Charity: Virtue, Privilege or Excuse?

An analysis of the interaction between professed values and humanitarian behaviour

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Abstract

Giving behaviour in its various forms has been widely investigated, mostly from the point of view of finding what motivates certain people to donate to certain organisations. However, in Australia, there have been few studies that have examined how the underlying personal values of an individual affect charitable behaviour. The overarching aim of this thesis was to explore this relationship, which required also achieving the preliminary aim of identifying, selecting and testing the applicability in the Australian environment of a strong theoretical framework for the classification and measurement of personal values.

This thesis commences with a review of the two most prominent of these frameworks and a justification of the choice for the Schwartz Theory of Basic Values, which is well established worldwide but has not been as widely applied in Australia as in other countries, especially in Europe. To provide a context for the empirical work, the effectiveness of this framework in the Australian environment is investigated.

The thesis then summarises the findings of two studies that analysed the data obtained by means of questionnaires that included instruments developed by Schwartz for the measurement of personal value preferences. These studies were aimed at investigating: a) how a progressive or conservative tendency, a philanthropic or charitable attitude, and religious belief affect the propensity to donate; b) whether donating to animal welfare causes is an expression of the same values that drive humanitarian donations.

The first survey aimed at obtaining a sample (N = 1865) that could approximate a representative random sample of the Australian population or at least of the population of the State of South Australia. The method chosen was address based sampling and over 30,000 questionnaires were posted to randomly selected address clusters throughout the State. Within identified and addressed limitations, some generalisation of findings was possible. Findings indicated that progressive or conservative orientation has no significant effect, whereas the mode of contribution and religious belief were found to be significantly related to the choice of recipients selected for the donations. Personal values were found to be weaker predictors of charitable behaviour than self-reported income, education and religiosity.

The second survey was an online survey conducted by means of a subscription software for collecting and analysing data. The analysis of the convenience sample of 780 South Australian residents obtained in this way confirmed and refined the findings of the first study and provided previously unavailable empirical evidence that the concern for animal welfare, the only non-humanitarian charitable purpose allowed by Australian law, is not compatible with the values expressed by donations to humanitarian causes. As a subsidiary finding it also provided evidence that, contrarily to previous literature, in Australia religiousness is significantly correlated with conservatism.

Besides providing new information contributing to the understanding of specific aspects of the relationship between personal values and behaviour and indicating areas of interest for further studies, particularly as regards gender differences and the evolution of the attitude towards animal welfare, this thesis presents an opportunity to advance the discussion of the morality of the legislation that defines charitable purposes in Australia by assessing the degree of its alignment to the universal personal values expected to drive charitable behaviour.

Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint award of this degree.

I give permission for the digital version of my thesis to be made available on the web, via the University's digital research repository, the Library Search and also through web search engines, unless permission has been granted by the University to restrict access for a period of time.

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Signed _____

Franco Lanfranchi

Date 15 August 2019

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Most heartening and appreciated was the generous and prompt availability of giants in the field, Norman Feather and Shalom Schwartz, to provide advice and assistance which I may only hope to have reflected well enough to not diminish their contribution.

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Chapter 1

Introduction and overview

1.0 Overview

The research project described in this thesis has two principal aims. The first is to examine the nature of values in an Australian population using an internationally recognised framework. The second is to apply the systematic study of values to understanding the factors that are associated with charitable behaviour: a topic of considerable public interest. In this thesis, I will describe an investigation that examines the correlation of people's values with their charitable contribution, defined as the ratio between their personal income and the total monetary value of their donations and voluntary work. It will be argued that psychological studies into the effect of personal values on people's attitudes towards charity are very useful for the development of multidisciplinary studies of taxation and transfer systems. Surprisingly, few studies have been conducted to examine this relationship. The paucity of research in this area sits in contrast to a more extensive literature that draws attention to the values which can be emphasised in advertising by charity organisations to attract donors who appreciate them (Bennett, 2002). In this introductory chapter, the two principal areas of research interest are delineated, before providing a summary of the structure of the thesis and an outline of the principal studies that follow.

1.1 The importance of values

Values research has provided a multitude of variables, generally pertaining to two models: values as attitudes, which relate mainly to career choices, and values as principles, which research and theory suggest more directly affect motivation (Parks & Guay, 2009). As will be discussed, most prominent among numerous value theories developed since the 1970s are those of Ronald Inglehart and Shalom Schwartz. This thesis will examine their salient features, strengths and weaknesses and explain how this research settled on Schwartz's value system as its principal focus because of its many practical advantages.
In Europe, since 2001, every two years the European Social Survey (ESS) provides a picture of the social fabric of up to 34 countries. The structural organization of human values adopted by the ESS was developed by Schwartz (1992) and the instrument used for data collection is his 21-item Portrait Values Questionnaire (PVQ) (Schwartz et al, 2001). Further

developments in the Theory provided an opportunity to see if these findings could be not only replicated in an Australian population but also verified using the most up to date instruments.

1.2 Charitable behaviour

At the time of planning the research reported here, Australia was in the process of establishing a statutory definition of “charity” and “charitable purpose”. Until then, whenever these concepts had been the subject of common law cases, generally for the purpose of claiming entitlement to receive tax deductible donations under State or Commonwealth provisions, reference was made to principles established in 1601 by the English Statute of Charitable Uses. The enactment of the Charities Act, 2013 on 1 January 2014 did build on those principles but did not change them substantially. From a social psychology perspective, an issue to be investigated was how 400 year old social principles influence the personal values of the individual in today’s society.

As a voluntary counterpart to compulsory taxation, charity is an essential component of the welfare system of any country. The concept of the Welfare State and its role varies substantially between the US and European Countries and is reflected in their fiscal structure (Cappellari, Ghinetti & Turati, 2011). Australia may be seen as a middle ground where US "philanthropy" and European "charity" meet. The definition and understanding of these different modes of giving is a fundamental element of this research. For Christians charity is a virtue. For philanthropists it is a privilege. An aspect of this debate that was prominent in 2013 was the attitude of the newly elected conservative federal government to promote charity as an alternative way to provide for welfare: an excuse.

The focus of this research is on the motivations underlying the charitable behaviour of each individual, expressed quantitatively in terms of time of money donations. These donations have been widely studied from an economic (e.g. Ellingsen & Johannesson, 2009) and sociological (e.g. Bekkers, 2010) point of view. It is argued that these different perspectives converge on the concept of utility which varies depending on the personal values of each individual (Viner, 1925a; Viner, 1925b; Stuphorn, 2006; Sanfey et al., 2006).

Most of the existing literature is based on a marketing research framework and focuses on the donors' demographics and perceptions of the values expressed by the charities they give to. The word "psychographics" is often used by marketing authors, e.g Lwin, Phau and Lim (2014), to indicate the study of the subjects according to psychological attributes, self-assessed personal characteristics like generosity and religiosity. More pertinent studies foster the understanding of attitudes but do not proceed to investigate how personal values potentially determine them: Webb, Green and Brashear (2000) acknowledge the need for such further investigation. This thesis aims at contributing to fulfil this need. The theoretical basis of the role of attitudes in the relationship between personal values and behaviour is discussed below at 3.2.1.

1.3 Structure of this thesis

The thesis is divided into a number of chapters. Earlier chapters summarise the principal theoretical an empirical literature underlying the topic, whereas the latter chapters summarise the findings from the major empirical studies. Chapter 2 commences with an introduction to the history of research on personal values then compares the two most widely applied theories, namely, those of Ronald Inglehart and Shalom Schwartz. Then the strengths and weaknesses of the framework chosen for this research, the Schwartz Value Theory, are discussed.

The third chapter describes the cognitive and motivational processes that have been identified as possible determinants of how values influence behaviour. One of the tenets of the Schwartz Value Theory is that people who prefer self-enhancing values would tend to act out of self-interest, whereas those who prefer self-transcending values would tend to express more compassionate attitudes and behaviours. The main hypothesis of this research was developed on the basis that, besides that expected outcome, it would be possible to find a significant influence of the other major dimension of the theory. The poles of this dimension, perpendicular to the poles of self-enhancement and self-transcendence, are conservation and openness to change.

The fourth chapter outlines the methodology for the first study and its purposes, mainly of an exploratory nature due to the absence of similar precedent studies. The proven methodology of the ESS was replicated for the State of South Australia with a questionnaire

comprised of a PVQ-21 and a number of questions sufficient to create a demographic profile of the participants, calculate their charitable contribution and supply information about the type of charitable organisations they supported. The results of the survey are discussed in chapter 5 and 6.

The fifth chapter discusses the representativeness of the sample calibrated to the South Australian population and identifies some of its culturally specific and universal characteristics, then provides an analysis of the structural characteristics of the Schwartz Value Theory and the extent to which South Australian values can be adequately described according to this theoretical structure.

The sixth chapter presents and discusses the results of the main study that utilised the data obtained and validated as described in chapter 5. The main hypothesis was tested and it was found that there is no significant relationship between the Conservation – Openness to Change dimension and charitable behaviour. The capacity of social norms and religiosity to moderate the influence of values on such behaviour, which had been suggested by the literature, was investigated and other possible interactions evaluated. This chapter also shows the results of a model to predict charitable behaviour according to the value preferences of South Australians.

The first study highlighted areas of interest for further exploration. The Schwartz Theory had also being recently revised (Schwartz 2012) to encompass a broader range of values. The availability of a new instrument, the PVQ-RR, designed to measure the revised values also offered an opportunity for deeper analysis. Chapter seven presents and discusses the development, the application and the results of the second study conducted using the PVQ-RR. Having briefly evaluated what appears to be the first application in Australia of the new instrument, the relationship between the more refined values measured and self-reported charitable behaviour was examined, so as to provide a deeper analysis of the hypotheses raised by the findings of the first study. In conclusion, chapter eight summarises the findings of the research and how they relate to the literature, the influence of methodological issues, and indications of possible future research paths to achieve a better understanding of how personal values influence charitable behaviour.

Chapter 2

Personal values

2.0 Overview

This chapter introduces the history of research on personal values, compares the two most widely applied theories, namely, those of Ronald Inglehart and Shalom Schwartz, and then discusses the strengths and weaknesses of the framework chosen for this research, the Schwartz Value Theory.

2.1 The construct of personal values

As suggested by Rohan (2000), to avoid confusion it is necessary to specify the meanings given to the word "value" and distinguish value types. According to Rohan, value would appear to refer to the finite number of universally important constructs that together constitute a structure, experienced by an individual as a personal value system. Such conceptualisation can extend from value priorities to preferences which indicate the relative importance each person places on each value type. Whenever the word "value" is used here without qualifiers, therefore, it has the meaning of "value type". At a measurement level, care shall also be taken to avoid the use of "item" to indicate both a question about a value item in an instrument designed to measure it and the "value item" itself; namely, the facet of the value type being measured, which together with other value items constitutes the construct of the value type. This polysemy is not uncommon in works of Schwartz and followers, e.g. Roccas, Sagiv and Navon (2017).

Psychological research on the construct of personal values was given prominence initially by Vernon and Allport (1931), who asserted that personality, being a unique complex system, cannot be thoroughly investigated by looking at specific traits and capacities. They proposed that broad functions common to all personalities should be investigated, and that such functions, "basic human values", had to be broad but specific enough to be meaningful and universal enough to allow comparisons at an individual level. The instrument they developed, the Study of Values questionnaire, allocated people to six ideal types: aesthetic, economic, political, religious, social, and theoretical, on the basis of their declared behavioural preferences. This instrument was one of the preferred measures

of value priorities for many years. For the next four decades, there was little development in this field.

In 1968, sociologist Robin Williams condensed, through an entry in the International Encyclopaedia of the social sciences (Williams, 1968), the then current theories on the construct of personal values. His definition of personal values as criteria that individuals use to evaluate people and events, and justify actions, was accepted and developed by Milton Rokeach in what became a fundamental text (Rokeach, 1973) on the nature of human values. His description of values as enduring beliefs that guide a person's conduct aimed at achieving personal or social goals is the most widely recognised for its usefulness in social analysis, but it is not univocally accepted. B. F. Skinner had contended that people do not actually possess values because only objects have a positive or negative value as instruments of behavioural reinforcement (Skinner, 1971). There is still some support for this perspective among behavioural analysts, although this endorsement has become increasingly tenuous over time (Ruiz & Roche, 2007). Notwithstanding this exception, the current consensus appears to be that personal values have a genetic basis and develop early in life due to the exposure to social inputs from the family, the education system and the community (Sagiv, Roccas, Cieciuch & Schwartz, 2017).

According to Rokeach there are two types of values: terminal, which are limited in number and refer to goals, like sex and aggression for Freud or Maslow's hierarchy, and instrumental, which indicate a larger number of modes of conduct, either moral (e.g. honesty) or expressing competence (e.g. imagination). In his instrument, the Rokeach Value Survey, respondents were asked to rank a list of words describing such values according to the importance they assigned to them. No theory about a value system structure was proposed. Without it, how the preference for one value affects the preferences for other values is not known. Later, Schwartz (1992) used this instrument to develop a theoretical structure, but did not find useful the distinction between terminal and instrumental values.

In the seminal period of the 1970s, the concept of value proved to be central to many behavioural sciences. The exploration of its importance was carried out in a variety of contexts but essentially within single cultures. In Australia the most prominent researcher of this topic was Norman Feather (Feather, 1975), who accepted Rokeach's definition of values as criteria that provide social justification for choices and behaviours. One of its early

contributions was to address the dilemma whether values should be studied as characteristics possessed by entities or as judgements of the person valuing the entities, a dilemma then settled in favour of the latter.

At the beginning of the 1990s a controversy emerged about defining value priorities as expressions of what is desirable, and people should do, or expressions of what people want to do. A consensus was forming about the latter, but Schwartz and Bilsky (1987) described values as expressions of the universal needs of biological survival and social interactions to meet group demands for the survival of the group. This suggests that people do what they should to survive, but also do what they want within these constraints. Hitlin (2003), a sociologist, studied values as the core of personal identity and came to a similar conclusion: people experience values as necessary and fundamental, but not necessarily binding, ideals to strive for: in other words, they are fundamentally desirable but also desired. Rohan (2000) viewed instead value priorities as judgements of a person's wants, although sometimes expressed as needs: to use her example (p.264), "I need a new car" is most likely an expression motivated by the power value type rather than by a survival need.

Schwartz and his followers still use the word "desirable" to describe the nature of values in a way that does not discriminate between the two concepts (Sagiv & Roccas, 2017). Under the title of "Deconstructing the Definition of Values - *Values Are Inherently Desirable*" (p. 4) they identify "desirable" with "inherently positive" because "important and worthy". Their ensuing explanation presents a rather circular argument: the value types listed by Schwartz are desirable because there is ample empirical evidence that all humanity wants them to some degree. One should do what we all want to do because we all believe that what we want to do is mostly what we should do.

It is undoubtedly true that the construct so defined has proved to be an effective working assumption and the argument as explained is acceptable, but its logic weakness soon becomes evident. In the very next page (p. 5), the authors state that, because people "can explain their behaviour by referring to their traits or interests as well as their values but refer to their values only, when they wish to justify choices or actions as legitimate or worthy (Roccas et al., 2002; Sagiv, 2002)", political activists "often frame issues they seek to promote in terms of values". To support this statement, they quote an article (Kurz, Augoustinos & Crabb, 2010) that discusses how Australian politicians have used "values of

national interest and lifestyle maintenance" to justify conflicting positions. In this article, "national interest" and "lifestyle maintenance" are clearly identified as rhetorical devices: ways to "frame issues" by appealing to values, not values in themselves. In any case, they would be "value items", not value types included in the list claimed to be desirable because empirically proven to be inherently positive.

Values are only one, albeit arguably the most important (Hitlin, 2003), of the various elements that constitute the personal identity; traits and attitudes are also essential components. The structural processes of self-enhancement, self-direction and related constructs refer to a "self" composed of various social identities, shaped by different roles and group expectations. Personal identity is the part of the self that each individual experiences as unique and not shaped by social considerations. To develop a coherent theory encompassing these concepts, Hitlin (2003) applies Schwartz' cross-nationally validated conceptualisation and measurement of values, based on five criteria: values are concepts or beliefs; they pertain to desirable outcomes or behaviours; transcend specific situations; guide the evaluation of behaviour or events; and are ordered by specific importance (Schwartz, 1992; Schwartz & Bilsky, 1987). The link between values and personal identity is the concept of authenticity, the feeling experienced by people behaving in accordance with their values.

Recently, Schwartz followers have analysed the relationship between two content aspects of the self, values and traits, and two structural aspects, self-discrepancies and perceived mutability (Roccas, Sagiv, Oppenheim, Elster & Gal, 2014). They found that values are seen by people as more representative of their ideal self than personality traits, which are seen as worth changing if undesirable. They also found "intriguing" (p. 154) that the 104 students who participated to one of their studies believed that their current traits and values represented more what they wanted to be than what they ought to be, which is inconsistent with the emphasis of the theory on the desirable, in a strict sense, nature of values discussed above. The caveat that the small size of the sample and its cultural homogeneity indicated the need for further investigation was necessary and in this case convenient.

The most distinguishing feature of values is that their importance for each individual follows a hierarchical structure. How much a person is motivated to rely on each value as a guiding principle for choosing what to do varies for each individual and remains mostly stable during a lifetime. Because values are subjective and can only be known from what people state about themselves, some doubt has often been expressed about the usefulness of researching their influence on human actions (Roccas & Sagiv, 2017). There is, however, a great amount of research about their ability to predict numerous attitudes and behaviours.

The past four decades saw the development of many effective frameworks for the analysis of personal values and the construction of psychometric instruments at a cross-cultural level. Two of them have gained worldwide acceptance and have been included in social surveys conducted in a large number of countries. Data from both these surveys have been publicly available for some time and have provided ample scope for the research reported here. The World Values Survey (WVS) applies the postmodernization theory of Ronald Inglehart and the European Social Survey (ESS) applies the theory of basic human values of Shalom Schwartz. Since 2005, however, the WVS includes ten indicators designed by Schwartz to measure the ten values of his original theory. This has provided an additional opportunity for analysis and suggests that, although both theories are continually evolving and have strengths and weaknesses, there is a growing global acceptance of the Schwartz theory.

2.2 The postmodernization theory of Ronald Inglehart

Originally, the theory of Ronald Inglehart (Inglehart, 1971) was based on an interpretation of Abraham Maslow's popular but never fully empirically supported hierarchy of needs (Maslow, 1970). If indeed, as Maslow asserted, humanity is motivated by values taught from birth to rise sequentially from the satisfaction of basic needs like food and shelter to the satisfaction of self-actualisation needs like creativity, societies can be expected to shift over time from materialistic to non-materialistic priorities. Later, however, Inglehart realised that this shift is better explained by a fundamental principle that he named "the diminishing marginal utility of economic determinism". This principle states that, as the average income of the citizens of a country increases above the minimum level necessary to satisfy their basic needs, the marginal utility of striving for additional income diminishes and they can dedicate more time to non-materialistic pursuits.

During the early 1980's, Scott Flanagan, while broadly supporting Inglehart's theory, suggested that the materialist to post-materialist evolution was not sufficient to appropriately describe values (Inglehart & Flanagan, 1987) and a second dimension was needed. He identified the second dimension as the evolution from authoritarianism to liberalism. In his seminal work (Schwartz, 1992), Shalom Schwartz does not make any reference to Flanagan but there are many similarities in their definition of some value constructs, which shall be mentioned in the next section.

Criticism about the "unidimensionality" of the theory increased in the following decade but Inglehart defended it vigorously, asserting that, although it is clear that many value dimensions exist, his analysis focuses on this one dimension "because the theory generates clear predictions about the type and direction of change one should find along this specific dimension" (Inglehart, 1997, p. 113). His revision appears more an induction from empirical findings than a theoretical improvement: the data provided by almost 60,000 respondents in 43 countries to the 1990-93 World Values Survey made him concede that "to a surprising degree" (p. 83), they fit a simplified model that explains reality in two dimensions. The resulting two-dimensional space is determined by a *Traditional/Secular-Rational* axis, which is similar to Flanagan's authoritarianism-liberalism dimension, and a *Survival/Self-expression* axis that is an expression of the materialism/post-materialism dimension.

Having previously used a variety of descriptions (post-materialist, post-bourgeois, post-industrial) for similar aspects of the same phenomenon, the shift from basic needs to self-actualisation, in this book Inglehart crystallized his analysis of socio-political development by identifying the second dimension as encompassing a Post-modernization theory. By contrasting this with the first dimension, identified as depicting an evolution of the original Marxist theory of Modernization, which states that cultural and political change is conditioned by economic change in predictable ways, he obtained a two-dimensional depiction of the values of social collectives that has become the most widely accepted in political and economic contexts. The Inglehart-Welzel cultural map of the world (Inglehart & Welzel, 2005) is widely used in the popular media to show where one's country fits in relation to all others (Figure 2.1).

An instrument originally used by Inglehart, the 4 item MPM (Materialism/Post-materialism) index, has demonstrated to be effective notwithstanding its extreme simplicity, but is essentially a measure of political preferences. For the revised theory an instrument including heterogeneous questions on topics as diverse as the importance of God and the willingness to sign petitions was established (Inglehart & Baker, 2000) by selecting items included in the World Values Survey since 1981. Again, more an acceptance of available empirical evidence than a theoretical development.

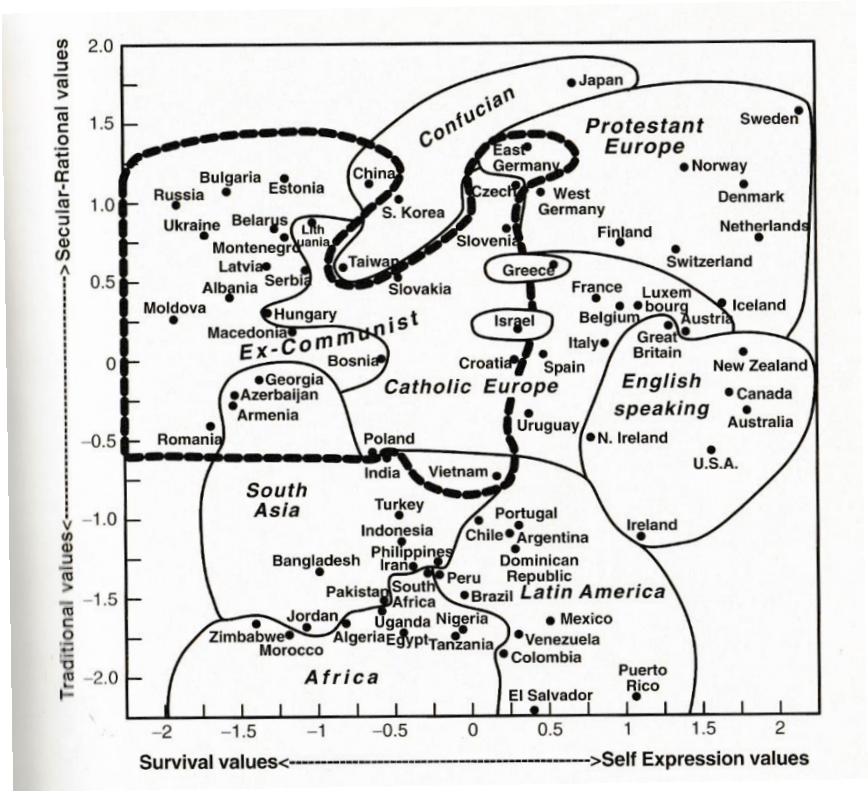


Figure 2.1 - The Inglehart-Welzel cultural map of the world (Inglehart & Welzel, 2005)

An interesting observation is that a comprehensive analysis of the values construct by an Australian author, Meg Rohan (2000), does not make any mention of Inglehart in her extensive list of references. While this could be seen as an example of parochialism, given the frequent quotation of the prominent Australian author Norman Feather and her alignment with the Rokeach-Feather-Schwartz school of thought, it suggests also an agreement with the view that the work of Inglehart is insufficiently developed from a theoretical perspective.

Notwithstanding its high level of worldwide acceptance, this theory does not appear to have predicted the reversal since the 1980s of one of its fundamental tenets, the trend towards income equality in developed countries. Already fully developed in 1987 (Inglehart & Flanagan, 1987) and defended a decade later (Inglehart, 1997), the prediction was that income equality would increase sharply with economic development until it reaches an optimal level, estimated to be when the top tenth of the population owns about one third of total income, then it would level off. No mention of the reversal that was already occurring appears until much later. In 2015- 2016 Inglehart addressed the issue (https://www.foreignaffairs.com/ articles/2015-12-14/inequality-and-modernization) and acknowledged that it appears to be a normal phenomenon of the Modernization process intrinsic to the capitalist system, as suggested by other authors. In this case, the 1950-1980 trend was only an exceptional adjustment to the distortions caused by the two world wars and the great depression that had occurred in the first half of the century. As Flanagan and others had already clearly envisaged (Inglehart & Flanagan, 1987), the priorities of people can change depending on their perception of relative disadvantage, therefore a return to more materialistic values can be expected as a consequence of increasing income inequality.

2.3 The theory of basic human values of Shalom Schwartz

The Schwartz Theory of Basic Values (hereinafter "the Theory") has a stronger psychological focus. It builds on Rokeach's definition of personal values and identifies a number of them according to the motivations that guide the individual towards the fulfilment of a universal need: the survival of human beings as biological organisms organised in groups that need social interaction. Schwartz and Bilsky (1990) used survey instruments developed by Rokeach to postulate the existence of eight motivational types (prosocial, restrictive conformity, enjoyment, achievement, maturity, self-direction, security, and power) and found relations of compatibility and conflict between them.

Further theoretical development by Shalom Schwartz identified eleven potential motivational types. Specific values were selected from the surveys of Rokeach and other authors or developed on theoretical premises: 56 values were included in a new instrument that became known as SVS, the Schwartz Value Survey (Schwartz, 1992). Convenience samples of teachers and students were collected in twenty countries, including South

Australia, and the analysis led to the identification of ten basic values: Self-Direction, Stimulation, Hedonism, Achievement, Power, Security, Conformity, Tradition, Benevolence, and Universalism.

The basic principle of describing the relations of compatibility and conflict between values, already applied by many pre-existing theories, was that any variable correlated with two main dimensions defined by opposite concepts can be positioned in a Cartesian coordinate system, which makes it easily visually interpretable. This principle generates the "circumplex model": elements that vary depending on their distance to either extreme of the two orthogonal axes, that is, on the strength of their motivation by either opposite concept, describe a circular space centred on the origin, the point where there is no preference for either extreme. The general usefulness of this model in psychological research is demonstrated by its wide application (Gurtman, 1997; Russell, 1980) for the study not only of personal values but also of other related but distinct concepts: attitudes, beliefs, traits and norms.

The innovation of the Theory was to identify the conceptual extremes of one axis as Openness to Change and Conservation and the other axis' extremes as Self-Transcendence and Self-Enhancement. In other words, personal values are identified by the preference for progressiveness as compared to conservatism and for remaining focused on oneself (self-enhancement) as opposed to being focused on the needs of other people or external causes.

The division of this circular space in sectors corresponding to specific values, arbitrarily based on the theoretical premises, was achieved by Schwartz using an early type of multi-dimensional scaling: Smallest Space Analysis (Guttman, 1968). Their boundaries "represent conceptually convenient decisions about where one type of motivation ends and one begins" in a continuum (Schwartz, 1992, page 45).

While the names change, there is a remarkable overlap between competing theories as regards the constructs being described. Flanagan (Inglehart & Flanagan, 1987) notices that what he calls *libertarian* Inglehart calls *post-materialist*, but "we are measuring essentially the same set of values" (p. 1304). It is now noticeable that his "self-indulgence"

parallels Schwartz's Hedonism, "self-actualisation" parallels Achievement, "equality and tolerance" parallels Universalism. In the next page (p. 1305) the same is said about *authoritarian* and *materialist*, which include with the same names Security, Conformity and Tradition.

The ten value structure (Figure 2.2) remained unchanged until recently (Schwartz, 2012) and continues to be the frame of reference used by many researchers for its simplicity and the vast number of studies already supporting it. The instruments used in the previous two decades, mainly the 56-item SVS and the 40-item Portrait Values Questionnaire (PVQ) allowed the identification of more narrowly defined values hierarchically subordinate to the original ten.

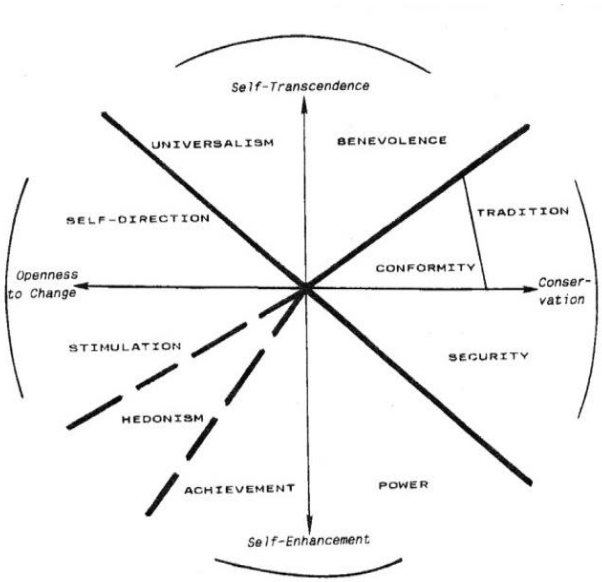


Figure 2.2 - The motivational circle of 10 values (Schwartz, 1992)

By applying confirmatory factor analysis to data previously collected with the PVQ40 fifteen values were distinguished (Cieciuch & Schwartz, 2012; Cieciuch, Schwartz & Vecchione, 2013). Their two-dimensional mapping is shown in Figure 2.3.

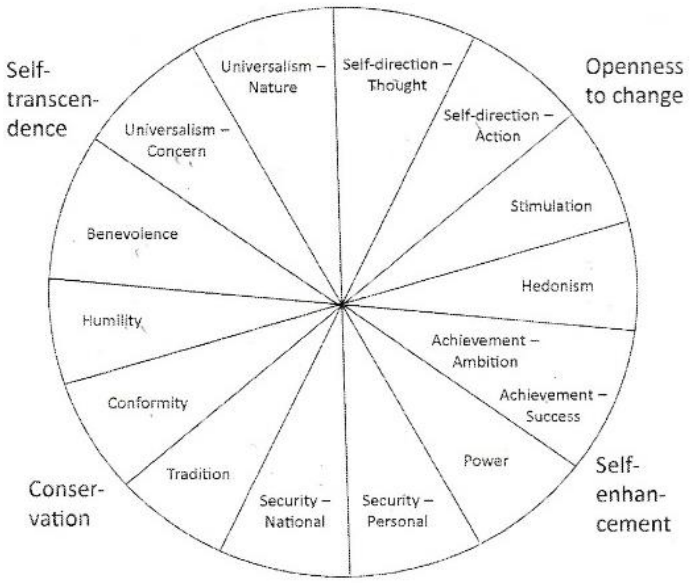


Figure 2.3- The circle of 15 values
(Vecchione et al, 2015, adapted from Cieciuch & Schwarz, 2012)

Although not all research has shown that samples show a clearly circumplex structure (e.g. Hinz, Brähler, Schmidt & Albani, 2005), the overwhelming weight of evidence is generally in its favour. Indeed, there is already robust evidence for the ability to work with any of the arbitrary subdivisions of the circumplex structure. For the two main dimensions, this is uncontroversial: Hinz et al. agreed, Verkasalo, Lönnqvist, Lipsanen and Helkama (2009) later confirmed it, and even the most recent developments of the Theory, notwithstanding significant changes, confirm this property of the circumplex structure.

The existing instruments generated various problems of measurement, already identified (Davidov, Schmidt & Schwartz, 2008): low internal reliability, cross-loading factors and multicollinearity between adjacent values. To overcome these problems, a more sophisticated instrument was developed, the revised Portrait Values Questionnaire (PVQ-R). Nineteen more narrowly defined value types were measured by three instrument items each, a number sufficient for CFA analyses that control for measurement errors (Schwartz, Cieciuch, Vecchione, Davidov, Fischer, Beierlein … Konty, 2012). This study confirmed the ability of the 19 values to be collapsed into the original 10 values and, even more reliably, in the four main dimensions. A summary description of these constructs is in Table 2.1.

Table 2.1

Schwartz Value Theory definitions (adapted)

10 values Schwartz (1992)	**19 values Schwartz et al. (2012)**	**15 values Cieciuch & Schwartz, 2012**
Self-Direction: Independent thought and action- choosing, creating, and exploring	Self-Direction, Thought: the freedom to cultivate one's ideas and abilities Self-Direction, Action: the freedom to determine one's own actions	Self-Direction, Thought: the freedom to cultivate one's ideas and abilities Self-Direction, Action: the freedom to determine one's own actions
Stimulation: Excitement, novelty, and challenge in life	Stimulation: Excitement, novelty, and challenge in life	Stimulation: Excitement, novelty, and challenge in life
Hedonism: Pleasure and sensuous gratification, enjoying one's life	Hedonism: Pleasure and sensuous gratification, enjoying one's life	Hedonism: Pleasure and sensuous gratification, enjoying one's life
Achievement: Personal success through demonstrating competence according to social standards	Achievement: Personal success through demonstrating competence according to social standards	Achievement: Ambition to succeed Achievement: Showing success
Power: Social status and prestige, control over people and resources	Power-Dominance: Control over people Power-Resources: Control of material and social resources Face: maintaining one's public image	Power: Social status and prestige, control over people and resources
Security: Safety, harmony and stability of society, self and relationships	Security-Personal: Safety in one's close environment Security-Societal: Safety and stability in the wider society	Security-Personal: Safety in one's close environment Security-National: Safety and stability of the nation
Conformity: Restraint of actions and impulses likely to upset or harm others and violate social expectations	Conformity-Rules: Compliance with rules, laws and formal obligations Conformity-Interpersonal: Avoidance of upsetting or harming other people	Conformity: Restraint of actions and impulses likely to upset or harm others and violate social expectations
Tradition: Respect, commitment & acceptance of ideas provided by culture, religion	Tradition: Maintaining cultural, religious traditions Humility: Recognising one's insignificance	Tradition: Maintaining cultural, religious traditions Humility: Recognising one's insignificance
Benevolence: Enhancement of the welfare of people with whom one is in contact	Benevolence-Dependability: being a trustworthy member of the ingroup Benevolence-Caring: commitment to the welfare of ingroup members	Benevolence: Enhancement of the welfare of people with whom one is in contact
Universalism: Understanding, tolerance, appreciation and protection for the welfare of all people and nature	Universalism-Concern: Commitment to equality and justice for all people Universalism-Tolerance: Acceptance and understanding of those who are different from oneself Universalism-Nature: Preservation of the environment	Universalism-Concern: Acceptance, understanding and commitment to equality and justice for all people Universalism-Nature: Preservation of the environment

An unexpected finding of the higher discriminatory capacity of the instrument was that the order of the 19 values did not remain as postulated in the original Theory and supported by a large number of studies for the preceding twenty years. The resulting order of the 19 values is shown in Figure 2.4: the position of Benevolence and Universalism is reversed. This does not affect the main dimensions because the two value types constitute the Self-Transcendence dimension, but needs to be taken into consideration when assessing the findings of the studies reported here and the preceding literature, which analysed data collected with less discriminative instruments.

Although explaining that this was "not completely surprising" because it had appeared in a large number of samples before, Schwartz et al. (2012, p. 678) admitted that "We have no definitive explanation for the benevolence-universalism reversal. Any explanation must be compatible with three facts: This reversal vas equally clear in adult and student samples and in samples from more or less Westernized and affluent countries, and it did not appear in studies using the Schwartz Value Survey prior to 2000."

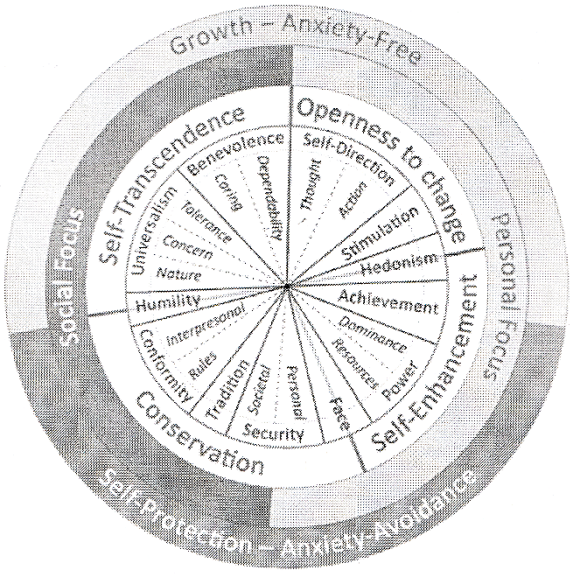


Figure 2.4 – The circle of 19 values (Schwartz et al, 2012, 2017)

Other studies published after 2012 but based on the SVS or the PVQ40 still refer to the original structure. In the latest version of the revised 19 values theory (Schwartz, Cieciuch, Vecchione, Torres, Dirilen-Gumus & Butenko, 2017) the PVQ -R was further reviewed. The new version, named PVQ -RR, had nine items identified as problematic in the

2012 study replaced and the wording of some other items reordered. The modified structural order was confirmed, but no explanation was given.

By far the largest data collection that applies the Theory, the ESS, uses a simpler instrument specifically designed for the purpose, a 21-item PVQ (Schwartz, 2003). This instrument, like all the preceding ones, was deemed sufficient to discriminate between the original 10 values, but after only two rounds of the ESS it was found (Davidov, 2008; Davidov, Schmidt & Schwartz, 2008) that using the 21 items in a multiple group confirmatory factor analysis (MGCFA) only the four higher order values identifying the two main dimensions (Openness to Change >< Conservation and Self-Transcendence >< Self-Enhancement) can be reliably measured in many countries.

2.4 Strengths and weaknesses of the Schwartz Value Theory

The present observation that there are numerous overlapping definitions and interpretations of value constructs, and that researchers in the field tend to quote others selectively to support their own view, has been made before (Datler, Jagodzinski & Schmidt, 2013). These authors also highlight that, while both the main theories presented above distinguish between value orientations at the individual level and values of social collectives, generally indicated as "cultural" values, Inglehart's research has progressively emphasised the cultural aspect, because in his view cultural change is an accumulation of personal changes. The main weakness of this theoretical development is that it has not been sustained by a parallel elaboration of suitable measurement instruments.

The measurement instruments Schwartz developed in collaboration with several other researchers have a solid theoretical base. He pointed out (Schwartz, 2007) that social researchers like Inglehart do not draw a clear distinction between values and attitudes. By attempting to measure values with questions on attitudes in specific fields of politics or morality, they may derive statistically the broad underlying values. Schwartz offers instead a comprehensive theory of the basic motivations that people identify as values and instruments developed on the basis of this theory. The basic motivations are then suitable to explain a wide variety of attitudes and behaviours in different aspects of life. Cultural values are those that the members of the social collective are encouraged to pursue and have the purpose to justify collective actions taken to pursue them.

Even such a robust theoretical framework, however, is largely based on the observation of behavioural patterns that have uncontroversial explanations because of overwhelming evidence already gathered in the past. It should not be surprising that a traditionalist person tends to be religious and vice versa, for example. This aspect has been recently highlighted by the realisation that the position of two value types had to be reversed (Schwartz et al., 2012). This indicates that the results of the analysis of empirical data that support the order of value types in the circumplex may not be sufficiently discriminative and allows for uncertain interpretations. Furthermore, any instrument that requires a personal interpretation of a question cannot totally eliminate differences due to individual experiences. These could modify the understanding of qualifying words, and therefore blur the distinction between attitudes and motivations.

The main disadvantage of the Theory is that the clarity of the visual presentation in two dimensions betrays the underlying complexity of the relationships between values. The relationships depicted by the theoretical circumplex can be calculated only approximately because they are projections of points existing in a multi-dimensional space. The further away two values are from each other, the larger is the mediated influence of other values and the weaker the theoretically opposite correlation. Conversely, adjacent values are highly correlated and a small number of indicators is not sufficient to clearly discriminate between them. The circular structure demonstrates the concern that Schwartz, as a psychologist, had for the structural consistency of his value system, but is particularly subject to this weakness. For these reasons, Datler, Jagodzinski and Schmidt (2013) conclude that the effects of values on external variables can substantially change as a consequence of small biases in value measurement caused by underlying suppressor variables and high correlation between adjacent values. Great caution was therefore necessary to ensure that this research on the effect of values on charitable behaviour is not obscured by such biases.

This problem has been addressed in the literature by complementing MDS, which is useful to confirm the existence of the postulated circular continuum and assess the possibility to visually distinguish separate values, with CFA, which is useful to determine how many narrowly defined values can be identified. Following the main studies already mentioned, the issues of configural, metric and scalar invariance posed by each instrument

used were examined in detail (Cieciuch, Davidov, Vecchione, Beierlein & Schwartz, 2014; Cieciuch, Davidov, Vecchione & Schwartz, 2014). Predictably, those authors found that the invariance properties of the instrument were better when the number of indicators included was larger. For this reason, the PVQ reduced to ten items, one indicator per value, which was added to the WVS, is not in itself useful either than as an opportunity for comparative study, as already mentioned.

Although commonly used in the analysis of values, the statistical methods mentioned are designed for the analysis of interval variables. Likert scales measure ordinal variables, therefore the underlying assumption, not always justifiable and always requiring consideration in the assessment of the results of these analyses, is that the interval between the scale items is constant and meaningful. Maximum likelihood estimation has often been used to alleviate this problem.

Being the simplest, easiest to administer and most comparable with a vast archive of data, the 21 item PVQ was a convenient choice for the first study of this research, provided that its properties were sufficient for the purpose. Datler, Jagodzinski and Schmidt (2013) had found that collapsing adjacent values, as Davidov (2008) and other authors had done, allowed this instrument to produce models with satisfactory internal validity while maintaining the original indicators of the Theory and identifying latent variables semantically close to the original values. They also indicate that the instrument allows a robust correction of the measurement error by using structural equation model (SEM) programs. With this methodology they found that the four higher level values described by Schwartz coincide with four latent variables, while Hedonism remains separate and located between openness to change and self-enhancement. This model is summarised in Table 2.2.

This confirmed that, at least at the higher level, the PVQ 21 indeed “demonstrates configural and metric invariance, allowing researchers to use it to study relationships among values, attitudes, behaviour and socio-demographic characteristics” as stated by Davidov, Schmidt and Schwartz (2008, p. 420). The relationships they found, however, often contradicted the premises of the Theory, which obliged the authors to indicate their willingness to wait for confirmation by other studies before making claims about the effectiveness of their model.

Table 2.2

Measurement of Schwartz dimensions using the PVQ 21

Schwartz higher level value *≡ Datler et al. latent variable*	*Included values*	*PVQ 21* *items*
Openness to change	Self-direction Stimulation	1, 11 6, 15
Self-transcendence	Universalism Benevolence	3, 8, 19 12, 18
Conservation	Tradition Conformity Security	9, 20 7, 16 5, 14
Self-enhancement	Power Achievement	2, 17 4, 13
Hedonism	Hedonism	10, 21

As regards scalar invariance, that is the assurance that the intercepts of the indicators included in a model and the factor loadings between the indicators and the constructs are the same for different groups, it is agreed that the PVQ 21 can provide it only in some instances. Davidov, Schmidt and Schwartz (2008) indicate that partial scalar invariance was found for some values across some countries, therefore a comparison of the mean preferences for those values in those countries would be possible. Comparing means of some South Australian values with the means of the same values in one of the countries participating to the ESS would then be possible, after establishing that scalar invariance holds in that particular instance.

2.5 Summary

The study of personal values is still in constant development. The structure of the Schwartz circular model has been validated by a large number of samples in a large number of countries, which indicates that people of any culture understand the meaning of each value type in basically the same way, although there are substantial variations in the importance given to it in different cultures. The complexity and number of the variables involved needs elaboration with multiple statistical techniques that optimise particular aspects. Obtaining reliable empirical evidence to support many theoretical hypotheses has proven elusive, which suggests that there could be many false positive as well as false

negative conclusions in the literature. To maximise the credibility of any findings, the consensus is that MDS, CFA, MGCFA, and SEM techniques need to be used concurrently.

In this research, only MDS was used extensively, which is an acknowledged limitation justified by reliance on the literature for most of the structural analysis and a focus on the development and assessment of hypotheses on the behavioural outcomes correlated to specific value preferences.

Chapter 3

How values influence behaviour

3.0 Overview

In the first part of this chapter the cognitive and motivational processes that have been identified as possible determinants of how values influence behaviour are discussed. The literature suggests that causal inferences are difficult to substantiate but many theorised correlations may be effectively investigated. In the second part of the chapter, the implications for this work of understanding individual differences in charitable behaviour are considered and the main hypothesis to be tested is developed.

3.1. The Theory's viewpoint

According to Higgins (2007) there are five major viewpoints about the origin of values. One of these is that values are shared beliefs about what is desirable, the Theory's viewpoint. In his opinion, the prevalence in the literature of this viewpoint and the observation that social psychologists, while very concerned with the value construct, tended to address it in terms of other concepts, such as goals, norms and especially attitudes, was a rather undesirable situation. In particular, he noticed that the evaluation aspect of attitudes, important for predicting behaviour, was rarely related to understanding what value really is.

To develop his argument, Higgins (2007) started with quoting the Oxford and Webster's dictionaries and focusing on definition 2 of the Webster's Ninth New Collegiate Dictionary 1989, p. 1303, that is: "the monetary worth of something: marketable price". He deems it "the kind of definition that would please behaviourists and traditional economists… useful as a measure that can be used … in research on value" (p. 455). Which "traditional economists" would indeed be pleased with this definition is not said, which is understandable because there are as many definitions of value as there are economic theories. For more than half a century, however, economists have not confused "price", indeed defined as "the monetary worth of something", with "value", which they have variously defined along the lines of definition 6 of the Oxford English Dictionary, 1971, p. 3587, also quoted but not selected by Higgins on the grounds that it is not "operational": "the relative status of a thing, or the estimate in which it is held, according to its real or

supposed worth, usefulness or importance". In other words, value is not a monetary measure, it is a personal decision, however derived, about an object's worth.

His subsequent review of the literature did indeed investigate different reasons that could influence the assessment of worth but did not make further references to the "operational" definition of value chosen in the introduction. The point of it then appears moot, whatever its accuracy. Having explained the insufficiency of the *shared beliefs about what is desirable* viewpoint and three others, *needs satisfaction*, *relation of the self with the outcomes*, and *evaluative inference*, he explained his preference for the fifth, that value is created on the basis of experience, and supported the primacy of emotion over reason in this process.

Conscious verbal reasoning, in particular the possibility to reframe a situation to trigger another intuitive reaction, and social interaction leading to the consideration of other arguments that similarly trigger further reactions, can all override the initial intuitive reaction. Although the extent to which each one of these cognitive processes is actually used by people is a matter of debate, it nonetheless seems reasonable to conclude that values are indeed more expressions of what people want than expressions of what people ought to do – after what they ought to do has already been interiorised genetically and in infancy.

By shedding light on the interaction of thought processes, this kind of taxonomic work helps explain how they may have contributed to recent developments of the Theory and suggest possibilities for further development. Schwartz (2009) adhered to his original proposition (Schwartz, 1977) that, when faced with the necessity to act, people generate "personal norms" (feelings of moral obligation) by weighing the consequences on the basis of their values. Values were defined as "socially desirable concepts" (Schwartz, 2009, p. 223), which blurred the distinction between personal and social.

By providing a structure that shows how values are related to each other, the Theory explains behaviour as a mediation between opposing values. People tend to behave in a way that balances the implications for the values they prefer against the implications for the values they like the least (Schwartz, 2006). The circular structure of values is a motivational

continuum that needs to be considered in its entirety to understand how it is related to a specific behaviour. Once the most positively and the most negatively related value types, which are not necessarily opposed, are identified, the correlation with all the other value types can be predicted.

The complex mechanisms that underlie this conceptually simple mediation process are addressed in detail in a book recently published (Roccas & Sagiv, 2017), which provides useful guidelines for the observations presented in this chapter. Based on the premise that values are near universal, the book takes a cross-cultural perspective. Its editors acknowledge, however, that in some cultures for which little research is available some values may have particular meanings that could have implications for the value-behaviour relationship. The evidence that there is a substantial variance in the importance attributed to values by different cultures is now well established.

Schwartz himself summarises concisely (Schwartz, 2017, pp.64-65) the mechanisms that in his view underpin the capacity of values to influence behaviour, and makes no suggestion that there could be a single model that encompasses these mechanisms in a homogeneous whole. For this reason, the following sections elaborate some of the approaches used to investigate the value-behaviour relationship in an attempt to find common principles to use as the foundation of the empirical studies reported in this thesis.

3.2 First mechanism: Activation

It is generally accepted that all cognitive structures need to be activated to affect behaviour. Most of the research about activation has been with reference to attitudes, which are much easier to measure as positive or negative evaluations of a specific referent. To demonstrate it in regard to abstract values is more complex and may require the intermediate step of activating a motivation, as suggested by Kruglanski (1996) and operationalised by Verplanken and Holland (2002).

3.2.1 The role of attitudes in the activation of values

"In most instances, attitudes mediate relations between values and behaviour. Consequently, correlations between values and specific behaviours are rarely very strong." (Schwartz, 2017, p. 64). Higgins's concern expressed ten years earlier (Higgins 2007) about

the circularity of definitions of related constructs still appears founded. Dictionary definitions of the critical mediating construct do not appear relevant: they are either too generic and not "operational", e.g. "Attitude = settled way of thinking or feeling about something", or too subject specific as: "Attitude = the ballet position in which the body …" The risks for social psychology researchers to be heavily influenced by such common connotations have been known for a long time (see Blascovich & Ginsburg, 1978). It is, therefore, important to understand what is meant by "attitude" and "specific behaviour" in the context of the Theory to assess consistency with the underlying logic.

Schwartz's colleagues explain that "The importance a person attributes to specific values is relatively stable across situations (Schwartz 1992) … This feature distinguishes values from norms, attitudes, and specific goals, which usually refer to specific actions, objects, or situations. … Whereas a specific attitude predicts mainly the specific action it refers to (Eagly and Chaiken 1993; Rohan 2000), a value can predict both specific and general behaviours." (Sagiv & Roccas, 2017, p. 5). The difficulty is then distinguishing between norms, attitudes and specific goals and how each one of these constructs "usually" refers to specific actions, objects or situations. In this context, the primary concern is about attitudes as an intermediate step for influencing behaviour: norms and goals will be discussed later.

Quoting Rohan (2000) to state that an attitude "mainly" refers to an action complicates the issue, because Rohan actually proposes "that the term *attitude* is used only for the evaluation of specific entities." (Rohan, 2000, p.258). Her purpose is to avoid confusion with the term *value* as defined by Schwartz, reserved for the evaluation of abstract entities, because Allport and the authors also quoted by Sagiv and Roccas: Eagly and Chaiken (1993) "used the word *attitude* to describe specific judgments as well as abstract judgments that could be labelled as values" (Rohan, 2000, p. 258). Whether the entity is an action, an object or a situation is not relevant in this reasoning.

By using "specific judgments" in comparison to "abstract judgments", however, Rohan still leaves a degree of uncertainty that Eagly and Chaiken (2007) later overcame, while remaining true to their original definition: "In the language of social psychology, an entity that is evaluated is known as an attitude object. … Attitude objects may be abstract or

concrete [writer's emphasis]". Sagiv and Roccas (2017) therefore quote Eagly and Chaiken (1993) in a way that is at least ambiguous. Their definition of the constructs involved in the process being discussed remains imprecise: while Rohan clearly states that a value is a judgment of an abstract entity and an attitude is a judgment of a concrete (i.e. limited in time and space) entity, they appear to consider this distinction as a matter of degree, not an absolute. In the words of Eagly and Chaiken (2007, p. 583): "Why should social psychologists bother to settle on a definition of *attitude*? Perhaps scientists should just do research and not worry so much about abstractions and labels. Not so. A science without definitions of basic constructs would be chaotic." Ten years later, scientists have not yet settled on *their* definition. By using "evaluation" and "judgement" for both attitudes and values the ambiguity is perpetuated.

A more useful but still not definitive distinction, as reminded by Verplanken and Holland (2002, p.435), is to follow Rokeach and Schwartz, who had already proposed similar ideas: attitudes are variations of evaluation, from favourable to unfavourable, whereas values are measured in terms of variation in importance for the person doing the evaluation. After Rokeach (1973) had revitalised the study of values that had been rather neglected in favour of the study of attitudes, Norman Feather (1990, 1995) addressed the relationship between values, attitudes and behaviour by drawing ideas from expectancy-value theory. The core principle of that theory was that attitudes are the result of a cognitive decision based on the expectation of the probability of success and the value of the goal being pursued. In this case "value" means the importance given to a positive outcome, or in Feather's words, "incentive value" as distinct from "human value" (Feather, 1990).

Its components are specific objects or events that have a valence, that is, a subjective attractiveness or aversiveness for the person making the decision. Feather assumed that the relatively stable "motives" that influence motivation according to expectancy-value theory include both needs and value types. The sequential process according to him therefore is: values -> valences -> attitudes -> behaviour, but he accepted that "valences can be conceptualised as attitudes towards objects and events" (Feather, 1990, p. 185), while still defending the need to maintain the distinction.

The context in which Feather developed his argument is the cognitive-developmental theory of Lawrence Kohlberg (1969, 1976), who in his view complements Rokeach because of parallels between Kohlberg's arguments for a set of universal stages of cognitive development and Rokeach's arguments for a set of universal values. While still dominant in the field of moral psychology, by the end of the 1980's Kohlberg's approach, focused on conscious reasoning, was already being superseded by the growing consensus that human morality is predominantly intuitive, based on automatic, emotive brain functions, with reason providing a secondary but still essential controlling function (Bargh, 1990; Haidt, 2007). After Schwartz had published his seminal work (Schwartz, 1992, 1995), Feather merged the cognitive-developmental approach with the new structural framework and concluded that the ten value types identified by the Theory may actually induce related valences and be organised in two bipolar dimensions, supporting his conclusion with the evidence found analysing a convenience sample of 239 students (Feather, 1995).

3.2.2 The activation process: accessibility, salience and centrality

What makes some values rather than others come to prominence in certain situations is a question still addressed by many theories. Higgins (1996a) did not address values specifically but discussed comprehensively how knowledge structures, which include values, may be activated to affect behaviour. Many studies had demonstrated that activation of knowledge already available because it is stored in memory makes it more likely to be used in a subsequent decision. While accepting that in the literature two concepts deemed essential for this process, accessibility and salience, were treated as practically synonymous, he defended the usefulness of distinguishing the accessibility of stored constructs from their salience. According to the existing literature, there are several determinants of salience. These include: the ease of retrieval from memory; the way the stimulus is presented; the situation; and how the person feels at the moment (Higgins, 1996a, p.133). The latter indicates an overlap with the perception of attitudes and values and for this reason Higgins (1996a, p.135) proposes to define salience only in terms of the properties of the stimulus event, so that it can be studied separately and compared with accessibility.

Accessibility is determined by "expectations, goals and needs" either momentary or "chronic", the interconnectedness with other stored constructs, and recent and frequent

prior activation (Higgins, 1996a, p.133). Given that "chronic expectations, goals and needs" seems a reasonable approximation of the description of interiorised values, in the present context it is proposed that value accessibility be defined as *the perception of the importance of a value within the person's value system as influenced at the time of access by previous related experiences*. Evidence of the influence of previous experiences is provided by the numerous studies that have investigated priming, that is, the deliberate overt or covert highlighting of a specific construct before asking for a decision that involves its application. This technique permits to demonstrate the effect of value activation by comparing primed and non-primed groups of participants.

Verplanken and Holland (2002) highlight a more specific aspect of values, their "centrality", that is the extent to which they are essential for an individual's definition of his or her own self, from the broader concept of importance, that may include a variety of other considerations, like social norms and pragmatic strategies. It is this centrality that determines how an individual defines and interprets a situation. In their Study 2, to measure it they used an adapted version of the Schwartz Value Survey where the response scale was replaced by an 11 point scale ranging from "this does not describe me at all" to "this describes me very well". They proposed, without detailed explanation, that this scale is preferable for the purpose of operationalising "value centrality as the extent to which a value is part of one's self concept" (Verplanken & Holland, 2002, p. 438). By selecting the first and fourth quartile of respondents, they identified those for which the dependent measure (protection of the environment) was or was not a central value. The value activation was manipulated by priming half the respondents. The analysis of variance of the 2x2 matrix indicated significant value congruent behaviour for the interaction between value centrality and value activation. The hypothesis that to influence behaviour the values must be cognitively activated and central to the self-concept was supported.

The importance of the role played by cognition, however, is controversial. Dunning (2007) agreed with the emerging evidence that human reasoning is subordinate to impulse outside of conscious awareness and starts from this premise to propose that decision making is not a calculation process but a process of belief harmonisation. By "belief harmonisation" he means "arranging and revising one's beliefs, needs, and preferences into a network of cognition that produces little, if any, tension or disharmony among its various

elements". This process assumes that beliefs do cause behaviour but behaviour can also change beliefs, if these contradict the essential motive of maintaining one's positive self-image. It is a way to produce cognitive consistency by reducing cognitive dissonance: beliefs are not denied, but the conscious evaluation of their importance is varied to suit the situation.

It would again appear that beliefs, thrown in with needs and preferences, are essentially equivalent to the construct of value in this context. The parallel is not absolute, because it refers to what occurs in the grey area between attitudes and values discussed above, but becomes more compelling when Dunning (2007, pp. 245-246) suggests that experiments and conclusions based on "specific self-views" may be just partial explanations of people's concern with their overall self-image.

3.2.3 Relationship between values and the self

That the relationship between values and the self is at the core of their motivational properties is not controversial but is seen in a variety of perspectives. As Schwartz argues, consistently with the Verplanken and Holland (2002) perspective, "High-priority values are central to the self-concept. Sensing an opportunity to attain them sets off an automatic, positive, affective response to actions that will serve them. Sensing a threat to value attainment sets off a negative affective response." (Schwartz, 2017, p.64). The specific reference to the core of the self-concept being high priority values provides a focus for understanding how the Theory approaches the vast number of psychological variables included in the concept of "self".

While stating that integrating into a single model all the variables that constitute the self would be difficult and probably not even desirable, Higgins (1996b) proposes a complementary perspective: that the primary function of self-knowledge is self-regulation. Because human survival requires adaptation to the environment, especially the social environment, self-knowledge, that is a person's memorised knowledge of being a distinct entity in relation to the world, and subject to the consequences of this relation, is essential for continuous regulation in order to survive. This perspective, which Higgins calls the "self-digest", is different from a self-description view of self-knowledge as captured by questions like those of the PVQ because of its focus on people's need to understand their role in the

world, which requires different kinds of information than just opinions about oneself. He also points out that a more precise label for self-description would be *potential* self-description, because "self-description at any one time can vary depending on which subset of self-beliefs is currently most accessible" (Higgins, 1996b, p. 1063). This would suggest that, although it is true that at the highest level of abstraction value types are relatively stable, refining the Theory to identify a larger number of more specific ones might reduce their stability. This could at least partially explain the uncertain relative position of Benevolence and Universalism found with instruments designed to identify 19 values.

What the Theory does not explore are the phenomena engendered by the effort to maintain a self-image that is generally found to be unreasonably flattering, possibly as a result of a constant engagement in the belief harmonisation process described by Dunning (2007). When this process coincides with the mediation of opposite values described by the Theory, there is no discrepancy and there is no obvious reason to criticise its appropriateness. If it is applied to excess, on the other hand, it can lead to results that would not be predicted by the value preferences of the person.

Of particular relevance is the phenomenon known as licensing effect: once a person is convinced that s/he is a "good" person, s/he is inclined to feel licensed to do something "bad": I have eaten salads all week, so I can have chocolate on Sunday. I am a benevolent person (I have said it in the questionnaire and will always say it), so I can be selfish this time. Any time? Mazar and Zhong (2010) demonstrated empirically that people who care for the environment are seen as more cooperative, altruistic and ethical, so it would be correct to predict that they would respond altruistically when primed with a theoretical opportunity; but once given a real opportunity to act altruistically, they would do so and subsequently act less altruistically because of the licensing effect.

All these approaches suggest that if it is true that value types are "relatively stable" across situations, which is a fundamental tenet of the Theory, either the relativity is so broad as to be practically meaningless, or the stability concerns primarily and practically entirely the self-image. It is evident that the first alternative would essentially debase the whole Theory, therefore a conclusion compatible with all these approaches is that the value system is not only the core of personal identity, it is practically its entirety. Personal identity,

self-concept and self-image are deemed to be essentially equivalent names for the same construct.

Furthermore, if it is accepted that the self is largely defined by how good in moral terms people see themselves (Dunning, 2007), this conclusion can be extended: morality, which in a descriptive sense is the interiorisation of the standards of behaviour accepted in a society, its social norms, is the summary of the central values of a person. Both moral judgments and value preferences depend on the social experiences of a person (Feather, 1990). If morality is crystallised in the golden rule that one should treat others as one would like to be treated by others, the defining criterion of morality is altruism, as implicitly stated by Sachdeva, Iliev and Medin (2009). Current moral psychology thinking is that people prefer to behave in a "good" way to boost self-image, but this generally comes at a cost because of the conflict between selfishness and altruism (Mazar & Zhong, 2010). These more recent developments support the hypothesis that values provide a cohesive force between the personal identity and the social identities of an individual that can be measured along the self-enhancement – self-transcendence dimension (Hitlin, 2003). All these hypotheses are essential considerations for the study of the influence of values on prosocial behaviour.

3.3 Second mechanism: Relevance

All cognitive and motivational processes are conceptually separable, but they are often related in ways that are not immediately evident to conscious awareness (Kruglanski, 1996). In the next three sections, attention will be directed towards mechanisms that are all essentially corollaries of the activation process explored above. One of the most important of these is relevance. Relevance, as described by Schwartz (2017), relates to the reciprocal ability of values and behaviours to produce consequences that influence one another.

According to this view, the abstract nature of basic values implies that it is difficult to be immediately aware of their relevance for the specific attitude or behaviour being encountered. For example, as Schwartz has pointed out, it is possible to observe people who might be careful not to discriminate on the basis of race but who are incapable of seeing discrimination in sexist remarks. This implies that a value would be more accessible in some circumstances than others. Conversely, a specific behaviour might have

consequences for fostering or hindering the attainment of the goals of a basic value that are not immediately obvious, so it would not be salient in this respect. Alternatively, whether values are activated might be influenced by 'applicability' (Higgins, 1996a), which refers to the magnitude of the overlap between the features of the stored knowledge and those of the presented stimulus.

3.4 Third mechanism: Values determine the valence of perceived consequences

The role played by values and their centrality to the self-concept in determining the valence of the perceived consequences of alternative available actions has already been discussed. A necessary complementary field of analysis is how behaviours express values. According to the Theory, the ability of a behaviour to express a specific value depends on the level of compatibility with that value and the related incompatibility with the values at the opposite end of the motivational circle. Bardi and Schwartz (2003, p.1209) use the term "value expressive behaviour" to indicate behaviours, e.g. engaging in pleasurable activities, that are presumably performed to pursue only one specific value type, in this case Hedonism. They also mention "ambiguous" behaviours that can express multiple values, like hiking for adventure (Stimulation), for love of nature (Universalism) or company with friends (Conformity). Some behaviours may even be compatible with conflicting values: they are named "value ambivalent" (Lönnqvist, Leikas, Paunonen, Nissinen, & Verkasalo, 2006) and their choice depends on the circumstances.

The concept of conflict between value types is implied in the generally accepted idea that most cognitive activity is initiated by a perceived discrepancy between an actual and a desired outcome, which interacts with the importance of the goal to determine the intensity with which the activity is undertaken (Higgins, 1996a; Kruglanski, 1996). The functional theory of human values, developed since 1998 by Valdiney Gouveia, also accepts a conflict/compatibility framework in the correlation of values with external variables (Gouveia, Milfont, & Guerra, 2014b) but refutes the concept of conflict between value types. It assumes that there are only six value types and that they are all positively correlated ("congruent") to each other, with congruence increasing with age. According to this theory, a behaviour may correlate positively with one value and correlate negatively with another, not because those values are motivationally incompatible, but because they

have low “congruence”, that is, they express different goals and different needs (Gouveia, Milfont, & Guerra, 2014b, p.251).

The theoretical premises then do not appear to lead to significantly different results as regards the ability of values to predict behaviour. It is possible, however, to test the conflicting hypotheses: if all values are congruent, that is, positively correlated to each other, as postulated by the functional theory when mature individuals are concerned, there should not be a mirroring effect when a behaviour is correlated with the extremes of the two motivational dimensions postulated by the Theory. This technique was used by Lönnqvist, Leikas, and Verkasalo (2018) and the results supported the motivational circumplex structure.

3.5 Fourth mechanism: Values affect perception and interpretation of situations

To engage in a cognitive activity it is necessary to have at least a minimum of motivation, as any student knows very well. When circumstances threaten or foster important values of an individual, his or her attention is aroused and more cognitive resources are allocated to perception and interpretation. The value of highest importance for the individual determines how the circumstances are perceived and evaluated, which might result in widely different choices: for example, a career soldier might see war as an opportunity for promotion instead of a tragedy for humanity.

As Kruglanski (1996) explains, cognitive processes require effort, therefore people will be motivated to engage in them if they perceive benefits in doing so. When the alternatives being assessed are very costly or are clearly conflicting with important values, people tend to become more aware of the influence of their values and use them in their decision making; otherwise, it is easier to fall back on stereotypes, that is, to associate some characteristic trait to a category as a way to simplify the decision making. As heuristic devices, stereotypes do not necessarily represent negative connotations of outgroups, their most studied instantiations, and it is conceivable that a person’s values could be consistent with some common ones. Both are products of the socialisation process and there is no logic barrier to their parallel development. Developmental psychology has suggested that concepts of equality emerge prior to the onset of prejudice and it is important to understand how this happens, but no empirical study appears to have been conducted on

what level of conscious awareness adults have of the interaction of stereotypes and values. It would appear reasonable to assume no awareness, as a working hypothesis, but that there might be a positive correlation with intelligence. It is known that experience and learning how specific behaviours have become instantiations of a value in the past teaches people how to express a value in future similar circumstances (Maio, 2010).

3.6 Fifth mechanism: Important values promote planning

Once decided that a goal is worth pursuing because it expresses one of the more important values, a person is more likely to make a plan to anticipate ways to behave in future circumstances (Gollwitzer, 1996). In this way, the importance of values increases the consistency of behaviour in the long term by promoting a coherent interpretation of circumstances and persistence towards the achievement of the goal, notwithstanding the obstacles and distractions that will inevitably occur.

3.7 Application to charitable behaviour

The evidence for the ability of values to influence behaviour in general is rather scarce and debated by theorists. Significant correlations have generally been found only with narrowly specified behaviours, e.g. church attendance (Schwartz & Huismans, 1995). Bardi and Schwartz (2003) addressed this concern by generating sets of common behaviours that could be expected to be more habitual than carefully considered, each one deemed to be “value expressive” of one of the ten basic value types, so that the relation of each set of behaviour to all the value types could be investigated.

The reported studies were correlational and the authors did not make any claims that their findings could support the causal impact of values on behaviour implied by the Theory, or distinguish the causal impact of behaviour on values. They expected that all correlations would be moderate and the results corroborated this expectation. Tradition and Stimulation values were found to correlate a little more strongly with the behaviours that express them, whereas Security, Conformity, Benevolence and Achievement values were found to correlate only weakly with the behaviours that express them. Their conclusion, later partially retracted because unsupported by further studies (Schwartz & Butenko, 2014), was that the relations between values and behaviours were partly obscured by the influence of social norms.

This now retracted conclusion was consistent, however, with the earlier analysis by Schwartz (1977), who emphasised the role of the activation of self-expectations, described as the internalised structure of values and personal norms (Schwartz, 1977, p. 223), as the primary process that determines the occurrence and nature of prosocial behaviour, together with emotional arousal and the activation of social expectations (social norms). At that time, Schwartz (1977, p. 232) adhered to the definition of values and norms given by Williams (1968, p.284): norms "… say more or less specifically what should or should not be done by particular types of actors in given circumstances. Values are standards of desirability that are more nearly independent of specific situations". This, and the idea proposed by Rokeach (1973) that values are arranged in order of importance and serve as a basis for self-evaluation, quoted in the same page, show the foundations on which Schwartz evolved his current definitions of personal values and attitudes.

The main distinction highlighted in Schwartz (1977) is between altruism, the prosocial behaviour generated essentially by a desire to help others based on one's value system, and the prosocial behaviour generated essentially by a desire to comply with social norms. Both motives of course coexist in various proportions in any such behaviour. No attempt has been made to separate and quantify these motives in the present investigation, although suggestions of their relative contributions as regards the samples analysed might be inferred by the strength of their correlations with the values, as in Bardi and Schwartz (2003).

3.8 Generation of the main hypothesis

The subject of this investigation is identified as "Charitable behaviour", that is the aspect of prosocial behaviour specifically manifested through giving either money or labour to help people. "Generosity" is used in this context to convey the common meaning of liberality of giving without the specific purpose of helping people in need. It should be noted, however, that "charity" has a specific meaning in Christianity, which is discussed below, and any generalisation of the results to other cultures should be qualified as pertaining to the concept of altruism.

This construct was operationalised as the contribution made in one year by each participant either in cash or in time voluntarily worked for charitable purposes, expressed as a ratio to the participant's personal income before taxes in the same year. The monetary value of voluntary work was measured according to criteria developed by Salamon, Sokolowski & Haddock (2011) and adopted by the International Labour Organisation (2011).

Charitable behaviour is primarily expressive of the concern for the welfare of all people that defines the Universalism value, and to a lesser extent expressive of the value of Benevolence, defined as concern for the people one is in direct contact with, which can be interpreted rather widely to include one's community. Both these values form the self-transcendence pole of the dimension that has self-enhancement at the other pole. That charitable behaviour will correlate positively, albeit moderately, with the former and negatively with the latter has been widely reported in the literature, e.g. Maio & Olson (1995), Roccas & Sagiv (2017), Schwartz (2007). What is being investigated here is whether conservative people are more or less charitable than people open to change, i.e. progressive.

Either possibility is logically defensible. Progressive people could be expected to be more generous, which does not necessarily mean more charitable. In the latest version of the reviewed 19 values theory (Schwartz et al., 2017), Power-resources is directly opposite to Benevolence-caring, which seems to be theoretical confirmation of the intuitive conclusion that self-enhancing people end up having more resources, at which point they want to keep them, i.e. to "conserve" them. There is a vast literature indicating that conservative people attribute poverty and wealth to individual efforts more than to bad luck and societal factors (Bobbio, Canova & Manganelli, 2010) and it is well known (see e.g. the Social Capital Benchmark Survey, 2000, URL https://ropercenter.cornell.edu/2000-social-capital-community-benchmark-survey/) that in absolute terms donations are positively correlated to income, but when donations are expressed as a percentage of income the correlation is negative.

According to the Theory, the Conservation end of the dimension opposed by Openness to Change includes Conformity, Security and Tradition value types. The hypothesis that Conformity has a moderating effect on altruism because the willingness to

follow social norms would hinder the willingness to follow one's own self-transcending values, proposed by Bardi and Schwartz (2003) and investigated by Lönnqvist et al. (2006), would be consistent with this intuitive reasoning.

Conformity is strongly correlated to Tradition, Tradition is strongly correlated to religiosity, and religiosity is positively correlated to Benevolence and negatively correlated to Universalism (Roccas & Elster, 2014; Schwartz & Huismans, 1995). This helped explain the earlier findings of Darley and Batson (1973), based on a sample of only 40 seminary students, which indicated that making them focus on the parable of the Good Samaritan had no effect towards improving their willingness to help a person in apparent distress. Greenwald (1976) had pointed out the weakness of a conclusion based on such a small sample but his critique has been ignored, given the unquestioning consensus on the matter.

Lönnqvist et al. (2006) found that the link between self-transcendence and altruistic behaviour is strongest in people with low Conformity, supporting Bardi and Schwartz's (2003) suggestion. As noted by Schwartz et al. (2017), tens of other publications had cited this finding on the strength of the argument, without testing it. It was then realised that this compelling argument might not be really supported by evidence: Schwartz and Butenko (2014) could not replicate the finding of Bardi and Schwartz (2003) and Schwartz et al. (2017) tested it with surveys in four countries. The failure of value importance to moderate the strength of value-behaviour relations in those samples raised questions about the real impact of normative pressure.

Lönnqvist et al. (2006) support for this hypothesis was found by analysing a small convenience sample of Finnish military cadets, a highly homogeneous group in a country highly committed to State welfare principles. In the Nordic model of welfare state, the social norm is that every citizen's welfare is a right guaranteed to a high level by the public administration, so charity is not needed: those who do it, do it because of their own self-transcending personality.

Conversely, an argument in favour of conservative people being more charitable is that politically conservative people tend to consider charity a more appealing alternative than paying taxes to support people that they see more as parasites than as just

unfortunate (Bobbio, Canova & Manganelli, 2010), according to long established theories about success being the gift of God to the righteous and poor people being deserving or not. To investigate this argument it is necessary to clearly define Conservatism as a political ideology and Conservation as a personal values dimension.

3.8.1 Personal values and political ideology

The study of political values within the framework of the Schwartz theory of personal values has been evolving in the past decade. The most popular single dimension model of political competition is identified by the names of "left-right" or "liberal-conservative" given to its polarities, but, as Piurko, Schwartz and Davidov (2011, p. 541) explained, their meaning in motivational terms is controversial and varies from country to country.

Caprara, Schwartz, Capanna, Vecchione and Barbaranelli (2006) had proposed the hypothesis that Italian "voters who value universalism and benevolence more and power, security and achievement less" would support the centre-left as compared with the centre-right (p. 15). In other words, they expected the left-right identification of political orientation to be determined by the Self-Transcending – Self-Enhancing dimension and only secondarily influenced by the Conservation values. Their results showed that the positive and negative correlations supported the hypothesis, but security was more strongly correlated than power. When included in a regression model constructed to predict voting, universalism did indeed predict preference for the centre-left, and security, tradition and conformity contributed significantly to the model, whereas "the other values that correlated significantly with voting did not contribute significantly in the regression because of their interdependence with the other predictors" (p. 19).

Piurko, Schwartz and Davidov (2011) studied the different relations of values with political orientations in "liberal" countries, i.e. Western European countries, post-communist countries, and "traditional" countries, defined as those where "religion plays a pivotal role in political discourse" (p.541), and confirmed that indeed universalism and benevolence explain a "left" orientation whereas conformity and tradition explain a "right" orientation. The common use of the terms "left" and "liberal" as approximately

synonymous would therefore imply that liberalism coincides with the Self-Transcendence motivational pole, not with the opposite of the Conservation pole.

Australia does not fit easily in this classification of countries: it is most similar to the "liberal" definition but has a weaker commitment to the welfare state system. Calling the opposites of conservatives "liberals" instead of "progressives" is further complicated semantically in Australia because the main party with a substantially conservative agenda is misleadingly named Liberal Party. Political commentators often use the periphrasis "small el liberal" to distinguish between the party and the concept.

Piurko, Schwartz and Davidov (2011, page 542) also agreed that two-dimensional models are more appropriate (v. Schwartz, Caprara & Vecchione, 2010) and refer to the suggestion by Schwartz (1994) that an economic dimension concerned with a fair distribution of resources and a social dimension concerned with human rights and social change may parallel the two bipolar dimensions of his Theory. This interpretation avoids the ambiguity of the meaning of "liberal" because people motivated by Openness to Change are identified as "progressive". In any case, there is no ambiguity about the consistency of the right and conservative definitions and the conservation value motivations.

A panel of political scientists from Latrobe University, the University of Melbourne and the University of Sydney came to a similar conclusion in developing a methodology for the identification of the political orientation of Australian people. They identified by means of factor analysis (http://voxpoplabs.com/votecompass/methodology/pdf) two main dimensions to describe political competition which essentially maintain the consistency with the motivational structure of personal values. They named progressive and conservative the opposite poles of a "social" dimension; left and right are the names given to the poles of an "economic" dimension. These definitions coincide with the view of the personal values scholars: that the essence of a "left" orientation is to strive for wealth equality, whereas the attitude towards change distinguishes conservatives from their political opposites.

3.8.2 Attitudes towards the Welfare State

The Global Financial Crisis (GFC) of 2007-2008 caused a substantial shift towards self-enhancement. Round 8 (2016) of the European Social Survey included the module

“Welfare Attitudes in a Changing Europe", an update of a similar module included in round 4 (2008), fielded just as the GFC was unfolding. Its purpose was to investigate trends potentially driving the future of the welfare state. Its leading perspective was that the institutional and social effects of the recent GFC put additional pressure “on the already problematic fundamental relations of solidarity in European welfare states (e.g. between generations, genders, rich and poor, working and non-working, natives and migrants, and, increasingly relevant, between fellow Europeans.” (van Oorschot, 2014).

One of the major findings of the 2008 module had been that self-interest was not a major driver of attitudes to the welfare state, whereas ideological considerations (values and beliefs) often had a stronger influence. The results of Caprara et al. (2006) where therefore supported at the European level. On the other hand, there are sizeable differences in class effects on welfare attitudes between European countries and types of welfare state, for which no successful explanations are found as yet (Svallfors et al., 2012).

“Charity is a cold grey loveless thing. If a rich man wants to help the poor, he should pay his taxes gladly, not dole out money at a whim” is a sentence from Beckett (1997) often quoted to express the views of Clement Attlee, Labour prime minister from 1945 to 1951, who introduced welfare state policies in the United Kingdom. This does not mean that in welfare states people are not charitable because they do not need to be. It is known that in Sweden people donate as much or more than in comparable countries, preferably to the relief of poverty abroad and similar causes not covered by Swedish taxes (Vamstad & von Essen, 2012). This explains quite clearly why in 2006 the Finnish sample showed that altruism did “unexpectedly” not correlate with Benevolence and correlated positively with Universalism.

Australia introduced welfare state policies quite early, and at the beginning of the 20th century it was regarded as a world leader in this respect (Hughes, 1998, p.354); at the end of World War II, however, some structural similarities with the United States of America and the effects of their influence in the Pacific region seem to have led to a form of welfare state that shares some aspects of both the US model and the European model.

The role assigned to the State in the US is quite different from the European model, for a variety of political and behavioural reasons. It is therefore inappropriate to apply criteria developed in either environment to assess characteristics of the other. The comparatively stable US society has maintained for two centuries a constitution designed for the protection of property, whereas European countries have been more threatened by socialist revolutions and have needed to adopt more progressive solutions. Alesina, Glaesar and Sacerdote (2001) suggest that a most influential reason for the low level of resource redistribution in the US, or as they put it bluntly, "for the absence of an American welfare state" (page 189), is racial fragmentation: the poor, who in the US disproportionately belong to ethnic minorities, are seen as lazy, while Europeans mainly accept that the poor are just unfortunate people. Australia might be seen as an intermediate situation where such a consideration could partially apply, as is plainly seen in the treatment of the indigenous population. "Many voters resent paying taxes to provide benefits to someone else; many regard the money as wasted. In general, taxpayer resentment in Australia is not at the height of that in the US, but it is still there." (Hughes, 1998, p. 355). Total social expenditure as a percentage of GDP in 2016 was 30.8% in Finland, 19.3% in the US and 19.1 in Australia (https://stats.oecd.org/Index.aspx?DataSetCode=SOCX_AGG).

3.8.3 Philanthropy and charity

The concepts of philanthropy and charity coexist in many countries and are often used interchangeably, but they are quite different. At the most basic level, philanthropy is a method for expressing altruism, charity is a name Christians give to the broader concept of altruism. For Christians, charity is a specific virtue and a concept not exactly replicable in other religions. For example, it does not exist in Judaism, where the related term tzedakah indicates an obligation, not a virtue. Similarly, in Islam, zakat is compulsory religious giving of 2.5% of wealth and sadaqat is more akin to the general concept of altruism. The focus of philanthropy is on the donors, who decide the method; charity focuses on meeting the needs of the beneficiaries. The way the two concepts are described is indicative of the cultural backgrounds where they flourish. To overcome the underlying tinge of selfishness and arrogance connected with the presumption of knowing better than the elected Government how to redistribute resources, philanthropists often argue, rather speciously, that philanthropy is about providing people with the means to meet their needs themselves, instead of making them reliant on charity to meet their needs. In reality the

two options rarely occur separately, and certainly never when attempting to relieve extreme poverty. It would be useless to give people seeds to sow if these people would be all dead from starvation before the harvest.

The overall weakness of any conclusion is highlighted by Schwartz's considerations about the contrasting but potentially equally productive actions of benevolence values, which "promote the welfare of others out of concern for them", and conformity values, which motivate prosocial behaviour "to avoid negative outcomes for self" (Schwartz, 2009). Some indirect confirmation that conservative people are marginally less altruistic was found by Rempel and Burris (2015) in Canada, a country that shares with Australia the British colonisation of native populations, the traditional allegiance to the United Kingdom and a strong although sometimes ambivalent connection with the US.

In an attempt to develop a more refined taxonomy of the philosophies at the core of various charitable organisations, Rempel and Burris (2015) added to the already mentioned criteria, locus of decision making (the donors or the recipients) and type of assistance (direct provision or resource building), the criteria of method of engagement (hands-on or campaigning for change) and long or short term orientation. They asked 96 psychology undergraduates to complete the 56-item Schwartz Values Survey and express their preferences for the four criteria. They found by principal components analysis two factors, the first interpreted as a long term, recipient focussed philosophy on which the other two dichotomic criteria loaded practically equally, and the second a short term, donor focussed philosophy for which the other criteria were irrelevant.

The authors were careful to express their interpretation of the results in general terms not to risk offending someone, and stated "To be clear, it was not our intent to sort actual helping organisations into categories based on our model" (Rempel & Burris, 2015, p. 182). Caution is necessary when the evidence is provided by a sample of 96 psychology students, but the indications were clear. The first philosophy shows that charitable people care for the recipients, see charity as a lifelong commitment and do it without worrying too much about the details of how it is done. The second is not as much a philosophy as a way for people who are not really charitable to be "prosocial", that is, to do what is expected of them by throwing a few dollars in a hat they find convenient, as shown by its positive

correlation with Power and its negative correlation with Universalism (Rempel & Burris, 2015, p. 186). A clear demonstration of the distinction highlighted by Schwartz (1977) between altruism and the prosocial behaviour generated essentially by a desire to comply with social norms.

This finding appears to be more useful as a method for discriminating between charitable and philanthropic donors than for providing a taxonomy of charitable organisations. If it is accepted that philanthropy is a donor instigated methodology and a donor focus is not "charitable", it follows that philanthropy for Christians is a lesser "virtuous" method to be altruistic. It would be interesting to investigate whether fundamentalist Christians in the US would provide alternative interpretations, or support this as a core reason for giving to the Church instead of secular organisations.

Because of its relatively strong correlation with Tradition, investigating the impact of religiosity on altruism may clarify the role played by this component of the Conservation dimension. The Theory claims as a psychological universal that religiosity is positively correlated to Benevolence and negatively to Universalism because the primary function of religions is to create cohesion in the ingroup by means of dogma, which necessarily implies that all non-believers constitute the outgroup (Saroglou, Delpierre & Dernelle, 2004; Schwartz & Huismans, 1995). If Schwartz's altruism corresponds to Christian charity and is an expression of Universalism, particularly the Universalism-concern type in the revised Theory, and religiosity fosters Benevolence, particularly the Benevolence- caring type defined as "devotion to the welfare of ingroup members" (Schwartz et al, 2012), the paradoxical consequence is that Christians actively discourage something they deem virtuous but not morally obligatory.

Bègue (2014) investigated the role of religiosity and just world belief in influencing altruistic behaviour in France, and found that there religiosity, measured as attendance to religious functions, had a negligible (r = .02) and nonsignificant correlation with altruistic behaviour (Bègue, 2014, p. 73). Conversely, in the United States, Brooks (2004, p. 4) found that religious people were "25% more likely to donate and 23% more likely to volunteer than secularists". Brooks (2005) also reports that religious practice has a small negative impact on nonreligious giving, but its large positive impact on religious giving results in

larger contributions by religious people than by secular people. Brown and Ferris (2007) found that including social capital in models of giving reduces the influence of education and religiosity, which raises the question whether it was overstated in previous studies. Alternatively, it could suggest that religiosity and education exert a greater than previously thought influence on the creation of social capital, defined as community networking based on norms of trust and reciprocity.

These American studies precede the GFC, which significantly affected many people's ability or propensity to donate. Galen (2012) critically examined the literature then available to assess whether religiosity affects positively or negatively various areas of prosocial behaviour. Myers (2012) commented on Galen's analysis and concluded that ten of his assertions were "well documented by pertinent research". Three of these assertions are relevant for this tesis: that religious people prefer to give to their ingroup, which is consistent with the primary function of religion as indicated above; that religiosity predicts a more planned than spontaneous helping behaviour; and that religiosity correlates more with a preference for private giving as compared to a welfare state approach, as could be expected given the already discussed correlation between religiosity and conservatism and between conservatism and wealth.

Myers (2012) suggests also eight more questions worthy of further research. The first is where the boundaries of the "ingroup" really are. This thesis provides some indications of how to approach this issue in terms of Universalism and Benevolence. Addressing the other questions would have been interesting but vastly exceeded the scope of this thesis.

Saroglou (2012) also commented on Galen (2012) and criticised him at an ideological level. Saroglou believes that "religion and religiosity are responsible for and lead to prosocial behaviour" (page 908) and that those who, like Galen, come to opposite conclusions do so because they confuse causes and deliberately overplay and underplay findings and interpretations of evidence. Saroglou's arguments have been thoroughly considered and his appeals to caution have informed the analyses presented here, which aim at being as objective as possible. A case in point is the interpretation of the uncontested view that religion mostly favours the ingrup and is not universalistic: Saroglou rejects Galen's assessment that these characteristics are sufficient to deny that religion causes prosociality, but then qualifies his argument by saying that the prosocial behaviour caused

by religion could be the part of it that exceeds the narrower construct of altruism. The research reported here only examines the ways religion influences the expression of altruism that is charitable behaviour, and it suggests that they are not univocally positive.

In Australia, Kortt, Steen and Sinnewe (2017) analysed a representative sample derived from three waves of the Household, Income and Labour Dynamics in Australia (HILDA) Survey, managed by the Melbourne Institute of Applied Economic and Social Research. They agreed with the consensus view that donations are seen by religious people as an alternative to attendance, but did not investigate the correlation of religiosity with the amount of giving. They found with regression analysis that age has no influence and education has a strong positive influence on religiosity.

In summary, even the positive influence of religiosity, which should support the argument that conservative people are more charitable, appears to have ambivalent effects. Both Self-Direction and Stimulation, the values that identify the Openness to Change dimension, are expected to have positive correlations with altruism, whereas Security and Conformity have negative correlations counteracting the positive influence of Tradition. The hypothesis that charitable people are marginally more progressive would then appear more justified, even considering that Hedonism, which is theoretically divided between Openness to Change and Self-Enhancement, as regards charitable behaviour should be considered totally a self-enhancing value: money is required for one's fun, not for giving it to others. Additional analyses investigating the interaction effects of these values would need to be conducted to obtain further evidence for or against the hypothesis.

Chapter 4

Methodology

4.0 Overview

The extent to which personal values are expressions of needs or expressions of personal desires and how these are shaped by social desirability remains a fundamental source of uncertainty, although there seems to be more evidence for the prevalence of personal desires. The value system is deemed to practically coincide with a person's self-image and the primary role of social norms in shaping it through the development of morality is recognised. Causality can be investigated by priming specific values in a group of the participants and comparing the behaviours of primed/non primed groups, but the variety and complexity of mechanisms through which personal values may affect behaviour are such that the attempts to find specific effects by analysing small samples have yielded modest results. The most prominent studies in this field, which are replicated or followed in this thesis, have been of a correlational nature.

When large populations are statistically analysed and small effects emerge with sufficient consistency, reasonable broad interpretations can be developed, but the possibility that even subtle methodological differences may have caused the effects always needs to be considered.

This chapter addresses these concerns and describes the principal methodology used in the main survey study. It commences with a review of mail survey methodology and previous approaches to collecting data for value surveys of this nature in Europe. It then provides an overview of the sampling methodology, procedures and measures used in the study.

4.1 Contemporary Australian social surveys

The accepted best practice for nationwide social surveys in Australia is the selection of a sample of identified participants from the electoral roll or similar data bases. For example, the Australian Survey of Social Attitudes (AuSSA), conducted biennially from 2003 by the Australian National University and now managed by the Australian Consortium for

Social and Political Research Incorporated (ACSPRI), an association of academic and research institutions, follows a five steps process. This commences with sending to participants selected from the electoral roll an introductory letter, followed one week later by the questionnaire. If there is no response after two weeks, a reminder is sent to the non-respondents. If there is no response after a further two weeks a second copy of the questionnaire is sent to the remaining non-respondents. A final reminder is then sent to the remaining non-respondents. Using this method, the researchers have obtained an effective net sample size achieving a response rate of approximately 34% on an original sample of 5,000. No weighting for non-response is applied to the sample. The information above about the method and the cost involved is freely provided by ACSPRI on request.

Another relevant survey conducted in a similar way is the World Values Survey (WVS), which defines itself as a global network of social scientists in almost 100 countries who focus on the impact of personal values on social and political issues (worldvaluessurvey.org). The Australian data collected with the 2012 World Values Survey have been made publicly available recently (WV6 Results Australia, 2012). Sample members (N = 5,000) were random selected from the electoral roll. The questionnaires were sent by mail with a reply paid envelope and the option to respond to an online version. Even with monetary incentives, multiple reminders and acceptance of late arrivals, the rate of return was 29.5 %, 1477 completed surveys. The data were then rim weighted to match the demographics to the latest available census (World Values Survey Technical Report, 2012).

4.2 The European Social Survey

A relevant international survey is the European Social Survey (ESS) Organisation emanated from the European Science Foundation, an association of research organisations in 30 European countries, for the purpose of establishing a rigorous procedure for the collection of social scientific data. Since 2002 it has conducted a biennial survey constituted of a core module repeated every time and an additional module to address specific themes. To achieve an optimum level of comparability of the data collected in each country, the ESS Core Scientific Team produces a detailed project specification reviewed for each round. The current specification at the time of designing the survey was ESS (2013). It requires strict random sampling, a sample size N = 800 for countries of fewer than two million inhabitants and N = 1500 for larger countries, and a response rate of at least 70%. Various survey

designs within the guidelines can be used but all data have to be collected by face to face interviews.

4.3 Collection of data for the first study

The aim of obtaining samples reasonably comparable with those obtained by means of nationally funded infrastructure projects, without the ample resources required for such a task, was achieved in the first instance by limiting the coverage to the State of South Australia and adopting a low cost methodology that allowed the distribution of a large number of questionnaires. In comparison with the national surveys mentioned, the scope is also much smaller: only a few questions about one specific construct, in this case charitable behaviour, as compared with over 200 questions on multiple subjects.

The similarity between the South Australian survey and the ESS is the complementary use of the instrument developed by Shalom Schwartz, specifically for inclusion in the ESS, to collect data on personal values: the 21 item Profile Values Questionnaire (PVQ). A detailed description of the process that led to the choice of this instrument and its adoption by the ESS Organisation is in Schwartz (2003), where it is stated that the survey should only take 5-6 minutes to complete (Schwartz, 2003, p. 274). It is included with 9 additional questions in a supplementary questionnaire that should take about 10 minutes to administer at the end of an interview expected to take 50 minutes when conducted in English (ESS, 2013, p. 18). The specifications allow for the supplementary questionnaire to be left instead with the respondent for self-administration, but either method must be used exclusively (ESS, 2013, p. 19). For the South Australian survey the PVQ was complemented by 21 questions about the respondent's demographics and attitudes towards charitable behaviour. The resulting one page questionnaire, double sided, is therefore similar to an ESS supplementary questionnaire in size and expected time of completion.

4.4 Selection of an effective survey option

It was quickly established that the cost of a survey of the required magnitude based on the identification of each sample member and repeated contacts, whatever the contact medium, be it personal interview, mail, telephone, or online, would have exceeded the resources available. Relying on the electoral roll, as other Australian social surveys do, also

involves coverage problems. The electoral roll includes 92.8% of the Australian population of age 18 and above (AEC, 2013). To allow comparisons with the ESS the target population is people aged 15 to 90: all people aged 15, 16 and 17 are also excluded by the electoral roll.

These considerations lead to the adoption of an effective solution that has recently become available with advances in computer technologies: address based sampling, also known by its acronym, ABS. In this context ABS stands for Australian Bureau of Statistics, therefore the name of the sampling technique will not be abbreviated. Dillman, Smyth and Christian (2014) suggest that this method is beneficial from a total survey error perspective and suitable to the current environment of dramatically falling response rates (pp. 9-10), and illustrate its advantages and limitations with particular reference to the United States (pp. 65-66). In Australia it is even more effective because of the public availability of costantly updated lists of residences in each postcode, as separated from business addresses, that can be matched to population census data. Australia Post (auspost.com.au) provides on its website a list of residences by locality name which is updated every fortnight (Table 4.1).

Table 4.1

Extract of the file "delivery_area_SA_locality_04aug2014"

Seq. No.	***Postcode***	***Locality Name***	***Private Street***	***Private Road***	***Sum***
1	5000	ADELAIDE - 5000	2722	0	2722
2	5006	NORTH ADELAIDE - 5006	1276	0	1276
…..					
961	5732	COPLEY - 5732	0	1	1
…..					

In consideration of the departure from the best practice survey design, particular attention was given to the four cornerstones of quality surveys (Dillman et al., 2014), that is the techniques used to reduce the effects of the four sources of potential error intrinsic to any survey.

4.4.1 Coverage error

The delivery area identified by the postcode is the smallest practical cluster, one respondent for each individual residence is the sample unit. There could be small

discrepancies between the residences actually covered by the postal runs and the postcodes selected but these do not affect the randomness of the sample. Besides being irrelevant in this respect, they also allow the broadest coverage while overcoming the issue of anonymity in the country delivery areas with only one residential address. By including all residential addresses, only a very small number of homeless people has zero chance of selection.

4.4.2 Sampling error

Sampling error is mainly determined by the design of the sampling procedure and the size of the sample obtained. Producing a probability sample by clustering and then random sampling the clusters tends to increase sampling error. For example, to better estimate the expected response rate, consideration needs to be given to the number of randomly selected locations with a high density of holiday houses occupied only in certain periods of the year. In households with more than one person over 15, a possible source of sampling error with the bulk mailing method is that the mail opener might not be interested in responding and might, even inadvertently, not give another eligible person in the household a chance to respond. A possible design improvement could be to add to the explanatory letter a request that the questionnaire be filled by the person in the house who has had the latest birthday. The literature, however, is inconclusive about the actual usefulness of such a request.

Given the small size of the South Australian population and its concentration in the metropolitan area, the negative effect of clustering on the precision of the sample is in large extent counteracted by a stratification based on socio-economic status, the major potential source of correlation within each cluster. To help inform this process, the ABS (www.abs.gov.au) provides an index of relative socio-economic disadvantage (report code 2033.0.55.001, table 3) and the number of people in each postal area. It is therefore a simple matter to separate the metropolitan postcodes from non-metropolitan ones and assign to each of them the appropriate socio-economic status (SES) code.

On the basis of the known results of similar surveys, a return rate of about 6% was expected. The target number of questionnaires (N = 30,000) was calculated conservatively by applying a proportionally lower expected return rate in the lower SES quintiles (4% from strata 1 and 2, 5% from strata 3 and 6% from strata 4 and 5), which would have produced an

expected return of at least 1500 completed questionnaires and a sampling error exceeding ESS standards for countries of any size . It was also expected that the return rate from the non-metropolitan areas would be higher, so this consideration was applied when determining the final cluster for each stratum in the random selection process.

A computer generated list of random numbers between 1 and 1245, the number of postal delivery areas in South Australia at the time of the selection, was used to allocate sequentially the areas to each stratum until the number of residences covered was close to the target number based on the sample to population ratio. The decision to include or exclude the last selection for each stratum was based on the closeness of the final total to the target total of 30,000. The result of this process is depicted in table 4.2.

Table 4.2

Stratification of the sample by socio-economic status of the delivery area

	SES1	SES2	SES3	SES4	SES5	TOTAL
Metropolitan (17 suburbs)	4604	5643	4398	3510	3721	21876 (72.5%)
Non-metro (25 towns)	2100	1965	1572	1293	1361	8291 (27.5%)
Total sample	6704	7608	5970	4803	5082	30167

4.4.3 Nonresponse error

The main disadvantage of the chosen method is that it implies a low response rate. It is true that increasing the response rate lowers the risk of nonresponse bias but a higher response rate does not ensure that any such bias would be smaller than it would be if the response rate were lower (Schouten, Cobben & Bethlehem, 2009). Nonresponse error means that there are significative differences in the items of interest between the respondents and the non-respondents, and the amount of bias can be different for each item. In this case it is conceivable that only people with strong views about charity, either positive or negative, would have chosen to respond. The general nature of the topic and the variety of opinions on it would suggest, however, that the differences with the population may not be as significative as they would be if the topic were more discriminatory.

The usual strategies for minimising this risk are applied at the stage of designing questions and questionnaires and implementing procedures (Dillman et al., 2014). Once

chosen the anonymous mailing method, no further strategies for increasing the response rate by means of incentives and remainders were possible. The design of the questionnaire (displayed in Appendix 1) maximised the conciseness of presentation by having the 21 questions about the respondent's demographics and attitudes towards charitable behaviour on the front of the page and the PVQ at the back. By minimising the issue of reluctance to answer potentially embarrassing questions, the anonymity of the respondents also reduced the need to apply strategies to improve the willingness to respond, besides the essential one of expressing questions in a clear and polite way.

The only modification required for the PVQ questions, common to various other surveys, including the WVS, was the avoidance of gendered pronouns. In this case the determining factor was the impossibility to know in advance the sex of the respondent but a reason often given prominence in justifying this choice is to avoid making assumptions on the gender choice of the respondent.

4.4.4 Measurement error

The essential design feature of any survey question is that it must measure accurately the concept of interest. Whether common method variance (CMV), that is the variance caused by the measurement method rather than by the constructs being measured, is indeed one of the main sources of measurement error as stated by Podsakoff, MacKenzie, Lee and Podsakoff (2003) is controversial. Spector (2006), as quoted by Richardson, Simmering and Sturman (2009), deems it a misunderstanding. Dillman et al. (2014) do not mention CMV at all but discuss some of the potential sources of measurement error that Podsakoff et al. list as sources of common method bias. The more generic term of "method effect" used by Podsakoff et al. (2003) to create a taxonomy of potential sources provides a useful framework for their assessment and suggestion of ex-ante remedies, as also advocated by Dillman et al. (2014). Richardson et al. suggest that considering the possibility of CMV and attempting its detection and correction with post hoc statistical techniques, especially the confirmatory factor analysis (CFA) marker technique, is desirable to avoid making decisions based on a preconceived perspective.

The choice of a widely used, analysed and discussed existing questionnaire for the collection of personal value preferences implied that item characteristics, that is the

manner in which items are presented, and item context effects, that is the relationship of each item with the other items included in the questionnaire, were predetermined as effects identical to those considered in any study that has used data collected by means of the PVQ. Another context effect, however, exists in relation to the presentation of the PVQ in the context of a survey with a specific focus, charitable behaviour, as compared with more generic surveys with a broad social focus.

Any further issues should only be related to the influence of the method on the respondent as regards two specific common rater effects: social desirability and unwillingly fostering some implicit theories/illusory correlations. It is known that the presence of an interviewer does affect responses in these respects. While some amount of social desirability bias cannot be excluded even in conditions of anonymity, self-administration ensures that it remains at the level of self-deception, because nobody will ever know who the respondent is. In these circumstances, the primary consideration was only the clarity of expression.

One further advantage of anonymity was the willingness of respondents to scribble comments on the questionnaire, which highlighted a possible source of confusion. One respondent was confusing “rating” with “ranking” and interpreted the request to rate nine charity purposes on a scale from 0 to 9 as a request to rank the nine items from 1 to 9.

4.5 Sampling Procedure

The questionnaires sent to all the residences included in each one of the randomly selected suburbs and towns were printed double sided on one A4 sheet, manually stamped with the appropriate postcode, and sent by bulk mailing “to the householder”. Included with the questionnaire were a reply paid envelope addressed to the University of Adelaide and a covering letter asking for the questionnaire to be completed and returned within a month. Many continued to arrive in the following month and were accepted. A few arrived much later and were discarded to avoid issues of timing inconsistency. Sending a reminder would have required repeating the same mailing to all the residences included in the sample: while possible, it was not feasible. It would have doubled the cost for a presumably marginal increase in responses and checking that the same people did not answer twice would have been impossible.

4.6 Data cleaning and sample analysis

A total of 1989 responses, a better than expected response rate of 6.6%, were received. The expected self-selection bias favouring older people, females and country residents (Eaker, Bergström, Bergström, Adami, & Nyren, 1998) was confirmed. Rather unexpected, however, was the magnitude of the gender bias. Female responses outnumbered male responses by a ratio of 1.8 to 1. Of these responses, 24 were discarded because the responses to the questions added to the PVQ were confused, suggesting a lack of seriousness or understanding, as in the case of ranking mentioned above. Fortyone were returned blank, a few with disparaging comments on the usefulness of the purpose, many because of a specific incident that highlighted a risk of clustering with address based sampling: included in one postal run were shelter homes for mentally retarded adults. The manager of the shelter informed the researcher by telephone that some residents wanted to show goodwill but felt unable to respond appropriately. Fifty three were excluded on the basis of the filtering criteria described below for the PVQ, leaving a clean data set of 1871 records.

Schwartz (2005) indicates that responses that are too indiscriminate, that is 16 or more questions of the PVQ have the same answer, or too incomplete, because five or more answers are missing, should be excluded because of their potential for distorting the results. Further filtering was based on the stricter criteria used by a study that was meant to be replicated using the data obtained by means of this survey (Verkasalo et al., 2009): age not stated or more than two answers missing.

There were also six otherwise valid responses where the sex of the respondent was omitted or, in one case, indicated as “other”. The most likely interpretation remains that this respondent was actually referring to gender identity rather than biological sex. Although registration as “unspecified sex” is now legally allowed, the available census data do not yet reflect this reality. The net sample selected for comparison with census data was therefore N = 1865.

Schwartz (2005) indicated that initially all value items of the 21 items PVQ were coded with 1 representing “very much like me” but agreed that it is more intuitive and more useful to use the largest number for “very much”, the way it was used for the previous 40

items version of the PVQ (Schwartz et al., 2012). This study applied the coding from 1 ("Not like me at all") to 6 ("Very much like me") as used in other studies where it was indicated that it had been reversed, e.g. Hinz et al. (2005), including one in particular (Verkasalo et al., 2009) that was relevant for the planned analyses. No suggestion was found in the literature that the reversal had any influence on the analysis. In the few cases were two boxes had been ticked for one item, if they were adjacent they were interpreted as a way of expressing a half way score, so the score more similar to the score given to the other item measuring the same value was entered. If they were not adjacent they were interpreted as erroneous or indecisive and no score was entered.

4.7 Alignment with census data

The level of response experienced with address based sampling is generally low even with appropriate design features. A common way to deal with it is poststratification on the basis of a reliable external source, in most instances the latest available census of the population. To account for gender and age influences, the combination of these variables can be used to identify domains of the sample for which the equivalent census data are available (ABS 3101.0). A cross tabulation is sufficient to identify the correct sample to population ratios (table 4.3).

Table 4.3

Cross tabulation by age and sex, South Australia, ABS data 2013.

Age group	*Population*	*M %*	*F%*	*X%*	*Sample*	*Sample%*	
15-29	171263	0.2532		0.1246	49	0.026	
	163117		0.2335	0.1186	142		0.076
30-44	163845	0.2422		0.1192	109	0.058	
	162774		0.2330	0.1184	241		0.129
45-59	166174	0.2457		0.1208	151	0.082	
	169893		0.2432	0.1236	354		0.190
60-74	120982	0.1789		0.0880	278	0.150	
	127618		0.1827	0.0928	381		0.204
75+	54120	0.0800		0.0394	81	0.043	
	75261		0.1077	0.0547	79		0.042
TOTAL	**1375047**				1865		
Male	676384	0.4919				0.359	
Female	698663		0.5081				0.641

The response by SES area was more as predicted and provided close to proportional sampling in all domains except the first metropolitan quintile, which was rather under-represented, as shown in table 4.4. This confirmed that the initial stratification had indeed produced an appropriate coverage of all the State.

Indirect information on the levels of education was also available from the 2011 census. The total percentage of the population aged 15 years and over with post school qualifications was 51.9%. For these, a breakdown by age and sex was also available from the same source, which allowed the construction of the following summary table (Table 4.5). University educated respondents are widely overrepresented in the sample.

Table 4.4

Cross tabulation by location and SES

	Population %		***Sample***		***Sample***	
Quintile	*Metro*	*Non-M*	*Metro*	*Non-M*	*% M*	*% non-M*
First	0.148	0.052	133	70	0.07	0.04
Second	0.148	0.052	310	117	0.17	0.06
Third	0.148	0.052	323	123	0.17	0.07
Fourth	0.148	0.052	239	166	0.13	0.09
Fifth	0.148	0.052	297	87	0.16	0.05
TOTAL	0.740	0.260	1302	563	0.70	0.30

Table 4.5

Cross tabulation by level of education and sex

	Population			*Sample*			*Sample %*		
	M	*F*	*Total*	*M*	*F*	*Total*	*M*	*F*	*Total*
Bachelor degree and above	8.73	10.94	19.67	281	525	806	15.07	28.15	43.22
Certificate – diploma	18.79	13.44	32.23	185	269	454	9.92	14.42	24.34
School up to year 12	24.05	24.05	48.10	202	403	605	10.83	21.61	32.44

Two other demographic variables were collected: language spoken at home and religious attendance. The 2011 census indicated that the percentage of South Australian

population speaking a language other than English at home was 14.4%. Among the respondents, 109 or 5.8% identified themselves in this way.

The questionnaire asked the frequency of religious attendance (never, rarely, frequently) as a proxy for commitment to religious belief. Less than 1% (16) declined to answer, which is further indication of the advantage of anonymity when asking sensitive questions. In the 2011 census 8.9% South Australians declined to answer and 28.1% stated that they were not religious: in total, 37% non-religious or unidentified and 63% religious. (Commonwealth of Australia, 2014, pp.117-118). The respondents were 40% not practising, assumed for this purpose to correspond to the above 37% in terms of stated belief, and 60% rarely or frequently practising and therefore "religious".

Whether it is appropriate using weights to enhance the representativeness of a sample with these characteristics is questionable. As explained by Peck (2011), an appropriate technique for weighting data obtained with deliberate oversampling to correct for non-representativeness is to convert the joint distributions available to one dimension and "rake", that is calculate weights in function of marginal values only, using these together with the marginal distributions. This is an application of the theory of raking, also known as rim weighting, which was developed by Deming and Stephan (1940).

There are disadvantages with this technique, however. It is generally accepted that producing valid inferential statistics using poststratification-weighted data is problematic. By using only some marginal values, rim weighting could exacerbate differences between the sample and the population on relevant characteristics that are not included in the calculation of the weights. Given that it is considered inappropriate to use matrices where a cell includes fewer than 50 respondents to avoid extreme weights leading to undesirably high design effects, the number of usable variables is quite restricted by the size of the sample. The rim weighting procedure adopted by the WVS, for example, (WVS Technical Report) uses only Age by Education, Sex, and State/Territory Population. Even so, with only 1477 responses some of the cells contained an inadequate number of respondents. Australian National University researchers have applied weights effectively to larger samples (Butterworth, Olesen, Leach & Jacomb, 2010) but this technique is not used for AuSSA samples.

Like the WVS, however, the South Australian sample was highly skewed, which suggested the need for adjustment. It was then deemed preferable (Kish, 1990) to adopt an approach based on the random elimination of oversampled items. Knowing that the minimum effective size of the sample required by ESS standards for comparison with European data is 800 cases for a population of fewer than two million people, an aligned sample of this size was extracted from the full sample of 1865 responses and a comparison between the two was conducted to assess potential biases.

The variables used for the alignment must be relevant to the prediction of the survey outcomes. There is a vast literature describing the influence on personal values of age, gender, education, cultural background and religiosity. Table 4.6 displays the characteristics of the aligned subsample.

Table 4.6

Subsample aligned with census by means of random elimination of oversampled items

	Population	*Full sample*		*Subsample*	
	%	*N*	*%*	*N*	*%*
Sex					
Female	50.81%	1197	64.1%	406	50.81%
Male	49.19%	668	35.9%	394	49.19%
Age groups					
15-29	24.32%	191	10.24%	191	23.87%
30-44	23.75%	350	18.77%	194	24.25%
45-59	24.44%	505	27.08%	195	24.44%
60-74	18.08%	659	35.34%	145	18.08%
75+	9.41%	160	8.58%	75	9.41%
Education					
University	19.67%	806	43.22%	205	25.62%
Non-university	80.33%	1059	56.78%	595	74.38%
Language at home					
English	85.6%	1756	94.2%	691	86.4%
Not English	14.4%	109	5.8%	109	13.6%
Religion					
Practising	63%	1119	60%	504	63%
Not practising	37%	746	40%	296	37%

All respondents of age under 30 and those not speaking English at home were selected because their number closely matched the subsample to population ratio. The number of respondents in the other categories was reduced by random selection until the correct ratio was achieved.

4.8 Measures

4.8.1 Charitable purposes

At the time of establishing the scope of this research, Australia was in the process of reforming the charity sector. Until January 1, 2014, when the Commonwealth's Charities Act 2013 came into effect, there was no statutory definition of the legal concept of "charity". The Australian courts were still applying a definition developed in English common law and based on the Preamble of the *Statute of Charitable Uses*, a law enacted in 1601 by Queen Elizabeth I. The main development since then had been in 1891, when the House of Lords in the United Kingdom accepted Lord Macnaghten's suggestion that charitable purposes were the relief of poverty, the advancement of education and religion, and anything else that could be demonstrated to benefit the community. (Martin, 2015).

Sections 5, 6, 11 and 12 of the Charities Act 2013 establish that, to be a charity, an organisation must not be for profit, an individual, a political party or a government entity, and all its purposes must be charitable and for the public benefit. The definition of charitable purposes is in section 12 and additional explanations are in sections 14 to 17. Transitional provisions ensure that what was deemed charitable in common law continues to be so under the Act, although new rules for the determination of what is for the public benefit may apply. A substantial amount of detail expanded Lord Macnaghten's "anything else" category, but the advancement of education and the advancement of religion remained as largely self-evident statements always presumed to be for the public benefit.

The main survey conducted at the end of 2014 included nine main purposes that reflected the updated definitions established by the Act. The respondents were asked to rate their assessment of each one of them on a scale from zero = should not be allowed charity status to nine = of the highest importance. By indicating their level of approval the respondents not only provided data for an analysis of the population's attitude towards the new legislation, they indirectly provided some indication of the type of charities they were

most likely to support. To complement this summary assessment, the respondents were also asked to indicate, on a Likert scale from 1 = completely unaware to 5 = thoroughly informed, whether they did seek information about the efficient use of money by the organisations they supported, and whether this did really matter (Yes/No). These questions provided the elements for developing a specific Australian scale for the measure of attitudes towards charitable organisations, as distinguished from attitudes towards helping people, akin to the scales developed and validated in the USA by Webb, Green and Brashear (2000). Further analysis to develop and validate the scale was not conducted, however, and the information gathered was used in the context of this research only as background for the interpretation of findings.

4.8.2 Charitable contribution

People donate not only money, or goods with a monetary value determined by the market, they also contribute to charity by means of voluntary work, that is, by donating their time. Asking how much money the participant donated for charitable purposes, either tax deductible or not, was straightforward and presumably honestly answered, given the absolute anonymity of the survey. Tax deductible contributions could then be discounted by the income tax rate levied on the bracket including the income declared by the participant.

The convertibility into money of time donations, on the other hand, is a more complex proposition. It has long been known that it is strongly influenced by social norms and personal values, and recent studies demonstrate that most people underestimate the value to themselves of their work in comparison to cash (Ellingsen & Johannesson, 2009). This would appear even more clearly when voluntary work is considered, given than it always includes a more direct social satisfaction element. To have as comprehensive a picture as possible, the participants were asked to list hours worked in different ways that could be less easily recalled, besides the direct work for charitable organisations. This is common practice in surveys with descriptive aims not related directly to established occupational classifications. Its weakness is that it constrains a rigorous application of the estimation methodology recommended by the Manual on the Measurement of Volunteer Work issued in 2011 by the International Labour Organisation (ILO), the “replacement cost approach” (ILO, 2011, pp. 36-37).

Another main approach, the “opportunity cost approach”, measures volunteer work from the volunteers’ perspective: what they would earn in their paid job. It was dismissed by the ILO for the obvious reason that turning sausages is not more valuable if done by a highly paid professional, but still has a value even if the said professional considers it leisure, that is, with zero economic value from a personal point of view. The replacement cost approach is preferable because it attempts to measure the cost saved by the recipient in obtaining the service and, indirectly, the value to society of the service provided at zero cost. Even with this method, however, there are obvious limitations: the skill and productivity of a volunteer are seldom equivalent or better than those of an experienced worker, therefore various discount methods have been devised (ILO, 2011, p. 37) to account for the quality difference.

Due to all these difficulties and the minimum amount of information collected with the survey, the calculation of the contributed amount was not expected to have a high level of accuracy. Provided that a reasonable level of face validity of the formula used could be achieved, its consistent application to all respondents was deemed to give a sufficient indication of the generosity of each participant relative to all other participants regardless of the accuracy of the absolute value of the contribution.

In 2009 the Australian Bureau of Statistics developed a non-profit institutions (NPI) satellite account for Australia for the year 2006-07 using concepts and methods described in the *United Nations Handbook on Nonprofit Institutions in the System of National Accounts* (Australian Bureau of Statistics, 2009). The estimated hourly rate used for all volunteer activities was a weighted average wage of approximately $23 ($14.6 billion for 623 million hours: ABS, 2009, p. 4). The definition of NPI includes all not for profit organisations, even highly paying institutions like credit unions, not only charities. This suggests that for the purpose of assessing charitable behaviour such an estimate would be overstating the economic value of the essentially low pay caring and hospitality jobs typical of the charity sector. The social justice issue whether such jobs should be paid better is not relevant in this context.

For consistency with this precedent, it was deemed appropriate to use a similar rate with some adjustment for inflation, moderated by the consideration above: $24 an hour for

simplicity. The respondents were asked to indicate the hours worked in the past year in each one of six common settings. The full rate was applied to direct work for charitable organisations and community work organised through local councils, schools and churches. In the absence of more specific indicators, it was also applied to activities of a more organisational nature, such as contributing to the governance of charities or speaking on their behalf. In any case, the chosen wage, being a constant, does not affect the relativity of time donations. It does affect the comparison with money donations and the relative contribution as a percentage of income and, for this reason, sensitivity analyses could be conducted to establish how a range of assumptions on the wage level and discount methods would affect the outcome.

Caring for sick and elderly people outside of the organised circumstances covered by the previous categories was deemed to be mostly within the family, and therefore not voluntary work as defined by the ILO (2011, p. 17). This assessment was supported by notes of the respondents (e.g. “half time carer for partially disabled spouse”) and the advanced age of the respondents in many instances. It is likely, however, that some respondents did indeed provide such care in the community as individuals. How many of these there were in proportion of the total was unknown and impractical to establish within the survey, but anecdotal evidence seems to suggest that this facet of caring for thy neighbour is not uncommon, especially in country towns. To recognise it as a charitable contribution in the wider context of prosocial behaviour, for exceeding society’s expectations of caring, these hours were discounted by 50%, that is to say that, in the absence of an ILO approved discount method applicable to these circumstances, an arbitrary assessment was made that only half the hours were not eligible according to ILO definitions.. It seemed then appropriate to value hours worked for service club fundraising at the same level, given the mostly social nature of these activities.

In summary, for each respondent, the amount of money donations was calculated by adding the non-deductible amount to the tax deductible amount discounted by the applicable income tax rate for the 2014/2015 year; the economic value of voluntary hours worked was calculated by halving the hours for individual caring and club fundraising, adding the hours worked in all settings and multiplying the sum by the hourly rate of $24; the construct of “charitable contribution” could then be operationalised by adding time and

money donations and dividing the total by the declared income. Separate analyses for either component were also conducted when appropriate to highlight differences.

4.8.3 Personal values

Until recently the Schwartz theory identified ten basic values: Self-Direction, Stimulation, Hedonism, Achievement, Power, Security, Conformity, Tradition, Benevolence, and Universalism. Further studies identified larger numbers of more narrowly defined values hierarchically subordinate to the original ten. The identification of fifteen values seems to provide a useful discrimination.

Using the PVQ21 instrument to measure both the original ten constructs and the more narrowly defined fifteen values of the revised Theory is possible and expedient, because its most concise formulation is applicable to both. In the first configuration all values are measured by two questions except Universalism, which is measured by three. In the second, Power, Hedonism, Stimulation, Benevolence, Conformity and the concern for people aspect of Universalism are measured by two questions. All the other more narrowly defined values are measured by only one question.

Once established that the sample of value preferences of South Australians collected by means of this instrument is consistent with the theoretical motivational structure and broadly similar in its representation of sex, age and education characteristics to the European samples collected with the same instrument within the ESS, it is possible to use it to compute the Self-Transcendence – Self-Enhancement and the Conservation – Openness to Change value dimensions with the equations developed by Verkasalo et al. (2009) using a large composite sample of value preferences collected with the PVQ 21 in European countries. Having extracted three factors with maximum likelihood factor analysis, they had demonstrated that the first factor reflected response tendency and could be eliminated by ipsatisation, and the other two factors corresponded to the two hypothesised dimensions. They had scaled the least-square regression weights so obtained to produce variables with mean = 100 and standard deviation = 10. Individual scores on the two value dimensions can then be calculated as a linear combination, by applying these weights to the item responses on the 1 to 6 scale and adding the constant (Verkasalo et al., 2009, Table 2, p. 785).

While accepting that there is some trade-off between accuracy and parsimony, Verkasalo et al. (2009, p. 870) suggest that the advantages: reliability of the two dimensions being acceptable whereas the reliability of any of the ten values is very low, control of the response bias, and ease of graphical presentation, justify the usefulness of the method. This is particularly true when it suits best the aims of the research, as it is the case when binary correlation is used. A relevant example is the study by Lönnqvist, Leikas and Verkasalo (2018), which uses this method to predict change in new parents' behaviour along the Conservation – Openness to Change value dimension.

Chapter 5

Survey results – representativeness analysis

5.0 Overview

This chapter summarises results from the survey study with a particular focus on the extent to how they compare with previous studies reported in the literature. It commences with an assessment of the representativeness of the sample calibrated to the South Australian population and a discussion of possible biases due to design effects. The analysis leading to the identification of some culturally specific and universal characteristics is then presented and discussed. The third part of the chapter provides an analysis of the structural characteristics of the Schwartz Value Theory and the extent to which South Australian values can be adequately described according to this theoretical structure.

5.1 Overall attitudes and values

The sample N = 800 calibrated to match the South Australian population on the basis of sex, age, education, cultural background and religiosity allowed a comparison with the full sample to identify biases possibly due to differences in these variables.

The preferences expressed by the respondents regarding the importance of the listed charity purposes and their own personal values are summarised in Table 5.1, which makes the assumption that the variables can be scored meaningfully as interval-level measures.

Overall, the comparison shows that the full sample and the subsample were generally similar in relation to their rating of activities deemed worthy of time and money donations. The only exceptions were for the advancement of education and religion (both higher in the subsample). These findings suggest that any demographic differences between the full sample and the subsample are unlikely to result in strongly biased attitudes towards charitable donations to other causes. The ranking was practically identical and confirms that people prefer to support Australian charities and medical research. On the other hand, statistically significant differences consistent with the age bias were observed in the rating of personal values, which suggests that overall the subsample is well matched to the full sample and fulfils its purpose of representing more adequately the population of the State.

Table 5.1

Descriptive statistics comparing the calibrated sample to the full sample – raw data

	Subsample N = 800		*Full sample N = 1865*		
Importance of charity purposes (0 to 9 scale)					
	M	*SD*	*M*	*SD*	*t (2-tailed)*
Advancement of education	5.97	2.79	5.79	2.88	**
Advancement of religion	2.49	2.90	2.21	2.81	***
Animal welfare	5.40	2.80	5.38	2.77	NS
Prevention of disease	7.33	2.11	7.25	2.17	NS
Harmful human behaviours	5.63	2.70	5.49	2.71	NS
Protection of the environment	6.77	2.24	6.76	2.26	NS
Disaster relief in Australia	7.30	2.02	7.33	2.02	NS
Relief of poverty in Australia	7.38	2.02	7.44	2.02	NS
Relief of poverty abroad	5.80	2.65	5.93	2.66	NS
Personal values (1 to 6 scale)	*M*	*SD*	*M*	*SD*	*t (2-tailed)*
Achievement	3.44	1.27	3.20	1.24	***
Benevolence	4.83	0.85	4.82	0.86	NS
Conformity	3.79	1.17	3.75	1.19	***
Hedonism	3.66	1.17	3.42	1.16	***
Power	2.93	1.00	2.77	0.98	***
Self-Direction	4.60	0.95	4.58	0.94	NS
Security	4.49	1.09	4.40	1.13	***
Stimulation	3.53	1.17	3.43	1.17	***
Tradition	4.06	1.01	3.97	1.04	***
Universalism	4.77	0.79	4.82	0.80	**

NOTE: *** = p<.001, ** = p<.01, * = p<.05, NS = Not Significant.
This convention is used in all subsequent tables.

To use these variables in the analyses that follow, the value ratings were ipsatised (Hicks, 1970), that is, standardised by subtracting for each individual the mean response to all instrument items from his or her response to each item (Schwartz, 1992, 2012). This is necessary to eliminate the influence of individual differences in the interpretation of the response scale. At an individual level, because of the ordinal nature of the response scales used in the measurement instruments, it is the importance of each value in relation to all

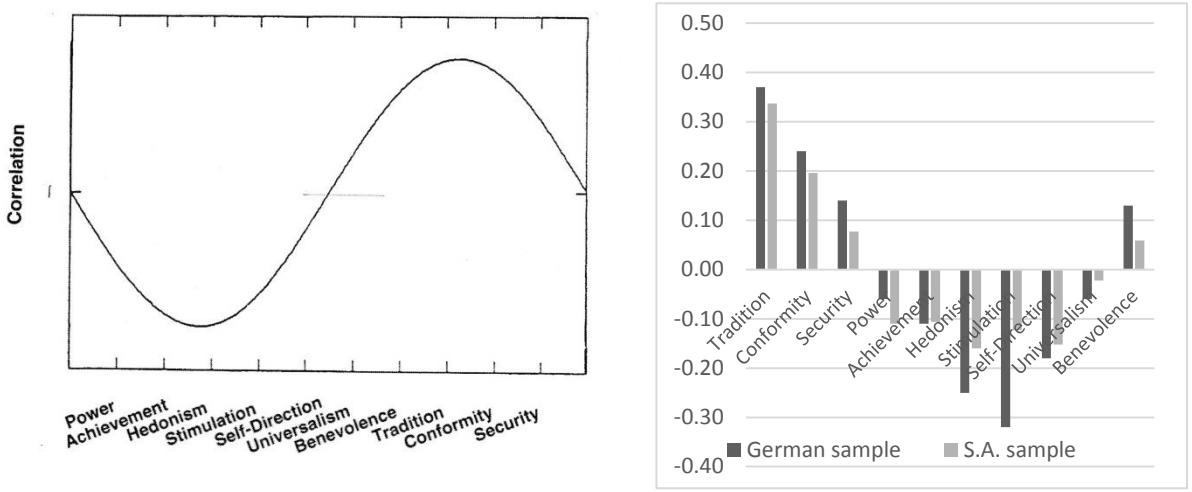
the others that identifies preference: if all answers are the same it would not matter if they are the lowest or the highest rating, the respondent would have expressed no preference for any item. Ipsatisation eliminates the response tendency factor and is integral to the Theory, but is an acknowledged weakness because it allows for the possibility of removing meaningful differences in the data (Fischer, 2004; Fischer & Milfont, 2010).

5.2 Correlation between religion and tradition

The choice of using the frequency of attendance to religious services as an appropriate measurement of "religiosity" intended as religious commitment, at least to its social aspects if not necessarily to its higher spiritual ideals, was justified on the basis that the same choice was made by Schwartz and Huismans, (1995). In their Second Study they tested the robustness of the basic pattern of relations between personal values and religiosity in a sample of similar size from the former West Germany (p. 100). The pattern was developed assessing the motivational power of each value towards the religious ideals indicated by theological, sociological and psychological analyses (p. 90) and resulted in the predicted order of correlations shown in Figure 5.1a. Tradition is the highest positively correlated; Conformity, Security together with Benevolence, and Universalism together with Power and Achievement follow in decreasing order, then Self-Direction, Hedonism, and Stimulation follow in increasingly negative correlations.

This pattern describes a 2π section of a quasi-sinusoid curve consistent with the premise of the circumplex structure of the motivational compatibilities and conflicts between values. The correlations with religiosity of the personal values expressed by the South Australian sample were calculated with the same method used for the German sample, Pearson's *r*. The correlation with Tradition can be seen as the zenith of a sinusoid curve, as expressed by Schwartz and Huismans (1995), or the beginning at π=0 of a cosine function as geometrically predictable and illustrated in Figure 5.1b.

Seven out of ten of the hypotheses supported by that study were also supported by the South Australian sample, as shown in Table 5.2. Spearman's rho with the hypothesised ranks was .95, which supports the hypothesis of fundamental equivalence of the theoretical structure of the two samples.



a) The hypothetical model of correlation with religiosity (Schwartz & Huismans, 1995)

b) Comparison of the South Australian sample with the German sample in Schwartz & Huismans (1995)

Figure 5.1 – Correlation of religiosity with value priorities

The more noticeable difference with the German sample was that the negative correlation with Stimulation was significantly lower, from r = -.320 to r = -.123. It could suggest that in the isolation of country South Australia going to church is a rather desirable opportunity for social interaction. All the negative correlations were in a narrow range, however, with the ranks from 6 to 10 being in the range between r = -.106 and r = -.160.

In the South Australian sample older people and females were largely over-represented. The analysis of the German sample (Schwartz & Huismans, 1995, Table 5) indicates a stronger negative correlation of religiosity with Self-Direction in these groups. It was therefore hypothesised that this correlation would be weaker in the calibrated sample extracted from the total South Australian sample. Table 5.2 shows that this hypothesis was supported.

Roccas and Elster (2014) summarised the findings of many studies conducted since the seminal work of Schwartz and Huismans, which were very consistent. They averaged the correlations of the 10 values with 28 measures of religiosity derived from 24 samples and produced a graph based on the graph obtained by Saroglou, Delpierre and Dernelle (2004), which shows that the correlations, reported in the last column of Table 5.2, are ranked almost exactly in the same order as in the whole South Australian sample.

The only difference, besides a negligible difference between Power and Achievement, was that the positive correlation with Benevolence shown in the graph of Roccas and Elster (2014) was noticeably higher than the correlation with Security. It was speculated that the South Australian participants, all "benevolent" by default, due to the willingness to participate in a "benevolence" survey, were more clearly differentiated by their age and attitude towards Security.

Table 5.2

Correlation of religiosity with value priorities

	Predicted Rank [a]		*German sample (N = 1,807)* [a]		*S.A. sample (N = 1,865)* [b]		*Calibrated S.A. sample (N=800)*		*Roccas & Elster,2014*	
			R	*Rank*	*R*	*Rank*	*R*	*Rank*	*R*	*Rank*
Power		5-7	-.06	6	-.110	7	-.149	8		6
Achievement		5-7	-.11	7	-.106	6	-.164	9		7
Hedonism	-ve	9	-.25	9	-.160	10	-.223	10	-.30	10
Stimulation	-ve	10	-.32	10	-.123	8	-.138	7		8
Self-Direction	-ve	8	-.18	8	-.152	9	-.098	6		9
Universalism		5-7	-.06	5	-.022 [NS]	5	-.002 [NS]	5		5
Benevolence	+ve	3-4	.13	4	.059	4	.047 [NS]	4		3
Tradition	+ve	1	.37	1	.337	1	.365	1	.35	1
Conformity	+ve	2	.24	2	.196	2	.275	2		2
Security	+ve	3.4	.14	3	.077	3	.092	3		4

NOTES*:* All correlations differ significantly from 0 (p <.01, one-tailed) except when indicated by [NS].

a) From Schwartz & Huismans, (1995)
b) Sample size varies slightly for each value because of missing data.

As already mentioned, the sample calibrated to represent the population was more conformist and traditionalist, therefore less dissimilar to the German sample in this respect. The resulting correlation range, although still not clearly showing a sinusoid shape in the negative section, was closer to it: the ranks from 6 to 10 were between r = - .098 and r = - .223. The rank of the positive correlations remained unchanged and in the theoretically hypothesised order, as it could be expected because of the rather tautological identification of religion as an expression of traditional values. The different ranking of the negative correlations, however, indicates some divergence from the theoretical explanation provided by Schwartz and Huismans (1995) of the potential strength of the association between each value and the religious ideals.

The German sample had been collected in 1990 and the South Australian sample in 2014. During the intervening quarter of a century there has been a substantial decrease in church attendance. While the attitude of older, less traditionalist people seems to have remained rather similar during this period, younger people need to be more self-directed and ideologically driven by tradition to keep their faith when many do not. As a consequence, self-enhancement values might be expected to fall lower in the ranked order.

The absolute alignment of the findings of Schwartz and Huismans (1995) with their hypotheses suggested that the convincing arguments used to establish the hypotheses were developed on the basis of the empirical data produced by the instruments used at the time. The recent reversal of the position of the Benevolence and Universalism value types in the circumplex, proposed on the basis of data obtained with the PVQ-R, (Schwartz et al., 2012) and confirmed later after reviewing the instrument (Schwartz et al., 2017) indicates that the instruments developed before it since 1992 almost inevitably led to obtain data ordered according to the structure originally described by the Theory. If the correct order is the one now being proposed by the author of the Theory, it is visually evident that putting the positive correlation with Benevolence before the negative correlation with Universalism reduces the similarity of the postulated approximate alignment with the cosine function, which must always exist if the circumplex structure exists. The informative value of this method is not in finding the expected sinusoid pattern, is in finding explanations for significant departures from the pattern due to the characteristics of the sample analysed.

Whether treating religiosity as a continuous variable may lead to unreliable results is not discussed by the authors. Some of the studies aggregated by Roccas and Elster (2014), e.g. Pepper, Jackson and Uzzell (2010), do treat religiosity as a categorical variable, but no criticism of Schwartz and Huismans (1995), and others who do not, has been found on this point. To some extent this is justifiable when large samples and a sufficient number of scale items are involved. Conducting both parametric and non-parametric tests on the South Australian sample found no difference in the significance and direction of associations and mostly marginal differences in their strength, with the exception of religiosity.

Having opted for only three broad categories of respondents as not religious, uncommitted or devout (1 = never attending, 2 = rarely, or 3 = at least monthly), non-

parametric analysis was deemed necessary. Schwartz & Huismans (1995, Study 2) measured religiosity with a similar four item scale where "rarely attending" was divided between two items: 2= on special occasions like weddings, and 3 = for religious events a few times a year. They then used it as a continuous variable with mean = 2.54 and *SD* = .98 (Schwartz & Huismans, 1995, p. 101). Whether four items are sufficient to approximate continuity is debatable but condensing this scale for practicality did undeniably reduce its meaningfulness to some extent. It could be argued, however, that going to a friend's wedding or funeral has no bearing at all on a person's religiosity: even an avowed atheist would hardly refuse. Opportunities depending on the age group could be a more relevant factor than religiosity. Adding these people to those who attend only a couple of major religious festivals does confuse the meaning of the category but creates a clearer distinction between the uncommitted and the devout. One of the points on which Galen (2012) and Saroglou (2012) agree is that distinguishing these categories of religiosity and investigating their differences in prosociality is a worthy pursuit.

Religious economists (Brooks, 2004, 2005; Kortt, Steen & Sinnewe, 2017) rely on more detailed scales and mathematical transformations to represent these variables as continuous. Although more justifiable in terms of statistical interpretability, manipulating data in this manner requires caveats. For example, transforming a nine item scale of church attendance from "never" to "every day" into a continuous function of yearly equivalents might be appropriate (Kortt, Steen & Sinnewe, 2017), but then non-linear adjustments are introduced, as it is obvious that saying that a person who attends church every day is seven times more devout than a person who attends every Sunday is not really meaningful.

5.3 Influence of age on personal values

Studies quoted by Verkasalo et al. (2009) found monotonic age increase in the importance of Tradition, Conformity, Security and Universalism and monotonic decrease for Hedonism and Stimulation. By comparing the ipsatised mean of each age group's preference for each value, evidence was found to support all these hypotheses. It was also found that Power and Achievement display a pattern of monotonic age decrease. The results of this analysis are shown in Table 5.3. The positive numbers indicate that the respondents, on average, identify more with the measured personal value, the negative

numbers indicate the reverse. The larger the number, the larger the preference expressed. When the respondents are separated by sex and one group expresses constantly larger preferences for a particular personal value, the influence of gender on that value becomes apparent.

Table 5.3

Ipsatised mean value preferences by age group

Male	*PO*	*AC*	*HE*	*ST*	*SD*	*UN*	*BE*	*TR*	*CO*	*SE*
Age										
15-29	-0.77	0.07	-0.05	0.09	0.67	0.53	0.53	-0.38	-0.87	-0.08
30-44	-0.74	-0.28	-0.22	-0.37	0.57	0.70	0.64	-0.21	-0.45	0.03
45-59	-0.91	-0.62	-0.55	-0.42	0.71	0.70	0.68	0.07	-0.26	0.32
60-74	-1.18	-0.81	-0.66	-0.55	0.74	0.80	0.76	0.14	-0.07	0.50
75+	-1.21	-0.88	-0.76	-0.88	0.82	0.77	0.76	0.21	0.36	0.70
Monotone	-	-	-	-	No	+	+	+	+	+

Female	*PO*	*AC*	*HE*	*ST*	*SD*	*UN*	*BE*	*TR*	*CO*	*SE*
Age										
15-29	-1.10	-0.22	0.03	-0.19	0.54	0.68	0.81	-0.41	-0.59	0.11
30-44	-1.07	-0.46	-0.37	-0.46	0.44	0.71	0.87	-0.12	-0.31	0.38
45-59	-1.23	-0.98	-0.59	-0.63	0.51	1.03	1.01	0.02	-0.18	0.46
60-74	-1.46	-1.12	-0.78	-0.64	0.70	1.04	0.96	0.11	-0.12	0.67
75+	-1.64	-1.26	-0.78	-0.67	0.59	1.04	0.90	0.33	0.10	0.75
Monotone	-	-	-	-	No	+	No	+	+	+

There were two minor exceptions at the extremes of the age range, which would not have appeared if the age groups had been more coarsely defined. Males displayed a monotone increase in Universalism until age 75 and a marginal decrease (3%) thereafter. Both males and females under 30 had a marginally (3%) lower preference for Power than people over 30 but the preference decreased monotonically and substantially thereafter.

The additional finding that, with increasing age, both males and females display the largest monotonic decrease in the preference for Achievement is not surprising: it is quite consistent with the pattern displayed by the other self-enhancement values. That it was not previously found in the studies quoted could be due to particularities of the samples used. In the South Australian sample a possible explanation of the increased visibility of the pattern could be some self-selection bias. People interested in charitable behaviour as a way of feeling still valuable in their later years might be more likely to express less interest in self-enhancement values after realising that they did not achieve as much as they desired when young.

Only one value, Self-Direction, appeared to vary in relation to age. Both males and females rated it lower if they were between 30-44 years of age, which is a period of life during which social responsibilities become more important. Over 75, males appear to have a greater fear of anticipated incapacity and resolutely assert their desire to remain in control, whereas women appear to be accepting of changes in this variable. This interpretation is supported by the other gender difference displayed by the analysis, the progression of the preference for Benevolence.

It is known that during the course of a lifetime, women always rate themselves as more benevolent than men, as discussed in the next section. The preference for Benevolence, that is, the desire to preserve and enhance the welfare of people near to oneself, raises monotonically with age in males, but in females it was found to raise until the age of 60, then decrease. This finding was rather unexpected and justified a search for more corroborating evidence. To this purpose, the database provided by round 7 of the ESS conducted in 2014 was downloaded (http://www.europeansocialsurvey.org/data/), reverse coded for consistency, and used to calculate the ipsatised means by age group.

Table 5.4 shows that aggregated samples of 20688 females and 18234 males from 21 European countries, who answered at least 16 of the 21 items, display the same pattern, although with less marked differences. This pattern is therefore deemed to be a universal gender difference culturally enhanced in the Australian population. The higher ratings given by the Australian respondents suggest that some context effect could also be involved.

Table 5.4

Influence of age on the perceived importance of benevolence (ipsatised means by age group)

AGE	*15-29*	*30-44*	*45-59*	*60-74*	*75-90*
European females	0.71	0.76	0.84	0.84	0.83
Australian females	0.81	0.87	1.01	0.96	0.90
European males	0.55	0.58	0.66	0.66	0.72
Australian males	0.53	0.64	0.68	0.76	0.76

5.4 Gender differences in the importance of personal values

The question whether gender influenced the personal values identified by his theory was addressed by Shalom Schwartz in 2005 (Schwartz & Rubel, 2005). The methodology used in the First Study described in their paper was replicated by first establishing whether, as found in the European countries, there are no significant differences in how South Australian respondents of either sex understand each item of the 21 items PVQ.

Alpha reliability coefficients for the 10 values averaged .60 (.59 in Schwartz & Rubel, 2005), the lowest being, in both instances, for Tradition: .26 (.39). This is clear evidence that the original construct of Tradition was indeed a confluence of two more specific constructs, humility and the respect for customs, as later accepted (Vecchione, Schwartz, Caprara, Schoen, Cieciuch, Silvester, … Alessandri (2015).

To assess whether men and women understand the PVQ items in the same way, Schwartz and Rubel conducted a multidimensional scaling (MDS) analysis to compare the spatial representations of the items plotted separately for respondents of either sex. They state that the results were “virtually identical” (p.1013) but no plots nor details of the algorithms used were provided. It was therefore deemed appropriate to apply the method later recommended by Bilsky, Janik and Schwartz (2011), which is discussed in detail in the next section. The plots obtained were superimposed to visually determine the distances between the male and female locations of the 21 items (Figure 5.2). It can be seen that a few items are indeed in “virtually identical” positions, but the majority are distinctly separate. In particular, there is a noticeable distance as regards item 18: “it is important to me to be loyal to my friends. I want to devote myself to people close to me.”

Even larger is the distance between the male and female location of item 20: "Tradition is important to me. I try to follow the customs handed down by my religion or my family." Contrary to expectations, in the South Australian sample the women are less traditionalist than the men, as found with the following analysis. Furthermore, item 18 is much closer to item 20 in males than in females.

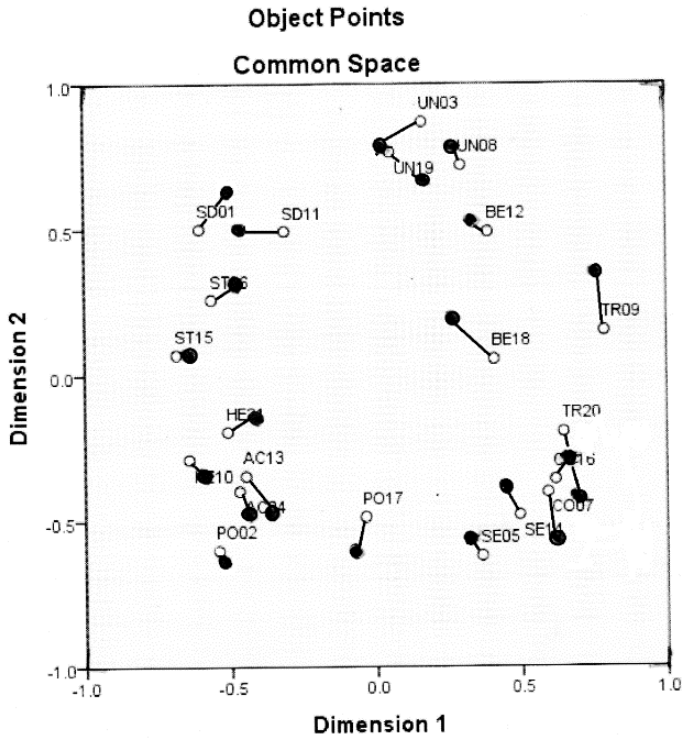


Figure 5.2 – Male (white dots) and female (black dots) item preferences

The effect size of the differences was calculated for each of the ten values with Cohen's *d*, (Cohen, 1988) and compared with the European average calculated by Schwartz and Rubel (2005). For simplicity, it was assumed that the methodological premises tested and found acceptable by Schwartz and Rubel would hold at a similar level and confirm that the interpretation of the items by either gender is essentially the same. The results indicated that this assumption was reasonable: nine of the ten preferences were found to be as expected, as shown in Table 5.5. The sign of *d* is determined by the order in which the sample means are compared. By starting with women, a preference by women has a positive sign, a preference by men has a negative sign.

Despite some male preference towards Hedonism and Stimulation and female preference towards Tradition, these differences and the neutrality towards Conformity were

not found to be significant. These findings are generally consistent with Schwartz and Rubel who stated (Schwartz & Rubel, 2005, p. 1014) that they also found that "despite the consistent direction of the sex differences […] their size was singularly unimpressive".

Table 5.5

Sex differences in value importance (Cohen's d) in Europe and South Australia

Value	*Europe* *	*SA*	*95% CL*		*Theoretical Preference*
Benevolence	.36	.30	.25	.33	Female – confirmed
Universalism	.26	.24	.20	.30	Female – confirmed
Self-Direction	- .10	-.16	-.10	-.21	Male – confirmed
Stimulation	- .14	-.06	-.12	.01	Male – confirmed (NS)
Hedonism	- .11	-.01	-.07	.06	Male – confirmed (NS)
Achievement	- .24	-.21	-.14	-.27	Male – confirmed
Power	- .29	-.33	-.26	-.37	Male – confirmed
Security	.20	.12	.07	.20	Female – confirmed
Conformity	.01	-.03	-.09	.05	Neutral – confirmed (NS)
Tradition	.15	-.05	-.11	.02	Female – denied (NS)

* From Schwartz & Rubel, 2005

5.5 Structural analysis

In 2011, Bilsky, Janik and Schwartz pointed out that a multitude of studies had been published about the structural model of the Schwartz Value Theory, but few were based on representative samples. By then the data collected by the ESS had become available for a more robust structural analysis, which they conducted using a theory based approach to multidimensional scaling. Their study was replicated by using the SPSS PROXSCAL ordinal MDS software, with the default ties and iteration criteria (up to 100 iterations performed until the difference in consecutive goodness-of-fit index values is less than 0.0001 and the stress value itself is smaller than 0.0001), to analyse the matrix of Pearson correlation coefficients between the 21 items of the PVQ. The starting configuration was the design matrix based on the Revised Schwartz Model calculated by them (Bilsky, Janik & Schwartz, 2011, Table 3, p. 766).

The measure of goodness of fit they chose, stress-1, was on average .118 for the 32 European countries they analysed. No explanation was given for preferring stress-1 to the Normalised Raw Stress index minimised by the PROXSCAL algorithm as a default, although it is known that stress-1 is often preferred because Kruskal (1964) provided some guidance on

the interpretation of this index : .20 poor, .10 fair, .05 good, .025 excellent fit (Borg & Groenen, 2005). For the South Australian sample stress-1 was remarkably similar, .121. This analysis produced the plot shown in Figure 5.3, which confirms consistency with the theoretical structure.

The location of item 9 offers an interesting insight. While question 20: “Tradition is important to me; I try to follow the customs handed down by my religion or my family.” is straightforward and appears where expected, question 9: “It is important to me to be humble and modest. I try not to draw attention to myself.” is evidently interpreted by South Australians as measuring a benevolent trait akin to being caring (question 12) and friendly (question 18). This confirms the need to separate the two constructs of modesty (item 9) and respect for customs (item 20), one of the refinements of the Theory developed by Vecchione et al. (2015).

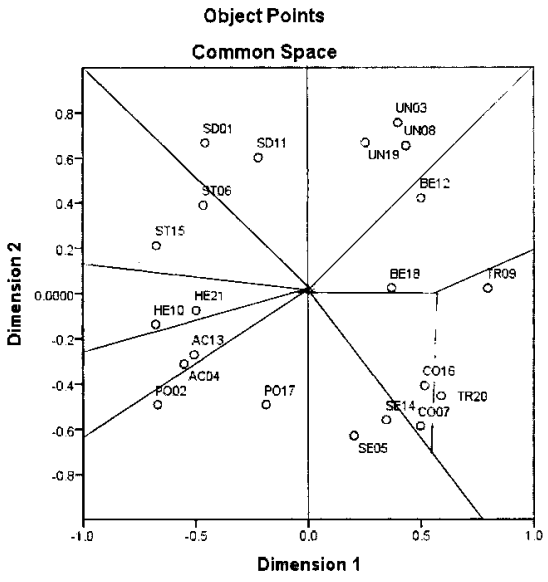


Figure 5.3 – Two-dimensional MDS of the South Australian values data 10 values configuration (Schwartz, 1992)

In this revised theory Power, Hedonism, Stimulation, Benevolence, and Conformity remain measured by the same two items. The concern for people aspect of Universalism is measured by item 3 and 8, while the concern for the environment is separately measured by item 19. Self-Direction is described as either a thought (item 1) or action construct (Item 11). Security is measured as either concern for one’s own (item 5) or the nation’s (item 14). Achievement is measured in terms of ambition (item 4) or success (item 13) but both are included in one section of the circumplex.

A design matrix based on 14 equal sections of the circumplex was constructed to represent the theoretical structure of 15 values of the revised Theory. Imposing this as a starting configuration for the MDS analysis produced the plot shown as Figure 5.4, which demonstrates that the South Australian data support the revised Theory as well.
The reversal of the positions of Self-Direction of thought and action and the increase of stress-1 to .122 are minor differences.

To confirm that the imposition of the theoretical structure does not produce artefactual results, Bilsky, Janik and Schwartz recommend checking that all other PROXSCAL starting configurations offered in SPSS (Simplex, Torgerson, multiple random starts) produce comparable fit levels. For the South Australian sample, stress-1 was .121 in all instances, with differences at the third decimal point rounding. It was found, however, that using squared Euclidean distances as dissimilarities, instead of Pearson correlations as similarities, PROXSCAL produced a much better fitting two-dimensional plot with stress-1 =.034 for the 10 values structure and .069 for the 15 values structure (Figure 5.5). While understanding that a better fit does not necessarily provide a better interpretation (Borg & Groenen, 2005), a disparity of this magnitude requires attention. Comparing Figure 5.4, which displays consistency with the theoretical structure, to Figure 5.5, which is obtained using distances as dissimilarities, a difference is clearly visible. In Figure 5.5 both personal and national Security are close to Benevolence, not to Power as predicted by the Theory.

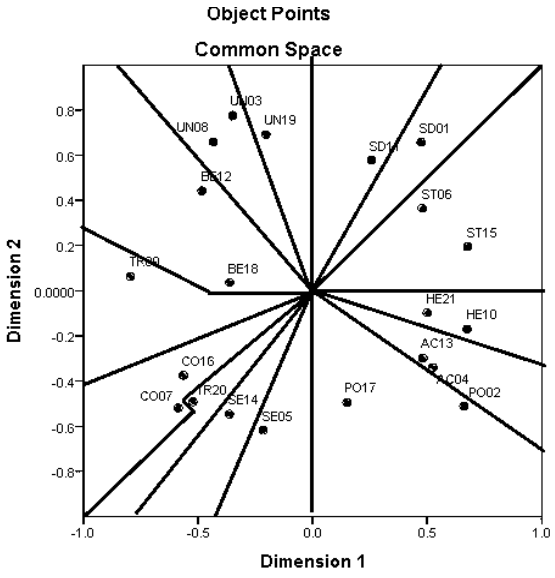


Figure 5.4 – Two-dimensional MDS of the South Australian values data 15 values configuration (Vecchione et al, 2015)

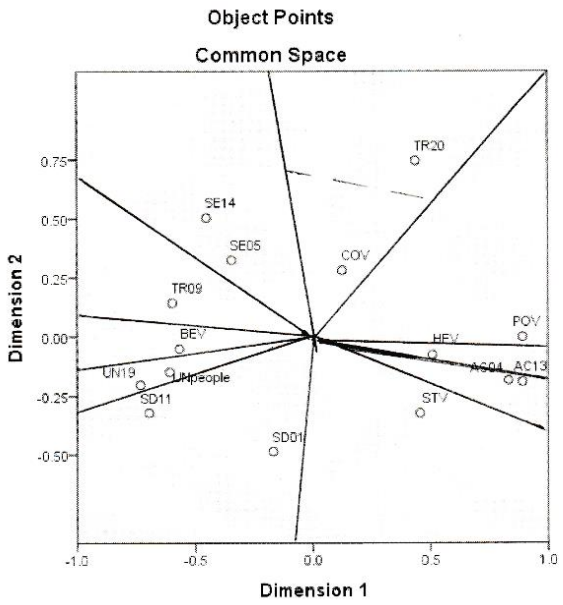


Figure 5.5 – Two-dimensional MDS of the South Australian values data using squared Euclidean distances as dissimilarities

To verify the hypothesis that this discrepancy is caused by the MDS approach, the analysis was replicated using the ESS file already mentioned. As it was the case for gender analysis, the hypothesis implies that the phenomenon being investigated transcends local cultures: therefore, the greater power of the aggregated sample is a desirable feature. The resulting representation has a stress-1 = .101 and is shown as Figure 5.6. The correlation of Security with Benevolence as opposed to Power is replicated and unequivocal.

As explained by Leydersdorff and Vaughan (2006), there is no need to apply a Pearson correlation to convert what is already a symmetrical proximity matrix, in our case the matrix obtained by establishing a priori the coordinates of the theoretical value points, because this is likely to distort the data. Their empirical example using the distances between ten American cities illustrates the point. This starting matrix, as Bilsky, Janik and Schwartz's, represents a two-dimensional map which is unambiguous and easy to verify.

Leydersdorff and Vaughan suggest that using the Pearson correlations instead of the distances distorts the representation and increases the stress. The purpose of MDS is to reduce the dimensions of the data and complex constructs cannot be easily represented in two dimensions. In these circumstances, as Bilsky, Janik and Schwartz also suggest, factor analysis might improve the understanding of the quality of the representation by allowing an algorithmic approach to study the quality of data reduction in more dimensions.

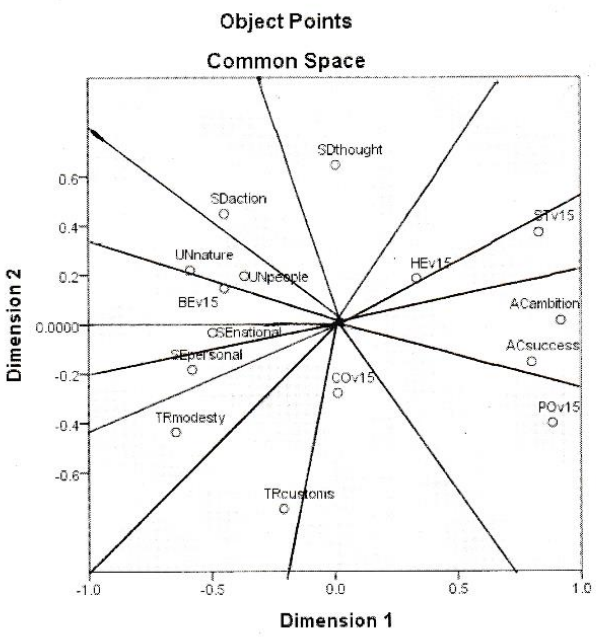


Figure 5.6 – Two-dimensional MDS of European Social Survey data using squared Euclidean distances as dissimilarities

As Bilsky, Janik and Schwartz (2011, p.762) themselves state, "Numerous factors may affect the results of multidimensional scaling [and applying them incorrectly (writer's synopsis)] may result in confusion at best and misinterpretation of findings at worst." The essential question here is whether imposing a preordained structure, albeit strongly justified as a methodologically sound "weakly confirmatory" MDS, does result in an artificially enhanced representation of the motivational circumplex.

5.6 Discussion

The aim of this set of analyses was to investigate the nature of personal values, charitable intentions and the validity of Schwartz's model in an Australian population, which had not been tested previously in an Australian State. On the whole, the findings confirmed that the survey design provided reliable data for the study of the Influence of personal values on charitable behaviour.

5.6.1 Representativeness of the personal values of South Australians

The full sample N= 1865 provides ample data to obtain reliable information on the preferences of South Australians interested in charitable behaviour. The subsample N=800 calibrated to match the demographic composition of the State's population still has

sufficient power to provide a credible estimate of the population's personal values. The differences between them are highly statistically significant, except for Benevolence and Self-Direction, but caution must be exercised in their interpretation because of the relatively large size of the samples and the fact that the ratings are in reality categorical variables. Considering that a difference of 0.1 between the means was sufficient for the t test to have p <.001, and none of the differences was larger than .24, the effects of the demographic composition are deemed to be marginal. The main advantage of the calibration is that the subsample can be used for cross cultural studies because it is representative of the population of South Australia, while the full sample provides greater reliability for the study of the characteristics of charitable people.

5.6.2 Influence of age, gender and religiosity

The accuracy of the calibration to represent the South Australian population was validated by checking the consistency of the effects measured by the study with the effects measured by previous studies recorded in the literature. While their size was small, as indicated above, their direction was largely as predicted and a high level of consistency was found. When the older age bias was corrected by the calibration, the preference for Achievement, Power, Stimulation and Hedonism was higher. The effect of correcting the gender bias, expected to be marginal, was not clearly evident in the small differences of the other personal value preferences, with the exception of Tradition. South Australian female respondents were unexpectedly found to be less traditionalist than the male respondents. Calibrating the sample for religiosity, which is strongly correlated with Tradition, certainly contributed with the correction of the gender bias to produce a significant increase in the preference for this value.

5.6.3 Validation of the theoretical structure of personal values

The survey used to collect the data analysed in this chapter was designed in a way for which there were no directly applicable precedents. In particular, there was no Australian precedent for a state wide survey of personal values according to the Schwartz Value Theory, and no previous examples of similar surveys having been conducted completely anonymously. The analysis was conducted as recommended by the author of the Theory and the data were found to have largely the same characteristics displayed by

representative samples obtained with strict random selection. This provides assurance that the personal value preferences expressed by the respondents can be reliably used to evaluate their influence on charitable behaviour. It was found, however, that the recommended method that was replicated seems to enhance artificially the two-dimensional representation of the motivational circumplex.

Applying the same custom initial configuration (Bilsky, Janik & Schwartz, 2011) is still the method used by the principal exponents of the Theory. Schwartz et al. (2017) used it to analyse with multidimensional scaling the most recent 19 values structure and found that the position of Security was where postulated by the Theory. The reversal of the two adjacent values of Benevolence and Universalism found by Schwartz et al. (2012) was included in the initial configuration and was confirmed. This could indicate that forcing the initial configuration to adhere to a specific structure allows the algorithm to adjust only minimally, which results at most in reversals of adjacent values, but reduces the overall fit: in none of the studies quoted stress-1 was under .1. This notwithstanding, no criticism of it has yet appeared in the literature, which suggests that further analysis is required before a negative opinion is confidently expressed.

Should the alternative method proposed be a better solution, as the lower stress indicated, a reasonable alternative interpretation could be offered to explain the finding of the correlation of Security with Benevolence instead of the postulated correlation with Power. The welfare of family and friends, which is the concern of a benevolent person, includes their protection from hostile acts. Such hostile acts are seen as more likely to be caused by terrorism than by a conventional war.

This interpretation is consistent with the literature. Verkasalo, Goodwin and Bezmenova (2006) found that the importance of security increased for the Finnish students in a sample collected just after the September 11 terrorist attack, although it returned to pre-attack levels in the samples collected a few days and 5 months later. The small size of the samples (N= 21, N=67, N=30, compared with a pre-attack sample N= 301) should be noted, but their results support the suggestion by Schwartz and Bardi (1997) that people do adjust their values to fit the opportunities offered by the environment, but the environment must change substantially for the changes to be sustained. Bardi, Buchanan, Goodwin,

Slabu, and Robinson (2014) found support for previous findings; namely, that when a change of values occurs, it is theoretically meaningful. Moreover, even when a change in a life situation is chosen, such as entering a training path or migrating to another country, the greater the change in situation the greater is the value socialisation or the 'interiorisation' of new values more appropriate to the circumstances; which are, in this example, the values prevalent in the new country of migration.

In recent years, terrorism has featured extensively in the mass media, although whether this is justified in Australia as a legitimate fear is unclear. National security is increasingly seen more as an extension of personal security than a desire to stand up to real or imaginary enemy nations. When respondents value highly "it is important to me that the Government ensure my safety against all threats. I want the nation to be strong so it can defend its citizens" it is reasonable to suggest that they think more about their children being safe in a public place than to their country being invaded as would be the case during a war. The civilian population is now subject in times of "peace" to events that in the past would have been associated with a time of conventional war.

5.6.4. Limitations and strengths

The analyses that follow are based on equations developed on the pre-existing assumptions about the structure of the motivational circumplex and on data collected with an instrument developed specifically for practicality but with known substantial limitations. Now that the structure has been reviewed in a way relevant to the assessment of the influence of values on charitable behaviour, the new structure needs to be taken into consideration. Because the modification is within the main dimension of self-transcendence it does not affect the analysis at this level, but any analysis at value type level must be qualified by mentioning the known low reliability of the instrument used.

The limitations caused by the survey design are methodological issues which have been addressed and as far as possible counteracted in that context. On the positive side, the survey resulted in the collection of a sample of sufficient power to ensure that the statistical analyses described above and the results of the data elaboration discussed in the next chapter are reliable.

Chapter 6
Survey results - how values relate to charitable behaviour

6.0 Overview

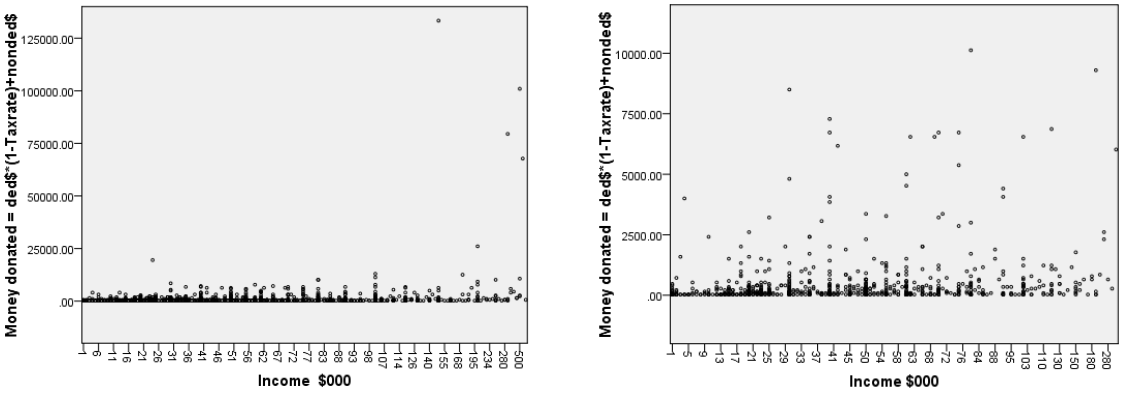
This chapter presents and discusses the results of the main study that utilised the data obtained and validated as described in the previous chapter. The main hypothesis being tested is the relationship between Conservation – Openness to Change dimension and charitable behaviour, for which no empirical evidence is currently available. The capacity of social norms and religiosity to moderate the influence of values on such behaviour, which had been suggested by the literature, is investigated and other possible interactions are evaluated. Information about the manner in which charitable behaviour reflects Universalism values is also examined. Finally, the chapter shows the results of a model to predict charitable behaviour according to the value preferences of South Australians.

6.1 Descriptive statistics

Notwithstanding the absolute anonymity of the survey, 9.3% of respondents did not declare their income. In 33 cases they declared zero income and it could be reasonably inferred that they were dependents in a family situation. They were therefore coded as 1 (thousand dollars) income so that their charitable contributions could be included and analysed. When the answer was left blank, however, the cases were excluded from the analysis because of the impossibility to make justifiable assumptions for calculating ratios to income.

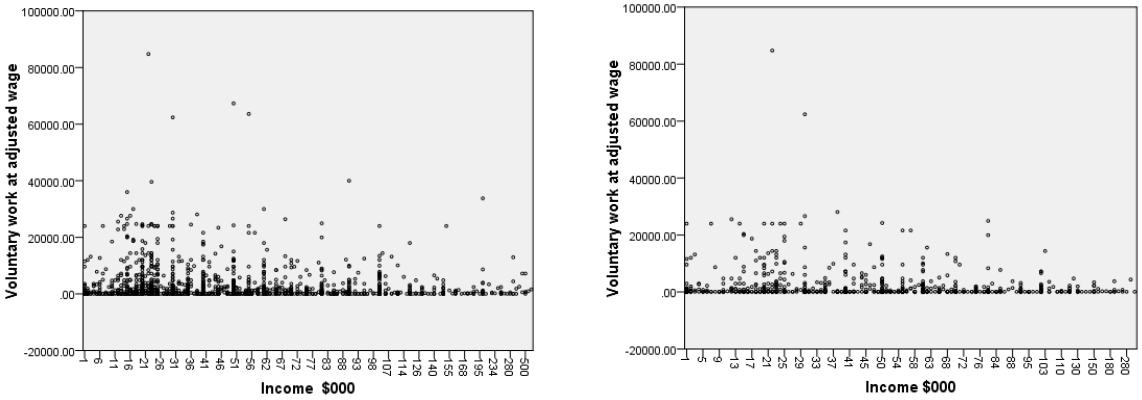
Further support for the representativeness of the calibrated sample came from the comparison of the average annual income with the relevant ABS data, retrieved from http://www.abs.gov.au/ausstats/abs@.nsf/detailspage/6302.0Nov%202014. The full sample average income was $58,155, 6% higher than the State average of $54,730, while the calibrated sample average was $51,220, 6% lower. The difference can be partially explained by the fact that the random selection method used to calibrate the sample did not select the two largest incomes, above $1 million, as shown by the much reduced standard deviation. The ratio to income of money donations of the calibrated sample, albeit still far higher at 1 %, was also much closer to the actual State average, estimated to be at the time (NAB, 2015) less than 0.3%. The average annual donation per person of $501 was 49% above the national average of $336.

Figure 6.1 shows that money donations remained mainly at the same low level regardless of income. Conversely, voluntary work remained relatively constant up to the average income level, then rapidly decreased, as shown in Figure 6.2. The charitable contribution was calculated by adding these two components and expressing the total as a proportion of the total declared income. It is to be noted that the calibration process produced a significant difference of the proportion of voluntary work as compared to monetary donations between the two samples. The economic value of voluntary work resulted almost five times as large as monetary donations in the calibrated sample, whereas the ratio was 3:1 for the full sample. This is an important consideration because, even with the precautions applied to the development of the construct, as discussed in section 4.8.2, it is acknowledged that "time is not money" (Ellingsen & Johannesson, 2009).



a) Full sample b) Calibrated sample

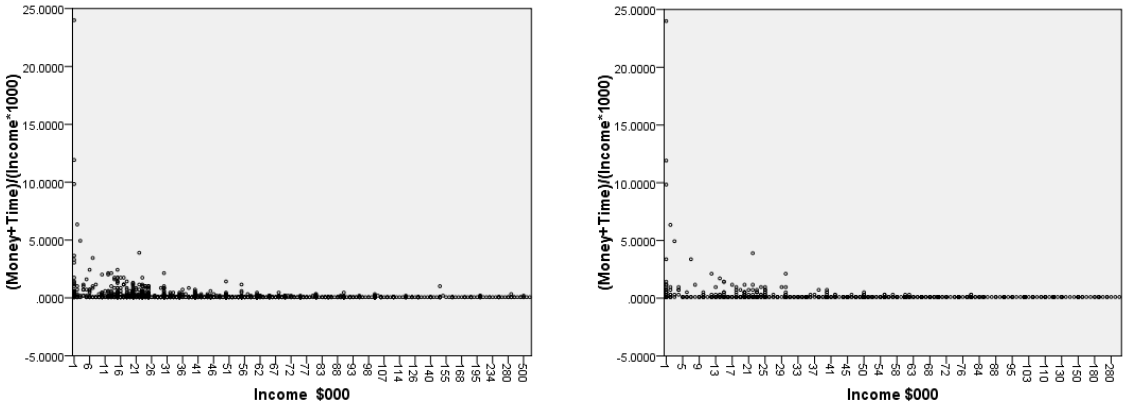
Figure 6.1 – Distribution of money donations by annual income before tax



a) Full sample b) Calibrated sample

Figure 6.2 – Distribution of voluntary work donations

At the individual level, the contribution of each respondent rapidly approximated zero as their income level increased, as shown in figure 6.3.



a) Full sample b) Calibrated sample

Figure 6.3 – Distribution of charitable contributions as a proportion of income

The cases of respondents on a very low income who contributed a substantial number of voluntary work hours are clearly evident and show why the average charitable contribution of 20% of income, with a large standard deviation, was consistent with a very modest average money donation. These results are summarised in Table 6.1.

Table 6.1

Descriptive statistics

a) money and time donations

	Full sample N = 1865 Disclosed income N= 1692		*Calibrated sample N = 800 Disclosed income N= 735*	
	M	*SD*	*M*	*SD*
Income	$58155	$65368	$51220	$41039
Money donations total *	$883 (1.5% of income)		$501 (1.0% of income)	
- tax deductible	$774	$5001	$428	$1215
- non-deductible	$353	$3180	$216	$764
Vol. work (hours) total	151		123	
- direct charity	37	193	34	175
- council	11	72	13	97
- caring activities	50	240	38	213
- club fundraising	8	52	9	51
- church, school	38	146	12	58
- governance, PR	7	33	5	30

* Total net of tax deduction.

b) Total contribution (money plus economic value of time) as a proportion of income before taxes (%)

	Full sample			*Calibrated sample*		
	M	*SD*	*Max **	*M*	*SD*	*Max**
Total	16	79	2400	20	113	2400
by gender						
- Male	12	38	635	12	48	635
- female	19	94	2400	25	152	2400
by age						
- <45	12	74	1192	13	84	1192
- 45 +	18	81	2400	26	136	2400
by education level						
- not tertiary	21	96	2400	23	122	2400
- tertiary	11	50	1192	11	85	1192

* Min always zero. Max 2400 (%) means the largest charitable contribution as a proportion of income was by a woman over 45 who declared 1000 hours of voluntary work, $24,000 worth, on an income coded as $1,000.

6.2 Influence of Conservation values on charitable behaviour

If and how the position of an individual along the Conservation – Openness to Change continuum predicts charitable behaviour appeared not to have been investigated before. Previous limited studies had not provided a clear indication. On balance, it appeared that a small positive correlation with Openness to Change could be hypothesised.

Individuals can be allocated a score on both value dimensions calculated with the weights proposed by Verkasalo et al. (2009) for each value type. On the basis of a composite sample of 29,410 participants to the first round of the ESS (2002-03) from 20 European countries, replicated with a sample of 35,831 participants to the second round of the ESS (2004-05), they had obtained weights appropriate to produce a scaled mean score of 100, *SD* = 10.

A composite sample of 37,089 respondents to round 7 of the ESS (2014), previously obtained for the analysis of gender characteristics, was used for replication and demonstrated that the Verkasalo equations indeed closely approximated the expected scaled scores: 100.2 average and 9.6 *SD* for Conservation, 100.8 average and 10.0 *SD* for Self-Transcendence. This provided assurance that deviations from the scaled scores can be reliably attributed to sample characteristics. The South Australian respondents where slightly less conservative (-2.2%) and more self-transcendent (4.1%). The subsample calibrated to represent South Australians showed the same preferences but with less deviation from the scaled mean score: -1.9% and 2.4%.

The positive correlation of charitable behaviour with Self-Transcendence was confirmed. No correlation at all (r = 0 at the second decimal rounding in both the full and calibrated sample) was found between charitable behaviour and the Conservation – Openness to Change dimension, as shown in Table 6.2. Missing items were excluded listwise in these calculations. Given the relatively large size of the samples the reduction in power was deemed a lesser limitation than the introduction of possible errors with missing item replacement techniques.

The correlations of charitable behaviour with the individual value types, answers ipsatised to remove the response tendency, showed nonsignificant small negative

correlations with Conformity and Security, compensated by a positive correlation with Tradition, the other value type that constitutes the Conservation pole. Table 6.3 summarises these results.

Table 6.2

Conservation and self-transcendence value dimensions' correlation with charitable behaviour

	Full sample N = 1865			*Calibrated sample N = 800*		
	M	*SD*	*r*	*M*	*SD*	*r*
Conservation score (a)	97.8	10.4	-.012NS	98.1	9.9	-.028 NS
Self-Transcendence score (a)	104.1	10.4	.066**	102.4	10.3	.096*

(a) = scores computed with the weights proposed by Verkasalo et al. (2009), scaled mean = 100, *SD* = 10.

Table 6.3

Correlation with charitable behaviour of the value types

	Full sample N = 1865	*Calibrated sample N = 800*
	r	*r*
Benevolence	.071**	.078*
Universalism	.049*	.054NS
Self-Direction	.031 NS	.055 NS
Stimulation	.020 NS	.031 NS
Hedonism	-.067**	-.089*
Achievement	-.070**	-.066 NS
Power	-.084**	-.072*
Security	-.018 NS	-.033 NS
Conformity	-.007 NS	-.014 NS
Tradition	.074**	.074*

This table shows that, contrarily to the general principle that Schwartz et al. (2017, p. 253) found supported, the values expected to inhibit the behaviour related more strongly and consistently with charitable behaviour in South Australia than the values expected to drive it.

The notion of conflict in the value system being challenged by the functional theory of values (Gouveia et al, 2014a, 2014b) was supported by the clear motivational opposition of the Self-Enhancement values. Although all the correlations are quite small, with $r < 0.09$ in all instances, the expected approximation to the cosine function due to the circumplex structure of the Theory is clearly visible in Figure 6.4. It is necessary to point out, however, that this is at least partially a consequence of the instrument used. Recent studies (Schwartz et al, 2012, 2017) have found, with newly developed instruments, that the position of Benevolence and Universalism could be reversed, which in this case would reduce the approximation to the cosine function.

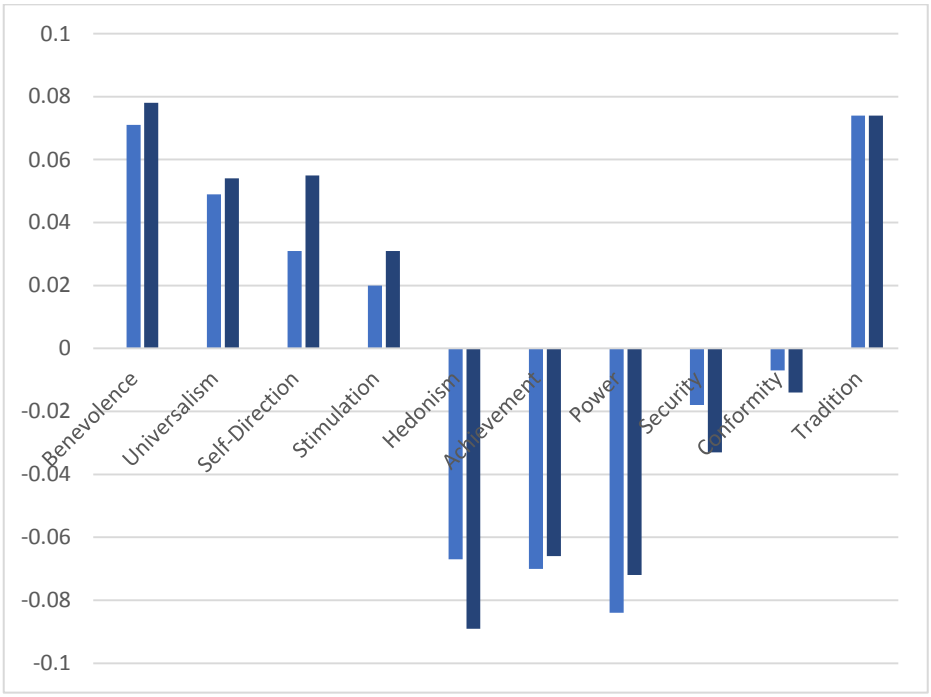


Figure 6.4 – Correlation of charitable behaviour with the ten Theory values (left column full sample, right column calibrated sample)

The absence of evidence for or against the hypothesis required further analysis of the interactions between the values that do indeed determine charitable behaviour, Benevolence and Universalism, and the values that determine conservatism or progressiveness. For Conformism and Tradition, through its strongly related concept of religiosity, there are relevant precedents in the literature. The interactions with the third element of the Conservation dimension, Security, and the two values describing progressiveness, Self-Direction and Stimulation, needed to be investigated in the absence of

precedents. Both the full sample and the calibrated sample were analysed by means of hierarchical multiple regression and the results were essentially equivalent, although the significance of the interactions shown by the calibrated sample was reduced due to its smaller size. When only the findings provided by the analysis of the full sample are reported below, they are deemed to be broadly generalizable to the population of South Australia, with the proviso that self-selection must have contributed to highlighting the phenomena investigated. One of the advantages of the strong theoretical framework is that the context allows interpretations based on the consistency of the results with the theory when statistical significance is marginal. Conversely, assuming the reasonableness of the interpretations on this basis has led to many being incorrect: one such instance is discussed in the next section.

6.2.1 Moderating effect of Conformity

It had been shown (Lönnqvist et al., 2006) that Conformity has a moderating effect on self-transcendence values because, as suggested by Bardi and Schwartz (2003), the willingness to follow social norms hinders the willingness to follow one's own values. Lönnqvist et al. (2006, p. 1479) explain that the absence of correlation with altruistic behaviour implies that people who value Conformity highly are not more or less altruistic than others, but the moderating effect on the self-transcending values is more apparent in them (p. 1474). In that paper, Conformism was the name given, without explanation, to the value Conformity of the Theory, after introducing it with its correct name. Their Study 1 (Lönnqvist et al., 2006, p. 1472) did not show significant correlations of altruistic behaviour with Benevolence and Hedonism, which indicates that their small sample (N = 195) was rather dissimilar to the postulated circumplex structure.

To test their hypothesis they performed and interpreted hierarchical multiple regression analyses as explained by Aiken and West (1991). The same method was used to replicate their study with the South Australian samples and their results were not confirmed. Centred scores of the predictors were used to avoid multicollinearity (Aiken & West, 1991, p. 9). No significant interaction of Conformity with the other value types was found to moderate charitable behaviour. As mentioned by Schwartz et al. (2017), the finding by Bardi and Schwartz (2003) was not replicated by Schwartz and Butenko (2014) either. To check that the South Australian sample composition was not responsible for the

failure to replicate, the rating frequencies were calculated and it was found that the full sample was normally distributed and slightly skewed towards high Conformity ratings, with 22.7% of the responses being above one standard deviation from the mean.

6.2.2 Influence of religiosity on charitable behaviour

Once decided that religiosity should be treated as a categorical variable, it was deemed appropriate to recode the charitable contribution variable on an ordinal scale better suited to display the results of non-parametric correlation tests. This scale was arbitrarily determined on the basis of some indicative points: under 0.5% of income is the most common level of money donations, 1% is deemed sufficient to eradicate poverty worldwide and 10% is the historically significant "tithe" contribution. The items of the scale were recoded as 1 = no contribution; 2 = contribution up to .5% of income; 3= from .51% to 1%; 4 = from 1.01% to 2%; 5 = from 2.01% to 4%; 6 = from 4.01% to 9.99%; 7 = 10% of income or more. The frequency distribution is shown in Table 6.4. The sample N= 1682 includes only those respondents who declared both their religiosity and their income.

Table 6.4

Frequency distribution of charitable contribution levels by religiosity

	Religiosity (church attendance)			
	Never	*Rarely*	*Frequently*	*Total*
Ordinal scale of charitable contribution				
1 No contribution	65	29	5	99
2 up to 0.5% of income	202	167	21	390
3 0.51% to 1%	84	80	24	188
4 1.01% to 2%	92	80	22	194
5 2.01% to 4%	63	61	32	156
6 4.01% to 9.99%	69	92	80	241
7 10% of income or more	107	168	139	414
Total	682	677	323	1682

The bicuspid shape of the distributions suggests the confluence of two binomial distributions in each category. This would indicate that, with the exception of a minority of

devout religious people, everybody with a lower degree of religiosity belongs to one of two groups, conceivably the two groups identified by Schwartz (1977). In this case, those who donate just because it builds social capital donate about half of one percent of their income, those who are genuinely altruistic donate as much as they can.

A possible explanation of the finding that this dichotomy is abated in devout people is that the two motivations merge as a result of religious teachings. Being virtuous to buy favour in the afterlife merges with building social capital in this life. It would appear that candour is not deemed virtuous, however: the percentage of respondents who did not declare their income was 10.7% for the devout, 10.3% for the somewhat religious and 7.1% for the non-religious.

An assumption required to measure the strength and direction of association that exists between an ordinal dependent variable and an ordinal independent variable using the Kruskal-Wallis H test is that the shape of the frequency distributions of the independent groups is basically the same. A visual analysis of the table above suggests that they are not, which is confirmed by a brief exploratory analysis as shown in Figure 6.5.

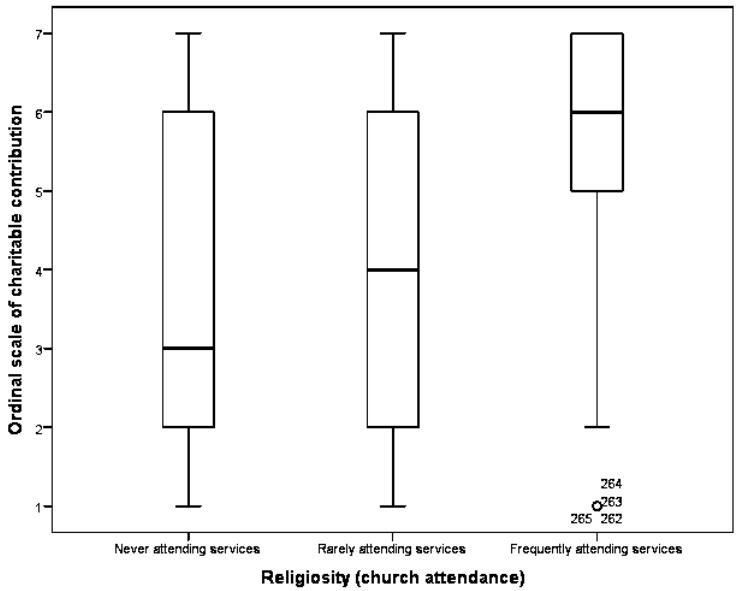


Figure 6.5 - Box plots of charitable contributions by religiosity group

The assumption that there is a monotonic correlation between religiosity and charitable behaviour was verified, therefore the association was assessed with the Somers'

δ test. The test indicated a statistically significant association: δ = .29, $p < .0005$ assuming that charitable behaviour is the dependent variable. While moderate, this association is much larger than any of the correlations of charitable behaviour with value types.

6.2.3 Moderation effects of other values

Given that no significant correlation was found between charitable behaviour and the Conservation - Openness to Change dimension, and that the hypothesis of Conformity moderating the influence of self-transcending values was not supported, the question arose whether any of the values comprised in Conservation and Openness to Change had significant moderating effects that could explain how their interactions produced the resulting indifference. The methodology used by Lönnqvist et al. (2006) was replicated again for this analysis.

It was found that Security, Self-Direction and Stimulation had no significant interaction with any of the values on the Self-Transcending – Self-Enhancing dimension. Tradition, however, had some influence, as its correlation with religiosity suggested. Table 6.5, which reproduces the format of Table 2 of Lönnqvist et al. (2006), illustrates these interactions.

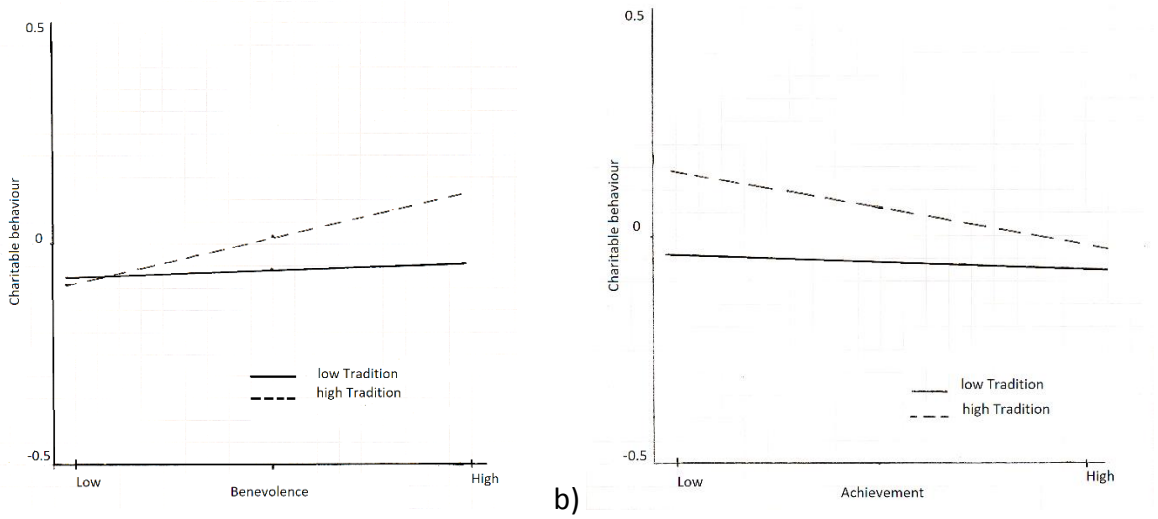
Table 6.5

Hierarchical regressions predicting charitable behaviour as a function of predictor values, Tradition and their interactions

	Predictor Value				
	Benevolence	*Universalism*	*Power*	*Achievement*	*Hedonism*
Step 1					
Predictor (P)	.046	.030	-.066**	-.037*	-.044**
Tradition (T)	.037	.043*	.052**	.050**	.052**
R^2	.006**	.005*	.011***	.008**	.008**
Step 2					
P x T	.041°	.008	-.025	-.032*	-.022
R^2	.008**	.005*	.012***	.011***	.010**
Δ R^2	.002°	0	.001	.003*	.001

NOTE: Table entries are the predictor's beta coefficients at step 2, except R^2, which is the adjusted squared multiple correlation of the predictors with the criterion at each step, and Δ R^2, which is the increase in R^2 from Step1 to Step2
° p = .051.

This table shows that Tradition was a significant predictor of charitable behaviour but only interacted significantly with Achievement and approached significance with Benevolence. Power, Achievement and Hedonism were all positively related to charitable behaviour. Simple slope analysis illustrated the nature of these interactions. Figure 6.6 shows the regression slopes predicting charitable behaviour for Benevolence and Achievement at the low and high level of importance attributed to the Tradition value. Plot a) shows that charitable behaviour increases significantly as a function of Benevolence for those who rate highly the Tradition value. Plot b) shows that the negative influence on charitable behaviour of the opposing value Achievement decreases for those who rate highly the Tradition value.



Note: low score = 1 *SD* below the mean, high score = 1 *SD* above the mean.

Figure 6.6 – Charitable behaviour regressed on low and high Benevolence and Achievement scores for low and high Tradition groups

6.3 Consistency of Universalism choices

Collecting data about the importance for the respondents of charity purposes that express the Universalism value allowed a more detailed analysis of this component of the self-transcendence dimension.

6.3.1 Concern for the people of the world A very significant difference, Welch *t* (3677) = 19.4, *p* (2-tailed) <.0005, was found between the ratings given on a scale 0 to 9 to the purpose of alleviating poverty in Australia (*M* = 7.44, *SD* = 2.02) and to the purpose of

alleviating it abroad (*M* = 5.93, *SD*= 2.66). It was therefore expected that the correlation between the latter and the importance given to item 3 of the PVQ, measuring the importance of treating equally the people of the world, would be significant but moderate, as indeed it was: $r = .28$, $p < 0.01$.

A "Universalism coherence index (UCI)" was then created by comparing each respondent's rating difference with the importance given to world equality, according to the formula:

$$UCI = (Puraust - Purworld) \times UN03$$

where Puraust = purpose of alleviating poverty in Australia, Purworld = purpose of alleviating poverty abroad, and UN03 is the PVQ item 3 score. When the two purposes have the same rating, that is, they are coherent, the difference, and therefore the index, is zero regardless of the importance given to equal opportunity in the world. The maximum level of incoherence is shown by a person who declares complete belief in equality (score 6 for Un03) but completely denies it in practice (difference 9 as score 9 – score 0), that is, UCI = 6 x 9 = 54. The distribution of this index (N = 1831), which can be treated as an ordinal scale from -54 to +54, is illustrated in Figure 6.7.

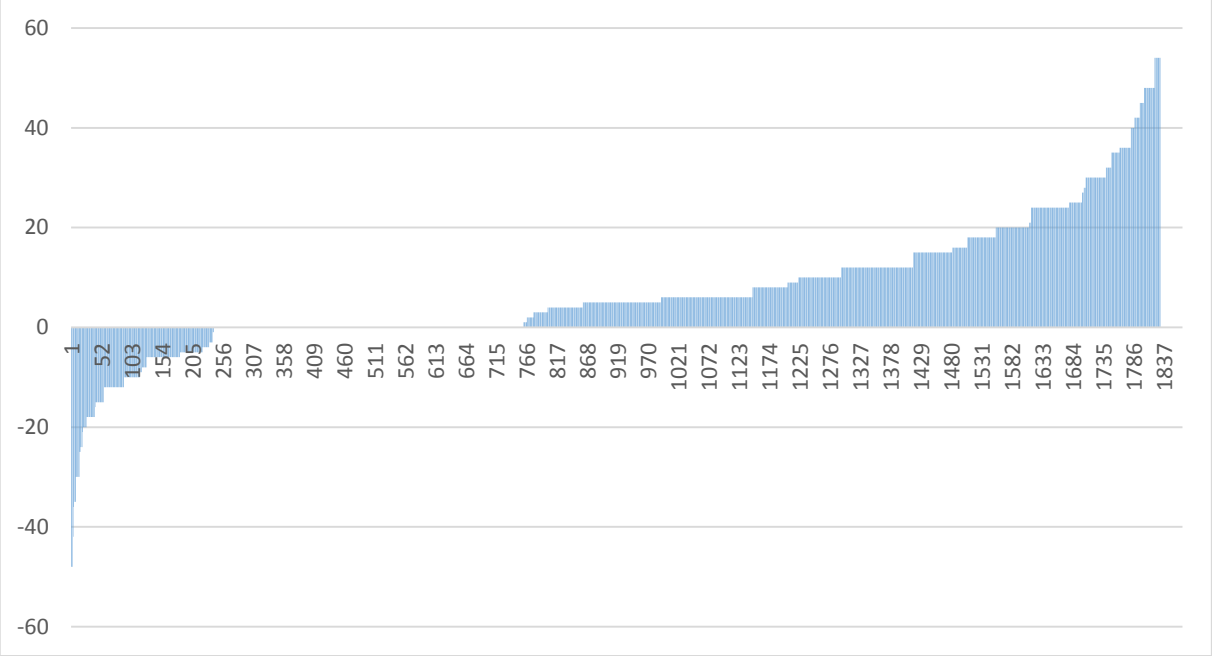


Figure 6.7 - Distribution of Universalism Coherence Index

This figure shows that 240 respondents, 13%, had actually a preference for relieving poverty abroad, which is interpreted as willingness to redress an imbalance between rich

and poor countries. In this case, there is no incoherence with the belief of equality of opportunities, although the existence of some instances of racial preference cannot be totally excluded. A total of 520 respondents, 28%, showed no inconsistency, but the majority, 58%, showed a preference for domestic charity that in most cases would be the expected preference for the ingroup, fostered by religion as previously discussed, but at the extreme levels is more consistent with unconscious or covert racism.

One of the arguments used by Saroglou (2012) to dispute the claim of other authors that religious people only want to appear prosocial but indeed they are not, is that they are willing to show that they do discriminate against people who they do not deem deserving, even when social desirability could induce them to be a little more hypocritical. It was therefore interesting to see how religious beliefs influence this aspect of charitable behaviour. Table 6.5 shows the frequencies by coherence group for the respondents who declared their religiosity (N= 1816). Religious belief fosters Benevolence and opposes Universalism, so it could be hypothesised that the opposition to Universalism would be compensated at a conscious level by increasing to some extent an awareness of the need to be fair to all people, which would decrease the level of incongruence highlighted by the index. The size of this association with UCI was measured with the Somers' δ test, which indicated that it was indeed small but significant: δ = -.07, *p* = .001.

Table 6.6

Frequency of level of concern for the equal treatment of all people by religiosity

	Religiosity (church attendance)			
	Never	*Rarely*	*Frequently*	*Total*
UCI level				
Help abroad (negative UCI)	84	97	59	240
Equal treatment (UCI = 0)	208	179	128	515
Some incoherence (UCI = 1-19)	309	343	136	788
High incoherence (UCI = 20+)	122	120	31	273
Total	723	739	354	1816

An even stronger assumption could be made that the level of education would have the same effect, which also raises the issue of the correlation between religiosity and

education. Again, the Somers' δ test indicated that the hypothesis was supported: $\delta = -.15$, $p < .0005$.

As religiosity and education are independent variables, the association between them was tested with Goodman and Kruskal's γ. It was found that there was a significant albeit small negative association: $\gamma = -.08$, $p = .004$.

6.3.2 Protection of the environment

Item 19 of the PVQ asks the respondents to state their belief in the importance of caring for the environment. It would appear that a person with this belief would like to donate to organisations with this purpose, and indeed the correlation was positive and significant: $r = .39$, $p < .01$; $\gamma = .35$, $p < .0005$. In this context the correlation is comparatively large, but in absolute terms it is rather moderate for such a clear cut and widely publicised cause.

Because of its connection to climate change and the role played by the use of fossil fuels, the debate about protection of the environment has been highly politically charged in Australia, particularly because the country is a large producer and exporter of coal. It was therefore necessary to consider the possibility that merging this issue with the concern for the welfare of the people of the world would exacerbate the conservative and progressive views of the respondents and reduce the overall rating of the value type. The regression of charitable behaviour on the concern of people items (PVQ items 3 and 8) was not moderated by the interaction with the concern for nature (PVQ item 19), which indicated that the confluence of the two issues was acceptable.

6.4 Value types as predictors of charitable behaviour

To examine the ability of value types to predict charitable behaviour, hierarchical multiple regression analyses were performed. Income was found to have a significant negative correlation with the total economic contribution calculated as a proxy measure of charitable behaviour and was considered the predictor in a preliminary linear model. It was found that income alone could predict the amount of charitable contribution to a highly significant degree, although accounting for only a minuscule amount of variability:

R^2 = 1.2%, p < .0005. All the R^2 coefficients presented are adjusted to account for the number of variables in the model.

The demographic variables age, sex, religiosity and education level were introduced sequentially to control for their effects, which had been found significant in many of the studies reviewed. Age and sex had no significant effect. The education level, recoded as four dummy variables, improved the model a little (R^2 = 1.4%). Only the university degree category showed a statistically significant coefficient. Religiosity, recoded as two dummy variables whose coefficients were not statistically significant, further improved the model: R^2 = 1.6%, p < .0005. Adding both education level and religiosity did not improve the adjusted R^2.

The significantly correlated value types were then individually added stepwise. Benevolence had the strongest significant effect (Δ R^2 = 0.2%, p = .033). Universalism and Tradition had no further predictive power. Of the opposing values the most influential was Hedonism (Δ R^2 = 0.3%, p = .011), then Power (Δ R^2 = 0.1%, p = .075). Achievement had no further predictive power. The highest predictive power (R^2 = 2.2%, p < .0005) was produced by the model shown in Table 6.6.

At such low levels of predictive power, however, none of the variables besides income has a really determining impact. Almost the same predictive power (R^2 = 2.1%, p < .0005) is achieved by replacing Religiosity and Power with Education and Tradition.

Table 6.7

Model for the prediction of charitable behaviour in South Australia

	Unstandardized Coefficients		*Standardized Coefficients*		
	B	*Std. Error*	*Beta*	*t*	*p*
(Constant)	.259	.035		7.464	.000
Income	-.001	.000	-.103	-4.180	.000
Religiosity (not)	-.075	.043	-.046	-1.753	.080
Religiosity (devout)	.039	.054	.019	.722	.470
Benevolence	.059	.023	.064	2.568	.010
Hedonism	-.031	.018	.045	1.662	.097
Power	-.039	.022	-.048	-1.784	.075

When only value types were used as predictors, the most efficient model including Benevolence, Tradition, Hedonism and Power was found to explain only 1.2% of variability ($p < 0.005$). Table 6.7 illustrates this model.

Table 6.8

Model for the prediction of charitable behaviour in South Australia with value types only

	Unstandardized Coefficients		*Standardized Coefficients*		
	B	*Std. Error*	*Beta*	*t*	*p*
(Constant)	-.164	.019		8.424	.000
Benevolence	.048	.024	.052	1.966	.049
Tradition	.043	.020	.057	2.181	.029
Hedonism	-.033	.019	-.048	-1.774	.076
Power	-.053	.022	-.065	-2.444	.015

6.5 Awareness of the effectiveness of charities

Most respondents, 89%, stated as expected that it is important to know how efficiently a charitable organisation spends the money received by donors. A total of 70% declared a medium to high level of awareness of the way the charities they support do so, three or more on a scale of five. It is assumed that their assessment was a matter of perception rather than an accurate description of the extent to which they perused the recommendations of the main charity evaluation organisations, all of which are based in the United States and England, or other sources of information. A substantial proportion of people, 24%, said that it is important but did not make the effort of informing themselves, while the great majority, 65%, is consistent: they say that it is important and that they feel well informed. Only 6% said that it is not important and did not inform themselves. Interestingly, 5% said that they were informed even not believing in the importance of doing so.

6.6 Discussion

Analysis of data from the South Australian sample indicated that the total economic contribution to charitable causes, as a proxy measure of charitable behaviour, correlates with Self-Transcendence values as expected, but has no correlation with the Conservation -

Openness to Change dimension. In Canada, Rempel and Burris had found the same regarding their first “philosophy” (Rempel & Burris, 2015, p. 186), which is a summary of motivations for engaging in charitable behaviour. It would then appear that, in broadly similar cultural environments, the causal relationship between personality and charitable behaviour is the same.

A perfect balance between the Conservation and Openness to Change poles is not an intuitive hypothesis because both the Openness to Change value types are positively correlated to charitable behaviour and the Conservation ones are divided. There is no theoretical basis to suggest that the sum of the effects of five contrasting variables would be zero to the second decimal rounding. An element contributing to this result was that one of the five, Conformity, had no effect at all.

The hypothesis that Conformity moderates altruistic behaviour, previously sustained in the literature without substantial evidence, was not supported by the findings of this study. In the original theory, Conformity and Tradition share the same section of the motivational circumplex, which implies that they should both have a similar effect on an external variable. Their contrasting correlation with charitable behaviour suggests that there must be elements in their nature that act differently on the two Self-Transcendence value types, Benevolence and Universalism. That in the large South Australian sample Conformity does not interact at all with either is a remarkable finding in itself, given the increased likelihood to find a small significant effect either way, but does not offer further insight on the matter. The significant interaction with Tradition was the obvious element that provided the balance.

Another characteristic of the sample is that Benevolence had a higher correlation with charitable behaviour than Universalism, the value type that theoretically drives such behaviour. For the South Australian participants, charity definitely starts at home. This can explain the substantial influence of Tradition through its highly correlated behaviour, religiosity, which is positively correlated to Benevolence but negatively correlated to Universalism. That religiosity causes people to be more generous towards religious charitable organisations than secular ones, and to favour local causes instead of global ones unless carried out in the context of a missionary agenda, appears uncontroversial (see

Brooks, 2005) and was not empirically tested. Some support for this statement was indirectly found in the correlation of religiosity with the conviction that religion is indisputably in the public interest.

Evidence was found that religious South Australians are marginally more coherent in expressing their belief that all people should be treated equally and expressing equal support for helping people locally and abroad. This does not necessarily indicate that religious people practice what they preach, it only indicates that they are more attuned to the issue and are less prone to fall in the trap of showing incoherence in their answers. It might also raise hopes that the many examples of horrific consequences of religious extremism in the past 20 years have reduced allegiance to the dogmatic aspect of religiosity and its predictable consequences. The increased awareness of the need for fairness shown by South Australian religious people would suggest also an acceptance of charity as a substitute of welfare state policies in an environment where these are lacking. While this need no further confirmation in the United States, it is a useful indication in the more welfare oriented Australian context.

The interplay of education and religiosity in determining the charitable behaviour of South Australians, who are less religious and more generous than the Australian average, (ABS 2071.0) provided a fruitful line of enquiry. Many studies that examine philanthropy in the US (e.g. Brooks, 2005; Brown & Ferris, 2007) indicate that, there, religiosity and education are positively correlated and both are positively correlated with charitable contributions. This did not occur in the South Australian sample. The correlation of religiosity with education was significantly negative, albeit small. The correlation of the level of education with charitable behaviour was also significantly negative. Consistent with the literature was the reduction of the voluntary work component of charitable behaviour associated with University level education.

Even assuming that anonymity allowed the respondents to be completely honest, self-reporting of the quantity of voluntary work carried out provides a much greater opportunity than monetary donations for overestimating one's contribution. The unavoidable flexibility of the definitions and their interpretation, and the difficulty to accurately remember all the instances and duration of the work performed in one year, may tend to produce inflated estimates, whereas the amount of money given to a charity is quite definite. This source of

uncertainty affects primarily the respondents at the lower end of the income distribution, who provide the greatest part of voluntary work. This magnifies the difference with the generally more educated people at the upper end, for whom the opportunity cost of providing voluntary work is higher. In Australia, where the statutory lower limit for retribution, the minimum wage, is set at a level not very distant from what could be deemed a "living wage", these dynamics are vastly different from those operating in countries, like the United States, where the minimum wage is set at a very low level and various legal dispensations may result in nominal remuneration.

Brown and Ferris (2007) had found that including social capital in models of giving reduces the influence of education and religiosity, which raises the question whether it was overstated in previous studies. Alternatively, it could suggest that religiosity and education exert a greater than previously thought influence on the creation of social capital, defined as community networking based on norms of trust and reciprocity. The picture that emerges from this study of South Australians is that, on average, the respondents to a survey on what drives their attitude towards charity are older more educated people who do not feel religiously obligated to donate. They want to achieve more in life and wish to keep contributing to society. By answering the survey they want to justify their level of giving, mainly to themselves, as appropriate or even generous. It would be prudent to assume some bias regarding these variables.

Previous studies in the US could have been affected by some confirmation bias, given that they are generally connected with religious entities. Such a connection existed also with the recent and so far unique Australian study by Kortt, Steen and Sinnewe (2017). Time differences would also need to be considered: the US studies quoted preceded the Global Financial Crisis of 2007-2008 that affected Australia and US in different ways.

It seems reasonable to conclude that, within the limitations highlighted, this study has provided empirical evidence of known cultural determinants of charitable behaviour. Giving as a component of building social capital is less prominent than in the United States because of the existence in the Australian environment of better welfare state policies. Charity in Australia still has ample scope to support local causes, however, which explains a greater influence of Benevolence than is to be expected in countries even more committed to welfare, like the Scandinavian countries.

Chapter 7

Second study

7.0 Overview

This chapter presents and discusses the results of the second study conducted using a recently available instrument designed to measure the 19 values of the reviewed Schwartz theory. As will be described in the following sections, this study had two main aims. The first aim was to evaluate the first application in Australia of the new instrument; the second was to examine the relationship between the more refined values measured and self-reported charitable behaviour, so as to provide a deeper analysis of hypotheses raised by the findings of the first study.

7.1 Aim 1: Refined measurement of personal values

Although useful because of its extensive application through the European Social Survey, the PVQ 21 has limitations that have progressively been identified and addressed since its development in 2003 (Sandy, Gosling, Schwartz & Koelkebeck, 2016). These developments led to the conclusion that a better understanding and a finer discrimination of the constructs investigated with the first study could be achieved by using the recently developed PVQ-RR, which has sought to capture more accurately the 19 value types described by the most recent revision of the Theory. To the writer's knowledge, this is the first use of the instrument in Australia, so it would be desirable to establish that the Australian data collected with the PVQ-RR actually distinguish between the 19 values and their position in the two-dimensional representation of the circumplex is as theoretically predicted.

A useful approach to undertaking this analysis can be discerned in a Brazilian study by Torres, Schwartz and Nascimento (2016), who used the procedure developed by Cieciuch and Schwartz (2012) to examine the ability of a previous version of the instrument, the PVQ-R, to discriminate the 19 theorised values. It involves the application of both confirmatory factor analysis (CFA) and MDS. CFA is applied separately for each of the four higher order values: Self-Transcendence, Conservation, Self-Enhancement and Openness to Change, with the aim of determining the number of distinct value types and identifying their content. MDS serves the purpose of presenting a two-dimensional plot useful for assessing

adherence to the theorised circular continuum and the possibility to visualise the partition in distinct values. For the purpose of this study the MDS analysis was deemed sufficient to address the issues raised by the first study. To carry out a process of cross-validation of the PVQ-RR as shown by the Brazilian study, a second independent sample might be collected in future with this instrument to verify that the factor solutions obtained with the two samples are consistent.

7.2 Aim 2: Refined analysis of the influence of values on charitable behaviour

The analysis of the literature and the interpretation of the results of the first study supported some fundamental premises. Charity is a Christian concept describing humanitarian altruism as a virtue, not an obligation, and is correlated with the values of Universalism and Benevolence. Philanthropy, often popularly equated with charity, is a method of giving aimed at achieving objectives which can be broadly considered charitable but might not be, depending on the definition applied, and is less strongly opposed by the Power value.

The main finding of the first study, that the position of the donor along the Conservation- Openness to Change dimension had no influence on altruistic behaviour, became the main target of further investigation. The confluence of charitable and philanthropic motivations expressed by means of donations to humanitarian causes appeared to be the most likely reason for the resulting balance of opposing influences.

In this study, as in the previous one, charitable behaviour was measured in terms of the sum of money and time donated, but it is acknowledged that this is a valid proposition only if “charitable” is interpreted in the broad sense of its legal definition, which was established mainly to clarify its meaning for taxation purposes. One of the challenges is that in Australia the relevant legislation (Charities Act, 2013) states that any behaviour that could be said to “advance religion”, and practically anything could, as shown by recent unsuccessful attempts to deny this status to less popular cults, is always in the public interest and therefore tax deductible. Thus in Australia, as in many other nations, donations to any institution that calls itself religious are by legal definition charitable. The paradox is that to the extent that they are motivated by faith, these donations are expressive of religiosity, a behaviour correlated to Benevolence, not to Universalism, as well explained by

the Theory (Schwartz & Huismans, 1995), and therefore are not really an expression of strictly defined charitable behaviour.

The generosity shown by giving to humanitarian causes, already seen as being associated with different values depending on whether giving behaviour is based on a charitable or philanthropic ideology, could then be further investigated to understand how other variables influence its nature by moderating the motivational force of the underlying value types. In this study, comparisons will be undertaken to assess the relationship between altruistic attitudes and actual generosity as based on self-reports by respondents.

7.2.1 Identifying the components of charitable behaviour

7.2.1.1 Hypothesis 1: identification of charitable and philanthropic people

Rempel and Burris (2015) had found that "charitable" organisations can be categorised according to their philosophy. One philosophy is characterised by the focus on the donors and the short term nature of the activities performed by the organisation. Another is characterised by the focus on the recipients and the long term nature of the activities.

The adherence to the first of these philosophies appears to be consistent with a philanthropic attitude and adherence to the second to be consistent with a strictly defined charitable attitude. By grouping people on the basis of their philosophical preference, it should be possible to predict how value types motivate their giving behaviour. The hypothesis that the philosophies described by Rempel and Burris do indeed distinguish charitable people from philanthropic people will be supported if it is found that the different motivational influence exercised by the value types on either group is consistent with the Theory. The charitable group should rate Benevolence and Universalism values more highly and the Power value less highly than the philanthropic group.

7.2.1.2 Hypothesis 2: Influence of the type of altruistic behaviour on the value dimensions

If the first hypothesis is supported, it will be possible to better investigate the extent of the contribution of the confluence of the potentially contrasting influences of charity and philanthropy to the relevance of the Conservation-Openness to Change dimension in determining the magnitude of donations to humanitarian causes.

No correlation was found in study 1 between the magnitude of charitable contribution and the Conservation – Openness to change value dimension as measured with the Verkasalo equations (Verkasalo et al., 2009). These authors had found by means of confirmatory factor analysis the coefficients with which to weigh each question of the PVQ-21 to produce an estimate of each respondent's position on the Conservation – Openness to change continuum. Their method could be used with the questions of the PVQ-RR when a large enough database collected with this instrument is available, but so far equations of this kind have not been developed. The practical solution adopted was to ask directly the participants to self-assess their conservative or progressive tendency. This method of ideological self-placement had been previously used in obtaining samples from numerous countries, including Australia (Caprara & Vecchione, 2015; Caprara, Vecchione, Schwartz, Schoen, Bain, Silvester … Caprara, 2017, 2018; Schwartz, Caprara, Vecchione, Bain, Bianchi, Caprara, … Zaleski, 2014; Vecchione et al., 2015).

The hypothesis to be investigated was whether charitable behaviour is positively correlated with progressive tendency and philanthropic behaviour is positively correlated with conservative tendency. In this case the confluence of these opposing tendencies could nullify the effect of the Conservation – Openness to change value dimension in determining giving behaviour.

7.2.1.3 Hypothesis 3: Type of altruistic behaviour preferred by religious people

Religiosity is positively correlated with Benevolence and negatively correlated with Universalism (Schwartz & Huismans, 1995). One of the differences displayed by philanthropic and charitable people should be a difference in their preference for Universalism, which is more consistent with a focus on the recipients than with a focus on the donors. It is therefore hypothesised that this difference would result in a significant difference of the influence exercised by religiosity on either group. Notwithstanding the teachings of all religions that charity is at least a virtue, if not an obligation, the Theory indicates that such difference should result in religious people being more philanthropic than charitable.

7.2.2 Conformity as a moderator of charitable behaviour

Bardi and Schwartz (2003) had postulated that Conformity has a moderating effect on self-transcendence values because the willingness to follow social norms hinders the

willingness to follow one's own values. Lönnqvist et al. (2006) performed and interpreted hierarchical multiple regression analyses to test for significant interactions between Conformity and three other variables: Universalism, Benevolence and Power. The same analyses were replicated using the South Australian data collected with the PVQ-21 for the first study. No evidence of moderation was found.

The distinction between Conformity with Rules and Interpersonal Conformity measured by the PVQ-RR should produce a clearer picture of the relevant interactions. The explanation given by Bardi and Schwartz (2003) suggests that the main driver of the postulated moderating effect should be Conformity with Rules: that is, restraining from behaviour contrary to established norms. The suggestion is that where established norms discourage generosity towards strangers, generous people who want to conform would curb their generosity. This would show as a significant reduction of the score for Universalism and Benevolence and a significant increase of the score for Power. The effect of Interpersonal Conformity might be less definite, given that it depends on the values of the community to which the individual belongs. It would then appear that the hypothesis that there is no moderating effect of Conformity on self-transcendence values will be confirmed, but if such an effect appears it will be more significant for the Conformity with Rules value type.

7.2.3 Concern for animal welfare as a personal value

In Australia, the Charities Act (2013) provides a statutory definition of charitable purpose that specifies which not for profit organisations can be correctly referred to as "charities". All but one of the charitable purposes listed are humanitarian purposes, the notable exception being "preventing or relieving the suffering of animals". This is a widely held emotional state akin to compassion, but is certainly not humanitarian and, by consequence, not a manifestation of charity in its strictest sense and of philanthropy in its literal meaning.

A comprehensive analysis of the Australian charity system therefore cannot omit to consider this peculiar but substantial component. Some Australian scholars (Sneddon, Lee, Ballantyne & Packer, 2016) suggest that it would be useful to conceptualise the concern for the welfare of animals as a personal value and locate it within the structure of the Schwartz

theory of basic values as a facet of Universalism. In their abstract, they state that "…the systematic concern for the well-being of animals is a central, desirable goal that transcends situations for a growing segment of society. Despite this, research continues to view animal-welfare concerns as situation specific attitudes rather than trans-situational guides."

Notwithstanding the implication that a construct applying to "a growing segment of society" is not universal even if it is deemed to be a value, they argue that reconceptualising it as a personal value opens the possibility to study its liminal properties between rationality and emotion that are not explained by cognitive attitudes. They propose that a more refined version of the Theory could add this hypothesised value to the 19 values currently identified and locate it between Universalism-concern (commitment to equality, justice and protection for all people), and Universalism-nature (preservation of the natural environment).

Supporting empirical evidence was provided in a successive paper (Lee, Sneddon, Daly, Schwartz, Soutar & Louviere, 2017). By co-authoring it, the creator of the Theory, Shalom Schwartz, did endorse the construct as a value on the basis that it meets the criteria historically used to classify constructs as values, as further developed by him (Schwartz, 1992, 2006, 2015).

For the purpose of this study, the acceptance of "concern for animal welfare" as a value within the theoretical framework was not seen as an essential condition for its potential usefulness, which is to provide a better understanding of a growing societal concern (Lee et al. 2017, p.12). It was deemed more productive to try to obtain such an understanding by investigating directly the value profile of people who prefer to donate to either cause. The respondents were forced to choose one of the two behaviours and, by doing so, allocate themselves to one of two mutually exclusive groups. It is understood that this denies the possibility to investigate intermediate positions (people who donate to both causes had to choose which one most appealed to them) but highlights the contrast between them.

From this point of view, the endorsement by the author of the Theory of the premise that to "Donate money or time to an animal welfare focused charity" is a behaviour expressive of this distinct motivational construct, regardless of its classification, is the

relevant consideration. That this construct does not coincide with the concern for nature facet of Universalism is not disputed. It was also found that it is characterised by a very low correlation with the concern and tolerance for people (Lee et al. 2017, p.10). This is not surprising, given that this construct is defined by its contrast with humanitarian motivations.

It would then appear that the motivational structure of this construct would not coincide with the position of Universalism in the circumplex structure: Self-Transcendence, which includes Universalism, implies humanitarianism. The undisputed fact that it concerns "a growing segment of society" suggests that the Openness to Change dimension is a more appropriate location for this construct. By analysing the pattern of correlations between the basic values and the behaviour that this construct expresses it should be possible to understand the construct and the reasons for its potential classification as a basic value, to determine its consistency with the motivational structure of the circumplex, and to assess whether it is or not a facet of Universalism. Therefore:

Hypothesis 5: even assuming that the construct expressed by the behaviour "Donate money or time to an animal welfare focused charity" could be classified as a basic value, not an aggregate of conscious attitudes, it will be found that this construct does not fit the anthropocentric motivational structure of the circumplex. The pattern of correlations between the basic values and the behaviour that this construct expresses is not expected to follow the sinusoid pattern that would result if the circumplex structure did include the construct. In particular, it will be found that the construct is not a facet of the Universalism value because it is not driven by Self-Transcendence values but by Openness to Change values.

7.3 Method

7.3.1 Participants and procedure

The sample for the second study was collected online by subscribing to an application service provider that hosted the survey. They contacted by email a panel of South Australian residents who received a small compensation for completing the survey. A total of 810 responses, by design 49% male and 51% female, were collected in six days in August 2018. There were no missing items because all questions had to be answered to complete the survey and therefore be entitled to compensation. The questions about

religiosity and the preference to donate towards human or animal welfare implied alternative choices that identified specific subsamples.

7.3.2 Instrument and measures

The 57 questions of the PVQ-RR instrument for the measurement of personal values were complemented by questions specifically aimed at facilitating the investigation of the hypotheses identified on the basis of the first study. All questions were designed to obtain an unequivocal self-assessment of the respondents by forcing specific choices, such as the practising-not practising and the faith-convention dichotomies mentioned above, or the preference for giving to animal welfare as opposed to human welfare.

The questions asking for demographic data:

gender,

age group,

highest education level achieved (5 item scale), and

perceived economic status (5 item scale) are self explanatory.

Openness to Change-Conservation dimension

Specific attention was given to the development of a scale (6 items) aimed at obtaining a self-placement score as comparable as possible to the score on the Openness to Change-Conservation dimension calculated for the first study. The resulting scale was therefore: 1 = definitely conservative, 2 = moderately conservative, 3 = centre tending to the right, 4 = centre tending to the left, 5 = moderately progressive, 6 = definitely progressive. This was deemed more suitable than a 7 item scale with a neutral "centre" item to induce a more nuanced awareness, which otherwise could have been avoided by a majority of the respondents. It is acknowledged that the use of "left" as a shorthand for progressive is not strictly appropriate, but there is no inconsistency between "right" and conservative, as discussed in Chapter 3. "Definitely" was preferred to "extremely" to induce more honesty, assuming that people do not like to identify themselves as "extremists".

Preference for human or animal recipients

The consequence of imposing on the respondents a dichotomic choice between animal welfare and human welfare is that the comparison of their giving behaviours coincides with the comparison of the groups of people expressing the behaviour. The possibility of people contributing a small portion of their total contribution to the less preferred cause was not deemed a substantial enough consideration to invalidate the analysis. Also, because the

participants were asked to disclose only a categorical level of contribution, not an amount measured on a continuous scale, the possibility that the deduction of the smaller contribution would have resulted in the stated level falling into a lower category was considered an acceptable limitation of this approach.

Preferred way to donate

Those who indicated their preference for human welfare were asked to indicate their preference for the four dichotomic criteria described by Rempel and Burris (2015) as markers of charitable or philanthropic preference.

Religiosity

Asking first whether the respondent practised a religion made clear the difference between the unbelievers and the uncommitted. To distinguish uncommitted and devout religious people, practising people were asked about their frequency of attendance to religious services using a nine item scale developed by Cameron (1999), adopted by the HILDA survey and used in the study by Kortt, Steen & Sinnewe (2017) mentioned above. They were also specifically asked whether their choice was due to faith or acceptance of social expectations.

Age of commitment to religious belief

To provide an indication of the influence of age on the secularisation trend, non-practising participants were asked whether they had made this decision before or after the age of 21, the age by which most people have completed their education. The reason of its inclusion was to investigate why the correlations found with the first study between religiosity, age and education could be seen as inconsistent with the findings of Kortt, Steen and Sinnewe (2017). It was later decided that this study, which also uses the variable named “faith” obtained from the recent release of HILDA Release 16, including data from 2001 to 2016, (doi:10.4225/87/VHRTR5) was only peripheral to the main purpose of the thesis. A brief discussion is in appendix 2. The availability of a measure for the construct of “faith” made also possible to assess how well attendance measured with the three item scale used in the first study and the nine item scale used in the second study can be used as a proxy for this construct.

It should be noted, however, that “faith” is measured by HILDA asking “on a scale from 1 to 10, how important is religion in your life?” Whether stating the importance of religion in one’s life can be reliably interpreted as a profession of faith is questionable. The actual distribution of responses suggested that it is not necessarily so: the respondents recognised

that religion still has a substantial impact on social life, far beyond the individual's own attitude towards it measured by attendance. A further level of discrimination, e.g. the importance of belief in God, as used by Saroglou, Pichon, Trompette, Verschueren & Dernelle (2005), would seem to be necessary for a better measurement of the construct of faith.

Attitude towards charity

The attitude towards charity of the participants was measured on a 4 item scale by asking them to express an opinion on it, which could vary from totally negative (a waste of money) to highly positive (contributing the tithe or similar). To investigate discrepancies between stated belief and actual giving, questions were asked about actual monetary donations made: either none (= 0), less than 1% of total yearly income (= 1) or more than 1% (= 2), and voluntarily worked hours, either none (= 0), one or less a week (= 1), between one and three (= 2) or more than three a week (= 3). The sum of both contributions then produced a 0 to 5 scale, 0 being none and none and 5 being the contribution at the two highest levels.

While limiting the application of statistical methods designed for the analysis of interval variables, the preference for unequivocally categorical variables was justified by the need to verify by means of alternative methods possible statistical artefacts produced by the former. The resulting questionnaire is attached in Appendix 1.

7.3.3 Descriptive statistics of the cleaned sample

Schwartz suggests dropping the cases that have more than 49 equal answers to the 57 questions of the PVQ-RR. Thirty cases met this condition, therefore the cleaned file included 780 cases, 385 male (49.4%) and 395 female (50.6%). The respondents were mostly over 54 (60.8%) and leaning towards conservation (54.9%); 39.3% had a university degree. Most considered themselves financially comfortable (48%) or just getting by (40%). No claim is made that this convenience sample is representative of the South Australian population, although sufficient in terms of statistical power. The analysis of the frequency of responses, however, indicated the conformity of the group of respondents: uncontroversial questions elicited normally distributed answers and questions that had a socially more desirable answer were skewed towards that outcome. Not many of the respondents showed great generosity. Table 7.1 shows that indeed the vast majority of people, 538 out of 780, are content with token gestures of generosity.

Table 7.1

Charity attitudes and reported behaviour

a) Money donations

	Actual yearly donation:			
Expressed belief:	*nothing*	*less than 1% of income*	*more than 1% of income*	*Total*
Charity is a waste of money	64 (80%)	12 (15%)	4 (5%)	80
It feels good to give a few dollars to the less fortunate	89 (16%)	366 (68%)	83 (15%)	538
People should donate about 1% of their total income to eradicate poverty	11 (10%)	52 (50%)	44 (40%)	107
People should contribute much more, like 10% (the tithe) to help humanity	1 (2%)	8 (15%)	46 (84%)	55
Total	165 (21%)	438 (56%)	177 (23%)	780

b) Voluntary work

	Voluntary weekly work for charities:				
Expressed belief:	*none*	*less than 1 hour on average*	*1 to 3 hours*	*more than 3 hours*	*Total*
Charity is a waste of money	75 (94%)	1	0	4	80
It feels good to give a few dollars to the less fortunate	395 (73%)	52	31	60	538
People should donate about 1% of their total income to eradicate poverty	68 (64%)	16	10	13	107
People should contribute much more, like 10% (the tithe) to help humanity	25 (45%)	7	12	11	55
Total	563 (72%)	76 (10%)	53 (7%)	88 (11%)	780

NOTE: Percentages of behaviour by attitude row

The 80 respondents who believe that charity is a waste of money can be assumed to be non-altruistic, even if some of them do indeed donate some money and/or time. Conversely, even among those who show a belief consistent with a highly positive attitude there are some people who do not act according to their belief by actually donating their money and/or time.

As regards money donations, the majority of people in each belief category did actually behave in accordance with their belief. This appears true also for the 90% of those who stated their belief that people should donate about 1% of their income and were rather evenly split between those who give less and those who give more, as they could not express a more specific choice due to the survey design.

Pearson's χ^2 goodness of fit test indicates that none of these distributions is random, the null hypothesis is rejected for all groups at the .01 significance level. The χ^2 test of independence indicates a significant association between expressed belief and level of actual donations (χ^2 (6) = 337.34, $p < .0005$). Whatever their belief, the respondents were mostly uninterested in working voluntarily but their willingness to do so increased as their positive attitude towards charity increased. This association between expressed belief and voluntary work is significant: χ^2 (9) = 53.38, $p < .0005$).

Not very surprising, but not expected before seeing the HILDA data collected in 2010, was the large number of respondents who admitted not being practising a religion: 73.6%, more than double the number of people who declare "no religion" in the census. In the 2010 HILDA survey only 33.6% of the respondents had stated that they did not belong to any religion (62% were Christians and 4.4% of other religions). In that sample, 73.5% had stated that they never attended religious services or attended less than or maybe once a year, the same percentage within 0.1% who declared themselves not practising in the South Australian second survey. Only 30.7% declared that religion is "one of the least important things in [their] life". This number is even more significant because of the predominantly older age of the respondents.

As it could be expected, when those who still indicate a religion to which they belong in name only are excluded, the minority who does practice does it overwhelmingly because of genuine faith: only 15% of these admitted doing it because of social expectations. Table 7.2 shows that the proportion of religious people remains close to the total average in all the age groups above 34, with females appearing to make the decision to abandon religion earlier than the males. It should be noted, however, that the number of respondents in the 18-24 and 25-34 age groups is so small that just a handful of people moving from the practising to the non-practising side would have resulted in the group falling into the average range.

About 80% of the non-practising people in all the age groups up to 65, both male and female, either were not brought up to be religious or abandoned the religion of their family before they were 21 years old. The proportion drops to about 50% for the older age groups and the average for the whole sample is 65% for males and 67% for females.

Table 7.2

Proportion of religious to non-religious people by age group

	Males				*Females*			
Age group	*Practising*	*Not*	*Total*	*%*	*Practising*	*Not*	*Total*	*%*
18-24	3	7	10	30%	12	8	20	60%
25-34	14	11	25	56%	10	30	40	25%
35-44	9	27	36	25%	17	32	49	35%
45-54	18	38	56	32%	12	58	70	17%
55-64	22	84	106	21%	14	87	101	14%
65-74	25	97	122	20%	33	61	94	35%
75-84	6	20	26	23%	9	12	21	43%
85+	2	2	4	50%	-	-	-	-
Total	99	286	385	26%	107	288	395	27%

7.4 Application of the PVQ-RR instrument to South Australia

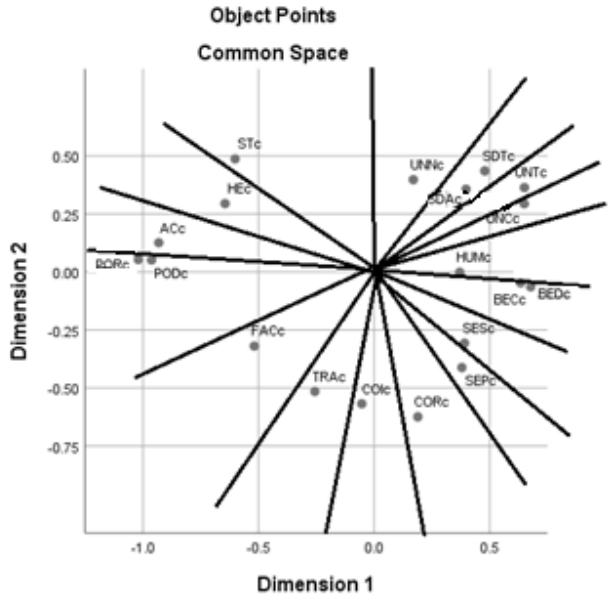
It is reported in the literature that a so far unexplained reversal of the Benevolence and Universalism values was found in many samples by using instruments developed after 2012, of which the PVQ-RR is the most refined version. This instrument has been validated in many countries and, as indicated in section 7.1, it was assumed that it would measure effectively the 19 values of the revised theoretical structure in Australia. It was still necessary to assess the adherence of the sample to the theorised circular continuum, to verify the expected reversal of the self-transcendence values and ensure that the fundamental motivational principles do indeed apply.

A preliminary analysis of internal reliability indicated that all scales except Humility (Cronbach's α =.54) had adequate reliability, on the basis of the commonly accepted criterion that alpha should be between .7 and .9. Security-personal (.61) and Face (.68) were slightly below this criterion. When aggregated in the ten original values of the Theory, all

reliabilities met it, varying from .705 for Tradition to .883 for Universalism. This confirms the finding of the first study that Tradition has the lowest reliability because Humility items have near zero correlations with the respect for customs items, in this case even negative: *r* = -.06. The .705 alpha would have actually increased to .743 had item 7 (it is important never to think one deserves more than other people) been omitted from the scale.

Similarly to the process applied by Schwartz et al. (2012), a MDS analysis of the sample was conducted using the SPSS25 MDS Proxscal program with ordinal proximity transformations and Euclidean distance measures. Instead of z-score transformations of values the preferred centring procedure indicated by Schwartz (2016) was used: ipsatised score (individual score minus average individual score of the 57 items) +4 as a constant. The centred scores were also used for the analyses that follow.

As it was indicated in Lee et al. (2017, p. 7), Schwartz et al. (2012, p. 671) and Torres, Schwartz and Nascimento (2016, p. 345) that using the Torgerson initial configuration gave results very similar to using equally spaced coordinates as prescribed by Bilsky et al. (2011), this readily available option was applied. The result (stress-1 =.086) is shown as Figure 7.1.



UNN = Universalism – Nature; SDT = Self-Direction – Thought; SDA = Self-Direction – Action; UNT = Universalism – Tolerance; UNC = Universalism – Concern; HUM = Humility; BED = Benevolence – Dependability; BEC = Benevolence – Caring; SES = Security – Societal; SEP = Security – Personal; COR = Conformity – Rules; COI = Conformity – Interpersonal; TRA = Tradition; FAC = Face; POD = Power – Dominance; POR = Power – Resources; AC = Achievement; HE = Hedonism; ST = Stimulation

Figure 7.1 – Two-dimensional MDS of South Australian values data collected with the PVQ-RR (19 values configuration)

The partition of the values is visible, although the facets of Power (Dominance and Resources), Benevolence (Care and Dependability) and Self-Direction (Thought and Action) are not distinctly separate. The reversal of Benevolence and Universalism does not occur, but other anomalies are visible. The concern for nature facet of Universalism is separated by Self-Direction from Universalism-Concern and Universalism-Tolerance. As found in the representative SA sample, Security is quite closely related to Benevolence and does not appear where expected in the theoretical circumplex. Humility is not adjacent to Tradition.

These discrepancies are attenuated in the aggregated ten original values, as shown in Figure 7.2, a plot obtained using the Bilsky et al. (2011) custom initial configuration (stress-1 =.068). The enhancement of the two dimensional presentation obtained with this method is evident. All the values are in the theoretically expected order, with a notable exception. Even setting the coordinates of the initial configuration according to the Theory was not sufficient to overcome the result previously found only with a different MDS setting: Security was correlated to Benevolence, not to Power.

Peculiar to this sample is the position of the self-enhancement values, all close together and, with Stimulation, in opposition to all other values. A possible explanation could be found in the mostly medium to low economic status and older age of the participants, who at their stage of life may have already abandoned self-enhancement aspirations.

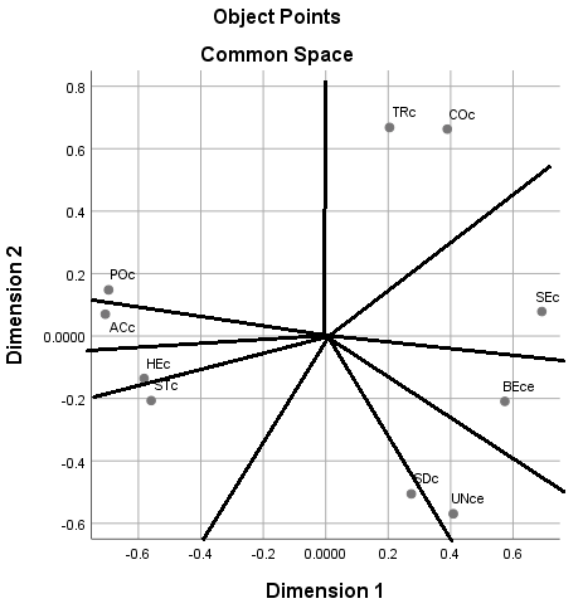


Figure 7.2 – Two-dimensional MDS of South Australian values data collected with the PVQ-RR (10 values configuration)

7.5 Influence of values on charitable behaviour

7.5.1 Hypothesis 1 - Identification of philanthropic and charitable people

Rempel and Burris (2015) had proposed that two different philosophies are at the core of various charitable organisations. One is focussed on long term assistance to address needs indicated by the recipients, for which the type and method of assistance are equally relevant. The second is donor focussed, short term assistance for which the other criteria are largely irrelevant. It is hypothesised that adherence to the first of these two philosophies identifies charitable people and adherence to the second identifies a more philanthropic orientation: to help when the donor finds it convenient, not necessarily when the need arises. By expressing a preference for the criteria that define it, people indicate which philosophy appeals to them. Of the 780 people constituting the full sample, 237 indicated preference for long term, recipient focussed helping and 73 preferred short term, donor focussed helping.

Assuming that people who have a charitable or philanthropic attitude are indeed identifiable by their adherence to the philosophies identified by these choices, it should be possible to confirm the validity of this assertion on the basis of the preference for the value types expressed or opposed by the behaviour of either group. According to the Theory, people identified as charitable would be expected to rate Benevolence and Universalism values more highly and the Power value less highly than people identified as philanthropic. The results shown in Table 7.3 are consistent with the Theory, although in the sample analysed the differences are not statistically significant.

Table 7.3

Identification of charitable and philanthropic people on the basis of different value preferences

Value importance score	*Charitable N =237 M (centred)*	*Philanthropic N = 73 M (centred)*	*Δ*
Universalism	4.37	4.16	+0.21
Benevolence	4.74	4.68	+0.06
Power	2.43	2.63	-0.20

If the preference for hands on projects as compared to campaigns for change does not greatly influence the attitude, it should be expected that the frequency of this preference would not change substantially in either group from the average displayed by the general population. This proportion changed marginally from the 71.6% - 28.4% of the whole sample to the 68.8% - 31.2% of the charitable group and the 76.7% - 23.3% of the philanthropic group. Predictably, the more conservative philanthropists are less inclined to campaign for change.

Contrary to what is sometimes mentioned by philanthropists as a defining feature of their attitude, the preference for enabling the recipients to look after themselves, as compared with just helping to address their immediate needs, was found in the charitable group (83.5% - 16.5%) and not in the philanthropic group (49.3% - 50.7%). This is consistent with the focus being on recipients instead of donors.

By only affecting the position of the donors on the Self-enhancement—Self-transcendence dimension, these differences in the motivation of altruistic behaviour do not provide further information about the relevance of the Conservation-Openness to Change dimension in determining the magnitude of donations to humanitarian causes.

7.5.2 Hypothesis 2 - Influence of the Conservation-Openness to Change dimension

The association (rank correlation) between the position of the respondents on the Conservation-Openness to Change dimension and their altruistic attitude, both self-assessed, was measured with Goodman and Kruskal's gamma (hereinafter γ). This test, more appropriate than Pearson's *r* given the categorical nature of the variables, is read in the same way, -1 to +1 range. When both tests were calculated for comparison with other studies that had applied the common convention of interpreting the numerical codes as interval measures, they were generally found to be very close and reported here together.

Table 7.4 shows the cross tabulation which resulted in a very significant association of progressiveness with "charitable" (in the wider legal definition) attitude: $\gamma = .215$, $p < .0005$. No association with actual donations of time and money was found, however, ($\gamma = .034$, $p = .375$) which confirmed the finding of the first study.

Table 7.4

Influence of the Conservation-Openness to Change dimension on altruistic attitude

	Number of respondents who stated that:				
Conservativeness	*charity is a waste of money*	*it feels good to give a few dollars to the less fortunate*	*people should donate about 1% of their total income*	*people should contribute much more, like 10%*	*Total*
Definitely conservative	16	40	6	6	68
Moderately conservative	19	140	21	9	189
Centre right	19	124	18	10	171
Centre left	13	95	20	7	135
Moderately progressive	8	105	29	11	153
Definitely progressive	5	34	13	12	64
Total	80	538	107	55	780

The finding that the association of Openness to Change with expressed altruism is highly significant but does not result in actual generous behaviour seems to indicate that there may well be an affinity at the intellectual level between progressive ideals and altruism or, conversely, between conservation of resources and conservation of established privileges, but what matters in practice is the attitude in the circumstances. A relevant contributing factor could be the financial status of the person. It was known, and the first study had confirmed, that income is by far more predictive of charitable behaviour than any of the basic values. The association between progressive tendency and perceived level of economic comfort was found to be significantly negative, although not large: $\gamma = -.098$, $p = .027$. This suggests that before thinking about giving, people have to feel sufficiently comfortable about their socio-economic status, which might also lead to a more conservative tendency as it increases. In other words, the marginal value of money is more important than the personal values in determining generosity.

The same method for measuring associations was applied separately to the philanthropic and charitable subsamples identified as discussed above. Scores on the Conservation-Openness to Change dimension were found to be unrelated to both types of behaviour. This confirms that only the differences in the importance attributed to Self-Transcendence and Self-Enhancement values are related to actual donations.

Self-transcendent people appear to care about others and behave altruistically, regardless of their preference for a charitable or philanthropic way of contributing or their preference for conservative or progressive ideals.

As stated by the Theory, altruistic (charitable widely defined) behaviour expresses the Universalism value. The finer discrimination afforded by the reviewed 19 values highlights some motivational differences between the two groups. For the people whose altruism is better motivated by a self-enhancement component, i.e. the philanthropic people, there is a significant association of their altruism with the tolerance of others. Within this group the level of money donations was only associated with Universalism-Tolerance with marginal significance (γ = .252, *p* = .049). The amount of voluntary work carried out (γ = .322, *p* = .007) was significantly associated with this value.

Within the group of people deemed to be charitable the level of money donations was significantly associated with Universalism-Concern: γ = .201, approximate significance *p* = .001, and with Universalism- Nature (γ = .214, *p* = .001), but no significant association was found between any value and the amount of voluntary work carried out. It was confirmed, as already mentioned, that philanthropists rated the Power value more highly, but not significantly, than charitable people did. These results are summarised in Table 7.5.

Table 7.5

Difference of motivation between charitable and philanthropic people

a) Motivation of money donations		
	Charitable N =237	*Philanthropic N = 73*
Association (γ) with:		
Universalism-Concern	.201***	NS
Universalism-Nature	.214***	NS
Universalism- Tolerance	NS	.252*
b) Motivation of voluntary work		
Association (γ) with:		
Universalism-Concern	NS	NS
Universalism-Nature	NS	NS
Universalism- Tolerance	NS	.322**

7.5.3 Hypothesis 3 - Influence of religiosity on charitable and philanthropic people

When discussing Schwartz and Huismans (1995), a concern was expressed about the efficacy of estimating a religious commitment broadly identifiable with the construct of "faith" by measuring attendance to religious functions with a three or four item scale. To assess the influence of the scale used, the survey questionnaire designed for this study included the same question of the HILDA survey (How frequently do you attend religious services, excluding special occasions like weddings and funerals?) coded on a scale from 1 = never to 9 = every day.

For comparison with the three item scale used in the two SA studies, the nine items can be summarised. Never = 1 in both scales and the other frequencies of attendance are summarised into "less than once a month" = 2 in the three item scale and "more than once a month" = 3 in the three item scale. This separation conceptually identifies non-practising, uncommitted and devout people.

As both attendance and faith are available in the HILDA extract, it is possible to calculate the rank correlation between them: γ = .751 males, .748 females if measured with the 9 item scale, γ = .798 males, .748 females if measured with the 3 item scale, all $p <$ .0005. This indicates that the more crude 3 item scale was as good an estimate of faith as the more sophisticated 9 item scale, and the two scales gave absolutely equivalent results for females.

The finding by Schwartz and Huismans (1995) that religiosity is negatively correlated to the basic value of Universalism as measured in accordance with the 10 value original Theory was confirmed. The ability to measure the 19 values of the refined Theory allowed a more detailed analysis. The 206 people who identified themselves as religious attributed less importance to the two facets of Universalism-Concern (M = 4.43) and Universalism-Tolerance (M = 4.28) than the 574 non-religious people did (M= 4.49 and M = 4.36); these differences, however, were not statistically significant, as shown in the last two columns of Table 7.6.

Table 7.6

Effect of religiosity on the importance attributed to Universalism values

	Charitable group		*Philanthropist group*		*Whole sample*	
	Concern	*Tolerance*	*Concern*	*Tolerance*	*Concern*	*Tolerance*
Religious people	.448	.246	.381	.429	.426	.280
Non-religious people	.636	.576	.464	.105	.488	.357
Difference	- .188*	- .330***	- .088	.324 *	- .062	- .077

NOTE: Mean ipsatised scores presented without the added constant (4 in all cases).

Significant differences in the mean importance attributed to Universalism-Concern and Universalism-Tolerance were found between charitable and philanthropic people. Religious charitable people rated the concern for others significantly lower than non-religious charitable people (Welch t (186) = 2.18, p = 0.03). Such a difference is in the same direction but not significant for philanthropic people. The effect on tolerance is instead opposite in the two groups. Religious charitable people rate the tolerance for others very significantly lower (t (185) = 3.44 p = 0.0007), whereas religious philanthropic people rate it significantly higher (t (47) = 2.038, p = 0.047) than their non-religious counterparts.

On the basis of this analysis, the hypothesis that the influence of religiosity on philanthropic and charitable people can be identified on the basis of differences in their rating of the Universalism values is supported. This analysis also indirectly provides support for the first hypothesis. The selection criteria based on the findings of Rempel and Burris (2015) did indeed identify two groups that display altruistic behaviours consistent with theoretical expectations.

7.5.4 Hypothesis 4 – Moderating effect of Conformity

A finding of the first study was the absence of a significant interaction of Conformity with the other value types that moderated charitable behaviour. To confirm it, the method of performing and interpreting hierarchical multiple regression analyses as explained by Aiken and West (1991) was again used with the South Australian sample obtained with the second survey. The Conformity rating frequencies were calculated and it was found again that the sample was normally distributed and slightly skewed towards high ratings.

The Kruskal-Wallis H test was conducted to examine the differences between the philanthropic and charitable groups. They were not significantly different in their level of religiosity (H (1) = .055, p = .814) or generosity: H (1) = 2.83, p = .093 for money donations, H (1) = .804, p = .37 for time volunteered. When these groups where classified on the basis of religiosity, however, the difference in the expression of their altruistic behaviour became highly significant: H (3) = 18.17, p < .0005 for money donations (Figure 7.3 on left), H (3) = 10.504, p = .015 for time volunteered (Figure 7.3 on right). These figures show that religious philanthropic people donated a little more money than their non-religious counterparts, whereas religious charitable people donated substantially less money than their non-religious counterparts. As regards time volunteered, religious philanthropic people contributed more than all the others.

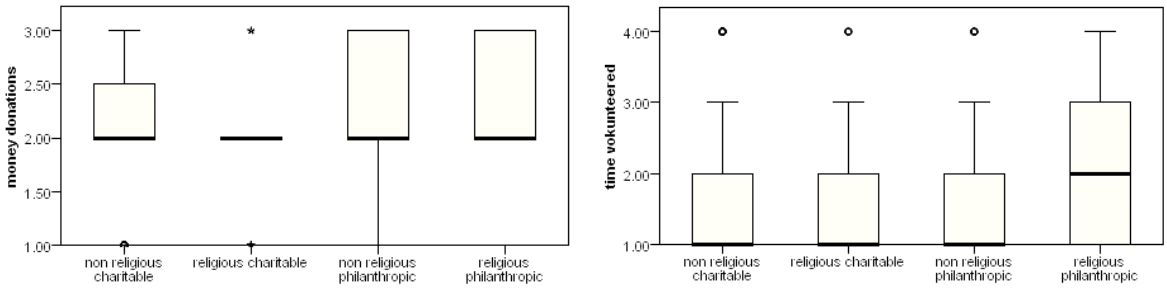


Figure 7.3 – Contribution distributions by altruistic and religious preference

These effects are explained by the strong association between religiosity and money donations (γ = .83, p < .0005) and between religiosity and voluntary work (γ = .48, p = .014) shown by philanthropic people. For charitable people the association between religiosity and money donations was significant but smaller (γ = .26, p = .023) and there was no significant relationship with the amount of voluntary work (γ = .22, p = .073). This empirical evidence confirms the theoretical expectation that religious people prefer philanthropic behaviour to charitable behaviour.

The analysis of the aggregated values replicating Study 1 of Lönnqvist et al. (2006) did not find any significant interaction between Conformity and Universalism, Benevolence and Power. The interaction with Power was found to moderate the negative correlation of this value with the contribution of time and money deemed to measure charitable behaviour, as found by Lönnqvist et al. (2006), but not at significant level. The same was found for Beneficence, also negatively correlated in the sample analysed, but the

correlation of the behaviour with Universalism was not moderated by the interaction with Conformity. These results are shown in Table 7.7 as presented in Table 2 of Lönnqvist et al. (2006, p. 1473).

The refined values measured by the PVQ-RR instrument allowed a more detailed analysis. The same method (Aiken & West, 1991) was used to analyse both facets of Conformity, Conformity -Rules and Conformity - Interpersonal, to see if they interacted with any one of the facets of the same predictive variables (three facets of Universalism: Concern, Tolerance and Nature, two of Benevolence: Care and Dependability, and two of Power: Resources and Dominance) to moderate their correlation with charitable behaviour. None of the resulting interactions was found to be even marginally significant. This study therefore confirms that the hypothesis of a negative influence of Conformity on charitable behaviour is not supported.

Table 7.7

Hierarchical regressions predicting charitable contribution as a function of three predictor variables, Conformity and their interaction

	Predictor value		
	Universalism	*Benevolence*	*Power*
Step 1			
Predictor (P)	.310	-.049	-.411
Conformity (C)	-111	-.232	-.252
R^2	.028	.000	.007
Step 2			
P x C	.026	.037	.069
R^2	.026	-.001	.007
Δ R^2	-.002	-.001	.000

NOTE: Table entries are the predictors' beta coefficients at Step 2, except R^2, which is the adjusted squared multiple correlation of the predictors with the criterion at each step, and Δ R^2, which is the increase in R^2 from Step 1 to Step 2.

7.5.5 Hypothesis 5 - Concern for animal welfare as a basic value consistent with the Theory

By asking the participants whether they preferred to donate to organisations for the welfare of animals as compared to organisations for the welfare of humans, two self-selected groups were identified. A common justification given by animal welfare activists, that animals need help because they cannot help themselves, or in other words humans

have a stewardship responsibility towards animals that they do not have for their human peers, was included in the question as a clarification of its fundamental intent and an encouragement for the less militant to express themselves freely. The animal welfare group, N = 297, constituted 38% of the total sample.

The Theory states that contributing to human welfare organisations is a behaviour expressive of Universalism. Schwartz also agreed that contributing to animal welfare is a behaviour expressive of the same basic value, albeit of a facet not previously distinguished, in the same way that contributing to environmental causes is expressive of Universalism-nature. A necessary caveat added was that no empirical studies were yet available to support this statement (Lee et al., 2017, p.5).

The hypothesis that the concern for animals is an additional facet of Universalism, distinct from the concern for nature as human habitat, implies that it would be positioned in the motivational continuum adjacent to the other facets of the same basic value, as it was found by Lee et al. (2017, figure 2, p.8) with newly developed instruments. The PVQ-RR does not measure this hypothesised value, therefore a preference for it can only appear as a higher rating for Universalism-nature. This was confirmed by conducting T tests.

Other significant differences were also observed. Those who cared for animals rated more highly Self-Direction, both of thought and action, and cared less for Tradition. Most significantly, they were less concerned about other humans, unless they were those close to them (Benevolence). They are marginally more progressive but significantly less charitable. The relevant statistics are shown in Table 7.8.

If donating to animal welfare charities is indeed a behaviour expressive of a new facet of Universalism, the logic consequence is that all forms of altruistic behaviour, be it directed to humanitarian, environmental or animal welfare causes, would be expressive of the basic value Universalism at the aggregate level. The correlations of each one of these forms of behaviour with the ten basic values of the Theory should then follow the quasi-sinusoid pattern produced by its circumplex structure, as previously shown when discussing the religious behaviour of South Australians in accordance with the explanation by Schwartz and Huismans (1995).

Table 7.8

Significant differences between people contributing to animal and human welfare

	Animal welfare		*Human welfare*		*Welch test*		
	M	*SD*	*M*	*SD*	*t*	*df*	*p*
Benevolence *	4.71	0.579	4.72	0.556	0.056	1	.813
Tradition	3.32	1.074	3.61	0.986	14.953	1	<.001
Self Direction - Thought	4.81	0.681	4.70	0.635	5.109	1	.024
Self Direction - Action	4.72	0.675	4.58	0.638	8.170	1	.004
Universalism - Nature	4.27	0.892	3.98	0.798	20.639	1	<.001
Universalism - Concern	4.39	0.782	4.52	0.670	5.693	1	.017
Progressiveness	3.51	1.518	3.33	1.358	3.082	1	.081
Charitable attitude	2.04	.664	2.26	.712	17.908	1	<.001

* Note: Benevolence shown to illustrate that the values not shown are similarly rated by the two groups. All value ratings are centred.

If it does not, as hypothesised, the construct that drives the behaviour does not fit within the circumplex structure of the Theory. Therefore, the scores of the correlations with the ten basic values of both behaviours were calculated separately as shown in Table 7.9.

Table 7.9

Correlation of the level of contribution with the value types in groups defined by their Animal welfare or Human welfare orientation

	Animal welfare group N = 297		*Human welfare group N = 483*	
	r	*γ*	*r*	*γ*
Benevolence	.005	.010	.064	.070
Universalism	.127*	.153**	.215**	.184***
Self-Direction	.096	.077	.076	-.042
Stimulation	.073	.070	.054	.032
Hedonism	-.004	.020	-.058	-.067
Achievement	.036	.047	-.074	-.042
Power	-.029	-.062	-.112*	-.117**
Security	-.040	-.056	-.091*	-.070
Conformity	-.089	-.096	-.003	.001
Tradition	-.145*	-.104*	.054	.048

Pearson's coefficient *r* is the preferred method for measuring correlations with the values of the Theory, which are measured on a six item Likert scale. By analogy, *r* should be equally adequate for analysing correlations when using the six item scale constructed to measure the altruistic contribution of the respondents of the South Australian second survey. As both are really ordinal scales, however, Kruskal's gamma was also calculated to provide assurance that both methods would produce similar results, as they did. Only the Pearson's correlations are presented in the following graphs.

When plotting the correlations of the ten values with the contribution to human welfare organisations, the expected sinusoid pattern appears (Figure 7.4). This behaviour is expressive of the Universalism value and is opposed by the Power value, as theoretically predicted. The correlations describe a 2π section of a quasi-sinusoid curve consistent with the premise of the circumplex structure of the motivational compatibilities and conflicts between values.

As previously discussed in Chapter 5, this premise dictates that once the highest positive correlation of a behaviour with its driving value is determined, it describes the beginning at π=0 of a cosine function. The rank size of the other *r* values in the -1 to +1 range follows predictably the quasi-circular sequence of values. The resulting curve is a quasi-cosine function, generally flattened on the negative side because the increasing complexity of the interrelations between more distant values tends to dilute their influence, as Figure 7.4 clearly shows.

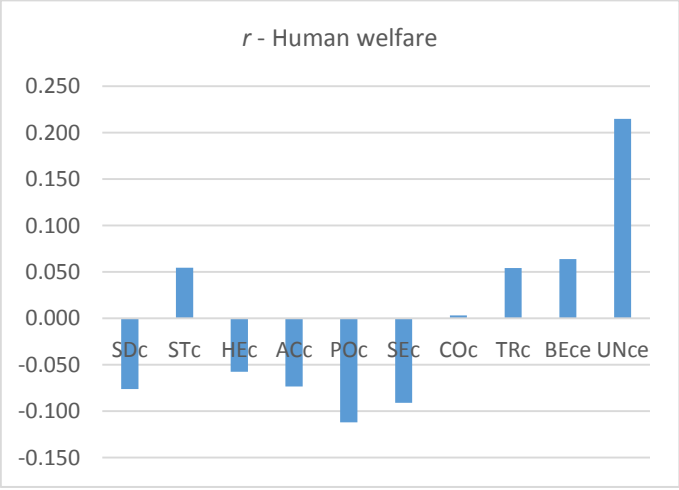


Figure 7.4 - Correlation with value types of the behaviour "contribution to human welfare"

The largest divergence from the expected curve is the low correlation with Self-Determination, which is consistent with the strong influence of religiosity on altruistic behaviour previously discussed.

The correlations with the contribution to animal welfare organisations show a different pattern (Figure 7.5). Once discounted the high expected correlation with Universalism, due to the fact that the instrument does not measure the concern for animals as a specific construct and its closest approximation is Universalism-nature, this behaviour is associated with Self-Determination and Stimulation and is strongly opposed by Conformity and Tradition. Both the correlations with Universalism and with Benevolence are lower than those displayed by the group contributing to human welfare, which indicates that Self-Transcendence is not the main motivating dimension. The almost nil correlation with Benevolence and Hedonism evokes the stereotypical image of a sad and bitter person alone in a room full of cats.

The hypothesis that this construct is better described as an aspect of Openness to Change rather than an aspect of Self-Transcendence is supported. Whether it is a new value as defined by the Theory and it is productive to insert it between Universalism and Self-Direction as a component of the Openness to Change higher level dimension could be further investigated, but this analysis suggests that it is not. Locating it between Universalism-concern and Universalism-tolerance, as Lee et al. (2017) do, is not supported.

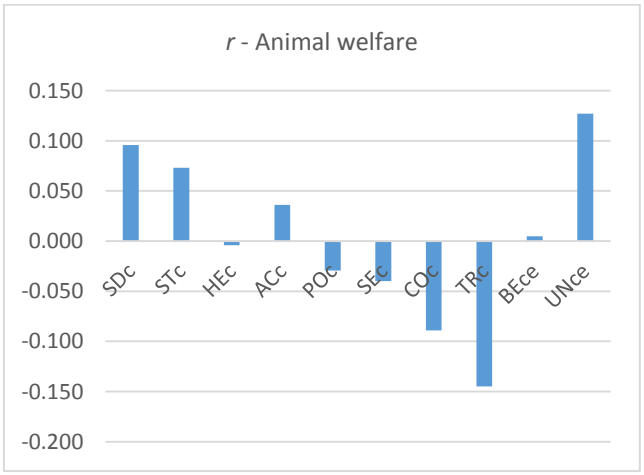


Figure 7.5 - Correlation with value types of the behaviour "contribution to animal welfare"

7.6 Discussion

7.6.1 Aim 1: Structural analysis of an Australian sample obtained with the PVQ-RR

To the best of the writer's knowledge, this is the first application of the PVQ-RR instrument to an Australian population that provided an opportunity to examine the resultant structure of the constructs using MDS. The resulting two-dimensional plots indicated that the preferences of the respondents were mostly located where expected in the theorised circular continuum, with some anomalies of minor consequence. The partition of the 19 distinct values was visible, although the facets of Power (Dominance and Resources), Benevolence (Care and Dependability) and Self-Direction (Thought and Action) were not quite separate.

Two main issues were investigated. The first was the reversal of Benevolence and Universalism found in previous studies that had used the PVQ-R instrument (Schwartz et al., 2012; Schwartz et al., 2017; Torres, Schwartz and Nascimento, 2016). The reversal did not occur in the South Australian sample. This did not affect the subsequent analyses, as these two basic values constitute the Self-Transcendence dimension and their relative position in it does not affect the theoretical structure of the higher level dimension. Lee et al. (2017) had also found that a mixed Australian-U.S. sample of almost identical size, N = 784, conformed to the originally theorized order. They analysed other unpublished MDS analyses of 42 samples, obtained mixed results, and concluded that apparently there is no stable ordering of these two values.

No further explanation of the reversal is attempted here, but it is noted that the explanation proposed for it by Torres, Schwartz and Nascimento (2016), albeit not supported by the empirical evidence mentioned above, provides some insight on a possible interpretation of the second issue investigated, the location of Security next to Benevolence. They suggest (p. 353) that the reason why the theoretical structure now appears to locate Universalism between Benevolence and Conformity might be because the finer discrimination of these basic values makes much clearer for the respondents the distinction between their ingroup and the outgroup. The conflict between self-interest and looking after others, be they close (Benevolence) or not (Universalism), is expected to produce the negative correlation that results in self-enhancement values being at the opposite end of the circumplex. The more nuanced representation of values fosters a less conflictual response, which results in a smaller negative correlation between Conformity,

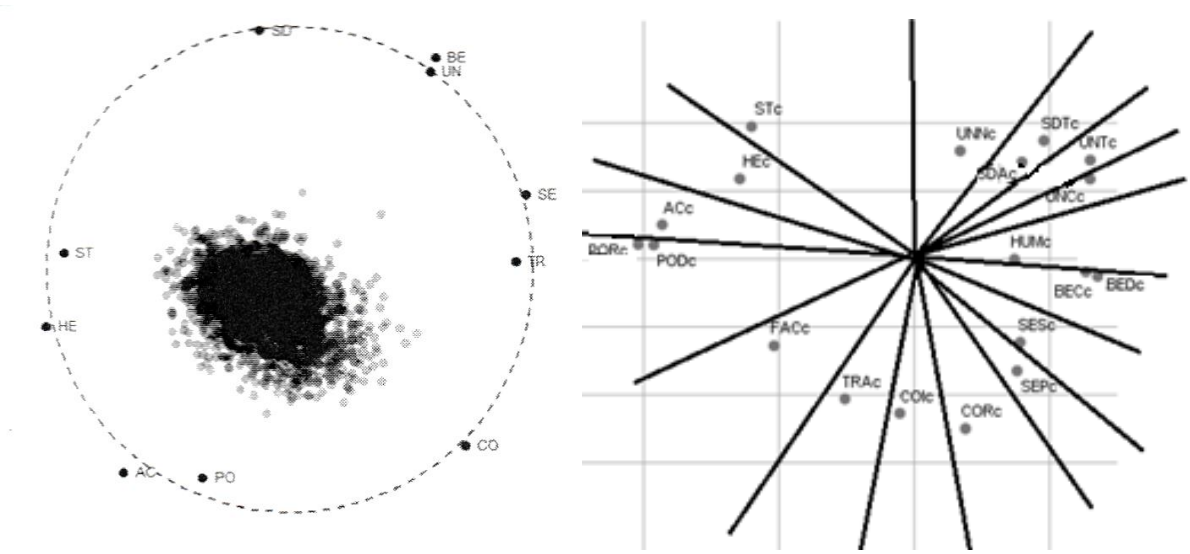
Universalism, Benevolence and the opposing self-enhancement values. To support this interpretation they propose “to investigate the correlation matrices of the projections of values in samples from different countries”. The correlation matrices of the South Australian samples are attached in Appendix 3.

The location of Security next to Benevolence instead of next to Power, found in both the South Australian samples, might be seen as an extreme example of a similar motivational shift. South Australians do not see Security as cognate to Power, they are motivated by this value in a similar way as they are motivated by Benevolence. The most compelling indication that this motivational shift is real is given by the application of the MDS settings used by Schwartz and the other leading authors in the field. There is now much less doubt that the different setting used in the first study could be the only cause of the unexpected result validated by the replication with ESS data. Borg, Bardi and Schwartz (2017, p.157) also had the same result investigating a sample of 2,261 British residents obtained with the 2012 wave of the ESS. Their methodology, derived from Coombs’s unfolding theory of preferential choice, was aimed at proving that the circular structure of values exists in every individual, not only across individuals. The samples analysed were mostly consistent with the theory. The data analysed with MDS is the matrix of all the value scores of all the persons, converted into dissimilarities.

The plot they obtained shows Security next to Benevolence and Universalism (Figure 7.6a). They did not attempt to explain the shift, besides noticing that it was evident in the full sample and the larger female subsample, not in the male subsample. The MDS plot (Figure 7.6b) shows that the two facets of Benevolence, Caring and Dependability, were overlapping, and Security-Societal was nearer to them than Security-Personal.

The refinement of the basic values allowed by the PVQ-RR does indeed strengthen the interpretation given in the previous chapter to this motivational shift. (All the value definitions used here are from Schwartz et al., 2017). The interpretation that the benevolent person’s concern for the welfare of the ingroup (i.e. Caring) includes their protection from hostile acts, which is a way to be a reliable and trustworthy member of the ingroup (i.e. Dependability) actuated by maintaining safety in society (i.e. Security-Societal), is clearly visualised in this depiction of the theoretical circumplex. The increasing awareness

of terrorism is changing the perception of national security, which is seen more as an extension of personal security than a desire to stand up to real or imaginary enemy nations. People are more worried about their children being safe in a public place than about their country being invaded.



a) *b)*

Figure 7.6 – a) is Figure 4, page 157 of Borg, Bardi and Schwartz, 2017; b) is Figure 7.1 above, shown again here for comparison.

Furthermore, the position of Humility between Benevolence and Universalism, although unexpected, appears consistent with increased awareness of the fragility of the human condition highlighted by the massive numbers of refugees around the world. It can be speculated that the acceptance and understanding of those who are different from oneself (Universalism –tolerance) and the commitment to equality, justice and protection for all (Universalism-concern) require more the recognition of one's insignificance in the large scheme of things (Humility) than worrying about upsetting other people (Conformity-interpersonal). Could a family loving, law abiding white supremacist really be humble according to these definitions?

7.6.2 Aim 2: Values which predict charitable behaviour towards humans and animals

The second aim was to provide more detailed evidence to support the findings of the earlier study of the influence of personal values on charitable behaviour, which was essentially an exploratory study because of the absence of specific precedents in the literature.

The definition of “charitable purpose” recently established in Australia by the Charities Act, 2013 identifies a list of purposes deemed worthy of tax deductible donations. Consequently, using this definition for the construct of “charitable behaviour” results in broadly equating it to altruistic behaviour. For the purpose of this analysis three distinct components of altruistic behaviour were identified. One stands out because it fulfils the sole purpose included in the Act that is not aimed at fostering the welfare of human beings: the purpose of fostering the welfare of animals. The other two are characterised by different modes of donation but are commonly considered synonymous: philanthropy and charity.

Charitable behaviour in a strict sense should be the expression of altruistic humanitarian behaviour, primarily motivated by a concern for the welfare of all human beings regardless of their proximity to the donor: that is, the values of Universalism and Benevolence, which together constitute the higher level value dimension of Self-Transcendence.

Philanthropic behaviour should be able to be distinguished from charitable behaviour because it is more strongly motivated by self-enhancement considerations, made apparent by a smaller negative correlation of this behaviour with the basic value Power, which is a major component of the Self-Enhancement higher level value dimension.

The amount of money and time donations is sufficient to measure giving behaviour but does not provide indications about the motivations of the donors. A recent study by Rempel and Burris (2015) had found that organisations which appeal for donations tend to fall into two categories, mainly characterised by their focus on the donor or the recipients and the short or long time nature of their approach. It was hypothesised that people who expressed their preference on this basis could be identified as charitable or philanthropic as defined above and display the value preferences that theoretically characterise them. The ability to distinguish these groups would also have made possible the investigation of two major issues highlighted by the first study: whether the influence of religiosity on either group was consistent with their different value preferences as theorised in the literature (Schwartz & Huismans, 1995), and whether aggregating the different motivations of philanthropy and charity was the cause of the unexpected finding of the complete irrelevance of the Conservation - Openness to Change polarity in affecting giving behaviour.

It was found that indeed the criteria developed by Rempel and Burris (2015) could identify two distinct groups of people characterised by charitable and philanthropic traits. This was not as much corroborated by the differences between the two groups in the preferences for Benevolence, Universalism and Power, which were in the theorised direction but not statistically significant, as by the very significant differences in the motivational strength of the Universalism facets, Concern, Nature and Tolerance, in determining the willingness of either group to donate money or engage in voluntary work.

The different influence of religiosity on charitable and philanthropic people was very significant and consistent with theoretical expectations. The level of religiosity was the same in both groups, which implies that the association of religiosity with conservatism, which was found to be significant as expected, had no bearing on the outcome. It should be noted that the significance of this association had not been found previously in an Australian sample (Caprara et al., 2018). This anomaly is discussed in Appendix 4.

It is the direct motivational force of religiosity that interacts differently with the choices that identify people as charitable or philanthropic. Religious people are more generous, but while people identified as charitable express more altruistic intents to begin with and being religious or not does not make a great difference in their actual behaviour, philanthropic people are highly motivated by religion to be actually more altruistic.

This difference also contributes to explaining the association between giving and tolerance shown by philanthropic people. Charitable people are by definition more concerned than the population average with the welfare of strangers, whereas philanthropic people, while similarly or even more altruistic than charitable people, show less concern because their altruism is more motivated by self-enhancement. Religiosity decreases the appreciation of Universalism values, because any dogma that has the purpose to increase the cohesion of the ingroup decreases tolerance for outgroup people and concern for their welfare. People who are charitable by nature are affected significantly by the focus of religiosity on the ingroup, which justifies “starting charity at home”. Philanthropic people are different in this respect: as they are more concerned about maintaining control over their giving, their tolerance and understanding of the recipients’ needs is not an essential consideration to begin with, and religiosity helps them to raise their awareness of it.

The finding of the absence of influence on altruistic behaviour of the Conservation – Openness to Change dimension was expected to be confirmed, and it was. The third hypothesis construed on the ability to distinguish the modes of expressing the behaviour, either charitable in a strict sense or philanthropic, was that it might at least partially explain this neutrality as a result of the aggregation of contrasting influences. It was found instead that both groups had no significant association between the expressions of altruistic behaviour, i.e. donations of money and time, and the basic values that constitute Conservation and Openness to Change. It can therefore be said with confidence that no significant influence of the Conservation – Openness to Change dimension on charitable behaviour is likely to exist, regardless of the specific definition of the construct. Progressive people deem themselves to be more charitable, but this analysis indicates that in practice they are not. Although most likely caused in great measure by the fact that progressive people tend to be less affluent than conservative people and income is the main predictor of generosity, this interesting finding deserves further investigation. The main objective would be to establish whether progressive people, who would be expected to have a preference for meeting people's needs by means of social policies funded by taxation, understand the questions regarding charity as an alternative funding source in the same way conservatives do.

The finding, discussed in detail below, that contributing to animal welfare causes is actually expressive of Openness to Change values and opposed by Conservation values highlights the inconsistency with humanitarianism of this behaviour.

The study was also designed to provide evidence for or against two controversial theories. The first, already debated in the literature (Bardi & Schwartz, 2003; Lönnqvist et al., 2006; Schwartz & Butenko, 2014; Schwartz et al., 2017) is that Conformity affects a person's willingness to give because it imposes a compliance with less favourable societal expectations. The more detailed analysis made possible by the new instrument further corroborated what had already been found about this theory with the first study. All the empirical evidence found suggests that Conformity does not have the moderating effect originally suggested by Bardi & Schwartz (2003).

The second theory investigated was the suggestion by some Australian scholars (Sneddon, Lee, Ballantyne & Packer, 2016), that the concern for the welfare of animals is a basic value included in the higher value of Universalism. Their argument for distinguishing this hypothesised value from Universalism-nature, further developed in Lee, Sneddon, Daly, Schwartz, Soutar and Louviere (2017), is indeed compelling. They suggest that "The closest recognised value to that of universalism–animal welfare is universalism–nature. They share a common goal in the preservation of the natural environment which includes animals. However, they differ in the focus of the goal. Universalism–nature reflects an underlying ecological ethic that ascribes importance to natural resources as a whole biotic community rather than specific entities within that community […] and is thus largely indifferent to the suffering of individual animals." (Sneddon et al, 2016, p.235).

Suggesting that "one might argue that animal welfare values are part of the universalism-nature value" (Lee et al., 2017, p. 5) then appears to be a straw man argument. Even considering that animal welfare ethics and environmental ethics can be reconciled within an individual's set of values, there is not much doubt that they are incommensurable (Campbell, 2018). A more important point, which does not clearly emerge from the arguments discussed in Lee et al. (2017), is how well such a distinct construct fits the original description of the purpose of Schwartz's theoretical structure. Is the fulfilment of the universal need of survival of human beings, as biological organisms organised in groups that need social interaction, really dependent on the concern for the welfare of animals supposedly becoming a universal, or at least quasi-universal, personal value?

It would appear that Sneddon et al. already answer this question with the paragraph quoted above. Concern for nature fits the purpose because nature is the habitat of the human species, as well as other species. Concern for the welfare of animals, as distinguished from concern for their existence in numbers convenient to the existence of humans in predator-prey or symbiotic relationships, does not. Accepted without reserve that "belief in the sentience of animals relates to greater emotional empathy towards animals" (Paul & Podberscek, 2000, quoted by Lee et al., 2017, p.4), circumstances dictate how this belief drives human behaviour.

Where ethical vegetarianism is possible, a committed person might go to the extreme of sweeping the soil where he or she walks to avoid treading on small insects. Where it is not, a person who believes that animals do have a soul might kill an animal and thank it for giving its life so that he or she can live. Even accepting that moral vegetarianism as a lifestyle "transcends specific actions and situations" (Lee et al., 2017, p.4), this is true only after the lifestyle choice is made by people for whom it is possible. Ignoring this necessary premise invalidates the use of this behaviour for the purpose of stating that the hypothesised construct that motivates it meets the criterion invoked to justify its classification as a personal value.

Another weakness is not making a clear distinction between concern for the welfare of animals and absence of cruelty towards them. If it is accepted that one universal aspect of civilisation, reflected in legislation, is to strive to overcome our basic instinct of aggression, made by progress increasingly less necessary for survival, the obvious consequence is that people well adjusted to social living do avoid unnecessary violence. Farming and killing animals for food does not necessarily imply cruelty. At the other extreme, it could be argued that enslaving an animal as a pet, which often involves fostering crippling genetic mutations, desexing, and imposing an unhealthy, unnatural lifestyle, is indeed cruel.

Even disregarding these weaknesses, the logic of the argument for the existence of the new value proposed by Lee et al. (2017) has limitations. This is how it proceeds. To be classified as a personal basic value, a construct needs to meet seven criteria. Various conscious attitudes driven by circumstances seem to meet at least one of these criteria. At least one such attitude can be found that meets one of the seven criteria. (If it can be proven that) all seven attitudes that individually meet a different one of the seven criteria are motivated by the same construct, this construct is a personal value.

As no direct proof of the causal link is provided, the conclusion is still speculative. The risk of similar fallacies in behavioural research is not uncommon (Regenwetter & Robinson, 2017). That the concern for animals is expressed by a number of attitudes driven by circumstances is undisputed. The divergence from the prevailing opinion may then be a matter of definitions.

For their Study 3, Lee et al. (2017, p.10) added to the PVQ-RR three questions to measure the importance attributed by the respondent to “care for animal welfare”, “take part in activities to defend animal rights”, and “protect animals from harm”. They then used a questionnaire with six behaviours believed to be expressive of the hypothesised universalism-animals value, including the one relevant for the study reported here, “Donate money or time to an animal welfare focused charity”, to assess the convergent and discriminant validity of the values. The introduction of a specific behaviour, “take part in activities to defend animal rights”, among the expressions of belief of the PVQ-RR illustrates the semantic problem. Any one of the other behaviours deemed to be expressive of the value could have been inserted in its place. The analysis of the relationship between belief and behaviour is compromised.

By directly asking the respondents of the South Australian survey to state their preference for giving to organisations for the welfare of animals or to organisations for the welfare of humans, it was possible to provide the previously unavailable empirical evidence required to support or deny the claim of Lee et al. (2017). These two behaviours were not found to be complementary and motivated by the same higher level basic value, they were found to be conflicting and motivated by different values.

This would appear to support the prevailing opinion that the concern for animals is a construct better classified as a group of attitudes, which, this analysis suggests, are shared by people who are not very happy with social conventions (low rating of Tradition) and use it as a compensation (high rating of Self-Determination) for their lack of concern for, or displeasure with, their fellow humans (low rating of Universalism-concern).

7.6.3 Methodological issues and limitations

A more thorough investigation of the applicability of the PVQ-RR to the Australian environment could have benefited from a confirmation of its ability to distinguish the 19 values of the refined theory by means of factor analysis. A future development could be the collection of another sample with this instrument and a cross validation of the two samples by verifying that CFA produces the same results with both.

The size of the cleaned sample, N = 790, although adequate to represent the South Australian population of less than 2 million, was not large enough to provide sample sizes of adequate power for the analysis of specific subgroups. Using research panels to collect samples is now becoming standard practice but it is conceivable that it could have introduced biases that were not adequately compensated by the control methods applied. Self-selection bias now might not be as much a matter of participants being only people interested in the specific topic, as a matter of participants being only people interested in answering anything at random just to get a small income. This raises the question whether people happy to be paid about $6 an hour for tapping a keyboard are representative of the population, and whether the difference between this amount being similar to the minimum wage, as in the U.S., or about one third of it, as in Australia, could produce significantly different results. Also concerning is the possibility that research panels could be intentionally used by specific interest groups intent on spreading their biased opinions. Coordinated flooding of surveys affecting a group's interest might be detected after it has happened if it produces highly improbable results, but it would be impossible to prevent and difficult to correct reliably.

Chapter 8

Conclusion

8.1 Overview: general aims

This thesis had two principal aims. The first was to examine the structure of values measured according to the Schwartz Theory of Basic Values in an Australian sample. The second was to investigate the association between personal values and people's charitable behaviour as measured by their self-reported engagement in helping the less fortunate. In addition to being one of the few detailed Australian studies of values and how they relate to charity, the study is perhaps the first to use the PVQ-21 and the PVQ-RR instruments designed to capture Schwartz's constructs. Within its broader aims, the research program investigated a number of specific areas: (a) did the value preferences reported by South Australians conform to the universal structure of values proposed by the theory? (b) How does the knowledge of the value preferences of South Australians contribute to the understanding of their humanitarian behaviour? (c) Does a conservative or progressive attitude affect giving behaviour? (d) How do charity and philanthropy differ? (e) Is religiosity related to giving? and (e) Is the concern for animal welfare a basic value compatible with the Schwartz Theory of Basic Values?

These questions are answered here in the context given by the interpretation of the findings and the acknowledgement of methodological limitations already discussed with reference to the specific studies. Possible future directions are then discussed.

8.2 Did the value preferences self-reported by South Australians conform to the universal structure of personal values proposed by the Theory?

General comparisons were made with the ESS to establish a common framework based on the use of the same instrument for the measurement of personal values. The replication of studies by Schwarz and Huismans (1995) and Schwartz and Rubel (2005), complemented by the use of techniques explained by Verkasalo et al. (2009), provided preliminary confirmation that the Australian data displayed value preferences similar to those of the European samples used in those studies and led to an unexpected finding. The importance of Benevolence increases monotonically for males during all their life, for females it increases until they are in their sixties, then it starts decreasing. This

phenomenon is rather prominent in South Australia and confirmed by the ESS data to exist, to a lesser extent, in the whole of Europe.

These findings generally support previous studies conducted in a total of 38 countries by Fontaine, Poortinga, Delbeke and Schwartz (2008) to investigate the structure and its stability across cultural groups. They concluded that the two-dimensional representation of the structure is sufficient and robust, and both sampling fluctuations and cultural variables cause deviations from the structure in approximately equal measure. So far, the only national survey in Australia that has any reference to the Theory is the World Values Survey (WVS), which is based on the postmodernization theory of Ronald Inglehart but includes, since 2005, ten of the PVQ-21 questions used to measure the ten values of his original theory. One item per value provides only generic insights not useful for theoretical analysis. All the published Australian studies that had applied the Theory had used older instruments more comprehensive than the brief PVQ-21, which was designed for ease of administration in the context of a large survey, and had collected only small samples without pretences of generalisability.

Although recent studies reported by the literature indicated that the position of Benevolence and Universalism in the circumplex was reversed in comparison to their position in the original Theory, no reversal was found in the samples obtained with the PVQ21 and the PVQ-RR, which would support the forming consensus that there is no stable positioning of the two values that constitute the self-transcendence dimension. A notable finding was instead that, in Australia, Security is not seen as related to Power but as related to Benevolence. The cause of this phenomenon, which seems to start to appear also in other countries, was speculatively attributed to the growing awareness, whatever its real justification, of the danger posed to the civilian population by acts of terrorism.

The exponential increase in the past fifty years of multiculturalism in Australia needs to be considered when discussing cultural analyses. At the time of writing seven of its 25 million inhabitants are migrants from virtually every country on the planet. This notwithstanding, political discourse often emphasises Australian values as if they constituted a homogeneous framework, to the point that among the variety of questions asked to aspiring new citizens to determine their willingness to assimilate such values, some

are about the national football code. Fischer and Schwartz (2011) demonstrated that there is more diversity in the value priorities of individuals within a predominantly mono-cultural country than across such countries, and suggested that only conformity values help to give a shared meaning to a culture, whereas it is very doubtful that culture determines values. On this basis, eliciting conformity to the appreciation of football makes some sense.

8.3 How does the knowledge of the value preferences of South Australians contribute to the understanding of their humanitarian behaviour?

The only analysis performed that was specifically designed to investigate the mechanisms by which personal values influence behaviour was the replication of the study by Lönnqvist et al., (2006), which denied their suggestion that the relations between values and behaviours were partly obscured by the influence of social norms. All the analyses performed were consistent with the correlational approach common in the literature, and no attempt was made to find empirical evidence supporting causality.

This thesis is based on the premise that the focus on personal values allows a reversal of the investigation perspective as regards their influence on the political aspects of humanitarian behaviour. As explained by Schwartz, Caprara and Vecchione (2010), political scientists and social psychologists have a different perspective about the influence of personal values. Political scientists focus on proposing criteria for justifying ideologies on how governments and societies should function, which tends to constrain their perspective to the liberalism - conservatism polarisation that is not sufficient to adequately represent political attitudes. Social psychologists focus instead on basic personal values, stable principles that underlie all other values.

Applying this perspective to the investigation of humanitarian behaviour, it was reasoned that if a person rates highly at one end of the Conservation - Openness to Change dimension, it can be reliably inferred that this person identifies him-herself as fundamentally liberal or conservative. It can then be inferred that his or her political values, albeit dependent on many other factors, would tend to be those known to be correlated with the liberal or conservative viewpoint. In the context of this thesis the political viewpoint being investigated is the extent to which social responsibility should be fulfilled by compulsory means (taxation) or voluntary ones (charity).

8.4 Does a conservative or progressive leaning affect giving behaviour?

Little evidence was found to support a link between variations on this dimension and charitable behaviour. The intuitive hypothesis that people leaning towards the left of the political spectrum give higher ratings to Benevolence, Universalism and Self-Direction values, whereas people leaning towards the right favour Power, Achievement, Conservation and Tradition, already supported by Caprara et al. (2006), was confirmed. Also confirmed was the finding by Schwartz, Caprara and Vecchione (2010) that the personal values preferred by the left underlie the political value of Equality, which is opposed by Power and Achievement. Valuing Equality means opposing self-interest if it is at the expense of others, therefore it can be broadly equated to being altruistic, the necessary premise to generosity. It was found, however, that this preference does not actually result in higher charitable contributions. Relatively to income, charitable contributions tend to diminish as wealth increases. In as much as poorer people tend to be left leaning and richer people tend to be right leaning, this is a measure of the expected difference in giving. About 0.5% of income seems to be the giving threshold that an overwhelming majority of people are reluctant to overcome, regardless of tendency.

A potential policy implication here is that an ideological preference for using charity as an alternative to taxation may not result in donating more than the people who believe that they have already fulfilled their social responsibility by supporting higher taxes. Both surveys, the first comparing the sum of time and money contributions with a progressiveness score calculated according to the equations developed by Verkasalo et al. (2009), the second comparing it to a self-assessed rating on a 6 item scale of progressiveness, resulted in nonsignificant correlations smaller than .04. It should be noted, however, that even the highly significant correlations with self-transcendence were small, under .1. The development of a predictor model by means of hierarchical multiple regression confirmed that basic values have a low predictive capacity as regards charitable behaviour. Much more predictive are the level of income, religiosity and education.

This empirical evidence suggests that most people feel the need to contribute to the welfare of others but there is a rather low threshold over which its cost to the individual overrides the perceived benefits. An ideological commitment to equality does raise it but to such a small extent that it is irrelevant for all practical purposes. Although not diminishing

the support found in the literature for the hypothesis that prosocial behaviour does make people healthier and happier up to the point where the task becomes overwhelming (Post, 2005), finding evidence that this point may be rather too easy to reach for the vast majority of people seems to suggest that the potential for generating physical and psychological benefits to donors is far from being fully established.

From a purely psychological perspective, it has long been debated whether altruism can be really selfless or is just a way to benefit the self. The consensus, supported by recent studies that found prosocial behaviour in children younger than 2 years of age (Svetlova, Nichols & Brownell, 2010) seems to favour the hypothesis that selfless altruism does indeed exist. A certain amount of gratification is almost always involved, however, even if not absolutely always, and the interpretation of gratification as a benefit to the self is still controversial. What matters in practice then is its level of importance, as illustrated by the differences between the modes of expressing the behaviour.

8.5 How do charity and philanthropy differ?

Australian law does not distinguish between philanthropy and charity. Its aim is to define charitable purposes that attract a tax deduction and establish legitimate ways of donating, so that the actual behaviour is not relevant in this context. To enable meaningful comparisons it was necessary to define these constructs on the basis of measurable differences in the underlying values. The discriminative criterion was identified in the focus of philanthropy on the donor and the focus of charity on the recipients, quite evident from the dictionary definitions. The Oxford Dictionary defines philanthropy as “the desire to promote the welfare of others” and charity as “the voluntary giving of help to those in need” but also “love of humankind” and “kindness and tolerance in judging others”. Both forms of giving are driven by self-transcendence values but the focus on the donor implies that philanthropists would display a higher preference for self-enhancement values than charitable people.

Rempel and Burris (2015) had used this criterion, together with other three, to investigate the philosophies at the core of various charitable organisations, and found that a preference for short term or long term intervention was also relevant to distinguish two

philosophies. The first was a long term, recipient focussed philosophy and the second a short term, donor focussed philosophy.

It is proposed that these two philosophies not only distinguish the type of charitable organisations, they also distinguish philanthropic from charitable people. To support this hypothesis it was necessary to establish that the different motivational influence exercised by the value types on either group is consistent with the Theory. The charitable group was expected to rate Benevolence and Universalism values more highly and the Power value less highly than the philanthropic group. This was found to be correct, although not at a statistically significant level. A greater level of assurance was provided by the finding that there was a highly significant difference, as expected between the two groups, in the rating of two of the Universalism facets identified by the 19 value reviewed Theory, Concern and Tolerance for the welfare of strangers.

8.6 How does religiosity relate to giving?

The finding by Schwartz and Huismans (1995) that religiosity is negatively correlated to the basic value of Universalism was confirmed. The rating of Concern and Tolerance for the welfare of strangers was significantly related to religiosity. It was found that both these values were higher for charitable people than for philanthropic people, as expected, but religious philanthropists were significantly more tolerant than non-religious philanthropists, whereas religious charitable people were significantly less concerned than non-religious charitable people. The level of religiosity and generosity displayed by the participants was about the same regardless of the preferred mode of donation. This disproved an alternative hypothesis made on the basis of the finding that Tradition significantly moderates Benevolence and Achievement: that religiosity would influence charitable behaviour because it is highly correlated with Tradition.

These findings were interpreted as implying that there may be two mechanisms at play. People identified as charitable express more altruistic intents to begin with and being religious or not does not make a great difference in their actual behaviour. On the other hand, philanthropic people are highly motivated by religion to be actually more altruistic, because their tolerance and understanding of the recipients' needs is not an essential consideration to begin with, and religiosity helps them to raise their awareness of it. In

summary, for generosity to occur an altruistic nature is essential, whereas religiosity primarily affects the choice of recipients.

8.7 Is the concern for animal welfare a basic value compatible with the Schwartz Theory of Basic Values?

Two considerations led the research towards this last question: the welfare of animals being the only non-humanitarian purpose accepted as charitable by Australian law and the recent publication of articles suggesting that the concern for the welfare of animals is another facet of the Universalism basic value of the Theory (Lee et al., 2017; Sneddon et al., 2016). These authors start from the premise that the concern for the welfare of animals is not the same as the concern for the environment described with the name of Universalism-Nature, but it is a cognate value that should be located between the other facets of Universalism as a twentieth value added to the 19 of the current reviewed Theory.

That these two types of concern are not the same is not disputed. It is suggested, however, that the arguments presented by these authors in favour of the concern for the welfare of animals being a value type consistent with the structure of the theory are not very convincing. By separating the value profiles of people self-selected as donors to animal welfare organisations from the value profiles of people self-selected as donors to humanitarian organisations, the second South Australian survey provided the empirical evidence required to debate their claim. The correlations of the giving behaviour of the humanitarian participants with their value profile displayed the expected pattern approximating a cosine function, starting with the driving value, Universalism, and displaying the opposition of Power. The equivalent analysis of the participants concerned with the welfare of animals did not. The driving value was Self-Determination and the opposing one was Tradition, not the value displayed at the opposite end of the circumplex. The simplest interpretation of this pattern is that the concern for the welfare of animals is an expression of discontent with society that appears quite unlikely to meet the criteria for inclusion in the structure of the Theory.

8.8 Methodological considerations

The specific methodological issues connected with the design, conduction and analysis of the two South Australian surveys conducted in 2014 and 2018 and the ways they

were addressed were discussed. As a general observation, addressing with limited resources issues best addressed by large scale surveys funded at national level soon proved rather ambitious, and the scope of the analyses specific to South Australia had to be confined within the limits of the data collected: samples of large size compared to most academic studies but rather small for the purpose. The possibility to extract relevant variables from publicly available data collected by national surveys with a different focus was helpful in this respect, but caution was needed not to introduce imperceptible biases due to the different modes of collection, selection and coding.

A premise to the practical application of the Theory was, therefore, the achievement of a reasonable level of assurance that the sampling procedure and the instruments used would be appropriate for the task. There being no doubts about the effectiveness of the PVQ-21 in the context of the nationwide probability sampling of the European countries participating to the ESS, an essential question was how well the techniques used to produce a State wide sample for South Australia with that instrument would overcome the problems of a more limited, self-selected sampling method.

Literature that had just become available at the time of designing the first survey (Dillman, Smyth & Christian, 2014) suggested that an address based sampling method was beneficial from a total survey error perspective and suitable to the current environment of dramatically falling response rates. Data provided by the Australian postal system made it a cost effective method, and stratification on the basis of the socio-economic status of the delivery areas ensured that the sample obtained had as many of the characteristics of a random sample as possible. Coverage, sampling, non-response and measurement error sources were considered and minimised.

Although it was expected (Eaker et al., 1998) that older people and females would be overrepresented, the much larger than expected number of female and highly educated respondents was a source of bias that needed correction. Other demographic characteristics were more similar to those of the South Australian population as measured by the latest census. Post-stratification techniques were considered, in particular rim weighting (Deming & Stephan, 1940). The variables used for the alignment must be relevant to the prediction of the survey outcomes, which in this case meant calibrating age, gender,

education, cultural background and religiosity, the variables identified by the literature as having the strongest influence on personal value preferences. Trying to optimise all these variables with rim weighting would have implied arbitrary choices likely to introduce new biases while correcting the identified ones. Given that the size of the sample collected (N= 1865) far exceeded the statistical power required to reliably represent a population of fewer than two million people, the selected solution was instead to reduce the overrepresented categories by random culling (Kish, 1990) until the proportions indicated by the latest census of the South Australian population were achieved in the reduced sample (N = 800).

The mean ratings of the value preferences of the participants included in the calibrated sample were significantly different from the mean ratings of the full sample. More than by the statistical significance of the very small differences, magnified by the large size of the sample, the confidence in the representativeness of the calibrated sample was supported by the consistence of their direction with what the correction of the biases was expected to produce according to the literature.

The sample obtained with the second survey also displayed some demographic differences from the population average. The gender ratio was fixed by design but the level of education of the respondents was again higher than the national average. Its size (N = 790) was already at the minimum level required for reliable representativeness and the application of calibration techniques did not appear worthwhile. Although their identity was not disclosed to the researcher, the participants were known to the online service provider who remunerated them. They did not have the opportunity of providing answers to potentially uncomfortable questions in absolute anonymity, which would suggest that, to a very small extent, the self-selection bias would be higher and the honesty of responses lower that that expected from the preceding survey. The main purpose of the second survey was to provide more refined empirical evidence to confirm the findings of the first survey. For this reason, the increased likelihood of appealing to people more committed than the general population to express their opinion on the topic, either positive or negative, was not deemed a limitation because of its usefulness for enhanced discrimination.

The public availability of databases collected by national surveys provided another way of achieving confidence in the generalisability of the South Australian samples. It was

reasoned that when a theoretical relationship between specific variables is clearly displayed by such databases and is also clearly displayed by the South Australian samples, this finding would not only indicate that the expected relationship is confirmed locally, but would also support the inference that the self-selected samples adequately identify phenomena as identified by true probability samples.

8.9 Limitations and future directions

A known limitation intrinsic to the Theory is the tenuous link between basic values and behaviours, which has led many researchers in the field to concentrate their efforts on the mediating factor, attitudes. The greatest strength of the Theory, its ability to provide an elegant and concise framework for describing generally accepted principles, is marred by this weakness: the basic principles generally appear in all analyses, but their practical application tends to produce weak associations that may be statistically significant but may also not be very meaningful. A productive new approach could be to investigate the possibilities of the Theory as the best available framework for displaying the results of behavioural science experiments. Its focus on the primary motivations of decision making that underlie cognitive attitudes might provide the necessary additional link to explain the mental process from the originating neural activity to the resulting behaviour.

By opening a new unusual path into a field still offering opportunities for discovery, this thesis allowed the identification of numerous areas worthy of further investigation. In particular, the gender difference in the effect of aging on the importance of Benevolence, and the fundamental reasons for the value differences between people concerned with the welfare of animals in preference to the welfare of their fellow humans seem to offer the possibility of interesting developments. At a national level, knowing what distinguishes people with a propensity to donate, either from a charitable or philanthropic perspective, from people without it, offers opportunities to contribute to the development of taxation and transfer policies, particularly in the light of the main finding that political inclination does not really affect the size of the monetary amount people are willing to contribute as a voluntary integration of their fulfilment of social obligations towards the less fortunate.

8.10 Concluding remarks

Overall, the results of this research illustrate that the selected theoretical perspective was appropriate to further our understanding of the complex associations that influence giving behaviour. It was also instrumental in explaining the substantial differences in motivation between contributing to humanitarian causes and to the specific cause of fostering the welfare of animals, which is considered equally meritorious in Australian law.

By providing a better understanding of the mechanisms by which personal values influence the behaviours investigated, this research might lead to better ways of investigating how values, which are generally believed to have a genetic basis and develop early in life due to the exposure to social inputs from the family, the education system and the community (Sagiv, Roccas, Cieciuch & Schwartz, 2017), will grow to become determinants of future behaviour.

Questionnaire – first survey

THE UNIVERSITY of ADELAIDE

BENEFICENCE SURVEY

Sex: male ☐ female ☐ Age: ☐ Main language spoken at home: _____

Education: Year 10-11 ☐ Year 12 ☐ Technical/ Diploma ☐ Bachelor ☐ Higher ☐

Religious services attendance: Never ☐ Rarely ☐ More than monthly ☐

Current yearly personal income before taxes in $1,000s ☐

Estimated total amount donated (not paid for charity lollies, raffle tickets etc.) during the past 12 months:

tax deductible (even if you do not pay taxes): $ ☐ non deductible $ ☐

Estimated total number of hours volunteered during the past 12 months without remuneration:

- direct work for charitable organisations ☐
- community service through local councils ☐
- caring for sick and elderly people ☐
- service club fundraising ☐
- community service through church, school, other (no sports, hobbies) ☐
- board positions, public speaking ☐

Please rate the following charity purposes (9 = best, 1 = least important, 0 = should not be allowed charity status)

advancement of education ☐

advancement of religion ☐

short term care or rehabilitation to injured, sick and orphaned animals ☐

prevention or control of diseases in humans ☐

prevention or control of behaviour that is harmful or abusive to human beings (e.g. smoking) ☐

protection of the environment ☐

relief of people in Australia in distress as a result of a disaster ☐

relief of poverty, sickness, suffering or disability in Australia ☐

relief of poverty, sickness, suffering or disability in other parts of the world ☐

How well informed are you about how efficiently the organisations you support use the money they receive?

Completely unaware [ ][ ][ ][ ][ ] Thoroughly informed
1 2 3 4 5

Is this a very important consideration? Yes ☐ No ☐

Please turn over

This is how some people have described themselves. Please read each description and think about how much that person is or is not like you. Tick the box to the right that shows how much the person in the description is like you.

		HOW MUCH LIKE YOU IS THIS PERSON?					
		Very much like me	Like me	Some-what like me	A little like me	Not like me	Not like me at all
1	Thinking up new ideas and being creative is important to me. I like to do things in my original way.	☐	☐	☐	☐	☐	☐
2	It is important to me to be rich. I want to have a lot of money and expensive things.	☐	☐	☐	☐	☐	☐
3	I think it is important that every person in the world be treated equally. I believe everyone should have equal opportunities in life.	☐	☐	☐	☐	☐	☐
4	It is important to me to show my abilities. I want people to admire what I do.	☐	☐	☐	☐	☐	☐
5	It is important to me to live in secure surroundings. I avoid anything that might endanger my safety.	☐	☐	☐	☐	☐	☐
6	I like surprises and am always looking for new things to do. I think it is important to do lots of different things in life.	☐	☐	☐	☐	☐	☐
7	I believe people should do what they are told. People should follow rules at all times, even if no one is watching.	☐	☐	☐	☐	☐	☐
8	It is important to me to listen to people who are different. Even when I disagree with them, I still want to understand them.	☐	☐	☐	☐	☐	☐
9	It is important to me to be humble and modest. I try not to draw attention to myself.	☐	☐	☐	☐	☐	☐
10	Having a good time is important to me. I like to "spoil" myself.	☐	☐	☐	☐	☐	☐
11	It is important to me to make my own decisions about what I do. I like to be free and not depend on others.	☐	☐	☐	☐	☐	☐
12	It is very important to me to help the people around me. I want to care for their well being.	☐	☐	☐	☐	☐	☐
13	Being very successful is important to me. I hope people will recognise my achievements.	☐	☐	☐	☐	☐	☐
14	It is important to me that the Government insure my safety against all threats. I want the nation to be strong so it can defend its citizens.	☐	☐	☐	☐	☐	☐
15	I look for adventures and like to take risks. I want to have an exciting life.	☐	☐	☐	☐	☐	☐
16	It is important to me to behave always properly. I want to avoid doing anything people would say is wrong.	☐	☐	☐	☐	☐	☐
17	It is important to me to get respect from others. I want people to do what I say.	☐	☐	☐	☐	☐	☐
18	It is important to me to be loyal to my friends. I want to devote myself to people close to me.	☐	☐	☐	☐	☐	☐
19	I strongly believe that people should care for nature. Looking after the environment is important to me.	☐	☐	☐	☐	☐	☐
20	Tradition is important to me. I try to follow the customs handed down by my religion or my family	☐	☐	☐	☐	☐	☐
21	I seek every chance I can to have fun. It is important to me to do things that give me pleasure.	☐	☐	☐	☐	☐	☐

All residences in your postal delivery run have received this survey. No individual residence can be identified through the postcode.

POSTCODE: 5NNN

Questionnaire – second survey

Gender 1 - Male 2 - Female

1 - Age
1 - < 18 -> end of survey
2 - 18-24
3 - 25-34
4 - 35-44
5 - 45-54
6 - 55-64
7 - 65-74
8 - 75-84
9 - 85+

2 – Highest education level obtained
1 - year 11 and below
2 - Vocational training
3 - High School Certificate (yr 12)
4 - Bachelor's degree
5 - Higher degree (e.g. master's, PhD)

3 -Religiosity 3.1 Are you practising a religion? yes - no

3.1.1 If no: did you make this choice
1 - before the age of 21
2 - after the age of 21

3.1.2 If yes: do you practise because:
1 - it is socially expected
2 - it is really important to you

3.1.2.1 How frequently do you attend religious services, excluding special occasions like weddings and funerals?
1- Never
2- Less than once a year
3- About once a year
4- Several times a year
5- About once a month
6- 2 or 3 times a month
7- About once a week
8- Several times a week
9- Every day

4 - Economic background: Do you consider yourself:
1 - poor
2 – just getting by
3 – comfortable
4 – well off
5 – wealthy

5 - Altruistic behaviour 5.1 Do you believe that:

1 – Charity is a waste of money

2 – it feels good to give a few dollars to the less fortunate

3 – people should donate about 1% of their total income to

eradicate poverty
4 – people should contribute much more, like 10% (the tithe) to help humanity

Questionnaire – second survey (continued)

5.2 Do you actually donate: 0 - nothing

1 - less than 1% of your total income each year

2 - more than 1% of your total Income each year

5.3 Do you do voluntary work for charities:

0 - No
1 - Less than 1 hour a week, on average
2 - 1-3 hours a week
3 - More than 3 hours a week

5.4 Do you prefer to help:

1 - The animals, because they cannot help themselves -> go to 6

2- Humans -> how do you like most to do it?

5.4.1 1 - Short term, e.g disaster relief
2 - Long term, e.g education

5.4.2 1- Hands-on, e.g. building something
2 - Campaigning for change

5.4.3 1- Providing resources (e.g. grain to eat)
2 - Helping to build resources (e.g. grain to sow)

5.4.4. 1 - Working out how to solve the problem
2 - Letting recipients decide how to solve their problem

6 - Political tendency: Politically, do you consider yourself:

1- definitely conservative
2- moderately conservative
3- centre tending to the right
4- centre tending to the left
5- moderately progressive
6- definitely progressive

APPENDIX 2

Associations between religiosity, age and education

One of the findings of the first study based on the data collected with a survey conducted by the University of Adelaide (UofA) in South Australia was that the level of education influenced almost as much as religiosity the magnitude of donations to humanitarian causes. Either variable could be included in a model to predict charitable behaviour with almost equivalent predictive power. The interpretation of the underlying motivational structure of the level of education achieved by the respondent is difficult: while donating to humanitarian causes and attending religious services are current expressions of a behaviour, the level of education achieved is the crystallisation of past behaviours influenced by a vast number of circumstances. It was found that there was a small negative association between the level of education and religiosity and a significant association of religiosity with age.

The recent publication of an Australian study (Kortt, Steen & Sinnewe, 2017) indicated the need for a deeper understanding of these associations. They had conducted a regression analysis on a representative Australian sample derived from three waves of the Household, Income and Labour Dynamics in Australia (HILDA) Survey, funded by the Australian Government Department of Social Services (DSS) and managed by the Melbourne Institute of Applied Economic and Social Research, and found no influence of age and a strong positive influence of education on religiosity. The data collected with the first South Australian survey showed instead a small negative association with education ($\gamma = -.08$, $p = .004$) and a very significant association of religiosity with age: $\gamma = .180$, $r = .178$ for males and $\gamma = .239$, $r = .236$ for females, all $p < .0005$.

The recent availability of HILDA Release 16, which includes data from 2001 to 2016, (doi:10.4225/87/VHRTR5) offered the possibility to conduct further analyses with other methodologies for this purpose. This release was obtained by means of the Dataverse open source web application. From the data file for the 2010 wave, the last one that included data about religion, were extracted the variables: age, sex, Australian State, religion, “faith”, church attendance and highest education level. For comparability with the second South

Australian survey being conducted by the UofA at the same time, only adults (age 18 and over) were selected, which resulted in extracting a sample N = 13411, average age 45.5, 6477 males and 6934 females, of which 628 male and 604 female South Australians.

This file was not meant to reproduce the file used by Kortt et al. (2017), which included people aged between 16 and 65 and a variable "years of education". That article does not indicate how the "years of education" variable had been derived from the HILDA survey. The aim was to obtain a file similar enough in size and composition to provide a reasonable level of assurance that the inferences made about applying different statistical methods could also explain the differences with the analyses of Kortt et alia. They had used "years of education" as an interval variable. While units of time measurement undoubtedly meet this definition, using time spent in learning institutions as a proxy measurement of the construct of "education" might not be a very accurate solution. The variable that appeared most relevant for this analysis was the highest education level achieved by the respondent, which was included in the UofA surveys and could be extracted from the HILDA data for comparison.

The highest education level was preferred on the basis of its certainty as an outcome, regardless of the number of years spent achieving it, which might depend on many external factors. This level was recoded on a 1 to 5 scale to match the coding of the UofA surveys and overcome two practical disadvantages of the HILDA coding: the quantitative reversal, i.e. 10 is the lowest education level, 1 the highest, which requires reversing the sign of the correlations, and the discontinuity of the intervals: code 8 is Year 12, code 5 is Certificate III or IV.

To assess the influence of the scale used to measure religious attendance, the survey questionnaire designed for the second UofA study included the same question of the HILDA survey (How frequently do you attend religious services, excluding special occasions like weddings and funerals?) coded on a scale from 1 = never to 9 = every day. The method for transforming this categorical scale (Cameron, 1999) was replicated. It consists of a conversion in annual equivalent figures. "Never" is therefore = 0, "once a year" is = 1 and "about once a month" is 12. The other answers are given arbitrary values up to 52, which

practically means that attendance once a week is discounted (= 40) and anything above that is truncated to what should be the annual equivalent of once a week.

The variable identified as "faith" is measured by HILDA by asking "on a scale from 1 to 10, how important is religion in your life?" Whether stating the importance of religion in one's life can be reliably interpreted as a profession of faith is questionable. On the basis of the actual distribution of responses, it is suggested that it is not necessarily so: the respondents recognised that religion still has a substantial impact on social life, far beyond the individual's own attitude towards it. Although only 33.6% of the respondents stated that they did not belong to any religion (62% were Christians and 4.4% of other religions), 73.5% stated that they did never attend religious services or attended less than or maybe once a year. Only 30.7% declared that religion is "one of the least important things in [their] life". Keeping in mind this limitation, the availability of this variable provided an opportunity to investigate the advantages and limitations of using church attendance as a proxy for faith, and to assess the effectiveness of the 9 item scale as compared to the 3 item scale.

The findings by Kortt et al. are based on the coefficients of a two-equation regression model meant to explain how 24 variables, ranging from family composition to smoking habits, determine the two endogenous variables religious attendance and faith. These two variables, and the type of affiliation (Catholic, Anglican, Other Christian, and Non-Christian) define religion in their study. The coefficients being discussed are shown in Table 1. They indicate the absence of influence of age and a strong positive influence of education in predicting attendance and faith, when these variables and 22 others are included in the predictive model.

Table 1

*Regression coefficients of age and education as determinants of attendance and faith**

	Males		*Females*	
	β	*p*	*β*	*p*
Attendance				
Age	-.038	NS	-.024	NS
Education	.649	< .01	.505	< .01
Faith				
Age	-.010	< .05	-.005	NS
Education	.112	< .01	.087	< .01

* From Kortt et al. (2017) tables II and III. Education is measured in years.

While a regression model is an appropriate method for the purpose to predict an outcome on the basis of a variety of predictors, the choice and number of predictors obfuscates the strength of the association between each specific pair of variables, which is best described by correlation measures. Using the HILDA extract as an approximation of the file used by Kortt et al. it was possible to estimate the rank correlations between the same variables, as shown in Table 2.

Table 2

Rank correlations of age and education with attendance and faith, HILDA national extract*

	Males		*Females*	
	γ	*p*	*γ*	*p*
Attendance (9 item scale)				
Age	.103	< .0005	.142	< .0005
Education	.144	< .0005	.081	< .0005
Attendance (3 item scale)				
Age	.124	< .0005	.171	< .0005
Education	.155	< .0005	.088	< .0005
Faith				
Age	.145	< .05	.182	< .0005
Education	.046	< .001	-.021	NS

* Highest level of education achieved, from 1 = Compulsory to 5 = Postgraduate

This analysis indicates that there was a very significant association between age and both faith and attendance, whereas education had a stronger association with attendance than with faith, and there were substantial gender differences.

Associations between faith and attendance - HILDA national data

The HILDA extract provides a measurement of "faith" on a scale from 1 to 10 interpreted as an interval scale. To what extent church attendance is an accurate estimate of one person's intensity of faith can be assessed by means of the correlation between them. Interpreting the categorical score of 1 to 9 as an interval measure, in the same way that the 1 to 10 score of importance given to religion is interpreted, the Pearson correlation in this sample is $r = .77$ $p < .0005$. Using the theoretically more appropriate converted values, the correlation drops to $r = .66$, $p < .0005$.

If both scales are treated as categorical, the association is similar: γ = .751 males, .748 females if measured with the 9 item scale, γ = .798 males, .748 females if measured with the 3 item scale, all $p < .0005$. This indicates that the more crude 3 item scale: non-practising, non-committed, devout, was as good an estimate of faith as the more detailed 9 item scale, and the two scales gave absolutely equivalent results for females.

Further clarification is provided by the Somers' *d* test, which estimates the association as $d = .69$ with the 1 to 9 scale and $d = .74$ with the 1 to 3 scale if faith is the dependent variable, but only $d = .57$ and $d = .52$ if attendance is, at it should be, the dependent variable (all $p < .0005$). There is therefore strong support for the conclusion that, as crude as it is, the broad but practically useful distinction between non-religious, uncommitted religious and devout people on the basis of church attendance is about as good as the more detailed scales to approximately measure the complex construct of faith.

As expected because of the good approximation of this variable provided by the measurement of religious attendance, the correlations of both variables with age and education are very similar. T tests were conducted to analyse the mean level of importance attributed to religion by the respondents depending on their level of education. It was found that for people who achieved their first qualification, high school certificate (Welch $t(3916) = 5.328$, $p < .0001$) or vocational certificate (Welch $t(5346) = 5.210$, $p < .0001$) it was significantly lower than for those who had not completed high school. The average "faith" of people with higher education, however, was almost identical to that of the high school dropouts, as shown in Table 3. This seems to suggest that once the decision is made at the beginning of adulthood, education has little or no impact on religiosity. People who attain the minimum level of qualifications are less religious than people who proceed to higher levels, which suggests that socio-economic factors might be the dominant causes.

Having converted the codes for attendance to religious services according to Cameron's formula, it is possible to analyse variances to see whether more educated people do attend more frequently. The wider range created by the conversion, from 0 to 52 as compared with 1 to 9, magnifies the difference.

Table 3

Importance given to religion ("faith") by education level

	N	*M*	*SD*
Masters or doctorate	466	3.55	3.510
Grad. diploma, grad. certificate	640	3.74	3.520
Bachelor or honours	1551	3.55	3.570
Advanced diploma, diploma	1038	3.89	3.591
Cert III or IV	2426	3.18	3.287
Year 12	1856	3.12	3.395
Year 11 and below	3226	3.65	3.448
Undetermined	6	3.83	3.312
Total	11209	3.47	3.452

Table 4 shows that the difference of church attendance between people with first level qualifications and higher qualifications is consistent with the difference in importance given to religion. In this case the difference is also large between highly qualified people and people who had not completed high school.

Table 4

Attendance to religious services by education level

	N	*M*	*SD*
Masters or doctorate	467	8.64	15.64
Grad. diploma, grad. certificate	642	8.43	15.58
Bachelor or honours	1554	7.39	14.83
Advanced diploma, diploma	1045	8.38	16.01
Cert III or IV	2440	4.90	12.50
Year 12	1859	5.61	13.13
Year 11 and below	3235	5.78	13.51
Undetermined	6	0.33	0.52
Total	11248	6.29	13.95

In summary, the HILDA 2010 data showed that both faith and attendance do not change significantly with progressively higher levels of university education. Conversely, there is a significant difference in attendance between people with education up to high school certification and university educated people. This appears to confirm that once the decision has been made at the beginning of adulthood, faith and education do not have a

significant impact on each other, but university educated people do attend religious services more frequently.

The Welch t test between the people who had not completed high school (and had the highest attendance of the less educated people) and the graduates at bachelor level (who had the lowest attendance of the more educated people) indicates that the difference is highly significant (t (4787) = 3.739, p = .0002).

Association between age and religiosity - HILDA national data

The cross tabulation of age and frequency of attendance (Table 5) of the HILDA 2010 data shows two clear patterns: the non-practising group constantly increases in inverse proportion to the age of the respondents, and the group of those who attend weekly or more increases with age, with the over 65 substantially more committed to weekly attendance. The other attendance habits do not present clear patterns and are of relatively minor importance.

Table 5

Frequency of church attendance by age group

Age	***Never***	*Less than once a year*	*About once a year*	*Several times a year*	*About once a month*	*2 or 3 times a month*	***Once a week or more***	*Total*
18-20	**56.8%**	11.7%	9.2%	9.9%	3.1%	2.8%	**6.5%**	100.0%
21-24	**60.0%**	10.5%	9.9%	8.7%	1.4%	1.4%	**8.0%**	100.0%
25-34	**56.1%**	12.3%	10.8%	9.8%	1.8%	1.5%	**7.8%**	100.0%
35-44	**50.5%**	14.2%	9.6%	11.7%	2.7%	3.2%	**7.9%**	100.0%
45-54	**48.2%**	15.3%	9.9%	11.0%	2.8%	2.7%	**10.2%**	100.0%
55-64	**48.9%**	13.7%	10.0%	10.6%	2.4%	3.0%	**11.4%**	100.0%
65-74	**38.2%**	14.8%	12.6%	9.9%	1.8%	3.6%	**19.2%**	100.0%
75-84	**37.2%**	13.3%	11.2%	10.2%	2.4%	4.6%	**20.9%**	100.0%
85+	**36.7%**	15.0%	10.2%	7.5%	2.7%	6.1%	**21.8%**	100.0%

The largest drop in attendance can be seen between those who were about 40 in 2010 and those who were about 30 at the time. As the coming of age appears to be the

time when most people make a decision about their future religious behaviour, the end of the millennium would seem to have been a period of particular relevance in this respect.

The progress of education is evident in Table 6. Most people up to 20 have not yet completed higher education and some might still be in the process of finishing high school. The 21 to 24 age group is when most achieve a degree. The expected distribution pattern emerges with the 25 to 34 age group and remains the same for the successive age groups, proportionally increased with time by the constantly better opportunities offered by progress. The over 85 age group is skewed towards higher education, which could be explained by self-selection of the respondents and intelligence and education being positively correlated with longevity. The option to select the 25 to 84 age range (N = 9500) to eliminate these confounding elements then appears appropriate.

Table 6

Level of education by age group

Age	Masters - Ph	Bachelor - Grad Dip	Y12 - certificates	Y11 or less	Total
18-20	0.2%	2.3%	68.9%	28.6%	100.0%
21-24	1.2%	16.6%	58.9%	23.3%	100.0%
25-34	9.3%	31.9%	43.8%	15.0%	100.0%
35-44	12.5%	29.5%	35.9%	22.1%	100.0%
45-54	14.0%	23.6%	35.3%	27.0%	100.0%
55-64	12.5%	20.9%	30.1%	36.4%	100.0%
65-74	7.6%	18.1%	25.0%	49.3%	100.0%
75-84	4.0%	13.3%	22.9%	59.7%	100.0%
85+	9.3%	22.3%	38.5%	29.9%	100.0%

The perfect rank correlation of devout attendance and absence of higher education in the 25 to 84 age range is visually evident (Table 7). Twenty-one percent of people over 75 attend weekly services and 60% of them have only compulsory education. Only 8% of people under 35 attend weekly, but almost all of them (85%) have at least completed high school.

With progress, the level of education of the whole population increases. Because the number of people who attend weekly services decreases steadily, the proportion of them who are more educated is bound to increase. Younger people are more educated that older ones, either devout or not. When the ratio of devout people who have a higher level of education is calculated, however, it becomes evident that there are increasingly fewer of these people as progress advances. Of the people who were 25-34 years old fifty years ago, highly educated people who attended services every week were 9%, as compared with less than 7% of people of the same age now.

Table 7

Devout attendance and higher education by age group

	Percentage of respondents who			
Age	*attend weekly religious services*	*have at most compulsory education*	*have higher education*	*are devout people with higher education*
25-34	7.8	15.0	85.0	6.63
35-44	7.9	22.1	77.9	6.15
45-54	10.2	27.0	73.0	7.45
55-64	11.4	36.4	63.6	7.25
65-74	19.4	49.3	50.7	9.84
75-84	20.9	59.7	40.3	8.42

Correlational analysis of the South Australian data

The availability of the HILDA file provided an opportunity to compare the samples obtained with the two South Australian surveys conducted by UofA with the 628 male and 604 female South Australian respondents to the HILDA survey. No significant difference in the importance attributed to religion was found between the HILDA SA subsample and the national sample. Table 8 shows that the HILDA extract broadly confirms the pattern of associations between religious attendance, age and education found analysing the data obtained with the first UofA survey. The association of religiosity with age is highly significant and the association with education is small and significant only for males. Females show a less positive association of religiosity with education than males, to the point that it was significantly negative in the first UofA survey. Unexpectedly, however, the second UofA survey provided contrasting results, which required further analysis.

The association between education level and religiosity was calculated separately for South Australian male and female respondents of the first survey (N = 668 and 1197). The directional association with education as the dependent variable (Somers' *d*) was *d* = -.02, *p* = .51 for males, marginally negative and not significant, whereas for females it was *d* = -.07, *p* < .01: more definitely negative and significant. In the smaller sample of the second survey (N= 385 and 395) the same pattern emerged, although both associations were positive: *d* = .20, *p* = .001 for males and *d* = .14, *p* = .024 for females.

Table 8

Comparison of rank correlations of age and education with religious attendance, South Australia

	Males		*Females*	
	γ	*p*	*γ*	*p*
HILDA SA extract				
Attendance (N = 496 M, 546 F)				
Age	.147	.002	.207	< .0005
Education	.131	.03	.043	NS
First study full sample (N = 668 M, 1197 F)				
Attendance				
Age	.180	< .0005	.239	< .0005
Education	-.031	NS	-.093	.007
First study representative subsample (N = 394 M, 406 F)				
Attendance				
Age	.418	< .0005	.330	< .0005
Education	-.067	NS	-.008	NS
Second study (N = 385 M, 395 F)				
Attendance				
Age	-.204	.015	-.002	NS
Education	.277	<.001	.184	.017

NOTES: Education scored on 5 item scale, attendance scored on 3 item scale for all samples

Even considering that the samples were collected at different times, 2010, 2014 and 2018, these differences suggested that the second UofA sample did not adequately represent the South Australian population. The cross tabulations previously used to analyse the national Hilda sample were replicated with the second UofA sample and highlighted its peculiarity and lack of representativeness. Table 9 shows that the respondents of any age had a higher level of education in a much narrower range, albeit lower with increasing age as expected, which indicates a high degree of self-selection into the online panel. This is not surprising, but needs to be taken into consideration when using this recruitment method.

More surprising was the shape of the distribution of attendance. Contrary to any expectation, the proportion of devout younger respondents, three times the national average as measured by HILDA, was far higher than that of middle aged respondents. There is no external source of evidence that a dramatic renaissance of religiosity is occurring in South Australia, therefore its limited age range suggests either that higher education is indeed replacing religion, for which no compelling evidence was found, or that a group of younger people with an unusual commitment to religion was included in the sample, either by coincidence or because of a concerted effort to respond to the survey to foster an agenda. Considering that only 98 people out of 780 declared themselves devout, a small number of people in this subgroup would have been sufficient to skew the result. Respondents over 55 displayed the expected proportional increase with age.

Table 9

Devout attendance and higher education by age group – second UofA survey

	Percentage of respondents who			
Age	*attend weekly religious services*	*have at most compulsory education*	*have higher education*	*are devout people with higher education*
25-34	21.5%	1.5%	98.5%	21.2%
35-44	17.6%	7.1%	92.9%	16.4%
45-54	9.5%	12.7%	87.3%	8.3%
55-64	5.3%	26.1%	73.9%	3.9%
65-74	11.6%	25.0%	75.0%	8.7%
75-84	21.3%	31.9%	68.1%	14.5%

For these reasons the second UofA sample does not appear suitable to measure meaningful associations of religiosity with age and education. The other samples also displayed differences that required analysis. Testing them with the Kruskal-Wallis H test indicated that the null hypothesis, that the distribution of attendance, age and education level was the same for all samples, could be rejected with 99% confidence. Most pairwise comparisons also indicated that the differences between the samples were statistically significant. Figure 1 illustrates the sample distributions and provides some insight to assess their meaning.

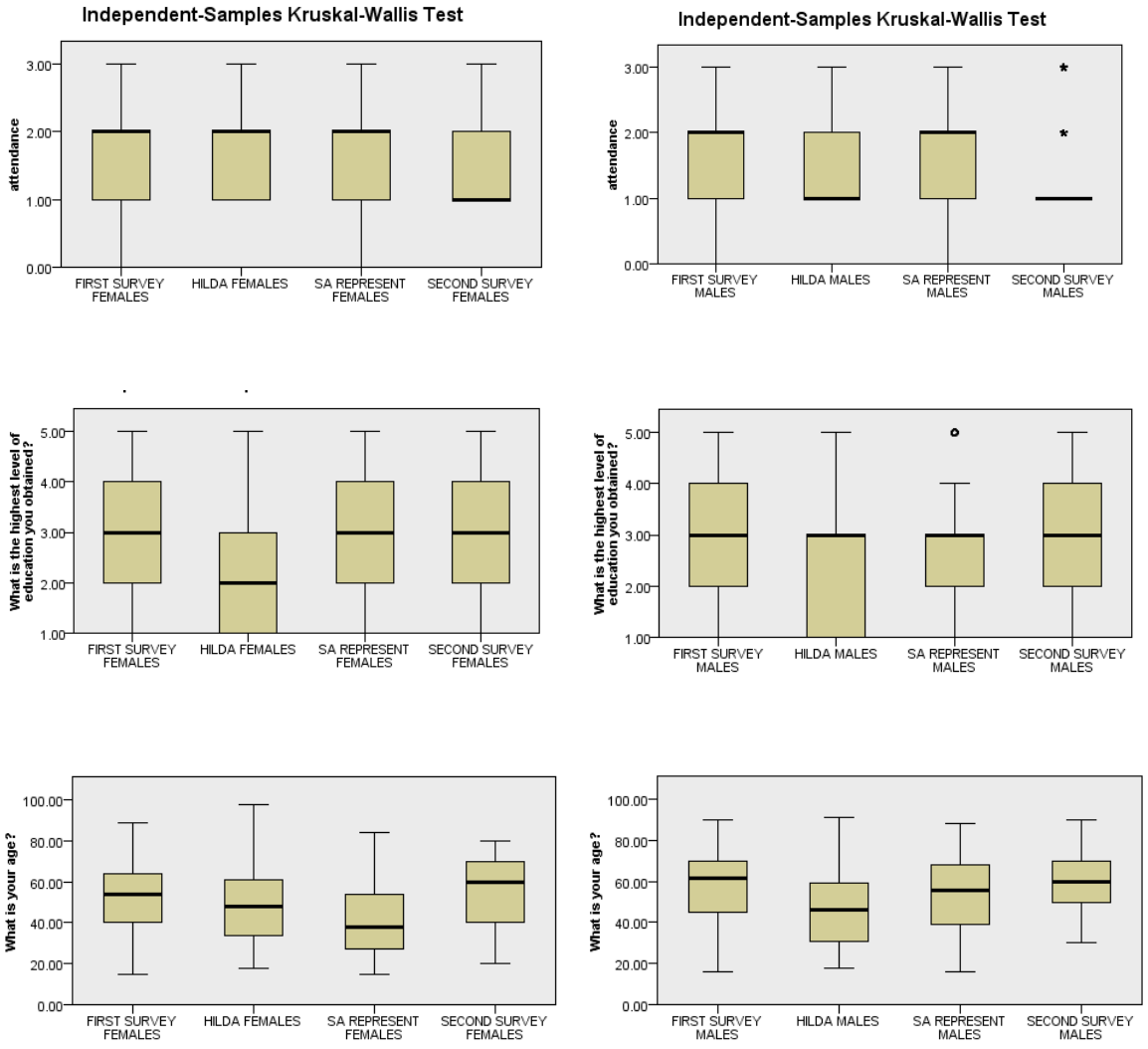


Figure 1 – Box plots of the sample distributions

The random extraction of the South Australian representative subsample from the full sample of the first survey, calibrated to match the main demographic variables with the latest census data, introduced some differences: the average level of education of males and the age of females were lower in the subsample. This made these variables more similar

to those obtained with random sampling by the HILDA survey, which supports the effectiveness of the calibration process. Asking the participants to the second survey to state whether they were practising or not practising undoubtedly eliminated the ambiguity of speculating the level of commitment of somebody "rarely" attending, but reduced substantially the number of people in the uncommitted category. This is shown by the median attendance in the second survey being 1, not practising, instead of 2, uncommitted.

Besides this design differences, it can be seen that the participants to the HILDA survey were significantly younger and less educated than the participants to both UofA surveys. The difference in education level was particularly relevant because the South Australian participants to the national HILDA survey were less educated than the national average, whereas the participants to both UofA surveys were more educated than the national average. Taking the 5 level categorical scale as an interval variable, the level of education of SA HILDA participants (M = 2.4, SD = 1.25) was significantly different (t (13895) = 4.08, $p < .0001$) than the national average of HILDA participants (M =2.6, SD = 1.29).

On the contrary, the respondents of both the first and second UofA survey were much better educated than the national average. First survey males: M = 3.13, SD = 1.36; first survey females: M = 3.09, SD = 1.42; second survey males: M = 3.09, SD = 1.23; second survey females, M = 2.88, SD = 1.28. The level of education of males was about the same in both UofA surveys (t (1051) = 0.48, p = .634) but the level of education of females was significantly lower in the second UofA survey: t (1590) = 2.61, $p < .01$.

Conclusion

The positive correlation of religiosity with age does not indicate that people become more religious as they get older. It only indicates that the people who are old now still maintain the level of attendance to religious services to which they were used when young, whereas an increasing number of young people in western developed countries decide at the beginning of adulthood that religion is not an important consideration for them.

More controversial is the question whether increasing levels of education cause this undoubted decrease of religiosity, which affects virtually all industrialised countries and is more prominent in the Christian faith. Although controversial and unable to be proved

empirically, it is a widely held view (Norris & Inglehart, 2004) that religiosity grows worldwide, essentially because of the higher fertility rates of the developing countries, were the “feelings of vulnerability to physical, societal, and personal risks”, which Norris and Inglehart (2004, p. 4) identify as a key factor driving religiosity, are still prominent for the majority of the population.

The analyses carried out suggest that in Australia the level of education does have an influence on the decision, but is not a determinant factor. The inference that appears most likely is that a person that at the beginning of adulthood has attained a level of education that is sufficient to overcome his or her feelings of inadequacy, and therefore exposure to risk, in the developed society where he or she lives, does not feel the need for religion. Once made the decision, attaining further levels of education makes little difference. People who attained higher levels of education are significantly more likely to belong to the ever decreasing number of people who regularly attend religious services, but it would appear that the cause of such devotion is not as much the level of education per se, as the socio-economic status achieved with it. If there were a cause-effect relationship between devotion and education, it would appear that the size of the effect should remain approximately the same, as the level of education is mostly attained before middle age and devotion is mostly under the control of the individual. The finding that the proportion of devout highly educated people diminished with age suggests that this happens, not because of a diminished faith, but because the relative socio-economic status conferred by the higher education decreases as the level of education of the whole population increases.

Correlation matrices, centred values, PVQ21 first survey, PVQ-RR second survey

	Achievement	Benevolence	Conformity	Hedonism	Power	Self-Direction	Security	Stimulation	Tradition	Universalism
Achievement	1	-.300**	-.223**	.151**	.376**	-.113**	-.165**	0.017	-.351**	-.352**
Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000	0.000	0.459	0.000	0.000
N	1863	1857	1859	1861	1858	1857	1862	1863	1861	1858
Benevolence	-.300**	1	-.047*	-.234**	-.290**	-.046*	-.100**	-.141**	.101**	.217**
Sig. (2-tailed)	0.000		0.044	0.000	0.000	0.049	0.000	0.000	0.000	0.000
N	1857	1859	1855	1858	1854	1853	1858	1859	1857	1854
Conformity	-.223**	-.047*	1	-.319**	-0.002	-.322**	.264**	-.474**	.275**	-.182**
Sig. (2-tailed)	0.000	0.044		0.000	0.944	0.000	0.000	0.000	0.000	0.000
N	1859	1855	1861	1859	1856	1856	1860	1861	1859	1856
Hedonism	.151**	-.234**	-.319**	1	.099**	-.147**	-.192**	.241**	-.265**	-.290**
Sig. (2-tailed)	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000
N	1861	1858	1859	1863	1858	1857	1862	1863	1861	1858
Power	.376**	-.290**	-0.002	.099**	1	-.144**	-.064**	-.119**	-.261**	-.444**
Sig. (2-tailed)	0.000	0.000	0.944	0.000		0.000	0.005	0.000	0.000	0.000
N	1858	1854	1856	1858	1860	1854	1859	1860	1858	1855
Self-Direction	-.113**	-.046*	-.322**	-.147**	-.144**	1	-.184**	.167**	-.258**	.122**
Sig. (2-tailed)	0.000	0.049	0.000	0.000	0.000		0.000	0.000	0.000	0.000
N	1857	1853	1856	1857	1854	1859	1858	1859	1857	1854
Security	-.165**	-.100**	.264**	-.192**	-.064**	-.184**	1	-.406**	.106**	-.231**
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.005	0.000		0.000	0.000	0.000
N	1862	1858	1860	1862	1859	1858	1864	1864	1862	1859
Stimulation	0.017	-.141**	-.474**	.241**	-.119**	.167**	-.406**	1	-.324**	0.004
Sig. (2-tailed)	0.459	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.863
N	1863	1859	1861	1863	1860	1859	1864	1865	1863	1860
Tradition	-.351**	.101**	.275**	-.265**	-.261**	-.258**	.106**	-.324**	1	0.011
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.627
N	1861	1857	1859	1861	1858	1857	1862	1863	1863	1858
Universalism	-.352**	.217**	-.182**	-.290**	-.444**	.122**	-.231**	0.004	0.011	1
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.863	0.627	
N	1858	1854	1856	1858	1855	1854	1859	1860	1858	1860

	TRAc	HUMc	SDTc	SDAc	PODc	PORc	FACc	SEPc	SESc	CORc	COIc	UNNc	UNCc	UNTc	BECc	BEDc	STc	HEc	ACc
TRAc	1	-0.062	-.295**	-.279**	0.054	-0.052	-0.006	-.077*	0.064	.272**	0.027	-.260**	-.239**	-.231**	0.005	-0.016	-.158**	-.177**	-0.052
Sig. (2-tailed)		0.084	0.000	0.000	0.133	0.149	0.864	0.031	0.073	0.000	0.453	0.000	0.000	0.000	0.885	0.659	0.000	0.000	0.149
HUMc	-0.062	1	.079*	0.020	-.200**	-.319**	-.178**	-0.009	-.116**	0.063	.131**	0.021	.194**	.254**	.083*	0.045	-.142**	-.229**	-.349**
Sig. (2-tailed)	0.084		0.027	0.578	0.000	0.000	0.000	0.809	0.001	0.077	0.000	0.561	0.000	0.000	0.021	0.211	0.000	0.000	0.000
SDTc	-.295**	.079*	1	.652**	-.283**	-.291**	-.200**	0.036	.127**	-.230**	-.324**	.103**	.186**	.162**	.176**	.228**	-0.031	-.104**	-.223**
Sig. (2-tailed)	0.000	0.027		0.000	0.000	0.000	0.000	0.313	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.389	0.004	0.000
SDAc	-.279**	0.020	.652**	1	-.249**	-.226**	-.125**	.150**	.075*	-.182**	-.245**	0.039	.092**	.095**	.075*	.142**	-0.063	-.093**	-.194**
Sig. (2-tailed)	0.000	0.578	0.000		0.000	0.000	0.000	0.000	0.037	0.000	0.000	0.278	0.010	0.008	0.037	0.000	0.078	0.009	0.000
PODc	0.054	-.200**	-.283**	-.249**	1	.612**	.107**	-.300**	-.329**	-.180**	-.151**	-.207**	-.366**	-.369**	-.351**	-.362**	.181**	.161**	.393**
Sig. (2-tailed)	0.133	0.000	0.000	0.000		0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
PORc	-0.052	-.319**	-.291**	-.226**	.612**	1	.129**	-.245**	-.243**	-.233**	-0.066	-.132**	-.406**	-.372**	-.442**	-.455**	.165**	.206**	.520**
Sig. (2-tailed)	0.149	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.067	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FACc	-0.006	-.178**	-.200**	-.125**	.107**	.129**	1	.132**	-0.014	-0.015	.127**	-.232**	-.265**	-.345**	-.253**	-.110**	-.161**	0.015	.206**
Sig. (2-tailed)	0.864	0.000	0.000	0.000	0.003	0.000		0.000	0.690	0.669	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.666	0.000
SEPc	-.077*	-0.009	0.036	.150**	-.300**	-.245**	.132**	1	.332**	.191**	.194**	-.099**	-0.039	-.146**	.142**	.115**	-.475**	-.157**	-.304**
Sig. (2-tailed)	0.031	0.809	0.313	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.005	0.281	0.000	0.000	0.001	0.000	0.000	0.000
SESc	0.064	-.116**	.127**	.075*	-.329**	-.243**	-0.014	.332**	1	.071*	-.100**	-0.023	0.029	-.105**	.189**	.194**	-.313**	-.124**	-.290**
Sig. (2-tailed)	0.073	0.001	0.000	0.037	0.000	0.000	0.690	0.000		0.049	0.005	0.515	0.414	0.003	0.000	0.000	0.000	0.000	0.000
CORc	.272**	0.063	-.230**	-.182**	-.180**	-.233**	-0.015	.191**	.071*	1	.310**	-.210**	-.132**	-.074*	0.065	0.049	-.323**	-.354**	-.255**
Sig. (2-tailed)	0.000	0.077	0.000	0.000	0.000	0.000	0.669	0.000	0.049		0.000	0.000	0.000	0.038	0.069	0.174	0.000	0.000	0.000
COIc	0.027	.131**	-.324**	-.245**	-.151**	-0.066	.127**	.194**	-.100**	.310**	1	-.134**	-.080*	-.098**	-.127**	-.157**	-.263**	-.131**	-.187**
Sig. (2-tailed)	0.453	0.000	0.000	0.000	0.000	0.067	0.000	0.000	0.005	0.000		0.000	0.025	0.006	0.000	0.000	0.000	0.000	0.000
UNNc	-.260**	0.021	.103**	0.039	-.207**	-.132**	-.232**	-.099**	-0.023	-.210**	-.134**	1	.259**	.250**	0.010	-0.042	0.052	-0.067	-.127**
Sig. (2-tailed)	0.000	0.561	0.004	0.278	0.000	0.000	0.000	0.005	0.515	0.000	0.000		0.000	0.000	0.778	0.240	0.145	0.063	0.000
UNCc	-.239**	.194**	.186**	.092**	-.366**	-.406**	-.265**	-0.039	0.029	-.132**	-.080*	.259**	1	.572**	.195**	.142**	-.077*	-.173**	-.321**
Sig. (2-tailed)	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.281	0.414	0.000	0.025	0.000		0.000	0.000	0.000	0.032	0.000	0.000
UNTc	-.231**	.254**	.162**	.095**	-.369**	-.372**	-.345**	-.146**	-.105**	-.074*	-.098**	.250**	.572**	1	.177**	.119**	0.047	-.161**	-.286**
Sig. (2-tailed)	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.003	0.038	0.006	0.000	0.000		0.000	0.001	0.192	0.000	0.000
BECc	0.005	.083*	.176**	.075*	-.351**	-.442**	-.253**	.142**	.189**	0.065	-.127**	0.010	.195**	.177**	1	.493**	-.190**	-.258**	-.374**
Sig. (2-tailed)	0.885	0.021	0.000	0.037	0.000	0.000	0.000	0.000	0.000	0.069	0.000	0.778	0.000	0.000		0.000	0.000	0.000	0.000
BEDc	-0.016	0.045	.228**	.142**	-.362**	-.455**	-.110**	.115**	.194**	0.049	-.157**	-0.042	.142**	.119**	.493**	1	-.188**	-.179**	-.301**
Sig. (2-tailed)	0.659	0.211	0.000	0.000	0.000	0.000	0.002	0.001	0.000	0.174	0.000	0.240	0.000	0.001	0.000		0.000	0.000	0.000
STc	-.158**	-.142**	-0.031	-0.063	.181**	.165**	-.161**	-.475**	-.313**	-.323**	-.263**	0.052	-.077*	0.047	-.190**	-.188**	1	.409**	.315**
Sig. (2-tailed)	0.000	0.000	0.389	0.078	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.145	0.032	0.192	0.000	0.000		0.000	0.000
HEc	-.177**	-.229**	-.104**	-.093**	.161**	.206**	0.015	-.157**	-.124**	-.354**	-.131**	-0.067	-.173**	-.161**	-.258**	-.179**	.409**	1	.268**
Sig. (2-tailed)	0.000	0.000	0.004	0.009	0.000	0.000	0.666	0.000	0.000	0.000	0.000	0.063	0.000	0.000	0.000	0.000	0.000		0.000
ACc	-0.052	-.349**	-.223**	-.194**	.393**	.520**	.206**	-.304**	-.290**	-.255**	-.187**	-.127**	-.321**	-.286**	-.374**	-.301**	.315**	.268**	1
Sig. (2-tailed)	0.149	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

APPENDIX 4

The contribution of religiosity to ideology: empirical evidence from Australia

A recently published article (Caprara, Vecchione, Schwartz, Schoen, Bain, Silvester … Caprara, 2018) "showed that religiosity was consistently related to right and conservative ideologies in all countries, *except Australia*" (from the abstract, my emphasis). That study involved 16 countries which had provided convenience samples in all but two instances, Germany and Turkey, whose samples were representative. Australia provided the smallest sample (N = 285). All these samples had been previously used for other studies (Caprara & Vecchione, 2015; Caprara et al., 2017; Schwartz et al, 2014; Vecchione et al., 2015). For measuring the ten personal values of the original Theory the instrument used was the 40 item version of the Portrait Value Questionnaire (hereinafter PVQ-40).

The sample collected by the second survey reported in this thesis (N=780) shows the expected correlation with conservative self-assessment displayed by every other country investigated in the study mentioned above. It was collected for this thesis using the 57 item PVQ-RR to measure the 19 more detailed value types of the reviewed Theory, which were then aggregated to measure the original ten as specified by Shalom Schwartz. The alpha reliability coefficients of the PVQ-40 Australian sample were not specifically mentioned in that article but the mean across all countries ranged from 0.57 to 0.80 (page 912). Those of the PVQ-RR sample ranged from 0.71 to 0.88. In both instances the lowest coefficient was for Tradition.

The previous sample was collected online "from a database of community participants administered through a university" (Schwartz et al., 2014, page 911). The Australian university credited in the article was the University of Queensland, therefore it is likely that the community mentioned was within that State. Politically Queensland is generally considered Australia's most conservative State and South Australia, where the N = 780 sample was collected, also online, the most progressive State. Although the differences are not deemed to be substantial, they might appear magnified in samples of small size.

The following is a comparison of the two Australian samples to investigate the reasons for the discrepancy.

Ideological self-placement

The constructs being compared have different meanings in different environments and need to be defined clearly. Caprara et al. (2017, 2018) indicate that two scales had been used to measure the self-placement of participants on the basis of political ideology: the first was a 1 to 10 scale from left to right without intermediate labels and the second was from 1 = extremely liberal to 7 = extremely conservative. As Piurko, Schwartz and Davidov (2011, page 541) explain, "left-right" and "liberal-conservative" are commonly used as synonymous to describe the most popular dimension of political competition.

The survey that produced the PVQ-RR sample used a scale designed to place the participants along the Conservation-Openness to Change dimension. It is proposed that this scale can also be used to approximate the ideological self-placement of the participants on the basis of political ideology, because of the significant overlapping of the right and conservative political definitions with the conservation orientation indicated by Piurko, Schwartz and Davidov (2011), Aspelund, Lindeman and Verkasalo (2013), and Caprara et al. (2017). The differences between the political and motivational definitions of the opposite pole of the dimension do not invalidate the conservatism-conservation affinity.

This scale was coded as: 1 = definitely conservative, 2 = moderately conservative, 3 = centre tending to the right, 4 = centre tending to the left, 5 = moderately progressive, 6 = definitely progressive. This was deemed more suitable than a 7 item scale with a neutral "centre" item to induce a more nuanced awareness, which otherwise could have been avoided by a majority of the respondents. "Definitely" was preferred to "extremely" to induce more honesty, assuming that people do not like to identify themselves as "extremists".

Religiosity

The religiosity of the participants of the PVQ-40 sample was measured on an 8 item scale from 0 = not at all religious to 7 = very religious. The religiosity of the participants of the PVQ-RR sample was measured on a 3 item scale: 1 = not religious, 2 = uncommitted, and 3 = devout, derived by collapsing the two central items of the 4 item scale used by Schwartz and Huismans (1995). A more detailed scale based on 9 levels of attendance to religious services (Cameron, 1999) was also used, and it was demonstrated that the simpler scale had an equivalent level of reliability. Using these scales as interval variables was not deemed

appropriate, but the mean rating of religiousness for the PVQ-RR sample would have been *M* = 1.49, *SD* = 0.84, which indicates a mean level below the midpoint of the scale. For the PVQ-40 sample it was reported as *M* = 2.44, *SD* = 1.90, also below the midpoint. The mean of PVQ-RR sample is marginally closer to the midpoint, which indicates a slightly higher level of religiousness.

Correlations of basic values with religiosity

Table 1 shows that the correlation coefficients of religiosity with the centred ratings of the personal values were significant at the $p < .01$ level in both samples for Tradition, Self-Development and Hedonism. The PVQ-40 sample showed it also for Stimulation, which was not significant in the PVQ-RR sample. This confirmed the observation based on the representative South Australian sample collected in 2014 that religiousness was not as much negatively correlated to stimulation as it is in other countries.

Table 1

Correlations of basic values with religiosity

	SE	CO	TR	BE	UN	SD	ST	HE	AC	PO
PVQ-40 (N = 285)[1]	.03	.12	.41**	-.03	-.07	-17**	-.19**	-.17**	-.05	.08
PVQ-RR (N = 780)	-.03	.05	.28**	-.06	-.06	-17**	-.00	-.10**	.03	.02

[1] From Caprara et al. (2018, page 6, Table 2)

Correlation of religiosity with ideological self-placement

The peculiarity of the PVQ-40 sample, which alone among 16 country samples showed no correlation ($r = .06$ and $.01$) of religiosity with either of the two scales used by Caprara et al. (2018) to measure ideological self-placement, did not appear in the PVQ-RR sample. The association of religiosity with self-placement on the conservation scale was highly significant ($p < .0005$) when measured with Pearson's *r* (.17) and Kruskal's γ (.27).The larger sample size does certainly explain some increase in significance, but the magnitude of the coefficients does indicate a real difference between the two samples. It is concluded that Australia is not different from any other country in showing an association between religiosity and conservative ideology. It would appear likely that the results obtained with the PVQ-40 sample were due to variations within the sample.

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