AC and AR beliefs (Van Liere & Dunlap, 1978; Nordlund & Garvill, 2003). Research shows that specific beliefs rather than general beliefs are likely to be the best predictors of behaviour (e.g., Ajzen, 1985; Eagly & Chaiken, 1993; Wollman, Bachner, & Peterson, 1980). Therefore, in this thesis, AC and AR beliefs are specified towards the intentions and behaviours to be explained.

Although values are mentioned as important determinant for explaining prosocial behaviour, the NAM does not explicate which values are relevant when explaining prosocial behaviour. As I described in the previous sections, prosocial behaviours in general are most strongly and consistently related to self-transcendent and self-enhancement values. And, in the case of ESB, biospheric values may be relevant as well. Therefore, in this thesis I examine how egoistic, altruistic and biospheric value orientations fit into the NAM to explain prosocial behaviour in an environmental as well as in a social context.

For this thesis, three other issues are relevant when discussing studies that used the NAM as theoretical framework. First, the studies that tested the NAM agree on which factors should be included when explaining prosocial behaviour (i.e., AC, AR and PN). However, the relationships between these factors are not fully clear (De Ruyer & Wetzels, 2000). In essence, two interpretations of the NAM have been postulated. Some scholars suggest that AC and AR are antecedents of PN, while PN influences prosocial behaviour, whereas others assume that the relationship between PN and prosocial behaviour is moderated by AC and AR. In this thesis, I will test the utility of both interpretations.

Second, most scholars who base their studies on the NAM do not include all variables into the model (Bratt, 1999; De Ruyter and Wetzels, 2000; Eriksson, et al., 2006; Hopper & Nielsen, 1991; Joireman et al., 2001; Stern et al., 1999). Most studies include either AC or AR beliefs only, which complicates comparisons between studies. Furthermore, although Schwartz argues that moral norms are activated by internalized values as well as AC and AR beliefs, most empirical studies based on the NAM do not include values into their model. In this thesis, I will include values as well as AC and AR beliefs when systematically examining the interpretations of the NAM.

Finally, AR beliefs are interpreted differently. Some scholars define AR as responsibility for the consequences of the problem (e.g., Bamberg & Schmidt, 2003; Hopper & Nielsen, 1991; Schwartz, 1977). Other scholars describe AR as the extent to which a person believes he or she can make a useful contribution to the solution of the problem (e.g., Montada & Kals, 2000; Stern, Dietz, Abel, Guagnano, & Kalof, 1999; Van Liere & Dunlap, 1978), which reflects perceived outcome efficacy. In order to be able to generalize results, I will measure AR beliefs in both ways in this thesis.

1.4.3 Value belief norm model

In contrast to the NAM, the value belief norm (VBN) model (Stern, 2000) does include values explicitly to explain prosocial behaviour in an environmental context. Moreover, the model explicates which values are relevant when explaining ESB. According to Stern, VBN model links value theory (e.g., Schwartz, 1992), environmental beliefs (NEP; Dunlap & Van Liere, 1978) and the NAM into a mediation model that moves from relatively stable values and beliefs, to more specific beliefs that eventually will lead to proenvironmental action (Dietz, Fitzgerald, & Shwom, 2005; Dietz, Stern & Guagnano, 1998; Stern, 2000; Stern & Dietz, 1994; Stern, Dietz & Kalof, 1993; see Figure 1.3).

Stern distinguishes four types of proenvironmental actions that the VBN model is able to explain, namely environmental activism (e.g., donating money for environmental protection, volunteering to environmental organisations), non-activist behaviours in the public sphere (e.g., voting on a “green” party, acceptance of environmentally friendly policies), private sphere behaviours (e.g., recycling, buying organic food) and behaviours in organisations (e.g., reducing CO_2-emissions in a factory, designing environmentally benign products). All of these behaviours are affected by personal norms. Like the NAM, Stern and colleagues argue that personal norms to take proenvironmental action are activated by beliefs about the adverse consequences for valued objects (AC) and by the beliefs of one’s ability to reduce this threat (AR; Dietz, et al., 2005; Dietz, et al., 1998; Stern, 2000; Stern & Dietz, 1994; Stern, et al., 1993). AC and AR beliefs depend on environmental concerns, which are general beliefs about human-environment

relationships. At the beginning of the causal chain are egoistic, altruistic and biospheric value orientations that, through environmental concerns, influence AC, AR and PN and consequently ESB. This causal chain is in accordance with many others who propose that values affect behaviour indirectly (Feather, 1990).

Over the last decade, there has been an increasing amount of empirical support for the VBN model as well. These studies support the VBN model to explain a diversity of environmental significant intentions and behaviours, such as proenvironmental political behaviour (Joireman, Lasane, Bennet, Richards & Solaimani, 2001; Stern, Dietz, Abel, Guagnano & Kalof, 1999), willingness to reduce car use (Eriksson, Garvill, & Nordlund, 2006; Nordlund & Garvill, 2003), and general proenvironmental behaviour (Nordlund & Garvill, 2002; Schultz, Gouveia, Cameron, Tankha, Schmuck, & Franěk, 2005).

In conclusion, the VBN model proposes that egoistic and altruistic value orientations may make a useful contribution when explaining prosocial behaviour. In the case of ESB, biospheric value orientations may be particularly relevant. Therefore, in line with VBN model, I will examine how egoistic, altruistic and biospheric value orientations are related to the NAM and prosocial behaviour in this thesis.

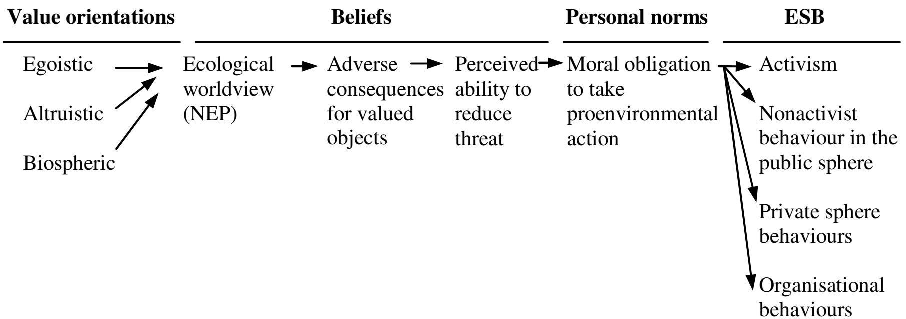

Figure 1.3. Representation of the value belief norm model of environmentalism (adapted from Stern, 2000).

1.5 Summary and outline of this thesis

Now I have outlined the value concept extensively, and discussed definitions, features, value theories and theories related to prosocial behaviour and ESB, I will provide an overview of the empirical chapters in this thesis (Chapter 2 through 6). I will first investigate whether a distinction into egoistic, altruistic and biospheric value orientations is valid and useful, because this distinction has hardly been supported empirically. Second, I examine how egoistic, altruistic and biospheric value orientations are related to (determinants of) prosocial behaviour and ESB. I discuss these two research aims in five empirical chapters.

In Chapter 2, a series of studies is reported aimed to examine whether egoistic, altruistic and biospheric value orientations can be distinguished empirically by using a new value instrument. I test whether this distinction is validated in empirical research, and whether the three value orientations are differently and uniquely related to general and specific environmentally significant beliefs and intentions. In Chapter 3, I further examine the validity of the value instrument. I test whether the distinction into egoistic, altruistic and biospheric value orientations is found in different cultures. In five European countries, I examine the structure of egoistic, altruistic and biospheric values. Relationships between the three value orientations and behaviour specific beliefs (i.e., awareness of environmental consequences and personal norms) in an environmental context are investigated to further examine the validity of the value instrument.

Chapter 4 and 5 investigates how value orientations may be incorporated in normative models that explain prosocial behaviour and ESB. In Chapter 4, I examine how determinants of the NAM are related to prosocial behaviours, because two interpretations of the NAM have been postulated (i.e., a moderating and a mediating model). Five studies are conducted to test which model interpretation is most plausible. To be able to generalize results, I aim to examine whether the model interpretations differ across different types of prosocial intentions and behaviours in an environmental as well as in a social context. Then, in Chapter 5, I examine how value orientations can best be integrated into the NAM. I report two questionnaire studies in which three types of ESB (i.e., acceptability of a transport pricing measure, intention to

reduce car use, and buying organic food) are explained by the NAM together with egoistic, altruistic and biospheric value orientations.

In the last empirical chapter (Chapter 6), I show how value orientations can make a practical contribution in the field. As an example of how value orientations can function as a basis for policy recommendations, I conduct a study that examines how a transport pricing policy would affect individual's quality of life, and whether different changes in quality of life are expected by groups differing in egoistic, altruistic and biospheric value orientations.

Finally, in Chapter 7 the findings reported in the previous chapters are summarized. Furthermore, I bring together the results of the empirical work of this thesis and I will discuss the main results and implications.