Sonia Roccas · Lilach Sagiv *Editors*

Values and Behavior

Taking a Cross Cultural Perspective

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Preface

Why do some people regularly show kindness to others whereas others react aggressively even to minor provocations? Why do some people consider their work mainly as a means to achieve personal success, whereas others consider it a means to contribute to society and an opportunity for self-fulfillment? Personal values play a crucial role in such behaviors. The chapters in this book address these and other questions regarding the relations of values to behavior, taking a cross-cultural perspective.

The construct of values is central to many fields in social sciences and humanities. After years of little attention to values, the last two decades have seen a substantial body of psychological research, investigating the content, structure and consequences of personal values in many cultures. Personal values are defined as abstract desirable goals that are relatively stable over time and across situations, serving as guiding principles for individuals (Kluckhohn 1951; Rokeach 1973; Schwartz 1992). The structure of relationships among values is dynamic, representing their compatibilities and conflicts (Schwartz 1992). The more importance a person attributes to a value, the more motivated s/he is to act in ways that promote the attainment of that value. The meaning of the 10 value types is similar across cultures. Thus, when people from different cultures reflect on the importance of a value (e.g., loyalty), they have in mind a similar construct. This feature of values makes them an invaluable tool for conducting integrative research across cultures.

The conceptualization and measurement of personal values typically focuses self-reports; that is, values represent what people report that they consider to be important. Researchers and laymen hence often question whether value statements are merely "cheap talk". A growing body of research points to relationships between values and behavior. The current book focuses on the value-behavior link, reviewing past literature and presenting new conceptual models. The first part of the book (Chap. 1–3) discusses the construct of values and how they are studied. The second part reviews the content of the relationships between values and behavior in different domains: pro-social behavior (Chap. 4), aggression (Chap. 5) work life (Chap. 6) and close relationships (Chap. 7). Finally, the third part of the book (Chap. 8–10) address some of the processes and mechanisms through which values affect behavior. Chapter 11 is an integrative commentary of the issues addressed in the previous chapters.

We are grateful to everyone who made working on this book such an enjoyable and gratifying experience. First and foremost, we thank the authors of the book chapters for their fantastic contributions and for their endless patience throughout the review process. We are also grateful to the many research teams whose work inspired this book and provided the research described in the book chapters. This book would have never seen the light of day without the help of Morgan Ryan from Springer. We greatly appreciate her valuable advice and constant support. This project has been facilitated by a grant from the Israeli Science Foundation (847/14), by grants from the Recanati Fund of the School of Business Administration and from the Mandel Scholion Interdisciplinary Research Center, both at the Hebrew University of Jerusalem, to the first author, and by a grant from The Open University Research Fund to the second author. We thank Andrey Elster, Gitit Kave, Ariel Knafo and Shalom Schwartz for their insightful comments on book chapters. Special thanks to Noam Keshet and Adva Liberman for their enormous help in keeping us organized and on track. Finally, we are grateful for Shalom Schwartz whose work on values has transformed the field. On a personal note, we are both most thankful for his evergoing mentorship.

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Part I
What Are Values and How Should They Be Measured?

Chapter 1
What Personal Values Are and What They Are Not: Taking a Cross-Cultural Perspective

Lilach Sagiv and Sonia Roccas

The construct of values is central to many fields in social sciences and humanities. The last two decades have seen a growing body of psychological research on values, investigating their content, structure, and consequences in many cultures. In research and in everyday life, values are often confused with other personal attributes, such as attitudes, traits, and specific goals. But values are a distinct construct, differing from other personal attributes in important ways. The unique features of values have implications for their impact on behavior. In this chapter, we discuss the commonalities and differences between values and closely related constructs by taking a careful look at the definition of values. We start by presenting the definition of values. Then—taking a cross-cultural perspective—we review, organize, and integrate research on the nature of values. We point to the similarities and differences between values and other constructs and discuss the implications of value characteristics for relationships between values and behavior.

Values are cognitive representations of basic motivations. They are abstract, desirable goals, relatively stable over time and across situations. Values vary in their importance; the higher the importance a person attributes to a value, the more likely he is to act in ways that promote the attainment of that value (Kluckhohn 1951; Rokeach 1973; Schwartz 1992). The structure of relationships among values is dynamic, representing their compatibilities and conflicts (Schwartz 1992).

This definition may seem simple. But it is complex because each element has important implications for the distinction between value and close constructs, and for the relationship between values and behavior. Throughout this chapter, we deconstruct the definition of values and discuss each of its elements, focusing on their implications for the relationships between values and behavior.

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Deconstructing the Definition of Values

Values Are Inherently Desirable

One feature that distinguishes values from other constructs is that values are inherently positive. They represent desirable goals and reflect what people consider important and worthy. Even values that are at the bottom of one's hierarchy are viewed as rather desirable. Consider, for example, power values, which in the Schwartz value project (see below), receive the lowest importance scores in most societies. These values receive average ratings of 2.39, 2.38, and 2.35 in student, teacher, and representative national samples, respectively (Schwartz and Bardi 2001). The response scale ranged from 7 (of extreme importance) to 6 (very important) to 3 (important) to 0 (not important) to −1 (opposing my values, Schwartz 1992). Thus, these scores correspond to a rating of "somewhat important" on the response scale (Schwartz 1992). Tradition and stimulation values, which are often also at the bottom of the hierarchy, receive on average importance scores close to 3 (2.85–3.43). These scores correspond to "important" in the response scale. Thus, the importance scores attributed to values usually range between "somewhat important" and "of extreme importance".

The desirability of values has another manifestation: People tend to be very satisfied with their own values. We recently examined satisfaction with personal values in a series of studies (Roccas et al. 2014). When asked directly, "how satisfied are you with your values?" individuals reported very high levels of satisfaction (4.32 and 4.36 on a 1–5 response scale, in a sample of students and in a sample of adults). This may not be surprising given the extensive body of research indicating that most people (at least in Western cultures) have high self-esteem and tend to have an overly positive evaluation of their own characteristics (e.g., Orth et al. 2012). What is remarkable about values, however, is that people see their values as especially desirable, even more so than other personal characteristics. Accordingly, we found that people see their own values as more desirable and closer to their ideal self than their personality traits (Roccas et al. 2014).

Thus, a person may have a strong need for security, which he does not particularly like about himself. He may recognize this need, and wish to be less anxious and more willing to take risks. Similarly, a person may see himself as more introverted than he would like to be, and wish to be more extraverted. In contrast, people are very satisfied with their values. Moreover, in a series of studies, our participants expressed almost no wish to change their values, and they considered them as very close to their ideal. The inherent desirability of values makes them a powerful motivator for action. Since all values are at least somewhat important, any value may serve to motivate action.

Values Are Guiding Principles

Values serve as standards or criteria that provide social justification for choices and behaviors (Rokeach 1973). This distinguishes values from personal attributes like traits or interests. People can explain their behavior by referring to their traits ("I helped her because I'm an agreeable person") or interests ("I like helping people") as well as their values ("I think it's important to help"), but they refer to their values only, when they wish to justify choices or actions as legitimate or worthy (Roccas et al. 2002; Sagiv 2002).

This characteristic of values is used, for example, by political activists, who often frame issues they seek to promote in terms of values. Interestingly, since values are trans-situational (i.e., can apply to a variety of situations), the same value can be used to justify opposing policies. Thus, the value of equality has been used both to justify and to oppose affirmative action (Brewer and Gross 2005, for a review). Similarly, a discourse analysis of the rhetoric of politicians from Australia revealed that referring to values of national interest and lifestyle maintenance was used to justify opposing positions with regard to climate change (Kurz et al. 2010).

Value Importance Is Stable Over Time and Across Situations

Another unique feature of values is that they transcend specific circumstances. The importance a person attributes to specific values is relatively stable across situations (Schwartz 1992). Thus, a person who views concern for others as an important value in the work context is also likely to attribute high importance to this value in other social contexts. This feature distinguishes values from norms, attitudes, and specific goals, which usually refer to specific actions, objects, or situations.

These characteristics of values have important implications for their relationship to behavior. 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 behaviors. Thus, for example, benevolence values, that express the motivation of concern and care for others, predicted a variety of specific behaviors such as the intention to donate money (Maio and Olson 1995), the amount of money contributed in a social dilemma game (Sagiv et al. 2011), the decision to volunteer to help an experimenter (Grant and Mayer 2009) and daily behaviors such as keeping promises and lending things to neighbors (Bardi and Schwartz 2003). Benevolence values also predicted broad decisions such as one's career choice (e.g., Knafo and Sagiv 2004; Arieli et al. 2016). Thus, values can predict behaviors that vary extensively in their breadth: from very specific behaviors (e.g., donating money in a social dilemma game) to broad behaviors with lifelong implications (e.g., choosing a profession).

Values are also relatively stable over time (see a review in Bardi and Goodwin 2011). Beinish-Wiesman et al. (Chap. 5 in this book) discuss value development during adolescence. Once formed, values remain relatively stable across the life course (Hitlin and Piliavin 2004). Thus, for example, a longitudinal study revealed high test–retest stability across one month (0.67–0.94), which remained considerable even after two years (0.50–0.66, Schwartz 2005). Recent studies revealed similar findings across three and eight years (Milfont et al. 2016; Vecchione et al. 2016).

Given this stability, can people change their values? Personality researchers often assume that people can change their values quite easily, especially comparing to other personality attributes such as traits. However, when we asked adults whether they could change their values should they want to, we got a very different response. Participants reported that changing their values would be very difficult, more difficult than changing their traits. Interestingly, this pattern was revealed when the participants were asked explicitly, as well as when they were primed with mutability of either values or traits (Roccas et al. 2014). Thus, people believe that their values are stable and that they have little power to change them even if they wished to do so.

What could account for this alleged contradiction between researchers' intuition and laymen's reports? Roccas et al. (2014) suggested that because values are close to the ideal self, individuals are not very motivated to perceive values as mutable. Moreover, being so close to their ideal attributes, individuals are motivated to preserve their value priorities. Changing one's values entails altering the very core of one's identity; individuals therefore perceive such change as both difficult and unlikely.

Values *can* sometimes change, however. Major life transitions, like immigration, sometimes generate substantial value change (e.g., Bardi et al. 2009, 2014; Lönnqvist et al. 2011). Is it possible to deliberately change another person's values? Education, social, and business institutions often aim to shape and change the values of their members (Arieli et al. 2014). So far, however, there have been only few attempts to initiate and test value change in the laboratory. A notable exception is Rokeach's seminal work on value self-confrontation (Rokeach 1973, 1975). In this procedure, participants were provided with feedback suggesting that their fellow students attribute higher importance than they did to a specific value. Following this information, the participants ranked this value as more important than before (see reviews in Maio et al. 2009; Rokeach 1975).

Recently, Bardi and Goodwin (2011) have proposed a conceptual model of value change. Drawing on the elaboration likelihood model of persuasion (Petty and Cacioppo 1986), they reasoned that the importance of values may change through both effortful (i.e., central) and automatic (i.e., peripheral) processes. Deliberate change is possible, because values are cognitively represented and are, at least in part, cognitively controlled (Roccas et al. 2002). Thus, individuals may modify the importance they attribute to some values deliberately, through an explicit consideration of what they consider important. At the same time, value change may take a more automatic route, through implicit processes (Bardi and Goodwin 2011). Reviewing the literature on values, Bardi and Goodwin (2011) identified five facilitators of value change, each of which works through one or both routes: direct persuasion, adaptation, identification, consistency maintenance, and priming.

Building on this model, Arieli et al. (2014) developed a 30-min intervention, designed to increase the importance of benevolence values. The intervention drew upon both implicit, automatic change facilitators (priming and consistency maintenance) and on deliberate self-persuasion. The findings revealed an increase in the importance of benevolence values following the intervention, which persisted for at least four weeks. Chapter 2 in this book (Roccas et al.) further discusses value change, taking a methodological perspective.

Values Are Structured According to Their Compatibilities and Conflicts: The Content and Structure of Values

In discussing the content and structure of values, we focus on Schwartz's theory of personal values. Since it was presented in 1992, this theory has gained attention and quickly became the dominant theory in the field (Rohan 2000). Building on the pioneering research of Rokeach (1973), Schwartz (1992) proposed a theory of the universals in the content and structure of personal values. Taking a cross-cultural perspective, Schwartz suggested that values differ in the type of motivational goal they express. He identified ten motivationally distinct types of values: power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security.

The more important a value is to a person, the more he/she is motivated to attain the goal it represents. It is impossible, however, to attain all values at once, because actions taken when trying to implement a certain value may be incompatible with actions that promote other values. Some values are compatible with each other—they reflect compatible motivational goals that could be attained at the same time, sometimes by the same psychological or behavioral manifestation. Other values conflict with each other—actions that promote one of them are likely to impede the attainment of the other.

This results in another unique feature of values: Values form a circular continuum organized according to the motivation they express. The relationships between these motivations vary: They can be compatible, conflictual, or irrelevant to each other (Schwartz 1992). When two values express compatible motivations, the same action is likely to promote the attainment of both, and attributing high importance to either may lead to engaging in the same action.

Schwartz (1992) analyzed the social, psychological, and behavioral consequences of the ten values. The complete pattern of conflict and compatibility among the values forms a circular structure in which adjacent values reflect compatible motivations and opposing values reflect conflicting motivations (Fig. 1.1).

The circular continuum of values can be summarized into four higher-order values that form two basic conflicts. The first contrasts *self-enhancement* with *self-transcendence*. Self-enhancement values emphasize the pursuit of self-interest by focusing on gaining control over people and resources (power) or by demonstrating ambition and competence according to social standards and attaining success (achievement). These values conflict with self-transcendence values that emphasize concern for others: demonstrating concern and care for those with whom one has frequent contact (benevolence) or displaying acceptance, tolerance, and concern for all people regardless of group membership (universalism).

The second conflict contrasts *openness to change* with *conservation.* Openness to change values emphasize openness to new experiences: autonomy of thought and action (self-direction), novelty and excitement (stimulation). These values conflict with conservation values that emphasize preserving the status quo: commitment to past beliefs and customs (tradition), adhering to social norms and expectations (conformity), and preference for stability and security for self and close others (security). Hedonism values share elements of both openness and self-enhancement, and are in conflict with self-transcendence and conservation values.

The circular structure of values implies that the ten values are not ten distinctive categories, but rather form a continuum, an integrated structure of motivations. Thus, when studying the relationships of values to behavior, the relationships with all values are meaningful (Schwartz 1992). Not only those that are positively and negatively related to the behavior, but even values that are unrelated, shed light on the meaning of that behavior. This feature distinguishes values from other constructs, such as attitudes and specific goals.

The motivational continuum of values could be partitioned in different ways. Many researchers study either the original ten values (Schwartz 1992) or the four

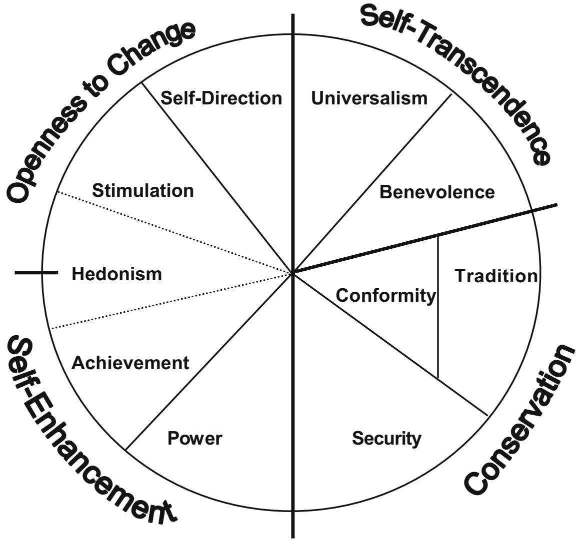

Fig. 1.1 From Davidov et al. (2008), p. 425

higher-order values described above (e.g., Benish-Weisman 2015; Vecchione et al. 2015). However, since the values form a motivational continuum, finer partitions are also possible. Indeed, in a recent development of the theory, Schwartz and colleagues distinguished among 19 values. This model is presented and discussed in Chap. 3 of this book (Schwartz). The larger the number of values that are considered, the narrower is the motivation each expresses. We discuss the implications of the value continuum and of studying narrow versus wide values in Chap. 2 (Roccas et al.).

Taking a Cross-Cultural Perspective: Values Are Near-Universals

Schwartz's circular model has been tested in cross-cultural research in more than 200 samples from over 70 countries in samples of students, teachers, and in representative samples. Findings provide strong support for the theory across the numerous cultures studied (Davidov et al. 2008; Schwartz 2005, 2015; Schwartz and Rubel 2005; Schwartz and Sagiv 1995). This body of research indicates that the *meaning* of the 10 value types is similar across cultures. Thus, when people from different cultures consider the importance of a value (e.g., freedom), they have in mind a similar construct. This feature of values makes them an invaluable tool for cross-cultural research in general and for investigating the meaning of behaviors across cultures in particular (Roccas and Sagiv 2010).

Interestingly, although all 10 value types were found to have a consistent meaning across cultures, some specific value items, such as "spiritual life," "self-respect," "healthy," and others, had different meanings in different cultures. These differences in meaning could potentially cause miscommunication and misunderstanding among individuals from different cultures. To date, research has focused almost solely on values that have a near-universal meaning. Future research could investigate values that have particular meanings in different culture, aiming to understand their antecedents and implications for the value–behavior relationships.

Research also indicates that culture moderates the structure of personal values. For example, the level of societal development moderates the structure of values such that the prototypical structure is more likely to emerge the higher the level of societal development (Fontaine et al. 2008). Research has yet to determine whether these findings reflect measurement issues or whether the *meaning* of values depends on such societal characteristics.

Comparing the value ratings of people from more than 50 nations reveals that people generally agree about which values are most important and which are at the bottom of the hierarchy (Schwartz and Bardi 2001). All over the world, people think that benevolence values are among the most important, whereas power, tradition, and stimulation values are among the least important. This shared hierarchy of values does not mean, however, that individuals and cultures do not differ in their values—they differ substantially. People vary in how important each value is for them and hence vary in the psychological and behavioral implications of endorsing these values. Furthermore, societies vary in the importance their members attribute to each value (see a review in Sagiv et al. 2010).

In sum, cross-cultural research on personal values reveals commonalities in the meaning of values and some similarities in personal hierarchies of values across cultures. At the same time, this growing body of research indicates substantial variance in the importance attributed to values across cultures. The current book takes a cross-cultural perspective in studying personal values and their behavioral implications.

Overview of the Book

This book discusses three main issues: In Part I, we ask what values are and how they are studied. The chapters in Part II discuss the content of the relationships between values and behavior. Finally, the chapters in Part III address some of the processes through which values affect behavior. We next briefly review the content of these parts and the chapters they include.

The first part of the book serves as a general introduction to the topic of values and behavior. It includes three chapters. Following this introductory, conceptual Chap. 2 is an introductory methodological chapter (Roccas et al.). The chapter begins with a discussion of the methodological implication of the definition of values, and how they are captured by the various measures developed to measure them. Then, the authors discuss a timely methodological issue: How to create short and valid value measures? The third and final part discusses the sometimes blurred distinctions between measuring, priming, and changing values.

Chapter 3 (Schwartz) reviews the recent refinements in Schwartz theory of personal values. The chapter presents the rationale for refining the original theory of ten basic values into a theory of 19 values. Schwartz discusses the new scale that operationalizes the refined theory and presents research that tests the psychometric properties of the new scale. The chapter then reviews recent studies that relate the refined 19 values to behavior across cultures.

The second part of the book focuses on the *content* of the relationships between values and behavior. Each of the four chapters in this section addresses a different life domain, by organizing the vast research on values and behavior in that domain, pointing to consistent findings, gaps, and contradictions, and suggesting future directions for studies on the effects of values in that domain. Together, the chapters present the state of the art of current research on the relationships between values and behavior across cultures and propose new insights.

The first chapter in this part (Sanderson and McQuilkin, Chap. 4) focuses on the relationships between values and prosocial behavior. The authors review the growing body of research which examined the relationships between personal values and a variety of prosocial behaviors, such as everyday kindness, political activism, and protection of the environment. They then review literature on the relationships of values to antisocial behavior. Together, this review provides us with new insights on the meaning of the different types of pro- and antisocial behaviors, and on the motivations that underlie each.

Chapter 5 (Benish-Weisman et al.) focuses on the relationships between values and aggression. Reviewing past and recent researches, the authors discuss the value–aggression relationships among adolescents. Adopting a developmental perspective, the authors seek to investigate how these relationships develop.

Moving to the work domain, Chap. 6 discusses the impact of values on behavior in organizations (Arieli and Tenne-Gazit). The authors review research on a variety of choices and behaviors of organizational members. Doing so, they provide the reader with a novel mapping of behaviors, according to the personal values that predict them. In the second part of the chapter, the authors focus on values of managers, discussing their content, their antecedents, and the multiple levels through which they affect individuals in organizations.

The final chapter in this part of the book focuses on the interpersonal domain of work-related behavior. Interpersonal relationships have been recognized as crucial for thriving of organizations and the individuals in them. In this chapter, Ravlin and Flynn present a new model describing the development of dyadic relationships in the work domain (Chap. 7). The authors present an integrative model of the development of relationships between individuals and discuss how these processes are affected by culture.

In Part III of this book, we move from focusing on the content of the values–behavior relationships to describing some of the mechanisms through which values affect behavior. The chapters in this section address processes that occur within individuals, in the immediate social context and at the societal or cultural level. Together, they provide novel understanding of the conditions under which values are most likely to exert their effect on behavior.

Hanel, Vione1, Hahn, and Maio (Chap. 8) describe the concept of value instantiations and discuss its role in bridging the gap between abstract values and specific actions. They then illustrate the potential role of value instantiations by re-analyzing past findings and by presenting some new empirical evidence from different cultures.

Boer (Chap. 9) presents a new model on the relationships of values to well-being, depicting culture and environmental threat as moderators of these relationships. The author then provides a preliminary test of the theoretical model and discusses the findings, their implications, and future directions.

The final chapter in this part of the book (Fischer, Chap. 10) takes a novel approach, proposing that whereas most research focuses on the impact of values on behavior, the opposite direction of influence is as, and maybe even more, likely. Fischer reviews novel methods of assessing values, such as content analyses of speeches of individuals from different cultures and reviewing cultural rituals. He recommends focusing on overt behavior in real-life contexts, as a means for developing a new understanding of the value–behavior link.

Finally, in the concluding chapter of the book, Jan Cieciuch offers an integrative review and summary of the chapters in the book.

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Chapter 2
Methodological Issues in Studying Personal Values

Sonia Roccas, Lilach Sagiv and Mayan Navon

The growing body of literature on personal values has yielded both conceptual and methodological developments. Both are reflected in the growing number of instruments developed to measure personal values. The psychometric characteristics of any specific instrument have methodological implications. Thus, for example, a short questionnaire may be less reliable but easier to administer than a long one. The psychometric properties of the instruments carry not only methodological, but also conceptual implications. These methodological and conceptual implications are the focus of the current chapter.

We start by deconstructing the definition of values presented in Chap. 1 in this book (Sagiv and Roccas), and discussing methodological implications of each element of the definition. In the second part of the chapter, we discuss a pressing issue in value measurement—the development of shorter versions of measures of values. The third part discusses and compares methodologies used to prime and change values. Additionally, the chapter includes an appendix that reviews some of the many instruments used to measure values (Appendix "Value Measures").

In this chapter, we focus on self-report measures of personal values. Self-reports are typically seen as the most appropriate measure of values because values represent subjective motivational goals. Some researchers have used other methods, however. For example, Portman (2014) analyzed speeches of leaders to assess their personal values. For a review of such methods of assessment, see Fischer, Chap. 10 in this book.

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Part I: From Theory to Measurement and Back

Values are **abstract**, **desirable** goals. Their importance is **stable over time and across situations**. Values **vary in their importance**; the more important a value is to a person, the more likely she is to act in ways that promote the attainment of that value (Kluckhohn 1951; Rokeach 1973; Schwartz 1992). Values are cognitive representations of basic motivations and **are structured according to their compatibilities and conflicts** (Schwartz 1992).

We next discuss the implications of each of the highlighted elements in the definition for the measurement and manipulation of values.

Values Are Abstract

Values are abstract goals. Accordingly, the original measures of values developed by Rokeach (RVS 1973) and Schwartz (SVS 1992) presented the participants with an abstract task. The participants receive a list of value items, each consisting of a word followed by a short description in parentheses (see an example for the SVS in Fig. 2.1). Respondents are instructed to evaluate the importance of each value. To do so, they have to introspect and decide which importance score best describes the importance they attribute to each abstract goal. For example, a respondent has to decide whether the importance of an abstract goal (e.g., equality) corresponds to a rating of 6 or of 5 (in the SVS) or to a ranking of 3 or 4 (in the RVS). This is a difficult task: Not only are the values abstract, but also pinpointing their exact subjective importance is hard. People are likely to be able to easily distinguish between values to which they attribute little importance, and those that they deem as very important, but determining the degree of importance for some values might be a daunting task.

Recognizing these difficulties, Schwartz developed another instrument, labeled the Portrait Value Questionnaire (PVQ, Schwartz et al. 2001). This instrument was designed to measure values in a more concrete and therefore easier way. It contains

In this questionnaire you are to ask yourself: "What values are important to ME as guiding principles in MY life, and what values are less important to me?"

AS A GUIDING PRINCIPLE IN MY LIFE, this value is:

opposed to my values	not important			important			very important	of supreme importance
-1	0	1	2	3	4	5	6	7

____EQUALITY (equal opportunity for all)

____SOCIAL POWER (control over others, dominance)

____PLEASURE (gratification of desires)

Fig. 2.1 Task instructions for the SVS (Schwartz 1992)

	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
He thinks it is important that every person in the world be treated equally. He believes everyone should have equal opportunities in life.	☐	☐	☐	☐	☐	☐
It is important to him to be in charge and tell others what to do. He wants people to do what he says.	☐	☐	☐	☐	☐	☐
He seeks every chance he can to have fun. It is important to him to do things that give him pleasure.	☐	☐	☐	☐	☐	☐

Fig. 2.2 Task instructions for the PVQ-40 (Schwartz et al. 2001)

short descriptions of individuals, in terms of the values that are important to them. For example, "He/She believes that people throughout the world should live in harmony. Promoting peace among all groups in the world is important to him/her" (universalism). The response scale is also easier to use: The participants are asked to report how similar to them is the person described, and each response is labeled (see Fig. 2.2). The PVQ has different versions for male and female participants so that the gender of the individuals described in the questionnaire corresponds to the gender of the respondent. To date, there are several versions of the PVQ, varying in the number of items (see Appendix "Value Measures": 21, Davidov et al. 2008; 40, Schwartz et al. 2001; 57, 2012, Chap. 3 in this book; see also Schwartz and Cieciuch 2016).

Another relatively concrete measure of values is the Picture-Based Value Survey for Children (PBVS-C, Döring 2008; Döring et al. 2010; Cieciuch et al. 2013). This instrument, designed to measure values of elementary-school-aged children, concretizes values by using pictures of a specific object, action or situation that are familiar to children (see Fig. 2.3; Appendix "Value Measures"). The recent Animated Value Instrument (AVI) took a similar approach (Collins et al. 2017; Appendix "Value Measures").

Studies that compared the various measures, employing multi-trait-multi-method techniques, typically revealed strong convergent and discriminant validity (e.g., Oishi et al. 1998; Schwartz et al. 2001). For example, the correlation between benevolence scores measured with the PVQ and benevolence scores measured with the SVS was 0.55. This correlation was stronger than any other correlation with value scores measured with either the PVQ (0.03 to −0.32) or the SVS (0.11 to −0.40) (Schwartz et al. 2001).

So far there is not enough research that systematically compares the different measures with regards to their relationships to external variables (e.g., traits and attitudes) and to behaviors. It is possible, for example, that the SVS is better suited to predict abstract attitudes and behaviors (e.g., self-ratings of religiosity or general

Fig. 2.3 Exemplary items from the PBVS-C (Döring 2008). The respondents see the label underneath each picture, but not the name of the value. Andrea Blauensteiner/AE Bilsky

attitudes toward protecting the environment) whereas the PVQ is better suited to predict more tangible behaviors (e.g., church attendance or recycling). Alternatively, it is possible that the SVS is a better predictor of behaviors than the PVQ (both abstract and concrete) because the SVS is abstract and hence may be a more valid measure of values. Future research is needed to further compare the predictive validity of each measure.

Values Are Inherently Desirable

Values are defined as inherently desirable and worthy. Few value items (e.g., social power, devout, and obedient) are viewed as undesirable by some people, but all values are desirable to most people (Roccas et al. 2014; Schwartz 1992). Consequently, individuals attribute high importance to most values (see Sagiv and Roccas, Chap. 1 in this book). This characteristic of values requires building instruments that encourage respondents to distinguish between the importance of different values, rather than merely reporting that all values are important. One way to address this problem is by using an asymmetrical response scale that includes more response options that denote high importance than response options that denote low importance (Schwartz 1992). In addition, the instructions often attempt to explicitly encourage respondents to distinguish among their values (e.g., "try to distinguish as much as possible between the values by using all the numbers." SVS 1992).

Another way to address the tendency to attribute high importance to most values is by means of instructing participants to rank a list of values according to their importance, or to compare the importance of all possible pairs of values included in a list. Both methods effectively induce participants to express distinctions between the importance they attribute to their different values. These techniques have, however, some important limitations. Later in this chapter, we discuss the advantages and disadvantages of rating versus ranking in value measurement.

The inherent desirability of values imposes an important restriction on value measurement. Even in cases in which one is interested in studying the effects of a specific value, accurate measurement requires that the respondents consider all values to assess the importance they attribute to each. Only by considering all basic motivations can the participant become aware of her subjective value hierarchy: That is, although all values are important to her, not all are important to the same degree. Asking participants to report the importance of only one value (e.g., openness to change) results in manipulating the accessibility of that value, or priming it, rather than accurately assessing it, because almost all values are deemed desirable and important. Accordingly, researchers have relied on this attribute of values to manipulate their accessibility and demonstrate their impact on behavior.

Consider for example our research on values and identification with the nation, in which we aimed to show that values influence the importance of the nation, as part of one's identity. The participants were randomly assigned to one of two value conditions: In the "openness to change values" condition, they were asked how much they agreed with a set of value statements such as "I want to be independent and self-reliant," "it's important that people have freedom of thought and action." In the "conservation values" condition, the participants were asked about their agreement with statements such as "my family's safety is very important to me," "I think it is important that people act politely." Thus, the participants in each experimental condition were presented with statements regarding one set of values only. This instrument was structured as a questionnaire. However, it did not serve to measure individual differences (i.e., capture variance in the importance attributed to the values), but rather served to induce homogeneity in the responses of the participants: All participants were expected to express high agreement with the statements they read. Accordingly, for example, 48 of 55 participants in the openness to change condition used one of the two highest scores to rate their agreement with the first statement. Following the value manipulation, the participants reported their identification with the nation. As hypothesized, participants in the conservation condition reported higher importance of their national identity than the participants in the openness to change condition (Sagiv et al. 2012).

The Importance of Values Is Relatively Stable

Values importance is trans-situational and stable across time (see a review in Bardi and Goodwin 2011). In recent years, longitudinal studies found high test-retest stability even after several years (e.g., Milfont et al. 2016; Schwartz 2005; Vecchione et al. 2016). This feature of values has important methodological implications for value research. Due to their stability, values serve as predictors of future preferences, choices and behavior. Thus, for example, values, as measured

1–2 months prior to the national election, predicted the party to which the participants voted in those elections, as reported 1–2 months later. These findings were demonstrated in two unrelated studies, conducted in two different cultures: Italy (Schwartz et al. 2010) and Israel (Roccas et al. in preparation). The patterns of findings were similar. In both cultures conservation values predicted voting for right-wing (vs. left-wing) parties. The similar patterns indicate similarity in the meaning of voting for left versus right-wing parties in the two cultures.

In another on-going research conducted among faculty members of a public university, respondents' conservation values, measured at time 1, positively predicted deference identification and negatively predicted alienation from management as measured at time 1, as well as four years later (time 2, Sagiv and Elster in preparation). Importantly, the correlations were similar in magnitude when values and identification were measured at the same time (0.22 at time 1, 0.20 at time 2) and when values were measured at time 1 and identification was measured four years later (0.22). The same pattern emerged for alienation from the management (−0.22 and −0.21 when values and alienation were both measured at time 1 and at time 2, respectively, vs. −0.31 when values were measured at time 1 and alienation 4 years later).

In sum, reflecting their stability, values serve as predictors of future preferences and behavior. From a methodological point of view, this means that researchers do not have to measure values and their predicted variables at the same session. Values can be measured before the measurement of the dependent variables in question. In fact, they can also be measured after—unless there is a reason to suspect a temporary or chronic value change. This advantage is especially important when researchers are interested in the relationships of values to other self-reported constructs, because they can measure values at a different time, thus minimizing common method bias (see Podsakoff et al. 2003).

Values Vary in Their Importance

Although all values are considered worthy and important to most people, values vary in how important they are to each person. The more important a value is, the more likely people are to act in ways that allow them to express it and attain the goals underlying it. Accurately measuring individual differences in the importance of values is crucial because differences in the importance of values predict behavior. Such accuracy may be affected by the way values are presented (e.g., abstract vs. concrete, discussed above), and by the form of response required from the participants, which we discuss next. Two main forms of response are used in most instruments: ranking and rating.

Ranking. Questionnaires that use ranking require respondents to compare the items to each other and to hierarchically order them. In the case of values, the respondents are required to order the values in the questionnaire from the most important to the least important. A notable example for a value instrument that uses ranking is the Rokeach Value Survey (RVS 1973, see Panel A of Table 2.3, Appendix "Value Measures") which consists of two value lists. The respondents are asked to rank the importance of all values in each list. Thus, respondents are asked to go over the list, find the most important value and rank it as 1, find the second most important value and rank it 2, and so on and so forth. This method is compatible with the view of values as inherently comparative (Rokeach 1973). Accordingly, respondents are required to judge the relative importance they attribute to each value compared to all other values and choose their value hierarchy (Alwin and Krosnick 1985). Ranking can thus help respondents gain a better understanding of their implicit value hierarchy (Ng 1982).

Ranking has some disadvantages as well. First, it is often difficult and taxing for respondents, demanding considerable cognitive sophistication and concentration (Alwin and Krosnick 1985). This is especially true when respondents are asked to rank a long list of items, as is done in the case of values (Schwartz 1992). Moreover, since ranking does not allow respondents to assign equal importance to different values, it ignores the possibility that people's internal representations of values might not include such fine distinctions. It is therefore possible that individuals report differences between values even when these differences are negligible (Maio et al. 1996), to make comparisons between values that they consider non-comparable (Braithwaite and Law 1985; Schwartz and Cieciuch 2016), or even make random responses in order to meet the task requirements (Ovadia 2004). In addition, ranking poses a statistical challenge: The sum of the ranks for any individual respondent equals a constant, producing a linear dependency among the set of ranked items. Consequently, conventional statistical techniques are not always appropriate (Alwin and Krosnick 1985; Rankin and Grube 1980).

Rating. Value questionnaires that use rating ask participants to consider each item independently of how they view the other items, and rate its importance on a scale. Compared to ranking, rating is considerably easier, especially for long lists (Schwartz 1994). Moreover, unlike ranking, rating does not force respondents to discriminate among values that they genuinely consider as having the same importance. Finally, the items are independently evaluated and are hence suitable for standard statistical analyses (Alwin and Krosnick 1985).

Ranking and rating differ in their very essence as measures of the importance of values. Ranking assesses the importance of values relatively to each other. In contrast, rating assesses the importance as per an "objective" scale. It may allow, for example, expressing negative importance of a specific value. Moreover, ranking assumes equal gaps of importance between all values. For example, the gap between the importance attributed to the values ranked second and third is assumed to be the same as the gap between the importance attribute to the values ranked fifteen and sixteen. It thus imposes a fixed distribution for all respondents. Rating, in contrast, allows one person to rate five values as most importance and five others as least important, and another person to rate only one most important and two least important values.

This flexibility captures real differences in value distribution (i.e., some people attribute high importance to more values than others do). However, it also makes rating susceptible to individual differences in response style. Thus, the same "objective" score (i.e., 6 on a −1 to 7 scale) may have different subjective meanings to different people. Individual differences in scale use may hence distort comparisons across individuals. Centering value scores—that is, partialing out the respondent's mean importance across all values—somewhat corrects for this problem and is hence the common practice among value researchers (e.g., Schwartz 2009; see review in Smith 2004. For exceptions see Fischer 2004; He and van de Vijver 2015). Ranking is less susceptible to such response style biases (Schwartz and Cieciuch 2016).

Researchers have tried to assess the reliability and validity of each method compared to the other. Rankin and Grube (1980) compared ranking and rating versions of RVS. The two techniques produced similar results, indicating satisfactory test–retest reliabilities, and good convergent and construct validity. In contrast, Maio et al. (1996) compared the predictive validity of rated and ranked values. They found that both methods yielded most of the predicted correlations with attitudes, but rated values predicted attitudes better than ranked ones.

To-date, most value measures use rating (see Table 2.3 in Appendix "Value Measures"). Several researchers have developed instruments that employ techniques that aim to overcome the disadvantages of both rating and ranking. Thus, for example, the Computerized Paired Comparisons of Values (CPCV, Bilsky et al. 2015) and the Pairwise Comparison Value Survey (PCVS, Oishi et al. 1998) present the participants with series of pairs of value types (e.g., conformity vs. security, see Fig. 2.4). For each pair, the participants are asked to report which of the two values is more important to them, and to what extent. This technique requires, however, a large number of items: comparing ten values to each other results in 45 comparisons. It is therefore impossible to employ this technique for a long list of values. Other instruments that combine aspects of both ranking and ranking are the

Fig. 2.4 Exemplary item from the CPCV (Bilsky et al. 2015)

PBVS-C (Döring 2008; Döring et al. 2010) and the Best–Worst technique developed by Julie Lee and her colleagues (SVBWS, Lee et al. 2008; AVI, Collins et al. 2017).

In sum, so far there is not enough research to determine whether differences in response format affect the validity of value instruments. However, using rating, ranking or pairwise comparisons reflects assumptions regarding the representations people have of their values (e.g., do people distinguish between the importance of all values, or can they attribute the same importance to different values?), and has methodological implications (e.g., completion-time and difficulty of the task). In choosing the instrument, researchers should therefore consider their underlying assumptions and implications.

Values Are Structured According to Their Compatibilities and Conflicts

One of the main conceptual developments proposed by Schwartz was moving from a list of value items, to conceptualizing values in terms of their underlying motivations. As detailed in Chap. 1 in this book (Sagiv and Roccas), Schwartz identified ten basic motivations and derived ten values (or value types) that represent them. The ten values aim at a comprehensive representation of all universal human motivations (Schwartz 1992, 1994). Their dynamic nature is reflected in the circular structure of their interrelations. This structure reflects the conflicts and compatibilities among the values: Adjacent values in the circle represent compatible motivations whereas values at opposite directions express conflicting motivations. As described in Chap. 1 (Sagiv and Roccas), this structure has received extensive validation in cross-cultural research.

The structure of values has implications for the ways values are stored in our memory. Pakizeh et al. (2007) examined people's speed in judging the importance of values and showed that people are quicker to determine the importance of a specific value if they have immediately previously rated a motivationally related value, than if they have immediately previously rated a motivationally unrelated one. Thus, it is easier to judge the importance of a value if you just had the chance to think about a different value that has compatible or contrasting motivational implications. This structure also has implications for the structure of value change. In a series of longitudinal studies, Bardi et al. (2009) found that an increase in the importance of a value is usually accompanied by slight increases in the importance of adjacent values and in slight decreases in the importance of opposing values.

Implications of the structure of values for understanding the relationships of values to behavior. The circular structure of values implies that the ten values are not ten distinctive categories, but rather form a continuum of motivations. Thus, values should be treated as an integrated structure of motivations. To understand how values are related to a specific behavior, researchers should consider the spectrum of values. In general, a behavior is likely to be associated similarly with values that are adjacent in the value structure. The correlations with the behavior are likely to decrease monotonically when moving around the circle from the most positively related to the most negatively related value (Schwartz 1992). Importantly, the most positively and the most negatively related values are not necessarily opposing. However, once theory-driven hypotheses are set for the values that most positively and most negatively predict the behavior, the circular structure of values allows the researcher to predict the expected pattern of associations with all ten value types.

Consider the example of the extensive research of values and religiosity. Ample studies have hypothesized and found systematic correlations between values and religiosity (see reviews in Roccas and Elster 2014; Saroglou et al. 2004). Figure 2.5 presents the correlations of values and religiosity in a sample of 1892 Israeli students that we collected. The respondents completed the SVS (Schwartz 1992) and reported their religiosity. The findings portray a very similar pattern to the one found in the past: Religiosity is most positively correlated with tradition values and is also positively correlated with the other conservation values (conformity and security). Religiosity is negatively correlated with openness to change values (hedonism, stimulation and self-direction). Two values yield correlations somewhat different from most past studies: The correlation with benevolence is near zero (compared to a low positive correlation in most past studies) and the correlation with universalism is negative (compared to near zero in most studies, but see Roccas and Schwartz 1993, on cross-cultural differences).

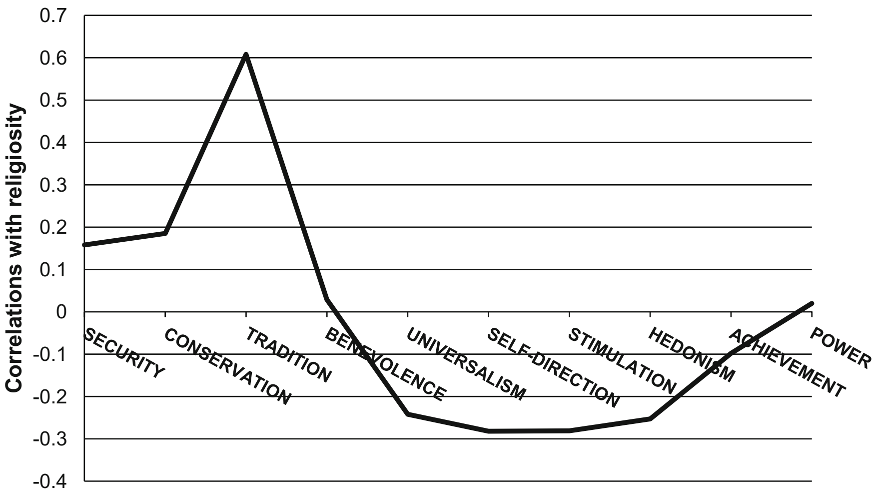

Fig. 2.5 Correlations between religiosity and the ten values. $N = 1892$. Values were assessed using a 46-item version of the SVS, which includes all the items from the original version that have been validated for cross-cultural use (Beyth-Marom et al. 2003)

We compared the overall pattern in Fig. 2.5 to the pattern found by Roccas and Elster (2014) who reviewed 24 samples in past studies. The correlation between the two sets of ten correlations was 0.90, reflecting strong resemblance, along with some differences.

Thus, when studying the relationships of values to behavior, researches can generate and test integrative hypotheses regarding all ten values. When an integrated hypothesis predicts the full pattern of associations, even insignificant correlations provide meaningful information. As exemplified here, integrated hypotheses allow researchers to test not only predictions for specific positive or negative correlations, but also the extent to which the full hypothesized pattern of relationships is confirmed or is consistent with past findings (for published empirical examples, see Roccas et al. 2002, for values and traits; Sagiv and Schwartz 1995, for values and tolerance; Sagiv et al. 2011, for values and behavior in social dilemmas).

Alternative partitions of the value circle: Broad versus narrow values. Another consequence of conceptualizing values as a motivational continuum is that the value circle can be partitioned in various ways. Originally, Schwartz's prototype model suggested distinguishing the ten values that represent the ten basic universal motivations he identified (Schwartz 1992, 1994). Each of the ten values is expected to predict choices, preferences, and behaviors that express the motivations underlying them. For example, security values were found to be positively correlated with trust in institutions (e.g., Devos et al. 2002), with voting for right-wing political parties (e.g., Schwartz et al. 2010), and with micro worries (worries about oneself or one's family) regarding health and safety (Schwartz et al. 2000).

A theory regarding the antecedents or consequences of values could address broader distinctions between values, however. Thus, for example, rather than focusing on security values as the predictor of behavior, researchers sometimes choose to focus on the higher-order value of conservation, which is comprised of tradition, conformity, and security values (Schwartz 1992) and expresses the motivation to preserve the status quo. In the examples above, trust in institutions and voting for right-wing parties were positively correlated with the higher-order conservation values. In this case, focusing on the higher-order conservation values seems advantageous. First, the measure of conservation is likely to be more internally reliable than the measures of tradition, conformity, and security values. Moreover, when these three values are all theorized to be similarly related to the dependent variable (i.e., trust or voting), then studying the higher-order conservation values is more parsimonious and could overcome random differences in the relationships observed for each of the three. In contrast, the research on worries revealed that health and safety micro worries were positively correlated with security, but not with conformity or tradition values. In this case, a focus on the higher-order conservation values would not reveal the relationships.

A theory could also focus on narrower conceptualizations of values. For example, in Chap. 3 in this book, Schwartz describes a refinement of the value theory that distinguished between 19 values (PVQ-RR, Schwartz et al. 2012; Cieciuch et al. 2014). In the example of security values, the refined theory distinguishes between personal security and societal security, which together form the original security value. Future research could investigate whether trust in organizations and voting for right-wing political parties are more strongly related to societal security whereas health/safety worries are more strongly related to personal security.

The choice of measuring broad versus narrow values (e.g., security values vs. the broader conservation values, or the narrower societal security values) holds conceptual implications. The larger the number of values a researcher considers (4 vs. 10 vs. 19), the narrower is the motivation that each expresses. The broadness of the value measured (and the motivation it expresses) may have implications for the relationships with behavior. Ample research on attitudes revealed that specific attitudes predict specific behaviors better than general behaviors (Ajzen and Fishbein 1973; see a meta-analysis in Kraus 1995). This may be the case for values as well. Following the above example, societal security values may predict attending a right-wing protest better than security values.

However, past studies found that relatively broad values predict specific behaviors such as performance in a creative task (e.g., Dollinger et al. 2007; Kasof et al. 2007) or cheating in an experiment (e.g., Feldman et al. 2015). It is therefore possible that narrow and broad values could be equally good predictors of specific action. The solution to this puzzle may rely on the mechanisms through which values are related to behavior. Thus, for example, to the extent that the value-behavior link is mediated by attitudes, specific values are likely to be better predictors of specific behavior. The value-behavior link, however, may be mediated not by attitudes, but rather by the interpretation of the behavior. Consider the example of cooperation in a social dilemma game. This situation could be interpreted differently by people who hold different values. Thus, those who emphasize benevolence values that reflect the motivation for concern and care for others could see it as an opportunity to help others, whereas those who emphasize power values could see it as an opportunity to gain profit. Each of these interpretations leads to a different action (contributing/not contributing, respectively, Sagiv et al. 2011). Hence, broad values could to be good predictors of specific actions (such as contribution in a dilemma game)—providing that the specific action is viewed as a means to express the underlying motivation. Future research is needed to shed light on this issue.

The choice of measuring broad versus narrow values also has methodological implications. The narrower the construct measured, the more reliable it is likely to be. For example, the alpha-Cronbach coefficient of a 3-item measure of societal security is likely to be higher than the coefficient of a 3-item measure of the broader construct of security. Broad constructs have by definition lower internal reliability. Indeed, the internal reliabilities of measures of Schwartz's original theory, such as the SVS or the PVQ40, often yield relatively low alpha-Cronbach coefficients (0.50–0.80, see discussions in e.g., Davidov et al. 2008; Schmitt et al. 1993; Schwartz and Rubel 2005; Schwartz and Rubel-Lifschitz 2009). The longitudinal stability of these measures, as well as their construct and predictive validity was established in numerous studies. This indicates that the low internal reliability of broad values does not reflect a measurement problem, but rather the broad nature of the constructs.

In sum, in the first part of this chapter, we discussed methodological implications of five aspects of the value definition—abstraction, desirability, stability, variance of importance, and motivational structure. We aimed to show that considering these methodological issues and applying them to value research could further contribute to our conceptual understanding of values. We next discuss a methodological issue relevant to many value researchers—the development of short measures of values.

Part II: Developing Short Measures of Values

Research investigating the principal measures of values (RVS, SVS, PVQ-40, PVQ-RR) indicates that they are reliable and valid. However, these measures are all lengthy and require relatively long time to complete. Consequently, researchers often look for ways to come up with shorter measures of values. As discussed above, measuring only one value (or one higher-order value) is not a good solution, because to fully understand the value-behavior relationships one has to consider the full spectrum of values. Moreover, measuring only one value results in priming, rather than assessing that value. Thus, shortening the measure of values by including only the values that are at the focus of the research might lead to misleading findings.

One alternative is to select some of the items of the existing instruments so that all the spectrum of values is represented, but each is measured by a smaller number of items than in the original instrument. This approach has been used, for example, in creating short measures of personality traits (e.g., TIPI, Gosling et al. 2003). In shortening well-established questionnaires by sampling items, researchers usually choose the items that are most similar to each other—that is, the items that result in the highest reliability. However, the high reliability might come at the expense of construct and predictive validity (see a discussion in Boyle et al. 2015). In the case of values, using few items to assess each value is likely to make it difficult to fully assess the broad constructs that values are. For example, a reliable index of security values, containing the “national security” and “social order” items (hence excluding the “reciprocation of favors,” “family security,” and “clean” value items) may be highly reliable, but limited in measuring the societal aspect of security while neglecting the personal aspect.

We exemplify the impact of shortening the value questionnaire by selecting few items with the sample of 1892 Israeli students who completed the SVS (Schwartz 1992) and reported their religiosity (see above). How would different shortened measures of tradition correlate with religiosity? We composed a series of 2-item measures of tradition, including all possible combinations of the five value items measuring tradition values in the SVS: respect for tradition (item 18), moderate (32), humble (36), accept my portion in life (44) and devout (51). As revealed in Fig. 2.6, the 2-item measures vary in their internal reliability as well as in their

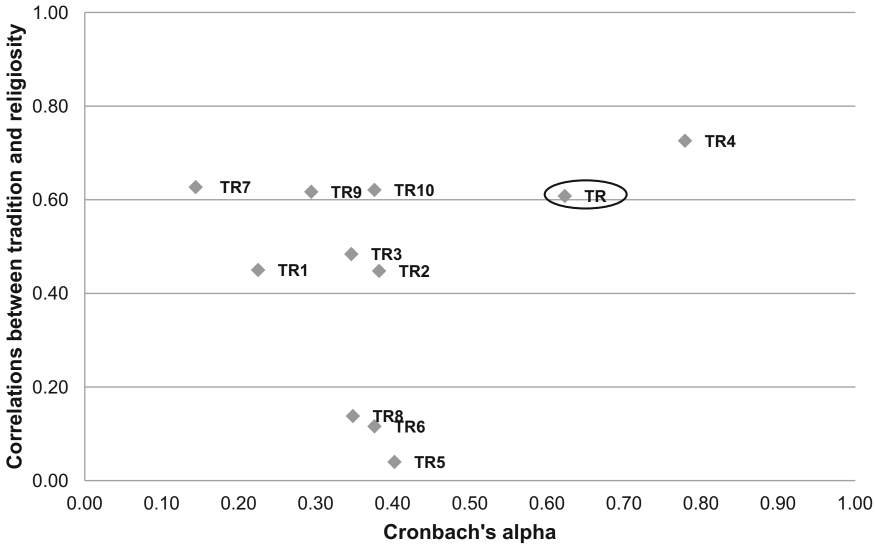

Fig. 2.6 Correlations between tradition and religiosity as a function of the internal reliability of the index (α). The *circled item* is the original, 5-item tradition index in the SVS (Schwartz 1992)

relationships with religiosity (i.e., predictive validity). Figure 2.6 (see also Table 2.1) maps all 11 indices measuring tradition values according to their reliabilities (x axis) and their correlations with religiosity (y axis). The original (full) tradition index is circled.

Figure 2.6 and Table 2.1 show that the most reliable index (#4, $\alpha = 0.78$) has the strongest correlation with religiosity ($r = 0.73$). However, indices with a much weaker reliability (#9, $\alpha = 0.29$; #10, $\alpha = 0.38$) and even the index with the weakest reliability (#7, $\alpha = 0.14$) are still strongly correlated with religiosity (0.62, 0.62, and 0.63, respectively). Moreover, while the most reliable index yields the strongest correlation, the index with the second strongest reliability (#5, $\alpha = 0.40$) yields a near zero correlation ($r = 0.04$).

The refined theory (Schwartz et al. 2012; Schwartz, Chap. 3 in this book) distinguishes two aspects of tradition. The first is labeled "tradition" and consists of respect for tradition (item 18) and devout (51). The second is labeled "humility" and consists of moderate (32), humble (36), and accepting my portion in life (44). As could be expected, religiosity is strongly correlated with the "tradition" aspect (#4, $r = 0.73$) and only weakly correlated with the "humility" aspect (#5, #6, #8, $r = 0.04$–0.14). Importantly, there are five indices that comprise of one item of tradition and one item of humility. These indices thus measure the broad tradition construct. They all yield strong correlations with religiosity (0.45–0.63).

In sum, researchers who are interested in a specific aspect of tradition values could use a homogeneous, narrow and reliable index of either "humility" or "tradition." In contrast, researchers who are interested in the broad construct of tradition

Table 2.1 Correlations between tradition indices and religiosity, and Cronbach's alpha

	TR	TR1	TR2	TR3	TR4	TR5	TR6	TR7	TR8	TR9	TR10
Correlation with religiosity	0.61*	0.45*	0.45*	0.48*	0.73*	0.04	0.12*	0.63*	0.14*	0.62*	0.62*
α	0.62	0.23	0.38	0.35	0.78	0.40	0.38	0.14	0.35	0.29	0.38

N = 1892

Items are pairings of tradition items taken from the SVS. TR includes all 5 items. TR1: 18,32, TR2: 18,36, TR3: 18,44, TR4: 18,51, TR5: 32,36, TR6: 32,44, TR7: 32,51, TR8: 36,44, TR9: 36,51, TR10: 44,51

*$p < 0.01$

values could use a short index comprised of items of both aspects of tradition. This measure will have weaker internal reliability, but adequate content validity which may yield predictive validity.

An alternative approach to shorten value measures is to use broader items to measure each value type, thus reducing the number of items needed. One example is the SSVS measure (Lindeman and Verkasalo 2005). This measure consists of ten items, one for each value type. Each value-item lists all value items from the SVS that measure that value. For example, the item for security reads "Security, that is, social order, national security, reciprocation of favors, family security, clean." The Short and Broad SVS (SBSVS) was recently developed by Roccas and her collages (based on Oppenheim-Weller et al. submitted. See Schori-Eyal et al. (2017); Sekerdej and Roccas 2016; for a similar approach see Knafo and Assor 2007). In this instrument, each value item consists of the broad definition of that value type. For example, the item for security reads "Safety, harmony, and stability of society, of relationships, and of self." These instruments thus fully assess each value type, and in that sense have better construct validity. However, using a single item for each value may reduce their reliability.

Figure 2.7 presents four samples in which the relationships between values and religiosity were investigated. Two of the samples used the SVS and two used the SBSVS. The patterns of the relationships of values and religiosity are remarkably similar to each other and to the pattern found in earlier research which we described in this chapter: Religiosity is most positively correlated with tradition values. It is also positively correlated with conformity and security but to a lesser extent. Religiosity is negatively correlated with hedonism, stimulation, and self-direction values. The correlations between the patterns found in each sample are very high, ranging from 0.89 to 0.97. Thus, in this case, the SBSVS measure of values yielded the same patterns of relationships as the SVS.

In sum, in the second part of the chapter, we discussed two common ways to create a short measure of values: selecting items of existing measures and creating a limited number of broad items. In discussing the first approach, we addressed the seemingly paradoxical tradeoff between reliability and construct validity. Sampling items may result in highly reliable measures that capture only a fraction of the value construct of interest. The second approach, forming short measures of broad items,

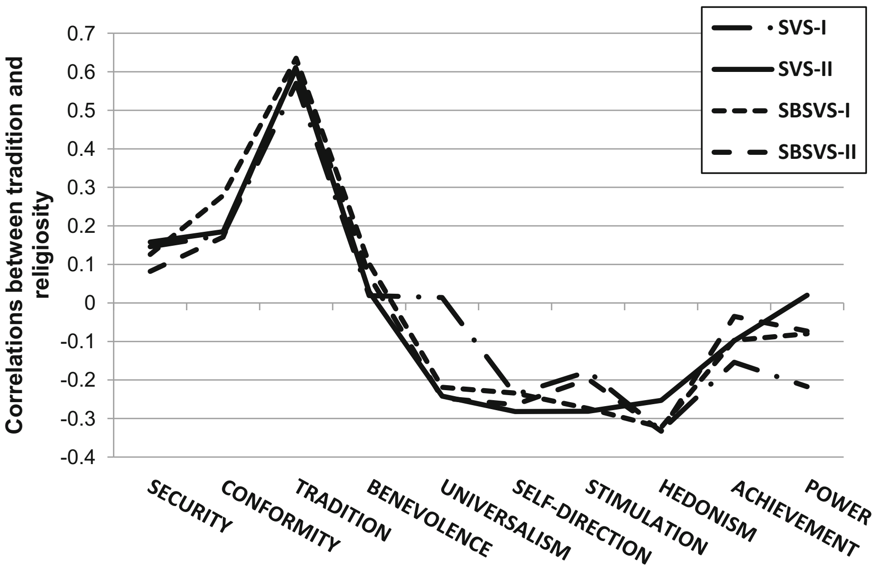

Fig. 2.7 Correlations of values with religiosity. SVS-I: $N = 197$, SVS-II: $N = 1892$, SBSVS-I: $N = 203$, SBSVS-II: $N = 190$

can overcome the concern of limited construct validity. However, in relying on one item only to measure each value construct, it is impossible to assess the internal reliability of the instrument.

Part III: Measuring, Priming, and Changing Values

So far we discussed the measurement of personal values. Measuring values allows researchers to investigate their associations with behavior; it does not allow, however, for causal inferences. In recent years, researchers have attempted in experimental studies to show that values are not only related to behavior, but also influence it. Such attempts are still rather rare. We next review studies that experimentally examined causal effects of values to exemplify the variety of instruments used to manipulate values as well as the range of topics and variables that have been studied.

Typically, to study the effects of values on behavior researchers have used priming techniques, aiming to show that when a value is rendered highly accessible it is likely to yield a behavior consistent with that value (see Table 2.2). The manipulations differ in the extent to which they are explicit. Below, we shortly discuss the different types of manipulations.

Table 2.2 Summary table of value priming techniques

Research	Primed values	Explicit/ implicit	Priming technique	Dependent variable
Roccas (2003)	Self-enhancement versus self-transcendence	Explicit	Agreement with items representing the value domain	Prestige-identification relationship
Amit et al. (2010, Study 3)	Conservation values versus control	Explicit	Agreement with items representing the value domain	Social projection
Verplanken and Holland (2002, Studies 1, 3)	Environmental values versus control	Explicit	Forming impression of a target based on his values	Choosing a television set
Verplanken and Holland (2002, Study 2)	Universalism values versus control	Implicit	Unscrambling sentences	Choosing a television set
Maio et al. (2009, Study 2)	Stimulation versus tradition versus control	Implicit	Unscrambling sentences	Evaluate themselves as better than average
Maio et al. (2009, Study 3)	Security versus self-direction versus control	Implicit	Unscrambling sentences	Cleaning tables
Maio et al. (2009, Study 4)	Security versus self-direction versus control	Implicit	Memorizing and recalling value-words and adjectives	Curiosity
Maio et al. (2009, Study 5)	Achievement versus benevolence versus control	Implicit	Memorizing and recalling value-words and adjectives	Exam, helping the experimenter

Explicit Priming of Values

Drawing on the notion that all values are desirable, discussed earlier in this chapter, Roccas (2003) reasoned that drawing attention to any one value would render it highly accessible and would therefore yield attitudes, preferences, and behaviors that are consistent with that value. One way to manipulate the accessibility of a value is therefore to explicitly draw attention to items that reflect that value. Because all values are desirable, such a prime will "remind" the person that the value in question is important for him or her, consequently increasing the likelihood of acting on that value.

Figure 2.8 provides an example with two of the items used by Amit et al. (2010) to prime the accessibility of conservation values. The participants in the conservation condition read and stated their agreement with five items, all drawn from the conservation values domain. In the control condition, participants were presented with five items unrelated to values (e.g., "I like fresh fruits and vegetables"). In both conditions, the participants stated their agreement with each item (see Fig. 2.8).

Importantly, this instrument—although phrased as if it is intended to measure stable individual differences—is not designed to measure the importance of values. Rather, the items used in the conservation condition were designed to elicit strong agreement, thus temporarily raising the perception of oneself as attributing high importance to these values. Accordingly, a manipulation check revealed that following the priming manipulation, participants in the conservation condition attributed higher importance to conservation values than those in the control condition, thus confirming the validity of the explicit prime (Amit et al. 2010, Study 3).

A few studies used this type of explicit priming to manipulate the accessibility of values and test their subsequent effects. Thus, for example, Roccas (2003) revisited the established relationships between perception of a group as prestigious and the identification with that group. Roccas proposed that values moderate these relationships. She hypothesized and found that the prestige-identification relationship is stronger among those who emphasize self-enhancement values, and therefore care a lot about social status and prestige, than among those who emphasize the conflicting self-transcendence values.

To show causality in these relationships, Roccas randomly assigned the participants to one of two priming conditions: Self-enhancement versus self-transcendence. The participants in the self-enhancement values condition were presented with items drawn from the self-enhancement values domain, whereas those in the self-transcendence condition were presented with items drawn from the self-transcendence value domain. As hypothesized, the relationship between perceived prestige of the group and the extent of identification with it was stronger for participants who were primed with self-enhancement values than for those primed with self-transcendence values (Roccas 2003, Study 2).

In another example, Amit et al. (2010, Study 3) investigated the impact of conservation values on social projection. The researchers employed the manipulation in Fig. 2.8 to prime conservation values (vs. control). As hypothesized, the participants in the conservation priming condition showed higher levels of social projection than those in the control condition. In a pioneering research on the influence of values on overt behavior, Verplanken and Holland (2002, Studies 1, 3) employed a different explicit technique to prime values. The participants in their study were presented with a target person, described by a list of values. The manipulation read:

> We want you to form an impression of a person whom we will call Mark. Mark is 22 years old. On the next page you will find a list of *values* that Mark adheres to. Consider this as a "profile" of Mark. Each value is stated and briefly described. Read the list of values, and while doing so try to form an accurate impression of Mark. For instance, try to imagine his profession, hobbies, main character traits, political views, and so on (Verplanken and Holland 2002, p. 437).

It is important that people abide by the law…… Strongly disagree 1 2 3 4 5 6 7 Strongly agree
My family's security is very important to me… Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Fig. 2.8 Explicit manipulation of conservation values (examples)

In the experimental condition, 12/20 values were environmental values. In the control, in contrast, none of the values were related to the environment. After they wrote their descriptions and were thanked, the participants were presented with 20 television sets, of which they had to choose one. As hypothesized, the participants in the environmental values condition tended more to pick an environmentally friendly television set.

This priming manipulation explicitly refers to values. However, it is different from the previous one in an important way. Whereas Roccas's priming task directs attention to one's own values, Verplanken and Holland's prime is indirect, allegedly focusing on another person. The effect of the two priming techniques is similar: Participants were more likely to act on the values primed. Together, the two methods indicate a causal effect of values on value-consistent action.

Studying the effect of explicit primes of values is significant, because it mimics many real-life situations, in which individuals, groups, or social institutions bring about attention to one type of values, aiming to promote behaviors that are consistent with that value. Thus, for example, teachers may stress to their students the importance of achievement values, hoping to encourage them to invest time and effort in their school tasks; military organizations often endorse the importance of discipline and obedience (i.e., conformity values) to promote behaviors that are consistent with those values; and right-wing political parties often remind societal members about the importance of personal and national security, hoping to turn voting in their favor. In these examples, the accessibility of a specific value is rendered high; the person is "reminded" that she/he indeed emphasizes that value and is hence more likely to act upon that value.

However, using explicit priming to investigate how values influence behavior carries methodological limitations. Explicitly focusing on one set of values might raise demand characteristics and thus artificially influence reactions. Using implicit primes of values could overcome this limitation. We next review studies that took this approach.

Implicit Priming of Values

In their research, Verplanken and Holland (2002, Study 2) employed an implicit priming technique: The participants were asked to unscramble sentences that included value-related words. Thus, for example, the researchers implicitly primed environmental values (i.e., universalism values), by presenting the participants with scrambled sentences which included words drawn from this value domain. As hypothesized, implicitly priming values led to behavior that was consistent with that value—providing that the primed value was central to one's self. Specifically, participants who viewed universalism values as central to their self-definition and were assigned to the universalism priming condition, were more likely to choose an environment-friendly television set than participants for whom universalism values were not central, and/or those whose values have not been primed.

A similar implicit value prime was employed by Maio et al. (2009, Study 2). Studying overt behavior in the laboratory, the authors showed that participants who were primed with scrambled sentences containing security-related items cleaned their desks more than those primed with self-direction related items. Participants in the control group fell in-between.

Maio et al. (2009, Studies 4–5) developed an additional implicit priming task. In each value condition, the participants were presented with a list of value-related words drawn from the domain of their value condition, and a list of clothing items (e.g., boots). Participants in the control condition received words relating to colors instead of to values. These words were located in a column labeled *Main Terms.* An adjacent column was labeled *Adjectives*. The values were presented adjacent to positive adjectives (e.g., happy, perfect), and the clothing items were presented adjacent to adverbs (e.g., normal, ordinary). The participants were asked to memorize items for the "*Main Terms*" column, together with the adjective adjacent to them. Three minutes later they were asked to recall the item with the adjacent adjective. In the next stage, the experimenter explained that the words in this task could be classified as clothing items or social categories, and the adjectives could be classified as positive or negative. The participants were then asked to repeat the task, with new words, allegedly for the experimenter to examine whether they recalled the words better once they knew the categorization.

Using this implicit priming technique (Study 4), the researchers primed self-direction versus security values (vs. control). The participants were then presented with various quiz questions. After solving each question, they could ask for more information about that question. The researchers calculated the number of questions for which the participant asked for additional information (of the number of questions she/he did not know) as a measure of curiosity. As hypothesized, curiosity was higher among participants primed with self-direction than among those primed with security values. Participants in the control condition fell in-between. In a subsequent experiment (Study 5), the participants were primed with either achievement or benevolence values (or none). They were then asked to volunteer to participate in future research. As hypothesized, those primed with benevolence values volunteered more than those primed with achievement values (the responses of participants in the control condition fell in-between).

Taken together, these studies indicate that implicitly priming a value serves to promote actions consistent with that value. However, these implicit priming techniques also have some limitations that raise conceptual questions. In manipulating values implicitly, researchers use words such as freedom, social order, successful, and honest. These words are value related, in the sense that they represent abstract desirable motivations. However, the same words could represent not only values, but also specific goals, traits, and sometimes even social situations. For example, the word "honest" could prime benevolence values, but it can also render highly accessible a specific goal (not cheating on a test), a trait, or a situation in which someone was dishonest. It is therefore impossible to judge whether values are primed, or other, content-related constructs (on the relationships between values and related constructs, see Chap. 1, Sagiv and Roccas).

To overcome this limitation, Roccas (e.g., Roccas et al. 2010) has developed another implicit technique: One that primes values per se. In this manipulation, the participants are presented with descriptions of six students who had allegedly applied to live in a university dormitory. The participants are asked to read the descriptions and to allocate two applicants to each of three rooms, matching them according to how similar they are. There is no explicit mention of values. However, the applicants are described in terms of their values. In fact, their descriptions are adopted from the PVQ (Schwartz et al. 2001) (e.g., "It is important to him to live in secure surroundings. He avoids anything that might endanger his safety"). Thus, although values are not mentioned explicitly, the items direct attention to the importance of different values. In each experimental condition, all six applicants are described in terms of the same value. Figure 2.9 provides an example for the manipulation of conservation values.

Below are the descriptions of six students who applied for a room in the dormitories.
Each room will house two students. Past experience indicates that the more similar the students, the better they get along as roommates.
Please help us decide how best to sort the students in the rooms

The students:

Student A: It is important to him to be polite to other people

Student B: He believes he should always show respect to his parents and to elders

Student C: He thinks people should follow rules at all times, even when no-one is watching.

Student D: It is important to him always to behave properly.

Student E: He wants to avoid doing anything people would say is wrong.

Student F: It is important to him to be obedient.

The Rooms:

Room 1	**Room 2**	**Room 3**
Student ____	Student ____	Student ____
Student ____	Student ____	Student ____

Please write your recommendation regarding which students should share each room.

Fig. 2.9 Manipulation of value accessibility: conformity condition

To test this manipulation, participants were primed with either conservation or openness to change values. Following the manipulation, the participants completed the SVS (Schwartz 1992). Verifying the validity of the manipulation, the importance the participants attributed to conformity (i.e., conservation) versus self-direction (i.e., openness) was higher in the "conservation" condition than in the "openness" condition (Amit and Sagiv 2013).

Employing this priming manipulation, Roccas et al. (2010) showed that participants primed with conservation values identified with their nation more than those primed with openness to change values. In another study, Amit and Sagiv (2013, Study 4) found that applicants in a university orientation day were more likely to locate and visit a camera store on campus when primed with values that were congruent with the complexity of the information they received earlier (openness to change values for complex information as opposed to conservation values for simple information).

Sagiv et al. (2012, Study 3) examined the effects of priming values on identification with the nation, using both explicit (Sample 1) and implicit (Sample 2) priming. The participants in both samples were randomly assigned to conservation versus openness to change conditions and were subsequently asked about the importance they attributed to their national identity. The patterns of findings were virtually the same using the explicit or the implicit primes. As hypothesized, the participants in the conservation values prime condition attributed higher importance to their national identity than those in the openness to change values condition.

The research reviewed so far shows that priming one set of values—either explicitly or implicitly—results in action that is consistent with that value, thus indicating a causal influence of values on attitudes, preferences, and behavior. In many other real-life settings, however, multiple values are simultaneously salient and it is the hierarchy among various important values that influences choices and behavior. What happens when the full hierarchy of values is accessible? In studying cooperative versus competitive behavior, Sagiv et al. (2011) examined the effect of making all values salient. All participants reported their values. Two weeks later, half of the participants reported their values again. Thus, their full value hierarchy was primed. Then, all participants played an intergroup dilemma game. Asking participants to report their values immediately prior to playing the game increased the strength of the relationships between participants' values, as measured separately two weeks prior, and their overt behavior (i.e., monetary contribution in the dilemma game).

In sum, the studies reviewed above employed a variety of priming tasks, showing that raising the accessibility of values, either explicitly or implicitly, affects attitudes, preferences, and behaviors. This is still a small body of research, however. Additional experimental studies are needed to establish the causal effect of values on behavior. Furthermore, it is possible that studies in which primed values did not affect behavior were conducted but not published. Failing to find an effect of primed values could reflect methodological limitations of the priming task or the procedure employed. The lack of effect may also indicate that while values are related to another construct, the specific relationship does not reflect a causal influence.

Consider for example the study of values and identification with the nation reviewed earlier (Sagiv et al. 2012). In that study, the authors investigated the relationships of values to four modes of identification. They theorized that although all four modes of identification are related to personal values, only the cognitive mode (labeled *importance*) will be affected by values. The researchers reasoned that importance identification is largely context-based and is therefore the most susceptible to change, and that directing a person to think about her self-concept (e.g., the importance of conservation/openness values) will affect the importance attributed to being part of the national group. Consistently with this hypothesis, participants in the conservation versus openness to change conditions differed in their importance identification, but not in the other three modes (commitment, superiority, and deference). In this example, some identification modes (e.g., superiority and deference) are positively *correlated* with conservation values, but are not *affected* by the accessibility of these values.

Value Change

The research reviewed above provides evidence for changes in self-reported values following priming procedures. Some researchers thus consider priming a facilitator of change in values (see review in Bardi and Goodwin 2011). Others reason, however, that priming procedures do not change the *importance* of the primed values, but rather affect their *accessibility*. Because all values are desirable, accessible values are important values, and as such they are likely to yield value-consistent behavior. The change in accessibility is temporary, however, and therefore does not constitute a stable change in the importance of values (e.g., Roccas 2003; Sagiv et al. 2011; Verplanken and Holland 2002).

Value researchers have discussed other, more stable, patterns of change in the importance attributed to values. Reviewing past literature, Bardi and Goodwin (2011) proposed a theoretical model in which they describe five facilitators of value change. One is the priming facilitator which we discussed so far. This facilitator works through an automatic path. Bardi and Goodwin identified four others facilitators—consistency maintenance, identification, adaptation, and direct persuasion. These facilitators work, at least to some extent, through an effortful cognitive route (Bardi and Goodwin 2011; see also Arieli et al. 2014, below). The literature provides ample indirect or correlational-based evidence for value change (see reviews in Bardi et al. 2014; Bardi and Goodwin 2011). Attempts to induce change in empirical experiments are still rare, however.

The most notable exception is Rokeach (1973, 1975), who introduced the Self-Confrontation procedure as a method designed to induce value change. In the first step of this procedure, the participants complete a value questionnaire, reporting their value hierarchy. They are then presented with feedback which is designed to create a sense of inconsistency between their own value hierarchy and that of their fellow group members (e.g., other students at the university). Rokeach reasoned that the participants will change their values to reduce these alleged discrepancies. This procedure has been employed in many studies, resulting in some value change (as well as attitude and behaviors, see reviews in Maio et al. 2009; Rokeach 1973; Rokeach and Ball-Rokeach 1989). Maio et al. (2009) have recently showed that this procedure affects not only the targeted values, but also the values that oppose them in the value circle (which change in the opposite direction). In this study, the values were measured immediately after the manipulation, thus it is not clear whether the change persisted over time.

Taking a different approach, Arieli et al. (2014) developed and empirically validated a 30-min intervention, designed to increase the importance of benevolence values. Building on the theoretical model proposed by Bardi and Goodwin (2011), this intervention includes aspects of three facilitators of value change: priming, consistency maintenance, and deliberate self-persuasion. Thus, it is designed to work on both the automatic and the effortful routes.

The intervention was presented as part of a study on persuasion and consisted of four parts. The first part was designed to promote value change through the effortful route. The participants were asked to read a summary of several articles which provided evidence indicating that in general, individuals are more other-focused (i.e., helpful, cooperative, and compationate) than they realize, and that benefiting others is eventually self-benefiting. Thus, in this part of the intervention, the participants were provided with information that explicitly conveys the importance of benevolence values. The main goal of this part was to increase both knowledge and motivation, which are both required for central (i.e., effortful) processing (Petty and Cacioppo 1986). The second and third parts of the intervention were both designed to employ the consistency maintenance and priming facilitators of values change. In the second part, the participants were asked to complete a checklist regarding their everyday lives in the past month. The list included various actions showing kindness or helping others (e.g., calling a sick friend to ask how he is; giving a friend a present for her birthday). The researchers reasoned that most people will check most of the actions in the list (because it was comprised of everyday behaviors that most people do). Consequently, they will conclude that they are benevolent. This exercise served to prime benevolence values and to increase their importance in order to maintain consistency between values and action.

In part 3, the participants had 5 min to write a story, describing an experience in which they have made a positive impact on someone else's life. As in part 2, the reasoning was that reflecting on such a story will prime benevolence. This should lead to greater importance assigned to these values, to maintain consistency. Finally, in the fourth part, the participants had 10 min to write an essay attempting to convince others of the importance of being benevolent, generous, cooperative, and helpful. This part was therefore designed to employ effortful self-persuasion to facilitate the change in the importance of benevolence values.

Arieli et al. (2014) tested this intervention in three laboratory experiments. In each experiment, the participants were randomly assigned to either benevolence or a control condition. The participants in the benevolence condition experienced the intervention detailed above. In the control condition, the participants experienced an intervention with the same format, but with a different content unrelated to any specific value (e.g., perceiving personality as entity vs. incremental). The findings revealed an increase in the importance attributed to benevolence values immediately after the intervention (Studies 1–2) which also affected their pro-social behavior (volunteering, Study 2). Furthermore, the change in values remained four weeks after the intervention (Study 3). No other value has changed.

Interestingly, the importance attributed to benevolence values prior to the intervention was strongly correlated with the importance attributed four weeks later ($r = 0.83$ and 0.79 for two value measures). Thus, benevolence values changed following the intervention, but the hierarchy across individuals remained: Those who emphasized benevolence relatively to others before remained so after the intervention.

Arieli and her colleagues thus provide a promising path to investigate value change in the laboratory and to facilitate value change in real-life settings. More research is needed to identify the boundaries of the intervention and the conditions under which it is likely to be effective. Moreover, the intervention consists of four parts, which employ different facilitators of value change. It would be beneficial to unpack the intervention and investigate the contribution of each of its components. Is there one component that is particularly effective (or ineffective)? Is the effect of the four parts additive? Or is the interaction between all parts required to elicit change? Further research is needed to deepen our understanding of the process through which external factors may induce value change.

Recently, Tamir et al. (2015) employed the fourth part of this intervention to increase the desirability of values-related emotions. They randomly assigned participants to one of four value conditions (self-enhancement, self-transcendence, openness to change, and conservation) and asked them to write an essay to convince others of the importance of the values of their condition. The participants in this pilot study perceived this task as relatively easy and their essays as relatively persuasive. The manipulation affected the desirability of some value-related emotions (e.g., trust was most desirable in the self-transcendence condition; anger was least undesirable in the self-enhancement condition). But the authors did not examine whether the manipulation led to changes in the importance of values.

In sum, so far there have been few attempts to induce long-term change in values through experimental manipulations. This may be due to the stable nature of values. Furthermore, intentionally inducing value change in the context of research raises ethical concerns. The self-confrontation procedure, for example, requires presenting the person with information designed to create a false sense of discrepancy between the person and others in the environment. The fictitious information is intended to facilitate unpleasant processes of social-comparison and thus generates dissatisfaction. The four-step intervention (Arieli et al. 2014) overcomes these limitations: Other than the purpose of the study, all information provided to the participants is true and the process is free of unpleasantness. Still, because values are a core aspect of the self-concept, the mere attempt to induce value change raises ethical questions, especially if the change is persistent across time. Arieli et al. (2014) attempted to increase the importance of benevolence values—values that are among the most important to most people in most cultures. In other words, they increased the importance of values that were very important to begin with. Would the procedure be as effective in changing non-consensual values such as power or tradition values? And if so, would that be ethical?

Summary

In this chapter, we focused on methodological issues regarding the study of values. We began with unpacking the definition of values, discussing different aspects of the definition and their implications for research on values and behavior. We then addressed the challenge of developing short measures of values and discussed advantages and limitations of various approaches. To further compare the numerous instruments developed to measure values, we included Appendix "Value Measures." Finally, in the third part of the chapter, we discussed methodological issues regarding the processes of value priming and values change.

Throughout the chapter, we discussed measuring, priming, and changing values as three distinctive categories. We reason, however, that the boundaries between the three are fuzzy. Instruments developed to measure values, such as the RVS, SVS, and the many others that followed, aim to capture the value priorities of individuals who complete them. However, the distinction between measuring values and manipulating or shaping them is not always clear. Methodological choices such as the number of value types measured, the broadness of the measure, or the context in which the values are measured could all affect the priorities of the values reported. Thus, attempts at measuring values could sometimes result in priming values. The distinction between priming the accessibility of values and changing their importance is also sometimes blurry. Some researchers consider priming as a value change whereas others stress that priming change only the temporal accessibility of values. These two are conceptually different, but methodologically, often quite difficult to distinguish. This chapter thus portrays some of the challenges in investigating values and their relationships with behavior. These challenges reflect the complexity and richness of the construct of values, which will probably keep inspiring exciting research.

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Appendix: Value Measures

The research literature is rife with measures of values, attesting to the importance that the values construct has gained in the last decades. Table 2.3 lists the main instruments developed to measure basic values that correspond to the definition of values as desirable goals that serve as guiding principles. Allport and his colleagues (e.g., Vernon and Allport 1931) presented the earliest major work on values, setting the way for many studies to follow. They defined values differently, however, focusing on preferences for various life domains (art, religion, social, etc.). This measure is therefore not included in Table 2.3. Panel A of the table presents the seminal Rokeach Value Survey (RVS, Rokeach 1973). Panel B lists the instruments presented by Schwartz. Panel C includes instruments developed by other researchers who draw on Schwartz's theory and are designed to measure the same value system. Finally, Panel D lists measures that do not draw on Schwartz's model, but correspond to the same definition of values. Content-wise, the instruments listed in Table 2.3 are very similar. They vary considerably, however, in important methodological aspects. Below, we discuss some of the major issues.

Level of abstraction. Most value questionnaires ask respondents to assess the importance of abstract values such as "equality" or "wealth" (e.g., RVS, Rokeach 1973; SVS, Schwartz 1992; PCVS, Oishi et al. 1998). In contrast, the Portrait Value Questionnaires (PVQ40, Schwartz et al. 2001; PVQ21, Davidov et al. 2008, PVQ-RR, Schwartz et al. 2012, see Schwartz, Chap. 3 in this book) are more concrete in that they consist of short descriptions of individuals, described in terms of what is important to them (i.e., in terms of values). The respondents are asked about the extent to which the person described is similar to them. The concrete instruments are considered easier to complete and were developed, among other goals, to measure children's values. Other relatively concrete measures are the Picture-Based Value Survey for Children (PBVS-C, Döring 2008; Döring et al. 2010), which consists of a list of pictures, each depicting a specific object, action, or situation, accompanied by a short title and the Animated Values Instrument (AVI, Collins et al. 2017), also designed for children, which includes 3–5 s animated scenarios that combine pictorial, auditory, and written information. Each scenario expresses a desirable motivational goal.

Length. The instruments vary in length, ranging from very short questionnaires (e.g., SSVS, Lindeman and Verkasalo 2005; the SBSVS, Sekerdej and Roccas 2016, the TIVI, Sandy et al. 2016; all consist of 10 items) to medium-size instruments (TwIVI, Sandy et al. 2016, 20 items; PVQ21, Davidov et al. 2008, 21 items; RVS, Rokeach 1973, 36 items; PVQ40, Schwartz et al. 2001, 40 items) to longer questionnaires (SVS, Schwartz 1992 and PVQ-RR, Schwartz et al. 2012, both 57 items; SVBWS, Lee et al. 2008, 55–66 items). Most questionnaires aim at comprehensiveness and thus assess all 10 value types. They therefore vary mainly in the number of items measuring each value type. Whereas the relatively long questionnaires include several value items for each type, the short ones consist of one or two item per value type.

Table 2.3 Summary table of value questionnaires

Measure	References	Theory	Categorization	# of items	Abstractness	Method	Instructions	Examples of items
Panel A								
Rokeach Value Survey (RVS)	Rokeach (1973)	Rokeach	Terminal/instrumental single values	2 lists (18 and 18 items)	Abstract	Ranking	Rank importance as guiding principle in your life	"Comfortable life (a prosperous life)"
Panel B								
Schwartz Value Survey (SVS)	Schwartz (1992)	Schwartz	10 values, 3–8 items each	56 (later 57)	Abstract	Rating	Rate importance as guiding principle in your life	"WEALTH (material possessions, money)"
Portrait Values Questionnaire (PVQ)	Schwartz et al. (2001)	Schwartz	10 values, 3–6 items each	40	Concrete	Rating	Indicate similarity of a target person to self	"It's very important to him to show his abilities. He wants people to admire what he does"
PVQ-21/European Social Survey (ESS)—human values scale	Davidov et al. (2008)	Schwartz	10 values, 2–3 items each	21	Concrete	Rating	Indicate similarity of a target person to self	"It's very important to him to show his abilities. He wants people to admire what he does"
PVQ-RR	Schwartz et al. (2012)	Schwartz's refined theory	19 values, 3 items each	57	Concrete	Rating	Indicate similarity of a target person to self	"Protecting his public image is important to him"
Panel C								
Computerized Paired Comparisons of Values (CPCV)	Bilsky et al. (2015)	Schwartz	10 values, 45 pairwise comparisons	45	Abstract	Pairwise comparisons	Indicate which of the 2 values is more important to you, and to what extent it is more important	"Conformity" versus "security" (presented with respective descriptors)

(continued)

Table 2.3 (continued)

Measure	References	Theory	Categorization	# of items	Abstractness	Method	Instructions	Examples of items
Pairwise Comparison Value Survey (PCVS)	Oishi et al. (1998)	Schwartz	10 values	45	Abstract	Pairwise comparisons	Indicate which of the values you assign more importance to as guiding principle in your life	"Dutiful… power"
Animated Values Instrument (AVI)	Collins et al. (2017)	Schwartz	10 values, 21 subsets, 5 values each	105	Concrete	Best–worst scaling	Drag a yellow smiling face to the most like animation and a red frowning face to the least liked animation	"I want to be the best" (animated items combining verbal, visual-pictorial and auditory information)
Short Schwartz's Value Survey (SSVS)	Lindeman and Verkasalo (2005)	Schwartz	10 values, 1 item each	10	Abstract	Rating	Rate importance as guiding principle in your life	"Power, that is, social power, authority, wealth"
Schwartz Value Best–Worst Survey (SVBWS)	Lee et al. (2008)	Schwartz	10 values, 11 subsets, 5 or 6 values each	55–66	Abstract	Best–worst scaling	Choose the most and the least important to you as a guiding principle in your life	"Successful," "capable"… versus "protecting the environment," "a world of beauty"… versus "helpful"
Picture-Based Value Survey for Children (PBVS-C)	Döring (2008), Döring et al. (2010)	Schwartz	10 values, 2 items each	20	Concrete	Ranking	Place items according to the importance ascribed to them	Pictures, see Fig. 2.3

(continued)

Table 2.3 (continued)

Measure	References	Theory	Categorization	# of items	Abstractness	Method	Instructions	Examples of items
Short and Broad Schwartz Value Survey (SBSVS)	Sekerdej and Roccas (2016)	Schwartz	10 values, 1 item each	10	Abstract	Rating	Rate importance as guiding principle in life	"Living safely in an organized, stable place. Keeping one's family secure and happy"
Ten Item Value Inventory (TIVI)	Sandy et al. (2016)	Schwartz	10 values, 1 item each	10	Concrete	Rating	Indicate similarity of a target person to self	"He thinks it's important to be interested in things. He likes to be curious and to try to understand all sorts of things"
Twenty Item Value Inventory (TwIVI)	Sandy et al. (2016)	Schwartz	10 values, 2 item each	20	Concrete	Rating	Indicate similarity of a target person to self	"He thinks it is important that every person in the world be treated equally. He believes everyone should"
Panel D								
Chinese Value Survey (CVS)	Bond (1988)	None (data-driven)	None	40	Abstract	Rating	Indicate how important to you is each of the 40 items	"Filial piety" (obedience to parents, respect for parents)
Basic Value Survey (BVS)	Gouveia (1998, 2003)	Gouveia	6 values, 3 items each	18	Abstract	Rating	Rate importance as guiding principle in your life	"To enjoy challenges or unknown situations; to look for adventure"

Broadness. Value instruments also vary in the extent to which the items they include measure broad versus narrow constructs. Most instruments measure the ten values using the value items included in the pioneering RVS and SVS, either in an abstract manner (e.g., asking how important are helpful, freedom, successful, and social-power) or in a concrete manner (e.g., describing a person in terms of a value-item).

Recently, researchers have presented value measures that assess the ten values with broader measures. Whereas the original measures assessed several value items to measure each of the ten values, these new measures assess each value with one item, consisting of the definition of that value. Thus, for example, the CPCV (Bilsky et al. 2015) is a pairwise comparison instrument. Each pair includes the definitions of two of the ten values. Similarly, Roccas and her colleagues introduced the short and broad SVS (SBSVS) which includes 10 items, each consists of the definition of a value type and the value items that represent it (Sekerdej and Roccas 2016). Thus, to assess security, this instrument asks about the importance the respondents attribute to "Living safely in an organized, stable place. Keeping one's family secure and happy." Taking a somewhat different approach, each of the ten items in the Schwartz Short Value Survey (SSVS, Lindeman and Verkasalo 2005) assesses a value type, by presenting all value items that represent that value type in the SVS.

Schwartz et al. (2012) have recently proposed the Refined Theory of Values, and the PVQ-RR that measures it (see Schwartz, Chap. 3 in this book). The PVQ-RR includes 57 value items. Each three measures one of 19 value types. These 19 values can be grouped into the original ten values. Thus, they are narrower measures.

Response format and response scale. Another aspect which distinguishes among the various instruments is the response format they employ. Most instruments employ rating, but some use ranking (e.g., RVS, Rokeach 1973), pairwise comparisons (e.g., PCVS, Oishi et al. 1998; CPCV, Bilsky et al. 2015) and best–worst scaling (SVBWS, Lee et al. 2008; AVI, Collins et al. 2017). See column 7 of Table 2.3 for details. The instruments using rating vary in the scale used. Thus, for example, the SVS focuses on ratings of value importance, whereas the PVQ measures employ a different scale, asking respondents how much the person in each description resembles themselves. Both scales employ asymmetric response scales. The response scale of the SVS, for example, ranges from −1 (opposing my principles) to 0 (not important) to 3 (important) to 7 (of extreme importance). The asymmetry of response scale of value measures was designed to reflect the strong desirability of most values to most people (Schwartz 1992).

Cross-cultural validation. In developing his theory of personal values, Schwartz (1992) took a cross-cultural approach. The theory was studied in 40 samples across 20 countries (a students and a teachers sample in each), and the findings were used to refine the earlier structure, proposed by Schwartz and Bilsky (1987, 1990). The theory, as presented in 1992, has later received support in students and teachers samples in more than 70 cultures, representing all major areas of the world. Despite challenges of sample selection and instrument translation, the findings pointed to near-universals in the content and structure of personal values. Consequently, researchers can study values in any culture using the SVS. Other instruments (e.g., the PVQ and RVS questionnaires) have been studied across cultures, albeit to a lesser extent. More research is needed to test their cross-cultural equivalence (e.g., see Davidov et al. 2008; Schwartz et al. 2012). The short measures of values (SSVS, SBSVS, TIVI) were typically developed in a single culture. They therefore call for cross-cultural validation.

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Chapter 3
The Refined Theory of Basic Values

Shalom H. Schwartz

The theory of basic individual values (Schwartz 1992) divided the value space into ten distinct values. This was an arbitrary scientific convenience. Nonetheless, for over 20 years, researchers have used this division and the four higher order values meant to summarize the ten values virtually without challenge. This was certainly not what I expected. Instead, I anticipated that an improved theory would divide the space into discrete values "with greater universal heuristic and predictive power" (Schwartz 1992: 46). This chapter presents such a theory, the refined theory of basic values first introduced in 2012 (Schwartz et al. 2012). I call it "refined" rather than "revised" because it does not contradict the original theory. Rather, it identifies values with greater "heuristic and predictive power" in the same value space.

The core of the value theory is the claim that all values are ordered relative to one another on a circular motivational continuum. Terms that represent values (value items) are located on this circular continuum according to the compatibility or conflict between the motivations they express. In most, if not all, languages, there are thousands of value terms that express nuances of motivation. The value theory pictures these value terms (=items) as filling a two- or higher-dimensional space with no gaps. Multi-dimensional scaling (MDS) can represent all the value items as points in a two-dimensional space. In this space, the more highly correlated items are with one another and the more similar their correlations with other items, the more close they are. The less positive the correlations among items, the more distant they are in the space. Thus, the distance between any two items indicates how similar or different they are from one another. MDS imposes no constraints on the observed relations between items such as cluster or factor analyses do.

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In order to work effectively with values as scientific constructs, we must divide this crowded space of items into discrete values. The problem is how to partition the space and how many values to distinguish. Because the values and the value items form a continuum according to theory, any decisions about where to place boundaries are arbitrary. Moreover, the boundaries of the resulting discrete values are necessarily fuzzy; value items on one side of a boundary differ little from those on the other side. The original and refined value theories apply to the same value space. They differ in how they partition the space and in the number of values they distinguish.

The refined theory distinguishes 19 values. Given that parsimony should be preferred, why go from 10 to 19? One can split almost any construct into finer subparts that yield more precise understanding. The finer the distinctions between values, the clearer it is that the values do form a continuum. But, how far should we go? Two main criteria guided me in developing both the original value theory and the refined theory. First, there must be evidence that individuals across cultures actually discriminated these values. Second, there must be evidence that each value has unique associations with other variables—background, attitudes, and behavior—so there is some benefit in distinguishing them.

Developing the Refined Theory

In presenting the original value theory, I defined basic values as trans-situational goals, varying in importance, which serve as guiding principles in the life of a person or group. This definition also applies to the refined values. To qualify as a candidate to be a basic refined value, I expected a value to exhibit the same key characteristics as the original values. They should be grounded in one or more of three universal requirements of human existence with which people must cope: needs of individuals as biological organisms, requisites of coordinated social interaction, and survival and welfare needs of groups. Moreover, they should fulfill the dynamic functions that Schwartz (1992, 2006) attributed to basic values. They should (1) focus on attaining personal or social outcomes, (2) express openness to change or conservation of the status quo or (3) serve self-interests or transcendence of self-interests in the service of others, and (4) promote growth and self-expansion or protect against anxiety and threat to self.

The multifaceted definitions of some of the original values provided one clue to potential refined values. For example, Schwartz (1992) noted that the universalism value included facets related to nature/beauty, to tolerance, and to concern for others' well-being and that the security value included facets related to personal security and to security in the wider society. A second clue was spaces in the MDS projections of relations among items intended to measure the original ten values. Such spaces could appear within a region intended to measure an original value, for example, between the items measuring the wealth facet of power and the dominance items. Spaces could also appear between adjacent basic values on the motivational continuum. This often occurred between the power and security regions.

On these bases, my colleagues and I (Schwartz et al. 2012) generated distinct conceptual definitions for 19 values. We checked our theorizing about the potential, narrowly defined values against two types of available data. We first scrutinized MDS projections of the correlations among the value items in each of 344 samples from 83 countries. The samples had completed the Schwartz Value Survey (SVS: Schwartz 1992, 2006) or the Portrait Values Questionnaire (PVQ: Schwartz 2006; Schwartz et al. 2001). We sought visual evidence for the potential subtypes we theorized. That is, we examined whether the 19 values emerged in distinct subregions in the MDS projections. Second, we examined results of confirmatory factor analysis (CFA) studies of values. One available study analyzed SVS data (Schwartz and Boehnke 2004) and three analyzed PVQ data (Beierlein et al. 2012; Cieciuch and Schwartz 2012; Saris et al. 2013).

The 19 Values in the Refined Theory

Table 3.1 lists the 19 values that we expected people in each country to discriminate, each defined in terms of its motivational goal. Below, I briefly present the conceptual grounds for distinguishing each of these values and some of the empirical evidence that led us to propose it. Schwartz et al. (2012) provide more complete details.

(1) *Self-Direction Thought*
(2) *Self-Direction Action*

The conceptual definition of the original self-direction value implies two potential subtypes, autonomy of *thought* and of *action*. Both the SVS and the PVQ measured both components. Items relevant to autonomy of thought referred to creativity, curiosity, and interest. Items relevant to autonomy of action referred to choosing own goals, independence, and self-reliance. The MDS projections in many samples revealed separable subregions for thought and action items in the self-direction region. Autonomy of thought items were nearer to universalism and autonomy of action items nearer to stimulation. The CFA analyses also suggested that distinguishing thought and action subtypes was possible.

(3) *Stimulation*

The conceptual definition of stimulation mentions excitement, novelty, and challenge, three somewhat different concepts. The SVS and PVQ included one item relevant to each. However, all the items formed a single narrow spatial region in the MDS analyses and a single distinct factor in the CFA analyses. This suggests that the concepts are conceptually close and empirically inseparable. We, therefore, concluded that *stimulation* is sufficiently narrowly defined.

Table 3.1 19 values in the refined theory, each defined in terms of its motivational goal

Value	Conceptual definitions in terms of motivational goals
Self-direction—thought	Freedom to cultivate one's own ideas and abilities
Self-direction—action	Freedom to determine one's own actions
Stimulation	Excitement, novelty, and change
Hedonism	Pleasure and sensuous gratification
Achievement	Success according to social standards
Power—dominance	Power through exercising control over people
Power—resources	Power through control of material and social resources
Face	Maintaining one's public image and avoiding humiliation
Security—personal	Safety in one's immediate environment
Security—societal	Safety and stability in the wider society
Tradition	Maintaining and preserving cultural, family or religious traditions
Conformity—rules	Compliance with rules, laws, and formal obligations
Conformity—interpersonal	Avoidance of upsetting or harming other people
Humility	Recognizing one's insignificance in the larger scheme of things
Universalism—nature	Preservation of the natural environment
Universalism—concern	Commitment to equality, justice and protection for all people
Universalism—tolerance	Acceptance and understanding of those who are different from oneself
Benevolence—caring	Devotion to the welfare of in-group members
Benevolence—dependability	Being a reliable and trustworthy member of the in-group

From Schwartz et al. (2012)

(4) *Hedonism*

The conceptual definition of the original hedonism value refers to sensual pleasure. All the analyses suggested that *hedonism* constitutes a single construct.

(5) *Achievement*

The conceptual definition of the original achievement value refers to "personal success through demonstrating competence according to social standards." This was intended to specify what the achievement literature calls performance motivation—pursuit of normative competence rather than mastery of knowledge and skills (Elliot and McGregor 2001). Many SVS and PVQ items were ambiguous regarding whether they expressed the goal of normative success (demonstrating success) or of mastery (being competent) or both. Hence, the MDS and CFA analyses could not provide clear evidence of whether these two types of achievement were discriminable. To avoid this ambiguity and define achievement values as originally intended, we narrowed the original definition. We defined *achievement* as expressing only the underlying motivation that others judge one successful. We dropped the concept of competence because self-direction thought and self-direction action values capture the goals of mastering knowledge and skills, respectively.

(6) *Power Dominance*
(7) *Power Resources*

The conceptual definition of the original power value suggests three potential subtypes, *dominance* over people, control through material *resources*, and maintaining prestige or *face*. All three share the goal of promoting own interests by controlling what happens and thereby minimizing or avoiding anxiety-arousing threats. Items relevant to dominance referred to social power and being in charge. Items relevant to resources referred to wealth and being rich. Items relevant to face, present only in the SVS, referred to preserving one's public image and being respected. The MDS projections and CFA analysis of SVS items in many samples revealed separable subregions for all three subtypes. The dominance and resources subtypes were close to one another and near to achievement values. The face subtype was equidistant between the power and security regions. With only two dominance items and one resource item in the PVQ, analyses could only provide hints that these two subtypes were distinguishable.

(8) *Face*

We proposed *face* as a separate refined value for two reasons. First, the motivation to maintain one's public image has a strong defensive connotation absent in the more pro-active power values. Second, in many MDS projections of PVQ data, there was an empty space between the power and security regions; two face items usually occupied this space in the projections of SVS data. This suggested a distinct type of motivation that falls between power and security. We did not view face as a subtype of security because its self-interested and manipulative orientation toward others differs from security.

(9) *Security-Personal*
(10) *Security-Societal*

The conceptual definition of the original security value implies two subtypes, *personal security* and *societal security*. Both the SVS and the PVQ contained items that measure both components. Items relevant to personal security referred to avoiding danger and feeling cared about. Items relevant to societal security referred to social order and government stability. The MDS projections in many samples revealed separable subregions for the personal and societal items in the security region. Personal security items were nearer to power and societal-security items nearer to conformity and tradition. The CFA analyses also supported the personal versus societal distinction. In both the SVS and PVQ, there was one item referring to health. It did not align consistently with either subtype. Staying healthy is an important aspect of personal security. To emphasize the security connotation of the health concept, we operationalized it as avoiding becoming sick.

(11) *Conformity-Rules*
(12) *Conformity-Interpersonal*

The conceptual definition of the original conformity value includes two components, complying with social norms and avoiding upsetting others. However, the distinction between the components is not clear because not upsetting others is itself a social norm. Consequently, several SVS and PVQ items were ambiguous. We proposed a sharper definition of the first component, limiting it to conforming to *rules* and formal obligations. We labeled the second component *interpersonal* conformity. In the MDS analyses, the few clearly differentiated items (e.g., “follow rules” and “politeness”) provided some support for distinguishing the subtypes. The rules items were closer to tradition and security, and the interpersonal items were closer to self-transcendence values. Schwartz (1992, 2006) described the motivation underlying conformity values as protecting the self and avoiding negative reactions from others. The location of the interpersonal conformity items near self-transcendence suggests that concern for the other can also motivate interpersonal conformity.

(13) *Tradition*

The original definition of *tradition* specifies a conceptually narrow value, maintaining cultural and religious traditions. Two SVS and two PVQ items clearly expressed this value (e.g., respect tradition/preserve customs and religious belief/do what religion requires). However, two other SVS and PVQ tradition items (e.g., humble/modest and satisfied with what one has/do not ask for more) pointed to a conceptually distinct value not mentioned in the definition of tradition. Both the MDS and CFA analyses supported separation of two different sets of items. Not surprisingly, given this split, tradition had the lowest internal reliability among the ten values across samples (Schwartz 2005a, b). For the proposed tradition value, we retained the original definition of tradition, but proposed a new humility value to capture the connotations of the alternative items.

(14) *Humility*

We defined the motivational goal of *humility* as recognizing one’s insignificance in the larger scheme of things. Valuing humility entails attributing important to accepting what one has without expecting more, to being self-effacing rather than boastful. Additional SVS items that expressed humility were self-effacing and accepting my portion/submitting to life’s circumstances. Additional PVQ items were humble/do not draw attention to self.

(15) *Benevolence-Caring*
(16) *Benevolence-Dependability*

The original conceptual definition of benevolence referred only to *caring* for the welfare of in-group members. However, in the MDS analyses of the five-SVS-benevolence items, two (responsible/dependable and loyal/faithful to friends) separated consistently from the items that clearly operationalized caring (e.g., helpful/working for others welfare). This alerted us to another possible subtype of benevolence, which we tentatively labeled *dependability*. The PVQ items did not permit discriminating a dependability subtype because all referred to caring. To sharpen the distinction between benevolence-caring and benevolence-dependability, we defined the latter as "being a reliable and trustworthy member of the in-group."

(17) *Universalism-Tolerance*
(18) *Universalism-Concern*
(19) *Universalism-Nature*

The conceptual definition of the original universalism value was "understanding, appreciation, tolerance, and protection for the welfare of *all* people and for nature." Schwartz (1992) noted that this implied three subtypes. The MDS analyses of both the SVS and the PVQ revealed distinct regions for all three universalism subtypes, *tolerance* (e.g., broadminded, tolerant), societal *concern* (e.g., equality, social justice), and protecting *nature* (e.g., protect the environment). The CFA study supported separating nature and concern components and did not assess tolerance. We proposed three universalism values with distinct motivational goals (see Table 3.1). All three entail concern for the welfare of those beyond the in-group.

The 19 values partition the same circular motivational continuum as the original ten values (see Fig. 3.1). Cieciuch et al. (2014) demonstrated this with a third order CFA of values data from nine countries, gathered with the first version of the instrument developed to measure the 19 refined values. Each of the 14 refined values derived from subtypes of the original values loaded on a latent factor that

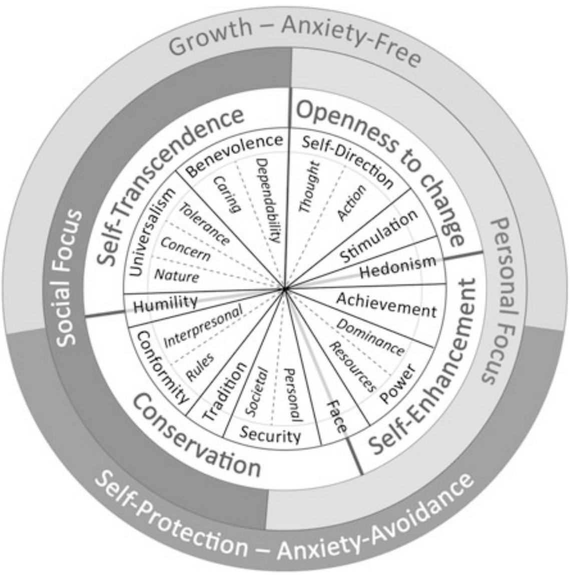

Fig. 3.1 Circular motivational continuum of 19 values in the refined value theory (from Cieciuch et al. 2014)

represented the broad original value from which it was split. Moreover, these ten latent values, together with the two new values introduced in the refined theory (face and humility), loaded on latent factors representing the four higher order values, self-transcendence, self-enhancement, conservation, and openness to change. Reflecting their location between higher order values, face loaded on both conservation and self-enhancement and humility loaded on both conservation and self-transcendence.[1]

Measuring the 19 Refined Values: The PVQ-RR

Researchers have noted various problems of measurement with instruments that operationalized the original ten values, specifically, multicollinearity between adjacent values, low internal reliabilities of some indexes, and cross-loadings of items on multiple factors (e.g., Davidov et al. 2008; Saris et al. 2013). The attempt to cover multiple, diverse, substantive components in the conceptual definition of each basic value with only a few items (Schwartz 1992, 2005a, b) largely caused these problems. The revised Portrait Values Questionnaire (PVQ-RR) to measure the 19 values reduces them. By defining the broad values more narrowly, the refined theory made it possible to generate more sets of items to measure each value that are more homogeneous.

The PVQ-RR includes three items per value, the minimum necessary for CFA analyses. Because each value presumably consists of a single, narrowly defined conceptual component, the same number of items can be used to measure each value. Each item portrays a different person in terms of his or her goals or aspirations that point implicitly to a value. Respondents compare each person to themselves and indicate how similar the person is to them. All items begin with the phrase, "It is important…" This is intended to insure that people recognize what follows as a value aspired to, not as a person's behavioral trait. Items are gender matched and consist of only one sentence, thereby avoiding double-barreled items.

Several characteristics of the PVQ method merit mention. First, it assumes that people have latent, basic values that are expressed in and can be inferred from their responses, not that they have articulated values. Second, it asks respondents to engage in a common everyday activity, social comparison. This is easier than reporting one's abstract values, because people rarely think about such values. Third, respondents compare others, whose value-relevant characteristics are described, to themselves, not themselves to the other. This directs attention to the specific, value-relevant characteristics of the other, so the similarity judgment is likely to focus on them. Comparing self to other might focus attention on salient, but

[1]Figure 2 in Cieciuch et al. (2014) shows conformity with an unexpected secondary loading on self-transcendence in addition to its primary loading on conservation. Conformity-interpersonal accounts for this. If it is allowed to have a secondary loading on self-transcendence, conformity loads only on conservation.

value-irrelevant aspects of one's self-concept (Schwartz et al. 2001). Finally, the PVQ-RR uses an asymmetric response scale. Because values are generally socially desirable, people tend to consider others who attribute importance to values as similar to self. Providing more similarity than dissimilarity options captures this psychological asymmetry and permits finer discrimination where needed on the scale (Schwartz 2005b).

Respondents' own values are inferred from the values of the people they describe as similar to themselves. For example, a respondent who indicates that a person described by "It is important to her to enjoy life's pleasures" is similar to herself presumably attributes importance to hedonism values. Additional examples are, "It … never to be humiliated" (face) and "It … to be humble" (humility). Respondents indicate how similar each person is to themselves on a 6 pt scale: (1) not like me at all, (2) not like me, (3) a little like me, (4) moderately like me, (5) like me, and (6) very much like me. The full PVQ-RR, which usually takes 4–8 min to complete, is available from the author with coding and analysis instructions.

The desirability of values makes self-reports vulnerable to social desirability and acquiescence biases; people tend to use the more favorable (higher) end of the response scales. This is a problem when comparing values of different individuals or groups or correlating values with other variables. To cope with the biases in these types of analyses, Schwartz (1992, 2006) recommended centering respondents' ratings of each item on their own mean rating of all the items by subtracting the mean from the score for each item. Alternatively, the mean of all items can be used as a covariate. Verkasalo et al. (1996) suggested yet another method with similar effects.

Distinctiveness of the 19 Refined Values

Two types of analyses provide evidence of whether people actually distinguish the 19 values and whether the measurement instruments adequately capture the distinctions people make, CFA and MDS. Schwartz et al. (2012) report analyses with the PVQ5X, the first, experimental scale designed to measure the 19 values. They gathered data from 15 samples from ten countries: Finland, Germany, Israel, Italy, New Zealand, Poland, Portugal, Switzerland, Turkey, and the USA. Separate CFAs on the pooled within-sample covariance matrixes, allowing no cross-loadings or covariances between uniquenesses, yielded an acceptable fit, after dropping nine items. MDS analyses within each of the 15 samples revealed that at least 17 of the 19 values formed a distinct region in 80% of samples. In almost all the remaining cases, the two intermixed values were values theorized to be adjacent in the circle. Every value was discriminated in at least 12/15 samples and most were discriminated in all samples (see Schwartz et al. 2012, Table 7).

Schwartz and Butenko (2014) replaced the problematic items in the PVQ5X. They then assessed the distinctiveness of the 19 values in a sample of 266 Russian students. An MDS plot of these data revealed that every one of the 19 values formed a distinct region. They also performed CFA analyses, allowing no cross-loadings or covariances between uniquenesses. However, they examined each of the four higher order sets of values separately (cf. Cieciuch and Schwartz 2012; Saris et al. 2013). This eliminates irrelevant sources of misspecification due to negative cross-loadings between values on opposite sides of the motivational circle. Such loadings do not reflect on the distinctiveness of adjacent values (Davidov et al. 2008). After dropping five items, all four models exhibited adequate fit statistics and supported the distinctiveness of the 19 values.

Schwartz et al. (in press) assessed the distinctiveness of the values in samples from Italy, Poland, Russia, and the USA with CFA. They used the same instrument and method of analysis as Schwartz and Butenko (2014) and dropped an average of four items. The CFA in each country supported distinct latent factors for the 19 values.

No CFAs have been done yet on data gathered with the PVQ-RR. However, we expect CFAs to support the distinctions among the 19 values. This is because the MDS findings and the reliability statistics of the values for 31 samples (12 adult, 14 student, three mixed student and adult, and two adolescent samples) (*M* alpha = 0.71, sd = 0.09) are as good as or better than with the previous versions. Samples are from 18 countries: Basque region, Costa Rica, England, France, French Canada, Greece, Iceland, Macedonia, Poland, Serbia, South Africa, Spain, Switzerland, Russia, Turkey, Ukraine, USA, and Vietnam. Eleven values were distinguishable in the MDS in every sample, seven in at least 27/31 samples, and security-personal was distinguishable in 25 samples. The values that intermixed were two self-direction (once), two security (three times), two benevolence (twice), and conformity-interpersonal with humility (three times). These findings strongly suggest that respondents across diverse countries discriminate the 19 values, measured with the PVQ-RR.

Circular Order of the 19 Values

The most common order of the 19 values in the refined theory corresponds to Fig. 3.1. However, in the MDS of the typical sample, one of the 19 values is slightly misplaced. Across the 31 PVQ-RR samples, only two values moved outside the region of their higher order value. The subtypes of the original ten values were all adjacent to one another. As compared with the order in the original theory, the order of the benevolence and universalism items reversed. Often, however, the benevolence subtypes emerged toward the center of the circle, with the universalism subtypes peripheral to them. Schwartz et al. (2012) speculate about possible explanations for this change, but clarifying why and under what the conditions this occurs requires further research. Schwartz et al. (2012) also discuss the rationales for the order of the subtypes within each broad value. I note only a few of the rationales that reflect the impact of the dynamic underlying functions on the order (see Fig. 3.1).

Hedonism falls between openness to change and self-enhancement. It is closer to openness to change in most samples (Schwartz 2006), however, because it promotes self-expansion rather than protecting against anxiety. Achievement falls between the self-protection and growth sectors because it has two goals, success according to social standards in order to gain admiration and power (self-protection) and public confirmation of one's capabilities (growth). Face falls between power and security because it shares a concern with power for maintaining control and with personal security for avoiding personal threat.

Humility falls between self-transcendence and conservation because its renunciation of self-interest may reflect either self-expansive concern for others or self-restrictive compliance with social expectations. Conformity-interpersonal emerges next to humility and sometimes intermixes with it or reverses positions. Such conformity may motivate individuals to consider the desires of others, not only to avoid their potential negative reactions. In the original theory and MDS analyses, tradition values were peripheral to conformity values, presumably reflecting their greater abstractness and stronger opposition to openness (Schwartz 1992, 2006). The more narrowly defined tradition value falls between conformity-rules and societal security and is toward the periphery in about half the samples.

Relations of Values to Demographic Variables and Attitudes

Across societies, people discriminate the 19 more narrowly defined values. But, do researchers gain heuristic and explanatory power by distinguishing among these values? I next provide some examples of insights that can be gained. I discuss relations of values with gender, age, religiosity, and a variety of attitudes. To obtain the most reliable possible findings, I combined the samples that measured the refined values with the PVQ-RR (30 samples from 18 countries) and with the earlier PVQ5X (15 samples from ten countries) and PVQ-R (five samples from five countries) questionnaires. These 50 samples came from a total of 25 different countries from six continents. I mention only statistically significant differences ($p < 0.05$, 2 tailed).

Gender. First, consider relations of several of the refined values to gender. Schwartz and Rubel (2005) reported that women consistently rated universalism values more important than men did. This was also the case for the more narrowly defined facets of universalism-concern and universalism-tolerance across the 50 samples. There was, however, no gender difference at all for the universalism-nature facet. Women attributed more importance than men only to the two facets of universalism values that involve relations to people; they showed no greater concern for nature. Although women rated both universalism-concern and universalism-tolerance values more important than men did, the association with gender was stronger for universalism-concern than for universalism-tolerance in

72% of samples. Concern for the welfare of others outside one's in-group is more in accord with the communal, feminine caring role than the more intellectual tolerance of distant others is.

Schwartz and Rubel (2005) also reported an inconsistent tendency for women to rate security values more important that men did. For the narrowly defined security facets, women attributed more importance to personal security values than men did in 88% of samples. This fits the evolutionary and role-based reasons given to explain why women value security more (Schwartz and Rubel 2005). Women have a greater need to protect themselves and their infants during the period of early child rearing. Moreover, their smaller size, lower status, and greater dependence on others' support make them more vulnerable than men. These reasons apply only to personal and not to societal security, however. Regarding societal-security values, men attributed more importance to this aspect of security than women did in 66% of samples. This, too, fits both evolutionary and role-based analyses. In evolutionary history, men were the ones who were typically tasked with hunting in peer groups for the community and men dealt more with protecting the tribe in contacts with other tribes in the region. Even today, in most countries, men are more involved in the affairs of the wider society than women are.

Schwartz and Rubel (2005) further reported that benevolence values were the values women most consistently rated more important than men did. Across the 50 samples, women also rated both facets of benevolence values more important than men did. However, benevolence-caring correlated more positively with gender than benevolence-dependability did in most samples. This accords with the idea that caring for close others is a more communal, feminine role whereas being the one on whom others depend is a more agentic, masculine role. We measured mastery and performance goal orientations (Elliot and McGregor 2001) in 15 samples (Schwartz et al. 2012). In 14 of these samples, benevolence-caring related more negatively than benevolence-dependability did to performance-avoidance, that is, to performing worse than others, as a goal at work or school. This competitive goal is incompatible with benevolence in general, but less so with the more self-assertive facet of benevolence-dependability.

The newly defined value of face falls between the values power-resources and personal security on the circle. Across the 50 samples, face was more important to females than to males whereas power-resources was more important to males than to females. Women's greater concern with their public image and men's greater concern with controlling resources accord with evolutionary arguments about advantageous mating strategies (Buss 1994/2003; Wright 1994). The various gender differences for the refined values, while consistent across samples, were generally small, as in Schwartz and Rubel (2005).

Age. Relations of values to age reveal interesting differences between the two facets of conformity values. Conformity-rules values show a linear increase in importance with age across the 17,714 respondents in the 50 samples. This fits the pattern of increased embeddedness in and commitment to the institutions of society over the life course (Hutchison 2011) and the decreasing respect for government authority among younger cohorts in many countries (Norris 1999). Conformity-interpersonal values are uncorrelated with age, however. Instead, their importance in different age groups reveals a U-shaped association. There is a linear increase in their importance after the age of 40, peaking above the age of 60, as one might expect for conformity values. Conformity-interpersonal values are also high among teenagers. This may reflect the substantial concern with evaluation by peers common during this developmental period (Brown et al. 1986). However, the importance of conformity-interpersonal values is lowest between ages 21 and 40. Perhaps, this is because people are more likely to be members of multiple groups that pose conflicting interpersonal expectations during this period (e.g., work-family conflict).[2]

Religiosity. Relations of values to religious commitment confirm the importance of separating the components of the original tradition value into more narrowly defined tradition values and humility values. The respective correlations of religious commitment with humility and with the narrower tradition value were, respectively, 0.041/0.421 across samples from six historically Roman Catholic countries, 0.125/0.495 across three Eastern Orthodox countries, 0.037/0.438 across four Protestant countries, 0.126/0.559 in one Jewish country, and −0.037/0.414 in one Muslim country. The finding that humility values are largely unrelated to religiosity is striking. While maintaining traditional practices and ways of thinking is strongly linked with religiosity, valuing being humble is just as important to secular as to religious people.

Attitudes. Relations of values to a variety of attitudes also confirm the importance of using the narrowly defined values to distinguish facets of the original broad values. Analyses are based on attitude data available only for the 15 samples from ten countries that responded to the PVQ5X. Universalism-concern correlated more positively than universalism-tolerance with the attitude that the government should reduce income differentials between rich and poor in 14 samples. On the other hand, willingness to accept immigrants, an expression of accepting diversity, related more positively to universalism-tolerance than to universalism-concern in 13 samples.

Attitudes also support the distinction between self-direction thought and self-direction action. Self-direction thought correlated more positively with following politics closely and wanting to learn as much as possible at work or school in 14 samples. Self-direction action correlated more positively in these samples with agreeing that individual freedom is an inviolable right that must be maintained at all costs. These differences reflect the contrast between a focus on intellectual versus physical autonomy.

Several attitudes clarify the distinction between power-resources values and power-dominance values. Not surprisingly, in every sample, power-resources correlated more highly than power-dominance with agreeing that "it is hard to get ahead without a lot of money" and that "a high income is most important in choosing a job." More interestingly, in 14 samples, valuing power-dominance

[2]I thank Sonia Roccas for this suggestion.

correlated more highly than power-resources with agreeing that it is "alright to impose our views on those who disagree with us" whereas power-resources correlated more highly than power-dominance with agreeing that "the police should be given more power so they can protect us". And in all samples, power-dominance correlated more with following politics closely than power-resources did. Indeed, across samples, the correlation with following politics was positive for power-dominance and negative for power-resources. This pattern of associations indicates that power-resources values concern being financially well-off personally and having one's wealth protected, regardless of how power is exercised in the society. In contrast, power-dominance values focus on exerting one's power over others and on the way power is distributed and used in the society.

Relations of Values to Behavior

Mechanisms Linking Values to Behavior

In most instances, attitudes mediate relations between values and behavior. Consequently, correlations between values and specific behaviors are rarely very strong. Later chapters in this book elaborate ways in which values are linked with behaviors. Here, I briefly describe linking mechanisms that have guided my thinking (Schwartz 2006, 2015). In order for a value to exert influence on an attitude or behavior, it must first be activated. Accessibility increases the probability that a value will be activated, and more important values are more accessible (Bardi 2000). So important values are activated more often and exert influence. Activation experiments are particularly important because they show that values can *cause* behavior (cf. Sagiv et al. 2011).

Second, a value must be experienced as relevant to the attitude or behavior in question. Because basic values are abstract, their relevance is often not obvious. People may see justice, for example, as relevant to discrimination based on race but not on gender. A behavior is relevant to a value if performing that behavior has consequences for promoting or inhibiting attainment of the goals of that value. Value activation often occurs outside of conscious awareness. People are more likely to become aware of drawing on their values to assess potential alternatives if the alternatives entail high costs or have conflicting implications for important values. Abstract values relate more consistently to specific behaviors that have become instantiations of a value through experience or learning (Maio 2010). People then know specific ways to express the value in real-life situations so it may even have an unmediated impact on behavior.

Third, values determine the valence people assign to the perceived consequences of available actions. Actions are more attractive to the extent that they promote or protect valued goals. 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. Some behaviors are "value-expressive," that is, they are primarily compatible with one value and incompatible with the opposing values in the circle (Bardi and Schwartz 2003). For example, manipulative behaviors are compatible with power values and incompatible with benevolence values. Values predict "value-expressive behaviors" more strongly than behaviors that are compatible with mutually conflicting values, called " value ambivalent" (Lönnqvist et al. 2006). For example, for a person who ascribes low importance to stimulation but high importance to conformity values, agreeing to go skydiving when pressured by friends is a " value-ambivalent" behavior.

Fourth, values influence behavior by affecting attention, perception, and interpretation of situations. People attend more to the aspects of situations that threaten important values or offer opportunities to attain them. People may perceive a job offer as an opportunity for greater self-direction or as a threat to security, depending on their value priorities. They may interpret such an offer as a way to improve their family's well-being or as a way to gain personal power. Each perception or interpretation promotes a different line of action.

Finally, important values influence behavior because they promote planning (Gollwitzer 1996). People are more likely to formulate plans for how to go about attaining the goals of more important values. By promoting planning, value importance increases value-consistent behavior. It focuses people on the pros of desired actions rather than the cons. It increases people's belief in their ability to reach valued goals and their persistence in the face of obstacles and distractions.

Associations of Refined Values with Behavior

A major reason for studying values is the assumption that they can explain, influence, and predict behavior (Roccas and Sagiv 2010; Rokeach 1973). Do each of the 19 values in the refined theory relates in a distinctive manner to behaviors? Three studies have addressed this question (Schwartz and Butenko 2014; Schwartz et al., in press; Lebedeva et al., submitted). The following presentation draws on analyses of value-behavior relations in four countries, Italy, Poland, Russia, and the USA.

Most previous value-behavior studies focused on the values that propel behaviors. In doing so, they ignored a key postulate of the value theory inherent in the notion of the motivational circle: Any behavior is a product of trade-offs between the values that promote and oppose it. If a value on one side of the circle promotes a particular behavior, values on the opposing side of the circle should simultaneously inhibit that behavior. I focus mainly on the Schwartz et al. (in press) study for two reasons. First, it examined the trade-offs between opposing values in predicting each behavior. Second, it used both self- and other-reports of the frequency with which people performed each behavior, combining the two rating sources to measure behavior more reliably.

The researchers generated a set of everyday behaviors they expected to be "value-expressive" of each of the 19 values. Each set was expected to be propelled primarily by one value and to be inhibited by values on the opposing side of the motivational circle. Table 3.2 presents results of the multiple regressions of corresponding behaviors on each value and on the opposing higher order value. These are results of hierarchical linear modeling analyses (HLM6.1) across the samples from the four countries. The table also shows the average correlation across samples between the behaviors and the values expected to propel them and the higher order values expected to inhibit them. Values were indexed with the centered factor scores derived from a multi-group confirmatory factor analysis that established the invariance of value measurement across countries. The table provides one example of a behavior for each value. The sets of behaviors included between three and five behaviors.

Table 3.2 reveals that each of the 19 refined values correlated positively and significantly across the four samples with the behavior for which it was expected to be the primary motivator. In the regression analyses, which also included the opposing higher order value, each value also predicted the behavior that it was expected to propel significantly across samples. In the separate country samples, these correlations and regression coefficients were significant and positive in almost every case. Prediction was most problematic for security-personal values. They predicted behavior significantly in only two of the four countries, although the coefficients were positive in the other countries too.

Table 3.2 also shows that each opposing higher order value correlated negatively and significantly, across samples, with the behavior it was expected to inhibit. Higher order values were used to assess the value trade-offs because multiple values oppose each value motivationally. In the regression analyses, only nine of the opposing values added significant predictive power to the values that propel the behaviors. Self-transcendence values inhibited self-enhancing behaviors (achievement excepted), and conservation values inhibited openness to change behaviors. Stated more broadly, concern for the impacts of one's behavior on others (social-focused values) inhibited engaging in behaviors aimed at promoting or protecting one's own benefits and status and engaging in behaviors that might change the status quo. In contrast, examining the distinctive contribution of self-enhancement values revealed that they had little or no inhibiting effect on self-transcending behaviors (universalism-tolerance excepted) and openness to change values had little or no distinctive inhibiting effect on conservation behaviors. Thus, person-focused values did not inhibit behaviors aimed at benefitting others or maintaining a safe, predictable environment.

The trade-offs between the values that propel and those that oppose each behavior explained an average of 16.0% of the variance in the behaviors. Values explained more than 25% of the variance in hedonism, stimulation, and power-resources behaviors, but less than 10% of the variance in personal- and societal-security behaviors. Perhaps, the relatively weak impact of values on security behaviors indicates that inborn traits or temperaments or situational factors play a larger role in driving these behaviors than in driving other behaviors.

Table 3.2 Correlations and regressions of behaviors on their corresponding value and opposing higher order value

Value-behavior domain Opposing higher order	Mean r	β	R^2	Examples of behavior items[a] How often did you/(she, he) engage in this behavior during the past year?
Self-direction-thought SDT Conservation	0.36** −0.33**	0.25** −0.18**	0.152	Develop my/her own opinion on a topic in the news by studying what was written on it
Self-direction-action SDA Conservation	0.37** −0.43**	0.16* −0.29**	0.195	Do something my/his way even if someone might disapprove
Stimulation ST Conservation	0.48** −0.50**	0.29** −0.34**	0.288	Look for exciting activities to break up my/her routine
Hedonism HE Conservation	0.44** −0.46**	0.28** −0.37**	0.294	Indulge myself/himself by buying things that I/he didn't really need
Achievement AC Self-transcendence	0.36** −0.23**	0.17** −0.04	0.130	Study or work late into the night before an exam or project due date even though I/she was already well prepared
Power-dominance POD Self-transcendence	0.43** −0.34**	0.23** −0.34**	0.213	Manipulate others to get what I/he want/s
Power-resources POR Self-transcendence	0.49** −0.38**	0.34** −0.16**	0.255	Mention to other people how valuable some of my/her possessions are
Face FAC Self-transcendence	0.31** −0.32**	0.15** −0.22**	0.136	Feel anxious that someone might think I/he did something immoral
Security-personal SEP Openness to change	0.21** −0.13**	0.15** −0.02	0.043	Check the expiration date on products before buying or using them
Security-Societal SES Openness to change	0.33* −0.18**	0.28** −0.07*	0.098	Praise government actions against groups that endanger the public
Tradition TR Openness to change	0.42** −0.27**	0.23** −0.05	0.166	Celebrate national or ethnic group holidays
Conformity-rules COR Openness to change	0.26** −0.16**	0.23** −0.02	0.115	Pay the full entry fee or fare, even when I/she could get away with not paying it
Conformity-interpersonal COI	0.29**	0.28**	0.142	Keep my opinion to myself/himself rather than disagree openly with others

(continued)

Table 3.2 (continued)

Value-behavior domain Opposing higher order	Mean r	β	R^2	Examples of behavior items[a] How often did you/(she, he) engage in this behavior during the past year?
Openness to change	−0.13**	−0.02		
Humility HU ST, HE, AC, POD	0.19** −0.11**	0.18** −0.01	0.112	Refrain from mentioning something I/she did because it would be boasting
Universalism-nature UNN Self-enhancement	0.40** −0.12**	0.23** −0.02	0.147	Avoid buying items that might harm the environment
Universalism-concern UNC Self-enhancement	0.25** −0.13**	0.19** −0.03	0.113	Collect food, clothing, or other things for needy families
Universalism-tolerance UNT Self-enhancement	0.28** −0.26**	0.23** −0.13**	0.155	In a conversation, say we should be tolerant toward people with different lifestyles
Benevolence-caring BEC Self-enhancement	0.35** −0.10**	0.29** 0.03	0.144	Help friends or family with tasks like moving, getting to the airport or station, baby-sitting, etc.
Benevolence-dependability BED Self-enhancement	0.34** −0.14**	0.32** −0.03	0.137	Do what I/he committed myself to do for a family member

Hierarchical linear model (HLM) across four countries ($N = 2016$)

**$p < 0.01$; *$p < 0.05$, 1-tailed

[a]Each behavior was measured on a 5 pt scale of the frequency of performance relative to the number of times one had an opportunity to do so in the past year. Scale points were 0—never, 1—rarely (about a quarter of the times), 2—sometimes (about half the times), 3—usually (more than half the times), 4—always. "Never" was used in less than 1% of responses. Self-reported and other-reported frequencies were combined. The behavior items were gender matched

The above findings speak to the predictive validity of the 19 refined values. They do not demonstrate the discriminant validity of the values, however. That requires establishing that each value relates more strongly to the behaviors it presumably propels than any other value does. For example, universalism-concern values should correlate more strongly than universalism-tolerance values do with behaviors like collecting clothing for the needy, even though these two facets of universalism are highly intercorrelated. Comparisons of the value-behavior correlations in the matrix of the 19 values by 19 behaviors averaged across samples supported the discriminant validity of the values. Each value correlated more highly with the behavior it presumably propels than any other value did in 98% of the 342 (19×18) comparisons. In 97% of comparisons, the correlation difference was significant.

The value with the weakest discriminant validity was achievement. Power-dominance, power-resources, and face values correlated nonsignificantly more highly with such behaviors as studying hard and trying to impress one's boss than achievement values did. This suggests that all the aspects of self-enhancement motivated these behaviors. Schwartz et al. (in press) bring evidence that the deviant findings for achievement values may reflect inclusion of two concepts in this value, success in attaining goals and recognition. Additional research should determine whether it is better to split the achievement value.

For the study just described, the authors began with the 19 refined values. They then chose behaviors that they presumed would be propelled primarily by one value and inhibited primarily by one opposing higher order value. This permitted systematic and comprehensive evaluations of the predictive and discriminant validity of all 19 refined values. Lebedeva et al. (submitted) began with the behaviors that interested them, overall creative behavior and creativity in six specific domains. They used the PVQ-RR to identify the values that underlie creative behavior. They generated hypotheses by considering the values that creativity in each domain was likely to express or threaten. For example, they expected stimulation values, which motivate pursuit of novel and exciting experience, to promote creativity and tradition values, which motivate preserving accepted ways of thinking, to inhibit creativity. This analysis led them to combine some facets into broad values (e.g., combining self-direction thought and self-direction action into a broad self-direction value) for the hypotheses but to use refined values for others (e.g., universalism-nature [linked to aesthetics] and security-personal).

Lebedeva et al. (submitted) tested their hypotheses in representative samples of adults from two cultural regions of Russia ($N = 2046$). A regression of overall creativity on the values and demographics confirmed the hypotheses. Self-direction, universalism-nature, and stimulation values promoted overall creativity. In contrast, humility, face, security-personal, tradition, conformity, and power values inhibited overall creativity.[3] The study also examined predictors of creativity in the domains of

[3]Lebedeva et al. (submitted) combined humility and tradition values. I separated them and reran the analyses.

crafts, plastic arts, music and dance performance, theater, products for work, and machine graphics. In at least five of the six domains, self-direction and universalism-nature values promoted creativity and humility and face values inhibited creativity. Unexpectedly, benevolence values also promoted creativity in five domains and overall. The authors suggested that benevolence does not motivate creativity directly; it does so by motivating cooperation and contribution in creative group activity. As expected, other values had no consistent associations with creativity.

Conclusion

The original theory of human values discriminated ten basic values, four higher order values, and two polar value dimensions. As this volume attests, it has proven most fruitful. The refined theory retains all the benefits of the original theory and adds to it the possibility of representing the motivational continuum of human values even more finely. This chapter has sought to demonstrate that making finer discriminations in the motivational circle is both justified and desirable. It has shown that people in diverse cultures actually do discriminate the 19 values in the refined theory. So using them in research does not mean imposing scientific constructs on respondents that are not meaningful to them. Each of the 19 values has unique associations with various background variables, attitudes, and behaviors. These values do provide greater heuristic and predictive power, as anticipated in the seminal chapter on the original theory (Schwartz 1992).

Measuring the 19 values with the PVQ-RR (and perhaps other instruments yet to be designed) yields reliable indexes. The PVQ-RR is easy for respondents and requires the same or less time to complete than any reliable measure of the ten values. Of course, not every topic we study will benefit from making all 19 distinctions, as the Lebedeva et al. (submitted) study illustrates. It is, therefore, important to note that the 19 values can be combined to yield indexes of the ten and four broader values. Moreover, these indexes are more reliable than previously available indexes were. The added face and humility values may be kept separate or included in the four broader values, face in self-enhancement or conservation, humility in conservation or self-transcendence. The fact that these two values fall on boundaries and include elements of adjacent higher order values reemphasizes the point that any partitioning of the motivational continuum is arbitrary. Further research may yet suggest a more useful partitioning.

In conclusion, this chapter is a call to researchers to adopt the refined theory of basic values. The refined theory offers everything provided by the original theory and more.

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Part II
Values and Behavior in Contexts

Chapter 4
Many Kinds of Kindness: The Relationship Between Values and Prosocial Behaviour

Rebecca Sanderson and Jamie McQuilkin

In the early summer of 1970, Ohio state police opened fire on a group of Kent State University students protesting President Nixon's military interventions in Cambodia and Vietnam, killing four and wounding nine. It was an event that shocked America, and in its immediate aftermath, more than 450 campuses across the country were closed by a wave of strikes and demonstrations. But only 11 days later, in Jackson, Mississippi, police opened fire on a group of African-American students who were demonstrating in solidarity and because of racial discrimination. Two students were killed, and 12 were injured.

For Milton Rokeach in Washington State University, and his colleague Daniel McLellan in Michigan State, these terrible shootings happened at a time when they were trying to finish a psychology study. For four months they had been sitting on an experiment to test the link between values and real-life participation in civil rights action. They were looking at "values self-confrontation" techniques designed to increase students' priority of Equality and Freedom values by informing them that civil rights protesters had very little discrepancy in their ranking of these values compared to people unsympathetic to civil rights, who supposedly "care a great deal more about their own freedom but are indifferent to other people's freedom". They asked one group of students to reflect explicitly on their own values and attitudes towards civil rights before hearing about the values and attitudes of others, but with the second group they did not. They also had a control group that did none of this reflection on values. Now, four months later, they were ready to do a follow-up to see whether there were any differences in how the groups responded to an actual call for help.

McLellan wrote to all his participants, asking them if they wanted to be involved in a new Committee to End Racism. They could choose to offer money to a legal

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defence fund, show support, join the Committee, or volunteer to work on the fall elections. Despite having low response rates, the strength of people's commitment to act on civil rights was still higher in both treatment groups compared to controls (Rokeach and McLellan 1972).

Why is this story important? Not only this is an extraordinary display of the lengths to which psychology professors went to (and were allowed to go to) in the 1970s, but it was also one of the first direct experiments connecting values with prosocial behaviour.

The relative priority of our values (in this case, Freedom and Equality) is a determinant of our behaviour, but so too is the extent to which we reflect on our values, and how much we think they are important to others. In this chapter, we focus mainly on the first area, though we touch on the second by reference to studies that have primed particular values (consciously or otherwise) to be important.

Prosocial behaviour may be defined as behaviour that benefits other people or society. Some psychologists add that it is behaviour that is beneficial to others and does not benefit (or even disadvantages) the agent (Twenge et al. 2007). These definitions concern the perceived consequences of behaviour, which are somewhat open to interpretation. As a result, there are many classes of behaviour that can be thought of as "prosocial", with varying degrees of consensus across and within cultures. Displays of everyday kindness towards another human being, helping an elderly lady across the road, for instance, or cooking dinner for a friend, are perhaps almost universally considered prosocial. On the other hand, working in a clinic to provide access to contraceptives, and campaigning to prevent a new runway being built, are behaviours that might be perceived as prosocial by some people, and in some cultures, but as neutral or even antisocial by others. In this chapter, we have looked at different possible candidates for prosocial behaviour, from the interpersonal to the more political, and compared their relationship to values, across cultures where we can.

Another way to think about prosocial behaviour is based not on consequence (whether or not it benefits other people, in some way), but on motivation. Consequence and motivation are not necessarily aligned. The reason I agree to help a colleague may be because I want to benefit her, or society, but I might also be motivated to show off my own competence, or put her in my debt. Am I still doing something prosocial, if I am motivated entirely by my own gain?

Broadly, there are two ways of thinking about it. On the one hand, we can define an action or class of actions as prosocial, then look at what values it is associated with. For example, "volunteering for a charity" may be defined as behaviour with prosocial outcomes and happens to have a positive correlation with Benevolence and Conformity values.

On the other hand, we can define a value as prosocial, then look at what behaviour it is associated with. For example, Benevolence and Universalism have the closest conceptual overlap with prosocial motivation and are associated with a whole host of behaviours that are consequentially prosocial, including caring friendships, volunteering, and donating to charity.

Given the relative ease of conducting values surveys compared to extensive cataloguing of prosocial behaviours, it is practical for researchers to use the first approach, looking at connections between all kinds of a values and a particular prosocial behaviour. Here we discuss values in the context of some popular ideas on what behaviours tend to benefit society without worrying too much about whether or not they always actually do. We also draw exclusively from the vast pool of literature associated with Schwartz' values model and those derived from it. This is because the Schwartz model has demonstrable cross-cultural validity and gives us as much standardisation in comparison as possible.

Everyday Kindness

Everyday acts of social behaviour we display towards other people, for example through kindness, helping or offering our time to others around us.

> Thanks for taking part in this study. Before you go, I just wanted to ask you whether you might be able to help me out with my research in future. Unfortunately, I have got no money left in my departmental account, so would be asking you to volunteer your time …

This, or something like it, was the script that researchers at Cardiff University read to their undergraduate psychology students at the end of a half-hour experiment in the laboratory. The students had been pouring over jumbled lists of words, trying to sort them into different categories of meaning, and words are such as "forgiving, happy, drawer, excellent, helpful, chair, ideal, honest, table", a deliberate mix of values, adjectives and furniture. But now, as each student reached for their bag to leave, they had come to the crucial part of the experiment: the plea for them to volunteer their time, altruistically, and without the promise of payment or course credit, to come back into the laboratory again next week. Would these innocuous-looking, Benevolence-related words, forgiving, helpful and honest, have any bearing on the student's willingness to offer help? Apparently so.

Students who looked at wordlists containing Benevolence words were significantly more likely to offer help than students who had been given the same word-sorting task but were asked instead to focus on achievement-related words ("capable, successful, ambitious"), or, in the control condition, more neutral words around food ("ham sandwich, pizza"). This is perhaps unsurprising, given that helping behaviour can be understood as an expression of Benevolence values. The more interesting twist in this tale, however, is that the students who were primed to think about personal success and ambition were significantly *less* likely to offer their time than even the control group.

Maio et al. (2009) concluded from their work that a prosocial behaviour, such as offering help, could be encouraged or suppressed quite predictably, depending on which values are primed. Achievement values which in the Schwartz model are in tension with Benevolence values because they have opposing goals, promote an orientation that is "distinctly self-focused and less amenable to a concern for aiding others" and are, therefore, associated with reduced prosocial behaviour (Maio et al. 2009, p. 710).

In a similar study design, Daniel et al. (2015), dramatized a call for help in order to collect data on the relationship between values and helping behaviour. Having already run values surveys with people in four different cultures, Germany, Scotland, Israel and Turkey, they re-contacted their 722 participants by email to say they had lost some of their data and would be very grateful if parts of the survey could be done all over again. Of course, the experimenters had not really lost the original data; they were instead looking to compare the value priorities of those who carried out this request for help with those who did not respond. They were also exploring whether this pattern differed depending on which country the students were from.

Looking at the general relationship between values and helping behaviour across cultures, a clear pattern emerges. The more people value Self-Transcendence over Self-Enhancement, and Conservation over Openness-to-Change, the greater the odds that they will offer help. In this study, logistic regression data is supported by correlational data which shows that helping is positively related to Self-Transcendence and negatively related both to Self-Enhancement and Openness-to-Change, but unrelated to Conservation.

When comparing cultures, however, some of these patterns become weaker. The Self-Transcendence versus Self-Enhancement index is positively related to helping behaviour in all countries, but only reaches significance in Turkey. The authors expected partial correlations between values and helping to be positive for Self-Transcendence, negative for Self-Enhancement, and non-significant for Conservation and Openness-to-Change. The findings were consistent with these hypotheses in Germany, Israel and Turkey (see Fig. 4.1), but not in Scotland. While

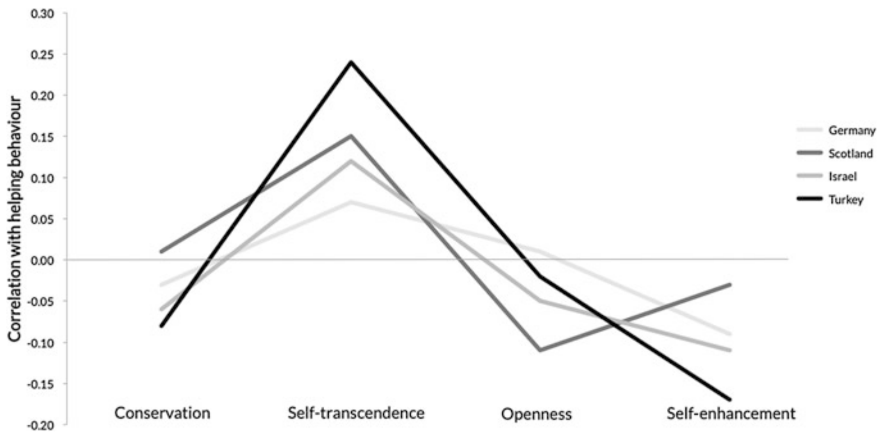

Fig. 4.1 Partial correlations between values and offering to helping an experimenter, controlling for age and sex (from Daniel et al. 2015)

none of the correlations differed significantly among cultures, people in Scotland demonstrated a slightly different pattern; indeed, they are the only group where helping is more negatively correlated with Openness values than Self-Enhancement.

Overall, this study suggests that concern for the welfare of others tends to promote helping, while helping is inhibited by concern for the welfare of oneself. But we must, as the authors note, be careful extrapolating from this result to helping behaviour more generally. Indeed, different values may come into play depending on (a) the task at hand (if it is something dangerous and risk-taking, which it was not in this experiment, then Openness-to-Change values might be instead be a predictor of saying "yes") and (b) the way the help is requested (having it demanded from someone in a position of authority might relate to Conservation values, while having it asked by a close friend might relate to Self-Transcendence, for example).

Further research might follow Daniel et al.'s (2015) study by looking at a range of different types of helping behaviours, or by including multiple countries from similar cultural zones to see if there are patterns of difference between East and West European countries, for instance.

It is a common theme in this literature that Benevolence tends to relate more strongly to helping behaviour than the other values. In a series of experiments focused mainly on the mechanisms behind value change, Arieli et al. (2014) found that Benevolence can be strengthened by a series of exercises designed to encourage participants to read about the importance of the value, reflect its salience to them personally and then write persuasively to convince others of its merits. The strengthening effect of doing these exercises for only 30 min lasted at least as long as four weeks, in this small sample of students from the Midwestern USA.

In a second experiment, this time with Israeli business students, Arieli et al. (2014) found that students who went through the 30-min Benevolence exercise were more likely to sign themselves up, via phone or email address, to volunteer in their community through a non-profit organisation (a 45% uptake, compared to 19% in the control group). A hierarchical regression analysis revealed that the effect of the manipulation on volunteering was fully mediated by the increase in Benevolence values. In other words, this is good evidence not only that Benevolence motivates prosociality, but also that it can be specifically strengthened by an intervention. Finding the same results in two different cultures, Israel and the USA, lends some weight to the generalisability of the findings, although of course it is important to test whether they continue to hold in other cultures too.

While these results so far point to Benevolence as being one value that motivates everyday kindness, it would be valuable to give greater consideration to other values, particularly using the 19-value model (Schwartz et al. 2012; see Schwartz, Chap. 3) and make explicit links between the contexts of prosocial behaviour and motivations behind it. The same kind acts—helping a professor, volunteering in the community, fixing someone's bike—might be motivated, in different circumstances, by wanting to gain course credit, look virtuous or demonstrate competence, or by a combination of these motivations all at once.

Bardi and Schwartz (2003) studies demonstrate that not only can other values (for instance, Tradition), sometimes have a stronger correlation with supposedly "Benevolence-expressive" behaviours, but also that these kinds of behaviours can be heavily influenced by other motivational factors, such as social norms.

With a team of researchers and undergraduates, Bardi and Schwartz came up with a list of activities that were deemed a priori to relate to each of the 10 value groups in the Schwartz model, and then asked people to rate how much opportunity they had to do these activities and how frequently they did them. The behaviours picked for Benevolence were "agree easily to lend things to neighbours" and "keep promises I have made" and, for Universalism, "use environmentally friendly products" and "make sure everyone I know receives equal treatment"—all behaviours that, by and large, should probably be included in a broad definition of prosocial.

The pattern of results in this study is quite subtle and surprising, warranting consideration by anyone interested in the connection between values and behaviour more generally. Stimulation and Tradition values were the only values that were strongly related to their congruent behaviours (e.g. "do unconventional things", or "observe traditional customs on holidays"), while the values most conceptually related to prosocial orientation, Universalism and Benevolence were in fact correlated only moderately and weakly (respectively) with their behaviours.

The authors explain this finding with reference to social norms. When there is a strong social pressure on a group of people to act in a particular way, as there is with prosociality, then people often act according to that norm, *irrespective* of their value priorities. Even someone who privately cares little about Benevolence values, for instance, can agree to lend things to their neighbours.

So, while it is plausible that Self-Transcendence values (and, specifically, Benevolence) have the strongest connection to prosociality, other values may be more important in certain contexts, and the impact of values on behaviour can sometimes be partially or completely obscured by social norms.

Political Activism

Participation in the formal political system, or protest against political decisions.

Political activism can be considered prosocial if it is directed towards the benefit of society, whether or not that is the outcome of a particular action or campaign. Unlike behaviours of everyday kindness, which usually aim at helping a person or a small group, the goal of activism is to help the wider society. Moreover, it often aims at helping society *change*. It is understandable, then, that both Openness-to-Change and Self-Transcendence values are important in motivating activists.

Schwartz (2010) found that activism, using an index made up of nine legal acts of protest performed in the past year, including public demonstration, boycotting a product and writing to a politician, is associated with Universalism values in

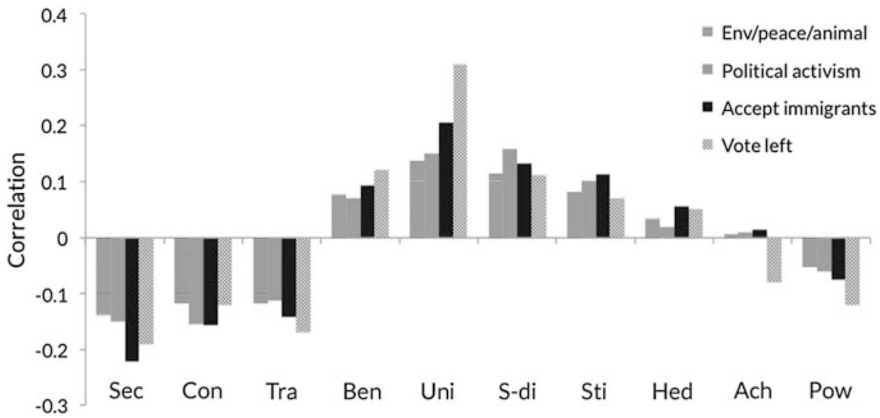

Fig. 4.2 Correlations between values and prosocial behaviours (from Schwartz 2010)

particular, interestingly followed first by all the Openness-to-Change values—Stimulation, Self-Direction, even Hedonism—and then Benevolence (see Fig. 4.2).

The negative patterns here are also somewhat different from helping behaviour. Self-Enhancement values, which are usually found to inhibit or discourage prosocial behaviour, have a very weak or non-significant relationship with activism. Instead, it is the Conservation values that are particularly in contradiction with activist behaviour and a host of other measures, including tolerance towards immigrants and support of organisations that protect peace, animal rights or the environment.

These findings are supported by a cross-cultural examination of political engagement across 28 countries and four continents (Vecchione et al. 2015). Looking at a range of behaviours over the past year, including signing a petition, contacting a government official and taking part in either lawful or illegal public demonstration, the authors find that political activism has a consistent, positive relationship with Self-Transcendence and Openness-to-Change, especially Universalism and autonomy of thought (Self-Direction), and a negative relationship with Self-Enhancement and Conservation values (especially to Conformity and Security).

The importance of both Self-Transcendence and Openness-to-Change values is supported by Pacheco and Owen (2015) who replicate this finding with ESS data, then extend it to look at how values predict the *strength* of people's participation—from zero participation, to weak (e.g. voting or wearing a campaign badge), to medium (e.g. contacting a politician, boycotting a product or signing a petition), to strong (working in a political party or action group; taking part in lawful demonstration). The ESS items were sorted into these groups by the authors based on how conventional and costly the behaviours were considered to be; a process which is of course constrained to some extent by the authors' interpretation, as well as the limited number of behaviours selected for ESS in the first place.

They found that the survey group was equally likely to engage in weak forms of participation, whatever their scores on the Openness-to-Change/Conservation axis. However, people high on Openness-to-Change were 23.7% more likely than people high on Conservation to move upwards from weak to strong participation. On the other axis, people who strongly valued Self-Transcendence were 10.3% more likely than people high on Self-Enhancement to move from no participation to weak, 26.9% more likely to move higher than weak, and 14.6% more likely to move from medium to strong.

So while Openness-to-Change and Self-Transcendence are both in general related to political activism, these values seem to play a particularly important role when moving from weak to stronger forms of participation. Perhaps this is because, to be motivated enough to work in a political party or take to the streets, one must not only care strongly about the welfare of others (Self-Transcendence), but also be particularly motivated to challenge the status quo and take personal risks in the pursuit of social change (Openness-to-Change).

It is interesting to reflect, in the light of the negative relationship between activism and Conservation values, that groups of activists are noted for defining their own countercultures, in-groups, lifestyles and social norms. While activists may wish to change rather than protect the status quo of wider society, they might still identify strongly with their membership of an activist community. In fact, we could speculate that *because* activists are reacting against some of the norms of society, the need to fit in and be protected and accepted by a group (which relates to aspects of Conformity, Security and Tradition values) can be of particular importance. One interesting avenue for future study would be to examine how Conservation values motivate and sustain the behaviour of groups of prosocial activists.

Another way to explore political participation is to compare the values behind conventional and unconventional political acts. This classification is widely used in the political participation literature (e.g. Sabucedo and Arce 1991; van der Meer and van Ingen 2009) and defines conventional acts as those that affect change through formal political representation within the electoral system, and unconventional as those that affect change from the outside, without necessarily observing existing rules and structures. It seems likely that Openness-to-Change, with its emphasis on novelty-seeking, daring and creativity, will be particularly associated with the unconventional, and this is indeed what Roets et al. (2014) find. Looking at the same nine ESS questions across Europe, Openness-to-Change values have a significant positive relationship with unconventional activism (e.g. boycotting products) and to a lesser degree with conventional (e.g. displaying a campaign badge).

In sum, values predict not only the strength of our involvement in political activism, but also the type of political activism we pursue. Future research with ESS data could try and separate out the effect of values on conventionalism and strength (or cost) of activism, and this could be extended beyond the ESS to test hypotheses with other relevant behaviours, for instance illegal protest, for which there is only one question in the survey (notably not included in the "unconventional acts" mentioned above).

Further cross-cultural work beyond Europe is a priority, as these relationships may vary considerably in other societies, particularly those less open to protest. Even within Europe there is variation; Roets et al. (2014) show that the relationship between Openness-to-Change and activism is particularly strong in Western Europe, and rather weaker in Eastern Europe, where unconventional activism is also much less common. This finding is supported by Slovenian researcher Hafner-Fink (2012) who looked at the relationship between Self-Transcendence values and political activism in a cross section of young democracies, old democracies and post-communist countries across Europe. She found a relationship only in the first two groups (Spain, Greece; Germany, Sweden), and not the latter (Slovenia, Czech Republic). We must be careful extrapolating the findings on values and prosocial behaviour cross-culturally, given the predominance of European and Western samples in this line of research.

Pro-environmental Behaviour

Behaviour that positively changes the availability of materials or energy from the environment, alters the structure and dynamics of ecosystems or the biosphere itself, or shapes the context in which choices are made that directly cause environmental change.

Although this chapter focuses on values and prosocial behaviour, it is important to mention pro-environmental behaviours as they overlap considerably in definition and in the values that motivate them. What is good for the environment is frequently good for society. This is especially so for future generations given the long-term effects of many environmental problems.

As with prosocial behaviour, pro-environmental behaviour can be defined by its motivation or by the consequences of an action, sometimes termed "intention-focus" and "impact-focus", respectively. So an action might be considered pro-environmental if it objectively helps or is considered to help protect or preserve the natural environment—through reduced carbon dioxide emissions, for example—or if it is motivated by pro-environmental reasoning. Some researchers consider that the latter is a necessary feature that the environmental action must be motivated in the "right way".

Pro-environmental values are operationalised in the latest Schwartz values survey with three items: "caring for nature", "taking part in activities to defend nature" and "protecting the natural environment from destruction or pollution" (Schwartz et al. 2012). However, behaviour with pro-environmental consequences may be motivated by a wide variety of factors including but not limited to the values listed above. From here on, we use "pro-environmental behaviour" to refer to the impact-focus definition, specifically the framing used by Stern (2000) given underneath the title above.

A considerable amount of correlational research on pro-environmental behaviour and values has focused on the Egoistic/Altruistic/Biospheric model (de Groot and

Steg 2008; Stern et al. 1999; Stern and Dietz 1994) which itself evolved from the Self-Transcendence/Self-Enhancement axis of the Schwartz values model. Research using the Schwartz values model and closely related instruments shows broadly that Egoistic values correlate negatively with pro-environmental behaviour and Biospheric and Altruistic values positively (e.g. Collins et al. 2007; Karp 1996; Nordlund and Garvill 2002; Schultz and Zelezny 1998; Stern and Dietz 1994; see Steg and de Groot 2012 for a review). Effective sizes tend to be rather small, but this is expected; there are many possible intermediate factors such as goals, attitudes, social norms, habits and opportunity. This is especially so given that pro-environmental behaviour is often operationalised with example actions that are performed by a minority of people. It is interesting that the relationship between Self-Transcendence and pro-environmental behaviour can be moderated by the extent to which we feel in control of events in our own lives (Engqvist Jonsson and Nilsson 2014), which is in turn related negatively to Conservation values. Future work is needed to identify other variables that mediate or moderate the relationship between the Schwartz model and pro-environmental behaviour.

Recent priming experiments reveal a similar pattern of relationships (Bolderdijk et al. 2012; Evans et al. 2012). In one British study (Evans et al. 2012), promoting a hypothetical car-sharing scheme using environmental framing enormously increased an immediate and ostensibly unrelated decision to recycle paper (83%), compared to environmental/financial (50%), control (39%) and purely financial messaging (15%). The conflicted message, which included a mix of environmental and financial framing, performed no differently to the control. However, the fact that financial reasoning reduced recycling even when placed along side Self-Transcendent phrases emphasises the conflict in these values groupings and also reveals the effects of unintended consequences—even if appeals to Self-Enhancement were to positively affect one behaviour (e.g. car-sharing), spillover effects on other pro-environmental behaviour might mean that this is actually counterproductive (Thøgersen and Crompton 2009). Untangling the relationship of value-led messaging with other spillover effects is a socially important area for future research (see Truelove et al. 2014 for a review).

Developments in research between values and environmental behaviour have tended to emphasise refining and partitioning values categories, as broad categories tend to include unrelated values. For example, Universalism was split early into Biospheric and Altruistic categories, the latter including also Benevolence values (Stern and Dietz 1994), and researchers in this three-value tradition have begun examining Hedonic values as particular inhibitors of environmental action (Steg et al. 2014) alongside Egoistic values. In the 10-value Schwartz model, these are already distinguished within the Self-Enhancement value group, although Hedonism lies across the boundary of the Openness-to-Change group. Recently, in his refined repartitioning of the values into 19 groups, Schwartz distinguished the grouping Universalism-Nature, essentially the same as Biospheric values, noting that this distinction may be necessary for properly predicting pro-environmental behaviour using his model. However, little has so far been studied in this vein. As the 19-value model is cross-culturally fairly well-validated—albeit mostly in

Western countries—and much more granular than other values models, further work in this area could significantly benefit the precision of our knowledge of the motivations for pro-environmental behaviour, which generally relies on models using three- or four-value groupings. The length of the instrument is often cited as a concern, yet the latest 57-value questionnaire takes a median of only 9 min to complete (McQuilkin, unpublished data).

The relationship of pro-environmental behaviour with Openness-to-Change and Conservation values is weaker, however, and depends more heavily on the behaviour in question; for example, valuing Openness-to-Change predicted greater energy use in transport (e.g. taking flights, cycling and walking less, driving faster; Poortinga et al. 2004) and valuing Conservation implied a slight tendency to not be a vegetarian (Kalof et al. 1999). This dimension has also received much less research attention, being left out of the Biospheric/Altruistic/Egoistic value model. Here, Schwartz' 19-value partitioning is again of diagnostic interest, as it may reveal complexities obscured by the use of very broad value categories.

It seems that the reason for pro-environmental behaviour's dominant relationship with Self-Transcendent and Biospheric values is likely to be partially a function of the way such behaviour is defined and framed; out of necessity, being green is often not in the self-interest of the individual and thus conflicts with Egoistic values and the alternative actions that stem from them (de Groot and Steg 2009). However, we must note again the preponderance of samples from Northern Europe and the USA in this line of research. People from indigenousness and/or non-Western cultures can have a radically different relationship with the environment, and different views on the extent to which people are seen as separate or integrated with the natural world; we would not want to assume that "pro-environmental behaviours", as we have defined them here, carry the same significance for these groups, or that they have the same patterns with values in other parts of the world.

Participation in Organised Groups that Work in the Interest of Others

Membership of and active contribution to organised groups that work in the interest of other people; acts that demonstrate kinship or support of a "marginalised" group of people (e.g. refugees, women, communities of colour), for instance, through supporting particular charities or attending meetings.

Similar to the findings for political activism, at least in Western Europe, Schwartz (2010) found a positive relationship between all Self-Transcendence and Openness-to-Change values and greater involvement in "organisations that work to protect the environment, foster peace or fight for animal rights". Again, this is seemingly more motivated by Universalism and Self-Direction values than it is by Benevolence (see Fig. 4.2), and, like political activism, it is the *Conservation* values, rather than the Self-Enhancement values that appear to exert the strongest negative influence.

Of course, working in the interest of a marginalised group can itself be a form of political activism, so it is not surprising that the values correlations are quite similar. What is interesting here, perhaps, is the question of people who are motivated to help, and why. Given a definition of prosocial behaviour as actions that benefit other people or society as a whole (see Twenge et al. 2007), it is apparent that prosociality is intimately bound up with ethics. Ethics guide how our actions affect ourselves, the people around us and our society, usually with principles designed to minimise harm or maximise happiness. One of the trickiest aspects of morality is how to decide when to help one person, or group of people, over another; whether, for instance, to privilege a friend or neighbour above a complete stranger. It is a well-known, uncomfortable ethical phenomenon that we are generally less moved to offer help to people and causes faraway than we are to those who suffer on our doorstep (Singer 1972). That there is a real difference in these motivations is suggested by the conceptual and empirical separation of Universalism and Benevolence in factor analyses of values survey data. It might also explain why Conservation values can positively relate to acts of kindness towards people in an in-group, but negatively to work in the interest of marginalised out-groups.

Sometimes, this is just a matter of personal knowledge and beliefs, if we doubt that our contribution to a cause will actually reach someone on the other side of the world via a charity, for instance, or if we believe that governments or other actors are more able to control events than ourselves (see Engqvist Jonsson and Nilsson 2014, for work on the "locus of control"). Other times it is affected by our identity and who we associate as being with us in our in-group.

We can, following Schwartz (2007), define the scope of a society's "moral universe" as the extent to which people assign particular values to the welfare of people outside their in-group. A country with high moral inclusiveness takes values such as Justice and Equality to apply to everyone globally, whereas in a low (or exclusive) moral universe, these supposedly universal values will apply just to the in-group, making them very similar in spirit and scope to the Benevolence values.

Investigating this idea of the moral universe, Schwartz first confirmed that people did indeed see Justice and Equality values as being moral. In fact, over 80% of respondents (Israeli adults) thought all of the Benevolence values were moral, and 70% thought all or most of the Universalism, Conformity, Tradition and Security values were moral too. While these findings are taken from just one culture, they suggest that a dominant conception of morality overlaps considerably with prosocial motivation, i.e. with values focused on the welfare or stability of the group, as are all of the Self-Transcendent and Conservation values. It is interesting to note in the context of political activism above that Self-Direction values were considered moral by less than 30%.

Schwartz went on to see whether there were cultural differences in moral inclusivity—i.e. the extent to which four chosen Universalism items formed their own region, separate to Benevolence, in a similarity structure analysis across 66 countries. Broadly speaking, he found greater moral inclusiveness in Western Europe, Scandinavia, North America and Australia and lower inclusiveness in Eastern Europe, China, Africa and South America.

Using just the ESS data set, Schwartz found that low moral inclusiveness was associated with a negative attitudes towards the consequences of immigration ($r = -0.49$, $p < 0.05$). So, the more a nation sees moral values as applying to just their in-group, the less accepting they are of outsiders—hardly a surprising result, but a highly relevant one in the context of immigration to Europe. The second finding pertains to “prosocial behaviour benefiting wider society”. Like in his later 2010 study, people were asked about their involvement in organisations devoted to environmental protection, peace and animal rights and/or an organisation devoted to humanitarian aid, minorities, human rights or immigrants. The extent to which Universalism predicted this involvement was strongly positively correlated with moral inclusivity in that country ($r = 0.74$, $p < 0.001$) (Fig. 4.3).

In other words, Universalism generally predicts membership of organisations that work in the interest of others but does so particularly well in countries with a more inclusive moral universe, those countries where people understand Universalism values to extend to people outside their immediate in-group.

In this discussion of the moral universe, Schwartz focuses on how people in different countries see Universalism (but not Benevolence) values as applying mainly to their in-group. This is one way to look at morality, but other researchers have found several different moral domains, which can have varying importance across cultures and differing relationships with values. Sverdlik et al. (2012), in

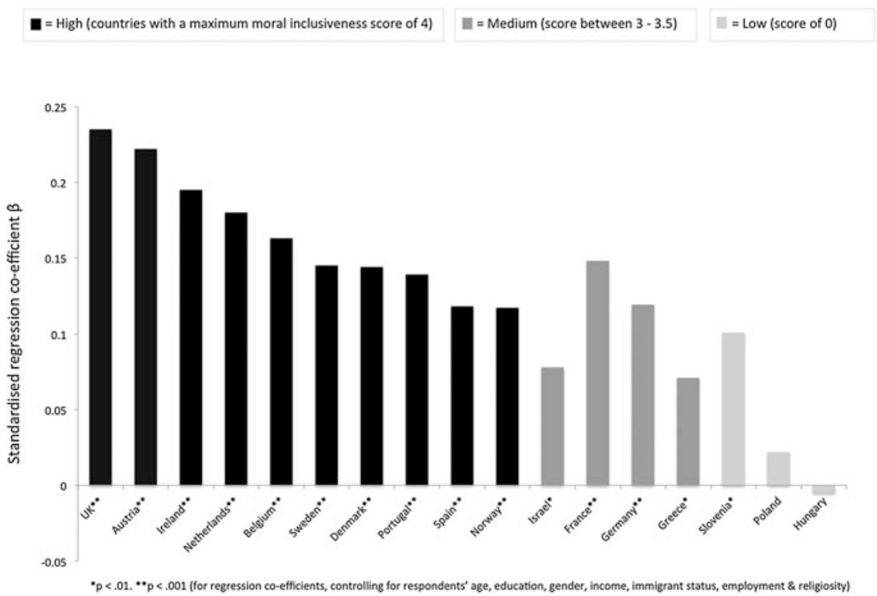

Fig. 4.3 Universalism predicts prosocial activity more strongly in countries with an inclusive moral universe (from Schwartz 2007)

their book chapter *Morality across Cultures: A Value Perspective*, explore some key differences between the moral outlook of Western and non-Western cultures. Western people tend to attach greater importance to Self-Transcendence and Openness values, and their perception of the moral domain is relatively narrow, focused mostly on an *ethic of autonomy*, which follows principles of avoiding harm and injustice (Shweder et al. 1997). The application of this ethic, however, is broad and tends to cover people in distant out-groups as well as in-groups.

In non-Western countries, where Conservation values seem to be more important in general, the picture is a little different. It was through interviewing Hindu Indians about norm violations that Shweder et al. (1997) developed a model of morality that included two further ethical codes beyond the ethic of autonomy: the *ethic of community*, which obliges people to transcend their self-interest in order to serve the traditions and leadership structures of the community, and the *ethic of divinity,* which covers that which is considered divine, sacred and pure. According to this research, non-Westerners tend to draw on a broad moral domain that includes all three ethical codes, rather than placing particular importance on autonomy. When it comes to the autonomy ethic, however, non-Westerners tend to apply it to people within their in-group, rather than distant strangers.

In sum, the link between values and certain kinds of prosocial behaviours (for instance, involvement in organisations devoted to peace, human rights or environmental protection) is affected by how people construe morality. But, as we have just explored, morality can be construed differently across cultures.

While the principle of avoiding harm and injustice is pretty universal, some principles, such as respect for the traditions of a community or purity of divine essence (both more associated with the Conservation values Security, Tradition and Conformity), are not usually judged as being a key part of the moral domain in Western countries. When we study the link between values and prosocial behaviours in people from different cultures, we must consider what part those values play in people's understanding of morality.

Schwartz (2007) found that the only values consistently considered moral by Israeli adults were the Self-Transcendence and Conservation values; all values that concern groups of people (rather than personal development or success). This finding is consistent with the values emphasised in the three moral domains, but could be corroborated with more comparative research into how people from different cultures rate the moral content of values.

Another avenue for more future qualitative and quantitative research is how people in non-Western, more collectivist countries, perceive the ethics of community and divinity as having prosocial outcomes. If might be that showing respect for community elders, for instance, or observing sacred rituals, are behaviours that are deemed to benefit others people or society more strongly in some countries than in others.

Antisocial Behaviour

Behaviours that violate widely accepted social ethical norms.

Curiously, despite its relevance to the functioning of society, the connection between values and the “dark side” of behaviour, defined as “the intentions to engage, the attitudes towards, and the actual participation in behaviours that violate widely accepted social ethical norms” (Feldman et al. 2015), seems to have less research to date. Kajonius et al. (2015) speculate that the paucity of research may be because antisocial behaviour is commonly pathologised, that the current focus is on avoiding rather than understanding antisocial individuals, and that the subject is sensitive and thus can be more difficult to study.

However, this does not account for the vast literature connecting personality traits and antisocial behaviour. One explanation may simply be that the connection between antisocial behaviour and values is weaker than that with traits. This would not be surprising since traits are by definition behaviourally linked, being summaries of patterns in individual action and reaction, whereas values are more abstract conceptions of motivational priorities distant from everyday action (for a detailed account of the differences see Parks-Leduc et al. 2015). An interesting path for future investigation would be determining whether values are more important in motivating prosocial behaviour than antisocial behaviour, tying into other current research on moral intuition and moral reasoning. Often prosocial behaviours require planning, and so they may more often require cognitive support that would reference values; values have been shown to influence behaviour mostly when cognitively activated (Verplanken and Holland 2002). Such a relationship is likely to be complex—for instance, Paharia et al. (2013) propose that cognition is more important in questions of moral ambiguity, e.g. high for ethical consumption but low for cheating or lying.

Speculations aside, the correlation between Self-Enhancement values and unethical behaviour is the strongest and most consistent of all the values groups—Kajonius et al. (2015) go so far as to label self-enhancing values the “dark values” due to their association with the “Dark Triad” personality traits of narcissism, machiavellianism and psychopathy. Actual unethical behaviour is difficult to study, for obvious reasons, so self-reports of behaviour, or attitudes towards the acceptability of behaviours are sometimes used as proxies. In general, attitudes have a much stronger demonstrable association with values than measured behaviours, although both are significant. For example, Feldman et al. (2015) demonstrate the positive relationship between Self-Enhancement and attitudes to unethical behaviours across cultures in a meta-analysis of data drawn from the ESS, World Values Survey and several surveys across Hong Kong, Taiwan, Singapore and China, and they find a small effect for behaviour itself (cheating for money and lying; $r = 0.20$ and $r = 0.10$, respectively) in two samples, noting that their measures of behaviour, particularly for lying, are crude and likely to be conservative. Their data also reveals other relationships. Conservation values are inhibitory to antisocial behaviour at a similar effect size, and based on the combined results of the behavioural studies and large-scale attitudinal surveys, the authors conclude that Self-Transcendence may be inhibitory where unethical behaviour harms others (suggesting a possible relationship with consequentialist ethical analysis), and that Openness-to-Change may vary in direction depending on the context, for example, being positive if a rule is to be broken and negative if it might take away the enjoyment of pursuing a goal. Given that antisocial behaviour implies a specific kind norm-breaking, it is interesting that it is not more positively correlated with Openness-to-Change.

Of relevance to this is Kajonius et al.'s (2015) finding that Stimulation and Hedonism (though not Self-Direction) can predict Dark Triad traits, although to a much lesser degree than Self-Enhancement, which may point towards differences in the way these similar values relate to antisocial behaviour. It should also be pointed out that despite Self-Transcendence values being fundamentally prosocial in definition, this grouping's relationship with antisocial behaviour is intermittent, though predictably negative where found.

If we confine ourselves to correlations with one of Schwartz' values instruments, there are only a few more studies that show an unambiguous connection with antisocial behaviour in adults. Pulfrey and Butera (2013) focus on cheating in students, showing a significant connection between Self-Enhancement values and both condoning cheating and the actual behaviour itself. Watson et al. (2009) found a small but significant connection between Power and Hedonism values and self-reported likelihood of behaving unethically, with inverse relationships for Benevolence and Universalism values.

Studies with children find a similar pattern to adults, for instance, with self-reported aggression (Knafo et al. 2008; see Benish-Weisman et al., Chap. 5).

Paciello et al. (2015) studied particularly disruptive children and found Self-Enhancement to be correlated with rule-breaking and more strongly with aggressive behaviour (teasing, fighting, arguing, breaking objects) and also an inverse correlation with Self-Transcendence. As reasoned above, it may be that children engage values more often in their moral decisions, as they develop their own moral heuristics and indeed value systems, but we know of no research to substantiate this speculation.

The Conservation/Openness-to-Change axis seems to have had less attention in this field, but there are some patterns that emerge. Watson and Berkley (2009), focusing on just three values (and, again, with an adult sample), find a small but significant relationship between Stimulation (positive), Tradition and Conformity (both negative) and self-reported unethical behaviour. In a similar set of results, Shafer et al. (2007) show a small positive connection between managers' positive attitudes to ethical business in China and the USA and Universalism and Conformity values, and a negative one between ethic-free business planning and both Self-Transcendence values and Tradition. Both these studies support Feldman et al.'s (2015) finding that the Conservation values (here Tradition and Conformity, although, interestingly, not Security) seem to act as a counterweight to antisocial attitudes and behaviour.

All of these are correlational studies, but there is a broadly similar pattern in priming studies, at least on the Self-Transcendence/Self-Enhancement axis. For instance, it is well-demonstrated that priming involving money or consumption (e.g. displaying actual money, conceptualising it, identifying as a consumer or member of “Wall Street” or viewing consumer goods) reduces helpfulness and prosocial behaviour (Bauer et al. 2012; Liberman et al. 2004; Reutner and Wänke 2013; Vohs et al. 2006, 2008). If these can be said to remind us of the values of wealth, success and associated concepts, then these are a prime of Power and Achievement values. More directly, Maio et al. (2009) show that completing a word search containing the actual names of Achievement values leads to significantly less time volunteered to help the researcher than in a control setup (see Section “Everyday Kindness” for more on this study). In general, as described before, the inverse also applies—Self-Transcendent primes will often induce prosocial behaviour. However, it seems that comparatively little research, priming or otherwise, has been done on the Openness-to-Change and Conservation value groups.

There is a notable exception to the above pattern in intergenerational scenarios studied by Wade-Benzoni et al. (2008). In a similar fashion to Maio et al. (2009), they directly primed the value of Power with a word-completion task. Those primed received a list which contained the words “authority, boss, control, executive, influence, and rich”, yet these participants were significantly more generous when asked to bequest money to the next round of participants, giving >25% more than the control. The authors propose that reminders of Power may lead to a kind of beneficence towards the next generation, and back this up by showing that the observed connection is mediated by affinity with the concept of stewardship. Further research in the causes of intergenerational prosociality would certainly be merited, given this unusual result and the importance of intergenerational prosocial behaviour to our collective future.

Concluding Remarks

In looking over the research to date on some of the main relationships between values and prosocial behaviour, Self-Transcendence appears to be a dominant positive motivating force, while Self-Enhancement is rarely associated with any behaviour that may be construed as prosocial (a possible exception being concern for future generations). In fact, it is this values dimension, and within it particularly Power that is most solidly associated with antisocial behaviour. The Conservation/Openness-to-Change axis is more context-dependent in its patterns, often neutral and sometimes supporting and sometimes inhibiting both pro- and antisocial behaviour.

This chapter has highlighted that prosocial behaviour (and its “opposite”, antisocial behaviour, if it may be so described), is a complex beast. If, by prosocial, we just mean an act of kindness, then we can easily limit ourselves to one class of behaviour and a set of studies that have an over-reliance on narrow experiments where a student is asked if they will come in next week to help their professor in the laboratory. If, by prosocial, we mean behaviour that benefits other people or society, then we have to open ourselves up to the full range of what these behaviours might be, and ask whether they would be considered prosocial in a culture different from our own. We could not consider every class of prosocial behaviour in this chapter, but we have approximated a range by looking at everyday kindness, political activism, pro-environmental behaviour and participation in organised groups that work in the interest of others.

Following this interrogation, we think it fair to conclude that Benevolence is associated with everyday kindness and willingness to help people, and that the Self-Transcendence dimension (of which Benevolence is a part) and Conservation dimensions are positively related to this type of behaviour, while their opposites (Self-Enhancement and Openness-to-Change) are not. This implies that the group-focused value dimensions are indeed associated with being more prosocial.

When it comes to political activism, the picture changes slightly. Universalism and Self-Direction values seem to be more important in this case than Benevolence, and, interestingly the Self-Transcendence and Openness-to-Change dimensions triumph over their opposites (Self-Enhancement and Conservation). Perhaps this is because political activism is generally associated with challenging established powers and advocating wider social change; concerns that go beyond immediate neighbours are far more consistent with being open to change rather than sticking with the status quo.

Similar patterns are found for people who participate in organisations working in the interest of marginalised groups, probably for similar reasons. The link between Openness-to-Change and activism appears to be stronger in Western Europe than it is in Eastern Europe, and the link between Universalism values and organisational participation seems to depend on cultural differences in how values are conceptualised—being particularly strong in countries where people assume Universalism ("understanding, appreciation and protection for the welfare of all people and for nature") really does apply to all people, globally, and not just people in the immediate in-group.

We must acknowledge that the over-representation of the global north in these types of studies means that we cannot speak with as much certainty on the links between values and prosocial behaviour in other parts of the world.

Further research that uses more granular values instruments (such as the 19-value model) and that accounts for specific cultural contexts seems likely to reveal new subtle relationships and may well increase the strength of known existing relationships between values and behaviour. At the moment, most research uses relatively blunt values instruments, so we are somewhat limited in the conclusions that we can draw.

More long-term measures of repeated behaviour—although more inconvenient—are also necessary, both to reduce noise and particularly in priming experiments to demonstrate the duration of any changes in prosocial behaviour. Future emphasis on behaviour and particularly on intermediate factors is needed too, despite the practical challenges involved. It is of course much easier to measure attitudes, but this does not address the twin value-action gap that still exists that is to say the gap between claimed motivation and specific behaviours, and the gap in our understanding of this inconsistency.

It is encouraging that most samples in cross-cultural values surveys appear to prioritise Self-Transcendent values (see Schwartz and Bardi 2001), giving a robust answer to a question about human nature asked for thousands of years. The most useful contribution of the field of values and prosocial behaviour to wider society may now be to better explain the situations in which we use these values and how they are affected by specific primes in the social environment, social norms, barriers to action and so on. With this information, we may eventually be better able to design our societies and environments in such a way that we can better actualize our existing motivation to be prosocial.

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Chapter 5
The Relations Between Values and Aggression: A Developmental Perspective

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I would there were no age between sixteen and three-and-twenty, or that youth would sleep out the rest; for there is nothing in the between but getting wenches with child, wronging the ancientry, stealing, fighting–Hark you now! Would any but these boiled brains of nineteen and two-and-twenty hunt this weather? (Shakespeare, *The Winter's Tale*)

In *The Winter's Tale*, William Shakespeare expresses a common idea of adolescence as a time of stormy behavior. As we will show in this chapter, there is some truth to this, but not all adolescents are aggressive, and this variation can be explained by value theory. In the last three decades, value theory has focused on the universality and validation of the value model across cultures (Schwartz and Rubel 2005) especially among adults. A focus on younger populations started only recently (e.g., Daniel et al. 2012; Knafo et al. 2008), and as yet, there is little scholarship on adolescents. Yet adolescence is an interesting period of change and growth in cognition, identity, and neurobiological systems; it offers a unique opportunity to examine processes as they evolve and to clarify the dynamics of these processes. Drawing on both theory and empirical studies, this chapter begins with description of studies and theories focusing on value development during adolescence; it addresses the relations between values and behavior in this period and discusses how these relations might change with age. Then, this chapter focuses on the main topic: the relations between values and aggression in adolescence and

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the mechanisms that explain and moderate them. It concludes with a discussion of the implications and suggestions for future research.

Values During Adolescence

Adolescence, a time of cognitive, emotional, and social development, is generally defined as the period between ages 12 and 18. From a *cognitive development* perspective, adolescence is a time of significant brain development, resulting in enhanced decision-making skills (Crone and Van Der Molen 2007) and the acquisition of metacognition, or the ability to evaluate their own thoughts (Kuhn 2009; Kuhn et al. 2000). Once capable of abstract thinking beyond specific circumstances (Piaget 1960), adolescents can create hypothetical and desirable scenarios that do not exist in real life (Dumontheil 2014). These scenarios may become guiding goals and values.

In addition to cognitive change, adolescence is a period of *identity* change. Adolescents ask themselves such questions as who am I? What is important in my life? They evaluate and reconsider their values. Values adopted from their parents are reconsidered, and new commitments to new values are created (Marcia 1980; Meeus 2011).

Do these processes of change mean adolescents' values are different from adults' values? The answer to this question should be given on two levels. First, we need to examine the *structure* of adolescents' values or their interrelations. As the next section will explain in greater detail, multidimensional scaling (MDS) proposes a circular pattern of ten major values (see Fig. 5.1); certain values have stronger

Fig. 5.1 Theoretical model of the structure of relations among 10 values (adapted from Schwartz 2010, Copyright© by the American Psychological Association)

relations which are reflected in closeness in space; others are farther apart, reflecting weaker or even opposite relations. Studies have applied this pattern to adults, and a recent measurement of the values of 11,902 adolescents in the European Social Survey (ESS) revealed only minor differences between adolescents' and adults' value structures (Schwartz 2012). When applying age-appropriate measurements, some studies have found the same structure appears in early adolescence and childhood (Cieciuch et al. 2015; Vecchione et al. 2015).

Second, we should ask about the *priority* of values, and here, we find differences. The ESS data revealed adolescents attribute less importance to other-oriented values (universalism, benevolence, tradition, conformity, and security) than adults. At the same time, adolescents pay more importance to self-oriented values (power, achievement, hedonism, and stimulation) than adults (Schwartz 2012). In the process of identity search, adolescents may become aware of their individualistic and distinct personalities and pay less attention to others' needs. Similarly, adolescence is an age of increased risk taking, gradually accompanied by an increase in behavioral control (Steinberg 2010). It is interesting to note that self-direction values develop differently than other self-oriented values. Although the former become increasingly important during adolescence (Daniel and Benish-Weisman 2017), as adolescents seek a distinct and autonomous identity, their appreciation of independent thought and action only reaches a peak in late adulthood (Schwartz 2012).

If adolescents have not yet reached autonomy, what are the major influences on their value priorities? What helps them navigate the stormy seas of adolescence? Theory suggests parents have a major role in the value development of their children (Grusec and Goodnow 1994). Some studies have found congruence between adolescents' and parents' values, with the highest congruence in tradition values and the lowest in hedonism, benevolence, universalism, and achievement values (Knafo and Schwartz 2009; Schwartz 2012). Adolescents' values are not direct manifestations of their parents' values (Strauss 1992), however, as value transmission is bidirectional. Adolescents are active agents; they perceive their parents' values and choose whether or not to accept them. They also influence the values of their parents (Benish-Weisman et al. 2013; Knafo and Schwartz 2009). Social and cultural factors are important as well, especially peers (Prinstein and Dodge 2008). Peers' values may be especially salient when adolescents undergo contextual change rendering their parents' values less relevant. For example, Knafo and Schwartz (2004) found the values of immigrant children more similar to their peer groups than to their parents.

An understudied topic is whether the values of adolescents and adults change in a similar manner (Döring et al. 2016). One interesting article has examined the value changes found by several two-point longitudinal studies. In the first study, high-school German students and English university students showed increased value change among adolescents compared to adults. However, a sample of Australian adults in a second study suggested the effect of life events was greater than the effect of age on value change (Bardi et al. 2009). Still other researchers found value changes among early adolescents during a war. These were retained two months after the war ended (Daniel et al. 2013). Arguably, extensive changes in adolescents' lives (e.g., new family roles, increased social relations) explain changes in values, not age per se.

We conclude with two important points. First, studies comparing adolescents and adults' values are cross-sectional, but we obviously need longitudinal examinations of the transition of adolescents to adulthood. Second, previous studies have used data from Western countries. We are not aware of any comparisons of the values of adults and adolescents in other cultures, but in more collective cultures, where adolescence identity development is embedded in a familial context, smaller differences may emerge. This merits closer examination.

Relations Between Values and Behavior During Adolescence

Values influence which actions are considered more justified than others (Feather 1995). Accordingly, they are consistently found to relate to behavior (Bardi and Schwartz 2003; Daniel et al. 2014; Pozzebon and Ashton 2009). Adolescents are no exception: Their values shape the way they operate in their surroundings.

We propose the relations between values and behavior will be weaker among adolescents than among adults for three reasons. First, adolescence represents an ongoing process of identity search and examination (Erikson 1968). This could blur adolescents' confidence in their values and interfere with value–behavior relations. That is, identity which is not yet cohesive and solid (Klimstra 2013) provides less consistent guidance to behavior. This theory is backed up by longitudinal studies of youth finding the stability of values to be stronger with age (Cieciuch et al. 2015; Daniel and Benish-Weisman 2017; Gordon 2006). Second, adolescents are more influenced by their social surroundings, especially their peers. In the process of striving to reach autonomy, a dependence on their parents might be replaced by a dependence on their peers (Steinberg 1990). Peer influence has a critical formative role in adolescence (Prinstein and Dodge 2008) and may cause adolescents to behave in ways that are not aligned with their original values. Third, adolescents might be more limited by their environment to express their values than adults. Adults have more freedom to shape their environment in a way that will support the behavioral expression of their values, while adolescents might find themselves constrained by external rules and norms (Vecchione et al. 2015).

Relations Between Values and Aggression During Adolescence

The previous section offers a general discussion of the relations between values and behavior during adolescence. This section turns to the main interest of the chapter—the relations between values and the specific case of aggression. Aggression is a behavior that is intended to harm someone. Aggressive behavior can include direct acts such as hitting and cursing and indirect acts involving social relations, such as gossip and exclusion (Card et al. 2008). During development from childhood to adulthood, aggressive behavior tends to decrease in general (Tremblay 2015) and to be less direct and more indirect (or social) (Ingram 2014). However, theory suggests there may be an increase in delinquency and antisocial behavior among some youth during adolescence due to neuropsychological changes (Moffitt 1993).

Adolescence is a sensitive period of brain development (Fuhrmann et al. 2015), with changes in neurobiological systems temporarily increasing the tendency for risk taking (Steinberg 2010) and aggression. The limbic system, the emotion center of the brain, plays an important role in seeking pleasure. Developments in this system during adolescence are associated with the intensification of the need for risk taking. At the same time, the prefrontal cortex which controls impulses, regulates emotions, and is in charge of decision making and future planning only reaches maturity in early adulthood (Giedd 2015). This discrepancy between the early development of the limbic system and the late maturation of the prefrontal cortex may put adolescents at risk of behaving aggressively "just for fun," seeking excitement and thrills, with no consideration of the consequences.

As the above suggests, adolescence is a time of shifts in social relations, including increased reliance on peer associations and decreased dependence on affirmation by parents (Meeus et al. 2005). These changes may promote risk taking and lead to delinquency (Moffitt 1993). Aggressive behavior at this age has pervasive psychological and physical effects on the victim of aggression (Rudolph et al. 2013), but it may also affect the aggressor, leading to severe adjustment problems (e.g., Prinstein et al. 2001; White et al. 1993).

Schwartz's value theory (Schwartz 1994) provides a solid starting point for an examination of the relations between values and aggression in adolescence. In this theory, ten values are organized in a circular structure; values situated in close proximity on the circle share similar motivations and will relate to behavior in a similar fashion; values opposite to each other on the circle represent conflicting motivations and relate to behavior in contradictory ways (see Fig. 5.1).

Following this structure, we suggest the relations between values and aggression will be as follows:

Self-enhancement values (power and achievement): Aggression is expected to strongly positively associate with self-enhancement values. Put otherwise, power values that focus on enhancing one's own needs with no or little consideration of the other's needs may result in aggression. Achievement values are adjacent and, like power values, are related to self-enhancement and are hypothesized to associate positively, albeit to a lesser extent, with aggressive behavior.

Self-transcendence values (universalism and benevolence): The values opposite to self-enhancement have an underlying motivation of caring for and helping others and are hypothesized to be strongly negatively related to aggression.

Openness to change values (self-direction, stimulation, and hedonism): These are hypothesized to be positively but weakly related to aggression. Those pursuing openness to change values will seek adventure, stimulation, and new ideas and experiences; such motivations could translate more easily into aggressive behavior. For example, adolescents may make fun of their peers to entertain themselves. "Eating the forbidden fruit" by breaking the laws of social norms of politeness and consideration can give adolescents a rush.

Conservation values (tradition, conformity, and security): Conservation values may lead an adolescent to exercise more restraints to meet social expectations, suggesting these particular values relate negatively to aggression. We suggest conformity will negatively relate to aggression. Security is more closely related to power, and some children may use aggression to promote their feelings of security. Hence, we expect a weaker relationship for security than conformity.

Previous findings for adolescents support this model. A study conducted among Arab and Jewish Israeli late adolescents found power values correlated positively and universalism, benevolence, and conformity correlated negatively with self-reported aggressive behavior, explaining 12% of the variance in aggressive behavior in the school context (Knafo et al. 2008). Another study examined the effect of parenting style and values on self-reported bullying among Israeli late adolescents. Among children with non-authoritarian fathers, universalism values related negatively to bullying. Among children with authoritarian fathers, power values related positively to bullying, while security related negatively (Knafo 2003). Similar results were obtained in a study conducted in Italy among mid-adolescents. The study used self-reports to measure the relations between values and traditional bullying (hurting someone directly) and cyberbullying (Menesini et al. 2013). When the four higher-ordered values were examined (see Fig. 5.1), the study found self-enhancement values related positively to both cyberbullying and traditional bullying (mediated by immoral behavior). Self-transcendence values were negatively related to traditional bullying, and openness to change values were negatively related to traditional bullying and cyberbullying (mediated by immoral behavior). These findings suggest the importance of values to predict aggressive behavior across types of aggressive behavior and across cultures.

Despite their extremely interesting findings, the studies cited above can be criticized for their reliance on self-reports. First, as aggressive behaviors are not socially acceptable, the report is likely biased due to social desirability (Paulhus 1991). Second, assessing both values and behavior with the same source, in this case a self-report questionnaire, might inflate the relations because of a shared-method variance (Kristof 1996; Pozzebon and Ashton 2009).

One study has overcome these limitations by using teacher reports to measure aggression (Gordon 2006), gathering cross-sectional data from youth in grades 4–7 (aged 9–13). Echoing the findings of previous studies, power, stimulation, and hedonism values related positively to aggression, while universalism, security, and conformity values related negatively. Interestingly, unlike previous work, the study found no negative significant relations between benevolence values and aggression. Age differences might explain this inconsistency. Previous studies were conducted among late adolescents, while this one considered children and young adolescents. Possibly, for younger children, being a good friend means being ready to fight to protect a friend, while such fights are rare at older ages (Bjorklund and Hawley 2014). Alternatively, younger children may show more benevolence values which focus on caring for the close environment, and these caring feelings may not include the wider social cycles toward which aggression is directed. As children grow up, they extend their social reference group from a relatively small peer group to a larger peer group (Rubin et al. 2005). Nevertheless, universalism which refers to the aim of caring for distanced groups was found to relate to aggression at younger ages. Obviously, this subject needs further investigation.

Another measure of aggressive behavior that can overcome the above limitations is peer nomination. In two recent studies, Arab and Jewish Israeli mid-adolescents nominated class members who were characterized by aggressive behavior. As expected, self-enhancement values (specifically power values) and openness to change values related positively to aggression. In addition, self-transcendence values (specifically benevolence and universalism) and conservation values (specifically conformity and security) related negatively to aggression (Benish-Weisman 2015; Benish-Weisman and McDonald 2015).

In most studies, the values that stand out as strongly associated with aggression are power (positively related) and universalism (negatively related). Possibly, these values are behavior specific. That is, power and universalism may be related to a limited set of behaviors, so these two values will have exclusive and strong relations with aggression (Benish-Weisman 2015). This hypothesis is partially supported by Bardi and Schwartz (2003) in a study of the relations between values and the behaviors expressing them. They found no significant correlations between the importance attributed to power values and the behaviors that were supposed to express achievement values. Similarly, there were no significant correlations between the importance attributed to universalism values and behaviors that were supposed to express benevolence values. That is, power and universalism values were exclusively related to specific behaviors. Along the same line, recent analysis (A. Bardi, personal communication, August 2016) of the same data ($n = 372$) revealed that the behaviors that express power and universalism were the most reliable ($\alpha = 0.76$, $\alpha = 0.77$, respectively).

The relations of aggression with other values might vary in different contexts (Benish-Weisman 2015). For example, security values in the context of intercultural relations might relate negatively to the readiness of majority groups to be in contact with minority groups (Sagiv and Schwartz 1995) to preserve social order. This might lead to group threat and result in aggressive behavior toward members of the minority groups (Struch and Schwartz 1989). Yet in an intracultural context, security values might increase concerns about personal well-being and health, discouraging individuals from taking an active part in struggles or fights.

Mechanism of the Relations Between Values and Aggression and Longitudinal Perspective

Values can relate to aggressive behavior either directly or indirectly (Bardi and Schwartz 2003; Roccas and Sagiv 2010). When they influence aggression *directly*, values highlight the relevance of one behavior over another within a certain situation. For adolescents, acting in accordance with their values is inherently rewarding, not least because by pursuing those values, they are more likely to achieve their goals (Bardi and Schwartz 2003). In addition, behaving according to their values contributes to feelings of self-consistency (Bardi and Goodwin 2011; Rokeach 1973). For example, adolescents who endorse self-enhancement values preserve an influential and powerful self-image by acting in a controlling or even aggressive way toward others.

The *indirect* mechanism refers to the ability of values to help organize and build perceptions of the world. According to the social information processing (SIP) model (Crick and Dodge 1994), values are prepositions informing processes of encoding, representing, searching, and responding and may lead specific adolescents to react aggressively (Dodge 1986).

Values can also be considered cognitive schemes central to identity (Bardi and Goodwin 2011), and adolescents observe the world in a specific way (Rohan 2000). First, their values *attract attention* to certain information cues (Crick and Dodge 1994; Verplanken and Holland 2002). Events and situations that are consistent with adolescents' values or ones that might risk values' fulfillment will be more salient (Schwartz et al. 2000). As a result, adolescents will act in ways that promote their values and remove threats to their fulfillment. Those who endorse self-enhancement values, for example, will pay more attention to signs speaking to their social status (e.g., how many peers voted for their nomination to the class committee) and may act aggressively when someone seems to dismiss their importance (e.g., isolating friends who did not vote for them).

Second, as cognitive schemes, values affect how adolescents *interpret reality* (Verplanken and Holland 2002), how they understand events around them, and how they behave as a result. Say two adolescents witness a fight at school. The one who stresses security values (i.e., conservation) will interpret the situation as hazardous and will try to keep away. The one who endorses stimulation values (i.e., openness to change) may see it as exciting and enjoyable and actually join in the fight. That is, the same event may result in two opposite behavioral outcomes in terms of aggression.

Of course, the above theories and studies revealing the mechanisms linking values and behavior deal mostly with adults, so conclusions about adolescents should be made with caution, especially given the developmental context. In fact, studying the association between values and aggression among adolescents inevitably directs our attention to the process of development in these relations. Over time, values and aggression are reciprocally related (Benish-Weisman 2015). These reciprocal relations across time raise the question of directionality. Do values influence aggression, or does aggression shape values for adolescents? To the best of our knowledge, only one study has estimated relations between values and aggression among adolescents across time, in three-wave longitudinal design (Benish-Weisman 2015). The directionality of the paths between values and aggression revealed reciprocal relations between power values and aggression; that is, higher levels of power values predicted higher levels of aggression across time, and higher levels of aggression predicted higher levels of power values. The study also found reciprocal relations between universalism values and aggression; higher levels of universalism values predicted lower levels of aggression across time, and higher levels of aggression predicted lower levels of universalism values. It found marginally significant negative relations between benevolence and aggression; that is, higher levels of benevolence values predicted lower levels of aggression across time. Finally, the path between aggression and conformity values was negatively correlated across time.

Although such a study might enable us to draw some conclusions about causality (Gershoff et al. 2009), we suggest caution. For example, a third factor, such as the neighborhood, may affect values first and behaviors second, leading to an association of early values with later behaviors.

Possible Moderators and Mediators of Relations Between Values and Aggression

Values direct human behavior (Roccas and Sagiv 2010), but there is evidence that there are not always strong associations between values and behavior (Bardi and Schwartz 2003). In the following section, we discuss several factors that moderate the relations between values and aggression.

Culture and Social Context

Culture moderates the relations between values and aggression in various ways (Boer and Fischer 2013; Roccas and Sagiv 2010). Culture provides the setting in which values can be enacted (or not). For example, a meta-analysis found aggression was less common in collectivistic cultures than in individualistic ones

(Bergeron and Schneider 2005). In a culture that emphasizes individual needs and success with less consideration of others' needs, aggressive acts may be more acceptable. As we will show below, the effect of culture penetrates many social contexts, including gender and parenting. In general, collectivist social contexts, which favor group interests over individual needs, offer fewer opportunities to express aggression and, thus, inhibit aggression.

In other cases, culture may encourage aggressive behavior. For example, cultural norms of honor and self-defense may encourage aggressive behaviors (Dodge 2006; Nisbett and Cohen 1996). Aggression may also be found within subcultures or social contexts where violence is considered a legitimate way to solve disagreements. For example, adolescents who belong to a gang might experience peer influence (which reaches its peak in mid-adolescence, Steinberg and Monahan 2007) to participate in aggressive action, even if this behavior does not reflect their values. In summary, culture helps determine whether adolescents can (or cannot) express their values in a form of aggressive behavior. In cultures with strong norms against or in favor of aggression, the relations between personal values and aggression will be weaker, because behavior will be determined by norms. In cultures where individual expression is accepted, aggressive behavior will reflect personal values.

An additional context for the value–behavior relationship is the school. In the Israeli high-school study described above (Knafo et al. 2008), in schools where violence was more common, adolescents' violence was more strongly related to power and universalism values. In an Italian study, antisocial behavior (a measure including violence) a negative relationship of universalism with antisocial behavior was apparent among children witnessed a high degree of violence at school (Bacchini et al. 2014). Taken together, these two studies suggest environments with a relatively high degree of violence, reflecting weak norms against aggression, make adolescents' values especially relevant in guiding behavior.

Gender

There are different cultural expectations or cultural norms for boys and girls, even when the general atmosphere does not support violence. Norms may affect the relations between values and behavior; when a value expressive behavior is not normative, a higher price is paid for acting according to the respective values. Therefore, with greater normative pressure, the relations between values and behavior should weaken (Bardi and Schwartz 2003). Aggression is generally considered undesirable, but this differs for boys and girls (Card et al. 2008). By and large, masculinity is associated with dominance and aggression (Mosher and Sirkin 1984), and femininity is associated with caring and nurturing (Schwartz and Rubel 2005). Therefore, girls with high self-enhancement values will suppress them and act less aggressively or will find nonviolent ways to express them. One study focusing on values, norms, and aggression found boys were more affected than girls by contextual factors that enhance aggression (Bernburg and Thorlindsson 2005). Another found no relations between values that relate positively to aggression (self-enhancement and openness to change values) and aggression among girls, but it did find positive relations among boys (Benish-Weisman and McDonald 2015).

Parental Socialization

Some theorists say parents have a paramount role in the value development of their children (Grusec and Goodnow 1994). If so, parenting practices will moderate the relations between children's values and aggression. Findings of one study back this up: Power values had a stronger association with self-reported bullying among Israeli adolescent children with autocratic fathers than among children with non-autocratic fathers (Knafo 2003)

As parenting takes place in a cultural context (Boehnke et al. 2007), culture offers a blueprint for parenting practices (Keller 2013). For example, one study found mothers from collectivistic cultures endorsed authoritarian parenting practices more than mothers from individualist cultures (Rudy and Grusec 2006). A Chinese sample found parenting practices mediated the relations between mothers' cultural values and adolescents' aggression. When mothers endorsed collectivistic values, their children were more likely to reflect on their behavior and think about the results of their deeds; this maternal practice was related negatively to direct aggression among their adolescent children (Shuster et al. 2012). In other words, parenting practices might be the connecting link between culture and children's behavior.

Not only do parents affect children's values and behavior, but the relations are bidirectional (Knafo and Galansky 2008; Kuczynski et al. 1997; Sameroff 2009): Parents influence their children's values and behavior; in turn, children's values and behavior influence the parents' socialization values (Benish-Weisman et al. 2013). Parents might take their children's specific values into account (consciously or unconsciously) and shape their socialization values accordingly. For example, parents who observe their child's eagerness to excel in karate competitions might support this desire by paying for karate lessons and looking for more competitions, even if they themselves would rather cooperate than compete. By supporting these behaviors, they emulate their child's competitive spirit and may increase their own socialization value of achievement. As suggested by Bardi and Goodwin (2011), repeated behavior might result in value change. Parents who initially attributed low importance to achievement values may increase the importance they attribute to these values after attending several competitions.

Private Self-consciousness

Private self-consciousness (PSC) refers to an individuals' tendency to be aware of his/her feelings, thoughts, and values (Fenigstein et al. 1975). In a process of self-evaluation, the self is compared to inner standards, including desirable norms or values (Carver and Scheier 1981; Alberts et al. 2011). As discrepancies between the self and these standards might cause discomfort (Phillips and Silvia 2005), privately self-conscious people may be more likely to behave in a manner congruent with their standards or values (Gibbons 1990; Silvia and Duval 2001; Wicklund 1979).

An early study found higher levels of PSC could strengthen the relationship between values and aggressive behavior (Duval and Wicklund 1972; Wicklund 1979). In a more recent study, PSC was important in moderating the relationship between the values and behavior of male adolescents, with higher levels of PSC related to stronger negative relations between self-transcendence and conservation and aggression (Benish-Weisman and McDonald 2015).

Attitudes

Finally, values may operate on behavior through their effect on *attitudes* (Homer and Kahle 1988). While values are, by definition, abstract, attitudes are more concrete and represent an individual's opinion about a specific concept or object, such as violence. Thus, attitudes may mediate the values–behavior relationship (Homer and Kahle 1988).

In the case of aggressive behavior, two such attitudes may be especially relevant. One is the attitude toward violent behavior, and the other is the attitude toward compliance with the law. In the sample of Israeli Jewish and Arab adolescents studied by Knafo et al. (2008), such attitudes were assessed with an adaptation of a children's version of The Attitudes Towards Violence Scale (Funk et al. 2004), including statements such as "It's okay to use violence to get what you want" and "Carrying a gun or knife would help me feel safer." Even if an adolescent has a positive attitude about violence, many aggressive behaviors are not normative and are often illegal. Therefore, researchers also assessed adolescents' attitudes to compliance with the law (e.g., "I prefer to behave according to the law, even if there is no chance of getting caught"; "As long as a certain behavior is forbidden by law, there is no chance I will do it out of my free will"; Daniel and Knafo 2011). The results showed violent behavior to be strongly related to a positive attitude to violence, $r = 0.51$ and $p < 001$, and negatively related to the attitude toward being law abiding $r = -0.23$ and $p < 001$. Figure 5.2 shows the correlations between values and violence in that sample (Knafo et al. 2008) and the correlations between violence and the two attitudes. The most striking finding is the similar pattern of results for attitudes to violence and actual violent behavior. Not surprisingly, attitudes about being law abiding had the opposite pattern of correlations with values.

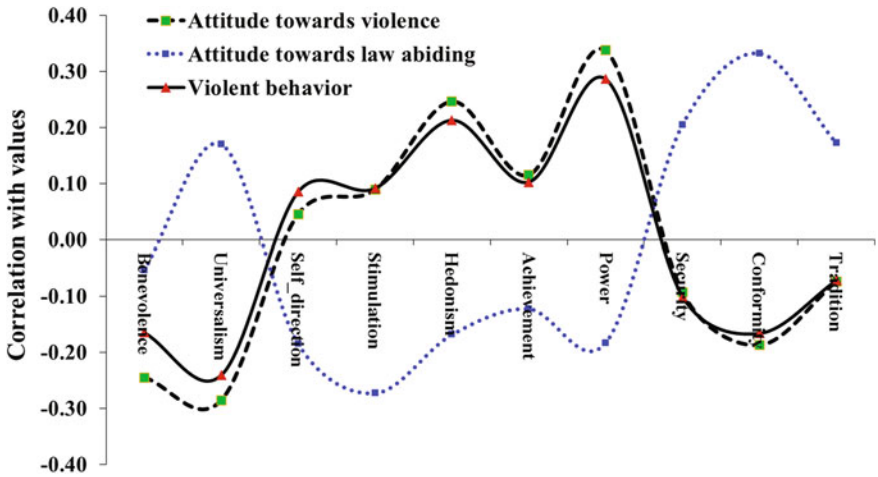

Fig. 5.2 Correlations between values and violence and related attitudes. *Note* Results for violent behavior appeared separately for Arab and Jewish adolescents in Knafo et al. (2008). Current results are for Arabs and Jews (N = 884), after within-group standardization. Correlations with an absolute value above 0.07 are significant, $p < 0.05$

Follow-up analysis (Baron and Kenny 1986) showed the association of violence with conformity values to be partly mediated by attitudes about being law abiding. Similarly, the association of violence with power values, emphasizing social status and dominance over people and resources, was significantly mediated by attitudes to violence.

Implications and Future Directions

This chapter reviews value development during adolescence and the relations between values and aggression. It summarizes the nature of the relations, proposes mechanisms that may explain them, and suggests moderators and mediators that may affect them. The research on these relations is taking its first steps, and we see several areas which could fruitfully be targeted by future studies.

Theory and some studies support the importance of socialization in children's value development, and recent evidence suggests both genetics and the environment unique to siblings (e.g., their peers) make a significant contribution to children's values (Kandler et al. 2015; Uzefovsky et al. 2016). Future studies should trace the contribution of genetic and non-shared factors to the relations between values and aggression.

Special attention should be given to peers. We know peers have an important influence on adolescents' values, but we know very little about how peers moderate the relations between adolescents' values and aggression. Using advanced methods such as social network analysis, future studies should examine the roles of peers in the development of values and consider how values promote or prevent aggression. In addition, as peers play an important role in adolescents' aggressive behavior (Meter and Card 2015), understanding the ways they affect the relations between values and aggression could help in planning peer-based anti-aggression educational programs.

As far as we know, to this point, all the studies examining the relations between values and aggression have been correlational. Being exposed to violence at school at home and in the neighborhood relates negatively to universalism and conformity values and positively to power values (Bacchini et al. 2014), and being indirectly exposed to war has been shown to relate to value change (Daniel et al. 2013). Perpetration of aggressive behavior might also lead to change in adolescents' values through self-reflection. We are aware of only one study examining the values–aggression relations longitudinally (Benish-Weisman 2015). It advanced scientific knowledge by providing evidence of bidirectional relations between values and aggression, but as the study was based on correlational data, this conclusion must remain tentative. Future studies should use experimental designs to probe the direction of the relations between values and aggression. For example, enhancing some values (e.g., self-transcendence values) through intervention (Arieli et al. 2014) might cause decreased aggression.

The research on the relations between values and aggression is evolving, with the potential to contribute significantly to the field of child development and educational psychology. As positive relations between self-enhancement values and aggression and negative relations between self-transcendence values and aggression have been found, we suggest future interventions should strive to enhance self-transcendence values and inhibit self-enhancement values in youth involved in violent actions. At the same time, they should promote peaceful behaviors, as these might enhance self-transcendence values and reduce aggression.

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Chapter 6
Values and Behavior in a Work Environment: Taking a Multi-level Perspective

Sharon Arieli and Orly Tenne-Gazit

In the organizational behavior literature, values are viewed as crucial to the functioning of both employees and organizations (Rokeach 2008; Suddaby et al. 2010). Values have a long reach and a wide span of influence on critical processes and characteristics in organizations, and have been associated with multiple organizational phenomena, including culture, socialization, performance, commitment, identification, and more (see review in Bourne and Jenkins 2013). In their endeavor toward uncovering the impact of values on organizational behavior, researchers have proposed various values constructs and investigated their influence on behavior at the micro and macro levels. Although this literature is rich and broad, it is also fragmented, composed of studies that were usually targeted at explaining behavior at a specific organizational level (e.g., subordinates, supervisors, teams). Organizational scholars have called for bridging this gap by developing an overreaching framework that incorporates the multiple paths through which values impact behavior (Bourne and Jenkins 2013; Meglino and Ravlin 1998). This task is extremely challenging as past research drew on diverse, even conflicting, disciplines, and research paradigms.

In this chapter, we focus on *individual-level* values and discuss their influence on organizational behavior, addressing the content the values convey, and the process through which they are translated into behavior at multiple organizational levels. More specifically, the first part of the chapter draws on Schwartz's theory of personal values to distinguish among four higher-order value dimensions, each comprised of a distinct set of motivations. Building on the understanding that values often constitute congruent behaviors, we use Schwartz's value theory as a framework for categorizing modes of behaviors that are particularly relevant to organizations. We start by reviewing past literature and continue with proposing lines for future research. The second part of the chapter discusses the value priorities of a

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prototypical manager. Their high status in the organizational hierarchy allows managers to influence the behavior of multiple levels of an organization, starting with the policies and strategies developed at the organizational level through the behavior of their subordinates. We end by questioning the cultural boundaries of this literature.

Individual-Level Values: Forming Value-Expressive Behaviors in Organizations

Individuals hold stable value hierarchies that reflect their central motivations (Rokeach 1973; Schwartz 1992). Their values impact the way they interpret information (Sagiv et al. 2011b) as well as their concerns (Schwartz et al. 2000), attitudes (Maio and Olson 2000), choices, and behavior (Bardi and Schwartz 2003; Roccas and Sagiv 2010; Sagiv 2002; Verplanken and Holland 2002). People behave according to their values because they seek a sense of consistency between their beliefs and their actions (Bem 1967; Festinger 1957; Rokeach 1973), and because value-expressive behavior allows them to attain their goals and aspirations (Bardi and Schwartz 2003; Sagiv and Schwartz 2000b). Consequently, people who sense consistency between their values and behavior tend to express higher levels of self-fulfillment, well-being, and self-esteem (Bardi and Schwartz 2003; Rokeach 1975; Sagiv and Schwartz 2000b). The influence of values on behavior is apparent across life domains, including work settings and organizations. Thus, employees are likely to rely on their values when they make decisions, choose a specific course of action, or justify their behavior.

Researchers who have studied the relationships between individual-level values and organizational behavior have examined values that differed in their focus. Whereas some researchers have studied work-related values (e.g., Chatman 1989, 1991; De Cooman et al. 2009; Elizur 1984; Judge and Bretz 1992), others have advocated for using a broader conceptualization of values and have thus studied basic values, reflecting the personality of employees and their general goals (Finegan 2000; Meglino and Ravlin 1998; Sagiv 2002; Schneider et al. 1995; Schneider et al. 1998). Theories of basic human values conceptualize work values as an expressions of basic values in the work setting, arguing that due to their trans-situational nature, basic values can explain behavior in work settings as well (Ros et al. 1999).

In this chapter, we draw on Schwartz's conceptualization of basic personal values (Schwartz 1992) as it seeks to encompass all human motivations and has been verified in extensive cross-cultural research (Schwartz 1992; Schwartz and Bardi 2001). Furthermore, research has shown that Schwartz's model explains some of the most prominent models of work values. For example, the nine work-value factors of the organizational culture profile (OCP, O'Reilly et al. 1991) and the McDonald and Gandz's scale (1991) were found to be consistent with Schwartz's taxonomy (Abbott et al. 2005; Bilsky and Jehn 2002; Finegan 2000).

Schwartz's theory (1992) presents a set of ten value types that are comprehensive in describing human motivational goals (for a review, see Sagiv and Roccas Chap. 1, this book). The dynamic relationships among the ten value types form a circular structure that represents the pattern of relationships among values. Values that are adjacent to one another in the circle reflect congruent motivations, whereas values that are opposite to each other in the circle reflect conflicting motivations. The circular structure can be summarized into two basic dimensions, forming four broad, higher-order types of values. One dimension contrasts openness to change values (pursuing autonomy of thought and action, novelty, and excitement) with conservation values (preserving the status quo by following tradition, adhering to social expectations, and pursuing stability). The second contrasts self-enhancement values (pursuing self-interests, achievement, and power) with self-transcendence values (concern for the interests and welfare of others).

Ample research has investigated the association between personal values and behavior and, by now, this body of research covers a wide range of behaviors (Roccas and Sagiv 2010). In our review of the literature, we focused on studies that investigated work-related choices and behaviors, and drew on Schwartz's value theory in conceptualizing and measuring values. We start by reviewing past research distinguishing between behaviors that are related to each of the two value dimensions mentioned above. This typology of behaviors sheds light on how the motivations carried by each of the four higher-order values are translated into behavior in organizational settings. We then identify gaps in the literature and discuss directions for future research.

Openness to Change Versus Conservation Values

The high-order value of openness to change encompasses self-direction and stimulation values. Self-direction values encompass the motivation for independent thought and action expressed in the freedom to choose, to create, and to explore. The need for autonomy is central for most individuals, and therefore, self-direction values are considered one of the most important values for most people across cultures (Schwartz and Bardi 2001). Stimulation values express the motivation for arousal, excitement, novelty, and challenge in life. Together, these values express the motivation for autonomy and diversity, encouraging individuals to challenge existing knowledge, and follow their natural curiosity and desires.

The higher-order value of conservation encompasses the values of tradition, conformity, and security. Tradition values encourage respecting and adhering to traditional customs and ideas. Conformity values reflect the motivation to comply with social expectations and norms, and security values reflect the motivation to maintain the stability and safety of the society, the group, and the self. Together, these values underlie the motivation of preserving the status quo and contribute to the constitution of harmonious social relations and group solidarity by calling for the avoidance of violations of group norms.

Table 6.1 summarizes the studies that investigated the associations between this value dimension and behavior at work. In our review, we distinguish between studies focusing on professional choice and studies focusing on behavior in organizations. We start by presenting the findings of each one of the studies and then discuss their contribution in advancing our general understanding of the impact of this value dimension on behavior in organizations.

Professional Choice

Openness to change versus conservation values influence behavior in work settings as early as in the first steps job seekers take in their vocational search. Studying clients in career counseling, Sagiv and Schwartz (2004) have shown that openness to change versus conservation values explained the behavior of clients during the process of vocational counseling. The researchers distinguished between behaviors that express "searching for tools" (e.g., being active, independent, and insightful) as opposed to behaviors that express "asking for answers" (e.g., being passive, dependent, and non-insightful). Then, they tested the pattern of associations between these two sets of behaviors (as reported by the counselor) and the value priorities of the counselees. Their findings showed that the more importance clients attributed to conservation values of conformity and tradition, the more likely they were to express "asking for answers" behaviors. In contrast, clients that emphasized self-direction values expressed more "searching for tools" behaviors.

Values also affect the professions people choose. Individuals emphasizing openness to change values tend to engage in artistic professions (e.g., artists, musicians, actors) and in investigative professions (e.g., scientists, medical doctors, and historians), holding vocational interests that entail affinity for activities that are self-oriented, free, and ill-defined. In contrast, individuals emphasizing conservation values tend to engage in conventional professions (e.g., administrative managers, accountants, receptionists), holding vocational interests that call for systematic operation, adhering norms, and following well-defined rules and instructions (Knafo and Sagiv 2004; Sagiv 2002). Clearly, the professional choice people make affect the type of behavior they are likely to engage in while doing their work (Holland 1997; Holland and Gottfredson 1975).

Behavior in Organizations

As the value dimension of openness to change versus conservation deals directly with the desire to express novelty and flexibility versus maintaining the status quo, researchers reasoned that it is associated with creativity and innovation.

Table 6.1 Studies investigating the associations between openness to change versus conservation values and behavior at work

	Openness to change values	**Conservation values**
Professional choice		
Behavior of clients during the process of vocational counseling (Sagiv and Schwartz 2004)	"Searching for tools" behaviors	"Asking for answers" behaviors
Professional choice (Knafo and Sagiv 2004; Sagiv 2002)	Artistic professions and investigative professions	Conventional professions
Behavior in organizations		
Creativity		
(1) General tendency to act creatively (Dollinger et al. 2007; Kasof et al. 2007)	Positive association	Negative association
(2) Employees' beliefs about their creative performance at work (Rice 2006)	Positive association with self-direction values	Negative association with conformity values
(3) Idea generation in the workplace (Lipponen et al. 2008)	Employees who emphasized openness to change (vs. conservation) values suggested more new initiatives for change	
Organizational change		
Support for organizational change (Sverdlik and Oreg 2009)	Support for *voluntary* organizational change	Support for *imposed* organizational change

Studies investigating the general tendency of individuals to act in a creative manner in their lives indicate that creative performance was positively associated with openness to change values and negatively associated with conservation values (Dollinger et al. 2007; Kasof et al. 2007).[1] The participants in these studies were asked to perform a series of tasks that require creativity, such as writing a poem or a story, and solving an ambiguous mathematic problem that requires originality and flexibility. A similar pattern of results emerged in a research on Egyptian employees from diverse industries (Rice 2006). Specifically, employees' beliefs about their

[1]Creative performance was also positively associated with universalism values and negatively associated with power values. Universalism values are adjacent to self-direction values in the circular value structure, and express motivations that are similar to the motivations embedded in openness values as they emphasize the motivation for tolerance toward other people and ideas as well as the motivation for an esthetic world. Power values are adjacent to security values, and express motivations that are similar to those of conservation values as they emphasize the motivation to gain control over people and resources.

creative performance at work were positively associated with self-direction values, and were negatively associated with conformity values.[2]

The opposing associations of openness to change versus conservation values with creativity can be explained in terms of intrinsic versus extrinsic sources of motivation. Research on creativity in organizations has indeed shown that whereas employees' intrinsic motivation is one of the most profound sources for enhancing their creative performance, extrinsic motivation usually hinders their creativity (Amabile 1997; Hennessey and Amabile 2010). Employees valuing openness to change values are more likely to express independent thought and action, engage in exploration, and pursue diversity. This approach toward work is expected to constitute an intrinsic source of motivation. In contrast, employees valuing conservation tend to be concerned with maintaining stability in their careers and respecting organizational hierarchies, customs, and procedures. They are thus more sensitive to instrumental outcomes, such as job security, appropriate income, and formal status, and are particularly susceptible to the influence of extrinsic sources of motivation (Ros et al. 1999).

Creative performance in organizations incorporates two important phases: idea generation and implementation, often termed as innovation. Studying day care centers in Finland, Lipponen et al. (2008) focused on the idea generation phase and reasoned that suggesting new initiatives for change is compatible with novelty seeking and with the motivation to express independence in action and thought. Their findings indicated that employees who emphasized openness to change (vs. conservation) values engaged in more suggestion-making in their work. This pattern of associations emerged when the extent of suggestion-making was self-reported by the employees themselves as well as when it was assessed by the employees' supervisors.

Interestingly, the findings have further shown that the effect of openness to change values on suggestion-making was stronger among employees who identified highly with the organization. Drawing on the understanding that identification with the organization is needed in order to instigate extra-role behavior, the researchers reasoned that employees who value openness to change but do not identify with the organization may find alternative venues to express their openness to change values. They are less likely, however, to contribute to the organization by thinking of new ways to improve it. These findings thus suggest that the relationship between values and behavior may be moderated by personal or contextual factors, attenuating or reinforcing their intensity.

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[2]Additionally, the findings have shown that creativity at work is positively related to achievement values and negatively related to power values. The positive association between achievement values and creativity may reflect the general belief in organizations that creativity leads to professional and organizational success. Thus, creativity allows employees to attain achievement values, representing their pursuit for success. In contrast, power values are likely to hinder creativity as they emphasize pursuing external rewards (e.g., bonus, evaluation, authority), which are considered detrimental to creativity (Amabile 1997; Hennessey and Amabile 2010).

Similarly, research on personal values and organizational change has shown that the nature of the anticipated change matters. Sverdlik and Oreg (2009) distinguished between two types of organizational change: changes imposed by the organization as opposed to changes in which employees may choose to participate voluntarily. The researchers theorized that each type of organizational change allows the expression of different types of values. Change imposed by the organization allows employees to express their motivation for compliance but, at the same time, hinders attaining autonomy in the workplace. In contrast, when the change is voluntary, employees are able to attain their motivation for autonomy, but are unable to express compliance. To test their theory, they observed the reaction of employees in a public university, in which the main campus of the university was relocated to another city (an imposed change). As expected, support for the imposed change was positively associated with conservation values and negatively associated with openness to change values when controlling for dispositional resistance to change.

To investigate differences between imposed and voluntary organizational change, Sverdlik and Oreg (2009) studied the reaction of students to a scenario displaying anticipated change in the university's teaching methods that would have a direct impact on them.[3] The students were randomly assigned to *imposed* versus *voluntary* experimental conditions. Participants in the imposed condition were informed that the anticipated change would be enforced in the following academic year. In contrast, participants in the voluntary condition were informed that they could choose whether to enroll in the new program. As expected, openness to change and conservation values interacted with the type of organizational change (imposed vs. voluntary) in affecting support for change. Students who emphasized openness values expressed greater support for change when it was voluntary, whereas students who emphasized conservation values expressed greater support for change when it was imposed. In an additional research, Sverdlik and Oreg (2015) further showed that openness to change versus conservation values interacted with the type of organizational change (imposed vs. voluntary) in affecting the level of identification with the organization.

Taking together, the studies reviewed above provide indications for the impact of openness to change versus conservation values on behavior at work, distinguishing between behaviors allowing for the attainment of autonomy, novelty and flexibility, and behaviors allowing for the attainment of stability, and acceptance of authority. Furthermore, the studies reviewed provide evidence for the trade-off between the two types of values, showing that they elicit opposing sets of behaviors. Thus, for example, whereas creativity at work is positively associated with openness values, it is also negatively associated with conservation values. Similarly, compliance is positively associated with conservation values and negatively associated with openness to change values.

[3]It is only at the end of the experiment that participants were informed that the scenario was fictional and not part of any actual initiative by the university management.

Drawing on these findings, we reason that employees who emphasize openness to change values are more likely to engage in and initiate organizational change that challenges organizational hierarchies, customs, and procedures. These employees are also more likely to engage in creative problem-solving, and in developing new knowledge and practices. In contrast, employees valuing conservation values are more concerned with maintaining stability in their work setting, and obeying authority. They aim at establishing harmonious relations and solidarity among organizational members by avoiding conflict, and adhering to organizational norms and expectations. To that end, they are more likely to favor self-restriction, risk aversion, and the restraint of provocative actions.

This review of the literature also reveals gaps that could be addressed in future research. For example, organizational agility received considerable attention in recent organizational research (Sambamurthy et al. 2003). It has been argued that agility is needed in order to cope with the constant changes in the business environment and to maintain, and even increase, the competitive advantage of the organization. Agile organizations are characterized with a flexible structure and capacity to adapt. They tend to grant their employees autonomy in problem-solving and encourage suggestions of new initiatives. Additionally, they require tolerance to ambiguity and to instability. We thus reason that employees valuing openness to change are more likely to prefer agile working environments than employees emphasizing conservation values. However, we know by now that multiple contextual factors may affect the associations between values and behavior, thus leading to multiple, more complex, paths of influence. For example, if the management imposes the demand for organizational agility through a top-down policy, values attainment of employees would probably change. Consequently, employees valuing conservation may form a more favorable view of the organization.

In addition, almost no research has studied the impact of this value dimension on risk management. Risk-taking behaviors express the seeking for variation in the distribution of possible outcomes, their probability, and subjective worth (March and Shapira 1987). We postulate that these behaviors would be positively associated with openness to change values and negatively associated with conservation values. The opposite pattern is likely to emerge for risk-aversion behaviors, expressing sacrificing some monetary gain for the sake of reducing the variation in possible outcomes.

Further research could also delve into the influence of each of the value types encompassed in this dimension. For example, while both self-direction and stimulation reflect the general motivation of openness to change, each focuses on different specific motivations. The first is cognitive-oriented, reflecting exploration, creativity, and autonomy in idea generation, whereas the latter is more affect-oriented, reflecting the motivation for excitement impulsiveness and diversity. These differences may yield different associations with specific behaviors. For example, whereas the motivation for exploration inherent in self-direction values may lead to an in-depth investigation of a specific issue, the motivation for excitement inherent in stimulation values may lead to investigate multiple issues in a shallower manner. Additionally, while both self-direction and stimulation may lead to challenging organizational rules and procedures, each value type presumably leads to different patterns of behavior. Self-direction values would probably lead to an in-depth exploration of existing rules and procedures with the aim of refining them. Stimulation values, in contrast, are expected to lead to spontaneous disobeying of rules aiming to break the routine for the sake of excitement and variation. Along the same line, research could delve into the impact of pursuing security and stability on behavior relative to seeking conformity, or adhering tradition.

Self-transcendence Versus Self-enhancement

The higher-order value of self-transcendence encompasses benevolence and universalism values. Benevolence values express care for the welfare of close others (e.g., helpfulness, honesty, forgiveness, loyalty, responsibility), and universalism values express concern and tolerance for all others (e.g., social justice, equality, broad-mindedness). Together, these values express the basic need of individuals to establish social relations with other people and are consistently ranked as the most important values for most people across cultures, where benevolence is usually ranked as more important than universalism (Schwartz and Bardi 2001).

The higher-order value of self-enhancement encompasses power and achievement values. Together, they express the motivation to promote self-interest, where power values reflect the motivation of gaining control over other people and resources, and achievement values reflect the motivation to demonstrate competence and success. Power is constantly ranked among the least important value for most people, where achievement values are rated in the middle range in most cultures (Schwartz and Bardi 2001). Hedonism values,[4] which reflect the desire to gain personal gratification, are also related to self-enhancement values.

Table 6.2 summarizes the studies that have investigated the associations between this value dimension and behavior in work setting. Here again, we distinguished between research on professional choice and research on behavior and organizations.

Professional Choice

Self-transcendence versus self-enhancement values are related to the attitudes, or orientations, that employees form toward their work, distinguishing between

[4]Hedonism values share elements of both self-enhancement and openness to change value dimensions. In Schwartz's value circle, they are positioned between self-enhancement and openness to change values.

Table 6.2 Studies investigating the associations between the value dimension of self-transcendence versus self-enhancement and behavior at work

	Self-transcendence values	**Self-enhancement values**
Professional choice		
Work orientation (Gandal et al. 2005)	Negatively associated with *career orientation*; Benevolence values were positively correlated with *calling orientation*	Positively associated with *career orientation*
Vocational interests (Sagiv 2002)	Social interests	Enterprising interests
Professional choice (Arieli et al. 2016; Gandal et al. 2005; Knafo and Sagiv 2004; Sagiv 2002; Sagiv and Schwartz 2000b)	Social professions	Enterprising professions
Behavior in organizations		
Preferences for systems of reward allocation (Fischer and Smith 2004)	Employees valuing self-enhancement found *reward systems based on performance and seniority* as more just than did employees valuing self-transcendence	
Organizational Status (Roccas 2003; Gandal et al. 2005)	Valuing self-enhancement versus self-transcendence moderated the association between organizational status and identification with the organization	
Altruistic behaviors of managers (Sosik et al. 2009)	Managers emphasizing self-transcendence values were evaluated by their employees as more altruistic than managers emphasizing self-enhancement values	
Helpfulness (Grant 2008)	Employees valuing self-transcendence (vs. self-enhancement) were influenced by an organizational intervention emphasizing virtues of helpfulness and kindness	
Behavior in social dilemma games (Sagiv et al. 2011b)	In a game emphasizing the virtue of *cooperation,* participants valuing self-transcendence contributed more money than participants valuing self-enhancement	In a game emphasizing *competition* between groups, participants who emphasized power over benevolence chose personal gain over the joint interests of their group
Conflict resolution (Bond et al. 2004; Williams et al. 1998)		Positively associated with competing style of conflict resolution (focusing on self-gain)

Career and *Calling* orientations (Gandal et al. 2005). Career orientation focuses on the advancements that can be obtained through work (e.g., monetary rewards, occupational status, resources), whereas Calling orientation focuses on the fulfillment of socially valuable work (Wrzesniewski et al. 1997). Therefore, for people with a career orientation, work is a means for obtaining external rewards and prestige, whereas for people with calling orientation work is a means for obtaining self-actualization. Accordingly, career orientation was found positively associated with self-enhancement values and negatively associated with self-transcendence values. Calling orientation, in contrast, was positively associated with emphasizing benevolence values (Gandal et al. 2005).

The importance people attribute to self-enhancement versus self-transcendence are also associated with their vocational interests (Sagiv 2002). In his theory of vocational interests, Holland (1997) distinguished between enterprising interests, entailing leading and directing subordinates' actions to successfully attain organizational or self-interest goals and social interests, entailing promoting actions of caring for and helping others. Studying clients in career counseling, Sagiv (2002) found that valuing self-enhancement was positively associated with enterprising interests, whereas valuing self-transcendence was positively associated with social interests and negatively associated with enterprising interests. Similarly, several studies have shown that individuals engaged in professions defined as enterprising (e.g., business and economics students, accountants, and managers) emphasized self-enhancement values more and self-transcendence values less than individuals engaged in social-oriented professions (e.g., social work and psychology students, teachers, and employees in an environmental organization) (Arieli et al. 2016; Gandal et al. 2005; Knafo and Sagiv 2004; Sagiv 2002; Sagiv and Schwartz 2000b).

Behavior in Organizations

Self-transcendence values are associated with the general propensity to collaborate, to establish supportive social relations (Lönnqvist et al. 2006; Schwartz and Bardi 2001), and to donate to charity (Maio and Olson 1995). In contrast, self-enhancement values are associated with competitiveness and with the pursuit after bottom-line outcomes and status (e.g., Arieli et al. 2016; Gandal et al. 2005; Roccas 2003; Sagiv et al. 2011b). In the following, we review research showing these conflicting patterns of behavior in work setting.

Consider, for example, the case of employees' preferences for systems of reward allocation. Reward systems based on the performance and on seniority of the employees draw on bottom-line outcomes and are competitive in their nature. They are, hence, compatible with enterprising interests and with self-enhancement values. In contrast, they conflict with social interest and with self-transcendence values. Research studying full-time employees from Germany and the United Kingdom has supported this reasoning, indicating that employees valuing self-enhancement found reward systems based on performance and seniority as more just than did employees valuing self-transcendence (Fischer and Smith 2004).

Another notable example is the importance individuals attribute to the status and prestige of the organization in which they study or work. Research on group identification has argued that people tend to identify more with high status groups than with low status groups, aiming to maintain a positive sense of self (Mael and Ashforth 1992; Tajfel and Turner 1979). Investigating students from diverse departments, Roccas (2003) found that the extent to which students valued self-enhancement versus self-transcendence moderated the association between the status of the department in which they were studying and students' identification with the department. Specifically, the more students valued self-enhancement and the less they valued self-transcendence, the more their identification with their department depended on its status. Similar findings emerged in research comparing two groups that differed in their emphasis on self-enhancement versus self-transcendence values: economics students (who attribute relatively high importance to self-enhancement values) and employees of an environmental organization (who attribute relatively high importance to self-transcendence values). As expected, the status of the organization was related to the level of identification among economics students but not among employees of an environmental organization (Gandal et al. 2005).

In contrast, altruistic and pro-social behaviors at work are compatible with self-transcendence values and conflict with self-enhancement values. For example, managers emphasizing self-transcendence values were evaluated by their employees as more altruistic than managers emphasizing self-enhancement values (Sosik et al. 2009). Another notable example was provided by a field experiment among fund-raising callers for a foundation providing scholarships to students (Grant 2008). During the experiment, some of the callers were subjected to an intervention attempting to emphasize how fund-raising can help students-in-need change their lives. In particular, these callers read letters from students who had received financial support from the foundation and shared their personal stories. The intervention improved the fund-raising but only among employees who attributed high importance to benevolence values. That is, only employees who strongly valued concern for others were influenced by an organizational intervention emphasizing virtues of helpfulness and kindness.

The trade-off between self-transcendence and self-enhancement values is particularly relevant to the choice of acting in a cooperative versus a competitive manner. Studying social dilemma games, Sagiv et al. (2011b) investigated how this value dimension explained participants' choice to cooperate or to compete. In a dilemma game called "The Paired Charity Game," participants had to choose between contributing money to their partners (cooperating) and keeping it for themselves (preferring self-gain). The game emphasizes cooperation by guaranteeing that for each dollar contributed by the players, the research team donates another dollar to a charity chosen by the player. That is, by choosing to contribute money, players not only cooperated with their partners to gain a larger reward, but they also donated to charity. As expected, participants who emphasized self-transcendence values were more likely to contribute than participants who emphasized self-enhancement values. Similar findings were found in another social dilemma game involving competition between groups. Participants who emphasized power over benevolence were more likely to choose personal gain over the joint interests of the group and hence refrain from contributing money to the group. The effect of values was stronger when values were highly accessible to the participants (e.g., they were asked to contemplate their values prior to making the decision) (Sagiv et al. 2011b).

Interestingly, recent research has shown that the influence of self-transcendence values on prosocial behavior in strategic interactions is moderated by the role people assume during the interaction (Lönnqvist et al. 2013). Particularly, the researchers distinguished between roles that call for behavior that expresses one central value (value-expressive behavior) and roles that allow multiple alternative behaviors, and thus may express distinct, even conflicting, values (value-ambivalent behavior). For example, Lönnqvist et al. discuss a trust game in which two players receive an endowment and are required to make decisions about how to divide the money. At the beginning, a player assuming the role of a Truster has to decide whether to share the money with a player assuming the role of a Trustee, knowing that the amount of money she decides to transfer will be tripled by the experimenter. For the second step, the Trustee has to decide how much of now-tripled money she would like to transfer back to the Truster. The behavior of the Truster may reflect prosocial motivation, but at the same time, it may also reflect the motivation for self-gain (as she is aware of the fact that the transferred amount is tripled). However, the decision of the Trustee reflects mainly pro-social motivation. Taking a meta-analytic approach, the researchers reanalyzed data from multiple studies involving strategic games in which participants are faced with the decision whether to compete or to collaborate. The findings indicated that, as expected, when the role particularly involved value-expressive behavior of concern to others (e.g., the Trustee role), the influence of self-transcendence values on pro-social behavior was significant and stronger than when the role involved value-ambivalent behavior (e.g., the Truster role).

Another example of the association between self-enhancement values and the propensity to compete and pursue self-gain was found in research on conflict resolution. Specifically, research focusing on MBA and psychology students from multiple countries (China, India, the Philippines, the United States, and Hong Kong) has shown that emphasizing self-enhancement values predicted a competing style of conflict resolution (focusing on self-gain). Interestingly, emphasizing conservation values predicted an accommodating yielding style (focusing on conflict avoidance) (Bond et al. 2004; Williams et al. 1998). These results are not surprising considering that solidarity and harmonious relationships are goals pursued by conservation values.

Taken together, this line of research has shown that self-transcendence versus self-enhancement values lead to contrasting sets of behaviors at work. Employees emphasizing self-transcendence values tend to collaborate with others, to engage in altruistic behavior, and to express helpfulness and commitment to the welfare of other people in the organization. In contrast, employees emphasizing self-enhancement values tend to compete for success, and to strive for status and prestige allowing them to obtain organizational or self-interest goals. The tension between self-transcendence and self-enhancement values is prominent in the business world where the demand to act ethically and in a pro-social and pro-environmental manner often conflicts with the wish to compete and to maximize profit (Arieli et al. 2016). As both cooperation and competition are essential for the success of organizations, future research could investigate how organizations and managers can balance between these two sets of values. For example, research has shown that high quality relationships within the workplace influence both the quality of collaborations between employees, and their performance (Dutton and Heaphy 2003). Thus, strong collaborations may be viewed as a means for fulfilling self-gain motivations and improve their bottom-line outcomes and competitive advantage.

Up to now, the unique influence of the specific value types encompassed in this dimension has not been studied. Benevolence and universalism share the motivation of concern for others; however, they differ in the target of concern. Whereas benevolence values focus on helping people with whom one is in frequent personal contact, universalism values reflect concern for all human beings and for nature. Thus, benevolence values are likely to evoke helpfulness and loyalty to colleagues and team members, and Universalism values are likely to create the impetus to help the larger society and protect the environment. These motivations do not always consolidate into the same patterns of behavior. For example, benevolence values lead employees to be loyal to their organization and co-workers, whereas universalism values would lead individuals to make sure that the organization does not jeopardize the broader social and physical environment. Along the same lines, research could delve into the motivation to pursue accomplishments expressed by achievement values, and its commonalities and differences with the motivation to pursue power and control over resources.

Summary

Taken all together, our review of the literature supports the idea that the impact of values on behavior goes through the entire value system, revealing the commonalities and differences between the value types. The ten value types in Schwartz's theory serve as a motivational continuum that shapes behavior, in which some values are related to each other (e.g., power and achievement values that composite the higher-order value of self-enhancement), some conflict (e.g., self-enhancement vs. self-transcendence values), and some are almost orthogonal (e.g., self-enhancement and openness to change). The findings presented above can be viewed as a trade-off between the poles of each one of the higher-order value dimensions. In this trade-off, behaviors (e.g., competing) that are compatible with the motivations underlying one pole of a dimension (e.g., self-enhancement values) are likely to conflict with the opposing pole (e.g., self-transcendence).

Our review of the literature also reveals that the influence of values on behavior is not only direct and straightforward. Values may moderate relationships between organizational phenomena. For example, a research studying employees from Germany and the UK has shown that the association between procedural justice and extra-role behavior is moderated by openness to change versus conservation values

(Fischer and Smith 2006). That is, only among employees that value openness to change perceiving the organizational procedures as fair instigated engagement in extra-role behavior. The researchers reasoned that organizational justice is more important to employees emphasizing openness to change (vs. conservation) values because they place less importance to traditional policies, and tend to challenge organizational hierarchies. A similar pattern of influence was also found in studies focusing on self-enhancement versus self-transcendence values. For example, the association between status and identification was moderated by self-enhancement values (Roccas 2003), and the association between task importance and performance in fund-raising was moderated by benevolence values (Grant 2008).

Research has also shown that values interact with various situational factors in affecting behavior (for a notable example, see the studies on organizational change reviewed above). This line of research is particularly important as it outlines in which circumstances values are expected to influence behavior, and in which circumstances they are expected to be less influential. We further reason that any direct effect of values on behavior can be interfered by situational factors that define the extent to which the value type in question can be attained. For example, situational factors that determine autonomy at work (e.g., mild supervision, elasticity, flexibility in working hours) versus complying and conforming (e.g., tight supervision, rigidity, fixed working hours) are likely to moderate the relationship between openness to change (vs. conservation) values and creativity. Similarly, self-transcendence values are likely to be stronger predictors of cooperation in situations that express concern for others (e.g., “The Paired Charity Game,” Sagiv et al. 2011b, described above).

Studying overt behavior in the field is extremely challenging from multiple diverse reasons. Consequently, only several studies investigated actual behavior of employees. Some of the studies focused on attitudes toward behavior (e.g., supporting vs. resisting organizational change), or self-reported behaviors (e.g., beliefs about creativity at work), whereas others studied work-related behaviors in the laboratory (e.g., social dilemma games). Future research could take a step further in finding solutions and opportunities to study the impact of personal values on actual behavior of employees (see also Fischer, Chap. 10, in this book).

Values of Managers

Managers provide a special case for looking at the connection between personal values and behavior at multiple organizational levels. Organizational researchers have considered entrepreneurs, founders, and top management executives as the strategic leadership echelon, a position allowing them to instill their personal values into the organization through a top-down, hierarchical, process (Schein 1992; Schneider et al. 1995). Consequently, the value priorities of managers affect not only their own behavior but also the behavior of their subordinates and of the organization as a whole. In the following, we first discuss the content of managers’ values, outlining the typical value patterns of the management profession and business schools. We then continue with discussing how mangers' values affect behavior in different organizational levels.

The management profession is considered an enterprising professional environment, involving leading and directing subordinates' actions, and obtaining control over resources in order to attain organizational or self-interest goals (Holland 1973, 1997). Management thus entails the pursuit of power and prestige, ambition and success, expressed by self-enhancement (vs. self-transcendence) values (Arieli et al. 2016; Sagiv and Schwartz 2000b). This value pattern was confirmed in research among employees from multiple different occupations (Knafo and Sagiv 2004). The findings indicated that compared to individuals in other professions, managers attributed higher importance to power and achievement values and lower importance to benevolence and universalism values. It is therefore not surprising that business schools are inclined to focus on teaching their students skills intended to maximize the company's profit and attain personal and organizational success, and pay less attention to discussing professional ethics (e.g., Giacalone and Thompson 2006; Navarro 2008; Rasche et al. 2013).

The value pattern of the management profession was further investigated in a research on the values reinforced by business schools (Arieli et al. 2016). The investigation started with a content analysis of the business school website. Websites of organizations are considered a major organizational artifact through which the organization defines and projects its identity, goals, and agenda (Coupland and Brown 2004; Preston et al. 1996). Indeed, researchers have content analyzed web-based curricula of accredited business schools to reveal their goals and aspirations (Navarro 2008; Wu et al. 2010). Arieli and her colleagues followed this line of research in analyzing the website of a business school. Table 6.3 summarizes their findings and provides illustrations for the words and sentences that were analyzed. As expected, a business school website included more words and sentences reflecting self-enhancement values than ones reflecting self-transcendence values (137 vs. 21.5 words; 48.5 vs. 5 sentences). Not surprisingly, a content analysis of the website of a social work school—a professional school that encourages concern for others—yielded an opposing pattern of results. The website included many more words and sentences reflecting self-transcendence values than ones reflecting self-enhancement values (150.5 vs. 23 words; 43.5 vs. 5.5 sentences). In addition, comparing the two website on their value emphases yielded significant results (see the last two columns in Table 6.3).

A study of self-reported values of students from the business and social work departments revealed consistent findings. Specifically, business students attribute more importance to self-enhancement values and less importance to self-transcendence values than do social work students (Arieli et al. 2016). Arieli and Sagiv (2016) further compared the value priorities of faculty members in business and in social work schools. As faculty members in all academic departments engage in academic research, they are expected to share some value emphases, which reflect their common profession as researchers. They are also expected, however, to emphasize the values most compatible with their department.

Table 6.3 Sentences and words that reflect self-transcendence and self-enhancement values on the business (*B*) and social work (*SW*) websites (Arieli et al. 2016)

Department/value type		Examples	Mean		*Z* test	
			B	*SW*	*Z*	*p* value
Self-enhancement	Words	Leadership, success, competitive, achievement	137	23	7.55	0.00
	Sentences	"…future generation of business leaders"; "… admissions criteria that are among the highest …"	48.5	5.5	5.88	0.00
Self-transcendence	Words	Concern, welfare, sensitivity, community-obligation	21.5	150.5	12.20	0.00
	Sentences	"…to fill professional roles in all fields of social welfare…"; "… obligation and contribution to the social environment…"	5	43.5	8.31	0.00

As expected, the findings indicated that faculty members in the business school differ from faculty members in the social work school in prioritizing self-enhancement and self-transcendence values in the same manner as the students in these departments.

These studies confirm that the value pattern of the management profession is apparent across three organizational layers in a business school: organizational artifacts, faculty members, and students. Arieli et al. (2016) have further investigated whether this consistent value pattern is a product of processes of self-selection, socialization, or both. Self-selection is the process through which individuals actively choose to engage in a specific profession, or to join a specific organization. Research shows that individuals prefer work environments that are compatible with their personal characteristics and allow them to express their values (Pervin 1989; Sagiv and Schwartz 2000b; Schneider et al. 1995). To investigate the self-selection process, the value priorities of freshmen in business school were compared to those of freshmen in social work school. The findings indicated that as early as the first week of studies, freshmen students hold values that match the value profile distinctive to their department, thus indicating a value-based self-selection process.

Socialization is the process through which organizations train their members to identify and comply with the organizational or professional values. As a result, individuals' values may change to match the values that are highlighted by their professional group (Fisher 1986; Louis 1990; Van Maanen and Schein 1979). To examine whether the values of students change in light of the socialization they experience during their studies, the value patterns of first- and third-year business students were compared (Arieli et al. 2016). The findings did not reveal any value change. To further test the impact of socialization on students' values, a longitudinal study following the value patterns of freshmen during their first year of study was conducted. The results indicated only a small value change in benevolence values. These findings indicate that the value priorities of business students are quite stable throughout their studies, and that the differences found between the values of business students and those of social work students are probably due to self-selection processes.

Taken together, these findings outline the prominent motivations of managers and of business students. These motivations have behavioral implications: Valuing self-enhancement versus self-transcendence results in a competitive mode of behavior reflected in prioritizing self-gain and in focusing on bottom-line organizational outcomes. Note, however, that like any social group, managers differ in their value priorities. Research has found value differences among managers and showed that these differences have consequences for organizational behavior. While the first part of the chapter discussed how personal values of individuals shape their own behavior, the following section portrays how the value priorities of managers influence the behavior of their organizations and subordinates.

Well-established approaches for strategic leadership, such as the upper echelons theory, postulate that the particular experiences, personality, and value preferences of top managers influence their strategic decisions which, in turn, influence the behavior of their organizations (Hambrick and Mason 1984). Support for the influence of managers' values on their strategic decisions was provided by research which studied managerial dilemmas by contrasting two distinct managerial approaches: the shareholders approach which prioritizes the interest of the owners versus the stakeholders approach which aims at balancing between shareholders' interests and the interests of other stakeholders, such as employees, consumers, and the surrounding community (Adams et al. 2011). Thus, for example, when considering the opening hours of a new recreation center, the first approach would focus on the monetary profit and advocate many opening hours as possible. The latter approach, however, would also show concern for preserving the character of surrounding neighborhoods and advocate limiting the opening hours.

Board members and CEOs of publicly traded firms in Sweden were presented with a series of such business dilemmas. The findings show that valuing power, achievement and, to a lesser extent, self-direction predicted a preference for shareholders' interests, whereas valuing universalism predicted a preference for the interests of other stakeholders. These results indicate that holding an entrepreneurial perspective, as expressed by power, achievement, and self-direction values, is associated with favoring the monetary interests of shareholders over other stakeholders. In contrast, concern for all people (as expressed by universalism values) is associated with employing a broader perspective and considering various stakeholders in their strategic decisions. In sum, the dominant value profile among managers may mistakenly form the impression that all managers would favor monetary gain over the well-being of others. This study, however, reveals that even among managers—individuals who share the same profession—value differences explain strategic decisions.

Along the same line, managers are likely to affect the type of organizational culture developed in their organization which, in turn, influences organizational performance. Studying Israeli companies in multiple industries (i.e., high-tech, appliances, paper, and food), Berson et al. (2008) show that the influence of the value priorities of CEOs on organizational behavior goes through the culture of the organization. The importance CEOs attributed to self-direction values was related to the constitution of innovation culture which, in turn, had a positive effect on the companies' sales growth and on the satisfaction of employees. In contrast, the importance CEOs attributed to security values was positively associated with bureaucratic culture which, in turn, was positively associated with organizational efficiency and negatively associated with the satisfaction of employees. Finally, the importance CEOs attributed to benevolence values was positively associated with a supportive culture which, in turn, was positively associated with the satisfaction of employees and negatively associated with sales growth.

As leaders, managers also have direct influence on followers' behavior through their social exchange relationships (Yukl 1994). The personal values emphasized by leaders are likely to influence the way they interpret situations in the organization which, in turn, shape the types of behaviors and outcomes they expect from their followers (Hambrick and Mason 1984; Miller et al. 1988). How leaders respond to organizational events and to employees' action signals to employees what type of beliefs and attitudes they are expected to hold and follow (Zohar and Tenne-Gazit 2008). In research on Israeli public schools, Oreg and Berson (2011) showed that the personal values of school principals influence their teachers' intentions to resist organizational change. Oreg and Berson reasoned that under conditions of change and high ambiguity, followers are especially likely to look up to their leaders as a source of certainty, and be more attentive to their guidance and actions. Hence, employees' reactions to an organizational change were expected to reflect their leaders' personal orientation toward change.

The Israeli public schools studied by Oreg and Berson were undergoing government initiated large-scale organizational restructuring. As expected, the findings indicated a negative relationship between the importance principals attributed to openness to change values and teachers' intentions to resist the change. In addition, as principals' values leaned toward conservation (vs. openness), their teachers were more likely to express resistance intentions.

Another way in which personal values of managers affect organizations is through leadership style, shaping the way managers present themselves to their followers and act as leaders. Leadership style is a particularly important consequence of personal values because it influences the behavior and choices of the followers (Sosik 2005; Sosik et al. 2009). In a multi-level research, Sosik (2005) demonstrated the role personal values play in the emergence of a charismatic leadership style among corporate managers, and its consequent effect on organizational outcomes. The research was conducted among supervisors, managers, and followers in technology-dependent industries, where the supervisors evaluated the performance of the managers, the managers reported their values and evaluated the behavior of their followers, and the followers evaluated the extent to which their managers exhibited a charismatic leadership style.

Sosik hypothesized and found that charismatic leadership was predicted by the importance managers attributed to self-enhancement, tradition and, to a lesser extent, self-transcendence values. Charismatic leadership, in turn, predicted a set of organizational outcomes, including their managerial performance and their followers' extra-effort and organizational citizenship behavior (OCB). A complex path analysis further revealed that most of these associations are significantly more positive among high-performing managers than among low-performing managers. Sosik reasoned that positive outcomes, such as high-managerial performance, reinforce managers' values priorities and their consequent behavior. This study thus reveals the complex organizational reality in which multiple levels are linked and serve as a dynamic system.

All together, these studies support the idea that organizations are strongly affected by the values of their managers. Managers use their authority to instill their values in the organizational culture and express their values through interactions with their followers. Consequently, managers' values guide organizational behavior at both the individual and organizational levels. The studies presented here show only some of the paths through which values of managers affect behavior in organizations. Future research could shed more light on the processes through which values at one level are diffused into other organizational levels. It could also investigate what happens when the values of managers conflict with the values of their subordinates.

Culture: The Role of the Broader Societal Context

Most of the studies reviewed in this chapter were conducted in Western countries (e.g., the USA, Western Europe, and Israel). Whereas all of them supported the notion that individual-level values guide behavior at work, rarely did they consider the role of culture and cultural differences. This raises the question whether the influence of values on behavior at work can be generalized to other world regions. This problem applies to the entire field of organizational behavior (OB) as most of the models and theories in the field were developed and tested on Western samples without specific regard for culture and cultural differences (Gelfand et al. 2007). The development of typologies of cultural values induced the incorporation of cultural differences in OB research as they provided a theoretical rationalization for these differences (Hofstede 1980; House et al. 2001; Schwartz 1999).

Cultural values are shared ideas of what is considered right, worthy, and desirable in a society (Williams 1970). Through ongoing enculturation processes, people acquire values, worldviews, and behaviors appropriate or necessary in a specific culture (e.g., Hofstede 1980; Markus and Kitayama 1991; Nisbett 2003; Schwartz 2009). Research has shown that whereas people from the same culture share similar social expectations and behavioral scripts, people from markedly different cultures hold distinct, sometimes opposing, expectations, and scripts. Thus, for example, research studying the influence of culture on negotiation strategy has found differences among Americans and Japanese negotiators (Brett 2000). Similarly, it was found that cultural values affect the choices and decisions taken by managers, such as the source of guidance they choose to follow (Smith et al. 2002), the type of stress they are likely to experience in their role, their perception of their organization, and their payment preferences (Sagiv and Schwartz 2000a). Through their influence on managers, cultural values are thus likely to form an indirect effect on organizational policies and strategies, and on the behavior of employees who are subordinate to the managers.

As cultural values underlie the functioning of the society as a whole, they are also expected to shape the goals and aspirations of organizations operating in the society (Hofstede 1991; Schwartz 1999). To gain and maintain legitimacy, organizations are required to act consistently with the cultural values prominent in the broader society. Therefore, organizations often rely on the cultural values of the society in developing their organizational culture (Sagiv et al. 2011a). Thus, for example, in organizations located in societies that emphasize autonomy and individualism (e.g., Western societies), the employees are viewed as a free agent with their own interests, aspirations, skills, and allegiances. In contrast, in organizations working within embedded collectivistic societies (e.g., East-Asian societies), the employees are viewed as an integral part of the organization and are expected to fully identify with the interests and aspirations of the organization and to strive toward the organizational goals (Arieli et al. 2015; Sagiv et al. 2011a). Clearly, the two types of organizations have different expectations from their employees and provide different sets of opportunities, thus encouraging different types of behavior. In sum, cultural values influence the behavior on multiple organizational levels.

Another cultural construct that is likely to affect behavior on multiple organizational levels is the tightness versus looseness dimension (Gelfand et al. 2011, see Roccas and Sagiv 2010). This dimension focuses on the intensity of norms rather than on cultural values. More specifically, it contrasts cultures in which social constraints are tighter and there are strong norms and low tolerance for deviant behavior, with cultures in which the social constraints are loose and there are weak norms and high tolerance for deviant behavior (Gelfand et al. 2006, 2011). In general, individuals are more likely to act on their values in loose rather than in tight cultures, as the strong norms in tight cultures lead to unified behavior, and self-expression is considered less appropriate. This trend is also likely to be reinforced by organizations.

Gelfand et al. (2006) view organizations as open systems influenced by the societal context. They thus expect organizations in tight societies to develop a work environment of high constraint, with norms and practices that limit the range of acceptable behavior and foster order, stability, and predictability. In contrast, they expect organizations in loose societies to develop a work environment with more latitude, with practices that allow for a wider range of acceptable behavior, and that facilitate exploration, openness, and risk-taking. These differences are likely to form distinct patterns of operation. For example, tight organizations would probably have greater cohesion and efficiency, but would be less adaptable to change. In contrast, loose organizations would probably have less order and cohesion, but would be more open to change, and express higher levels of creativity and innovation.

Summary and Conclusions

This chapter focused on individual-level values and showed how behavior at work is affected by the value priorities of individuals. In the first part of the chapter, we outline the type of behaviors that are likely to be elicited by each of the four higher-order values in Schwartz's theory. The discussion builds on past research to identify gaps requiring further investigation. The second part of the chapter discusses how values of managers influence not only their own behavior but also the behavior of other organizational levels, such as their subordinates. Finally, we discuss the cultural boundaries of this literature and call for incorporating cultural differences in research studying how personal values guide and shape organizational behavior. This chapter is only the first step in understanding the role values take in shaping behavior in work settings. Future research could delve into values on other organizational levels (e.g., organizational values, team values): first by investigating their unique influence on behavior and then by discussing the interplay between the multiple organizational levels.

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Chapter 7
Cultural Values and Relationship Development in Organizations

Elizabeth C. Ravlin and Patrick J. Flynn

Cultural values have been subject to a tsunami of research over the last 40 years in the context of the globalization of business (e.g., Hofstede 2001; Schwartz 1999). Individualism and collectivism have received the most attention (Oyserman et al. 2002), and findings indicate that these values impact everything from how people define themselves (self-construal) to what goals they set and how they prefer to relate to their employing organization. Interestingly, despite the endemic connection between individualism and collectivism and relationships between individuals within and across work organizations, these values have not been considered in depth with regard to the formation and maintenance of such relationships, particularly between individualist and collectivist individuals (Brewer and Chen 2007). Recently, relationship science, social networking research, and other related literatures have begun to highlight the importance of relationships in a wide variety of work contexts (Ferris et al. 2009; Liden et al. 2016). Beyond the ability to work effectively with other people from both individual and organizational standpoints, healthy social relationships are a fundamental part of social aggregate and individual adaptation (see, e.g., Goodwin 1995). However, culture is only beginning to take on a role in this research domain (Liden et al. 2016).

This chapter examines relationship formation and development in the context of individual cross-cultural interactions. These contexts include a variety of multinational enterprise (MNE) activities, such as expatriation (Black and Gregersen 1991), cross-national collaborations (Hinds et al. 2011), cross-cultural sales (Runyan et al. 2010), global virtual teams (Harvey et al. 2005), and other situations in which employees tend to span cultural boundaries. First, we present our model of relationship development with a focus on the role of uncertainty generated by new interpersonal interactions. We discuss how uncertainty is created and reduced, the roles played by the mediating concepts of normative agreement and relational

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embeddedness, and how relational social capital results. Second, we provide a phase model of relationship development that allows for the discussion of the processes that transpire as relationships commence and exchanges occur (e.g., Ferris et al. 2009). Third, we integrate research on individualism and collectivism to examine varying ways in which individuals define relationships and how the relationship development phases transpire. Our work suggests that each phase requires an understanding of how culturally different individuals perceive and act upon relationship development in order to predict the outcomes of relational attempts, including the emergence of valuable relational social capital. Lastly, we consider the research and practice implications of these processes for cross-cultural work in MNEs.

Uncertainty in Relationship Development

For the purposes of this chapter, we focus primarily on uncertainty in the relationship development process. Uncertainty reduction is a critical and universal motive (Hogg 2012, although the reduction process and motivation intensity vary across cultures, Hofstede 2001). Moreover, multicultural interactions (and any new relationship) are characterized by this quality, and relationship progression is comprised of components that are directly related to its reduction (Ferris et al. 2009, e.g., trust, creation of norms, and expectations). Entering new interactions, individuals experience and seek to reduce uncertainty in order to predict outcomes of the relationship and to assess and minimize risk. In our model, we capture the progressive reduction in uncertainty in relationship development through two mediating constructs at differing levels of analysis. At the dyad level, we examine normative agreement, or the mutual expectations held by the dyad (e.g., Meeker 1971). At the individual level, we explore the role of relational embeddedness, or the extent to which various social influences lead an individual to stay in a particular relationship (e.g., Uzzi 1997). How these mechanisms are affected by relationship progression and differing cultural perspectives is examined with the ultimate goal of better understanding the resulting relationship effectiveness, here considered to be the development of relational social capital (Nahapiet and Ghoshal 1998).

Because dyadic exchange is dynamic in nature (Ferris et al. 2009), we view dyadic progression as a means of reducing uncertainty, and in turn, of increasing relational social capital as the dyad develops. Therefore, in this chapter, we focus on mediating variables and processes that reduce uncertainty at each phase of the relationship. Uncertainty-identity theory argues that people are universally motivated to reduce feelings of uncertainty and that identifying with group attributes (incorporating group identity into their own social identity) fulfills this need (Hogg 2012). Dyads, as the smallest possible groups, can serve as referent social aggregates in which uncertainty reduction can occur. As individuals move through the different phases of dyadic evolution, their perceptions and behaviors change (consciously and/or unconsciously) to reduce uncertainty (Hogg 2012). In turn, these perceptions and behaviors strengthen and advance the dyadic exchange and grow the relational social capital of the exchange partners through a series of processes at both the dyadic and individual levels. At the dyadic level, the normative agreement of the dyad undergoes unique developmental shifts during the phases. At the individual level, the phases are characterized by changes in the relational embeddedness of each of the exchange partners.

In order to capture significant outcomes at both the dyadic and individual level of the relationship, we begin with initial interactions and social exchange. Our framework then subsequently examines how both exchange norms and relational embeddedness act to reduce uncertainty and enhance relational social capital from the exchange. We discuss these constructs and their relationships in more detail ahead and provide a depiction of our model in Fig. 7.1.

Social Exchange in Dyads

Social exchange theory (Blau 1964) provides foundational principles for our understanding of relationships, particularly in the work environment. Social exchange theory posits that individuals approach exchange partners because of the social or economic attractiveness of the potential exchange (Blau 1964). Here, we use the distinction between transactional and relational exchanges as we argue that these types of exchanges are relevant to individualism and collectivism (Thomas et al. 2016), have different outcomes for the exchange partners, and thus differentially affect relationship evolution. Relationships that are founded on *transactional exchange* focus on mutually beneficial economic outcomes for both exchange partners (economic attractiveness), but do not necessarily contain any consideration for the exchange itself or the partner outside of the economic outcomes (Ferris et al. 2009); often, such relationships are characterized by formal agreements such as contracts. In contrast, exchanges that are approached with a *relational interest* focus

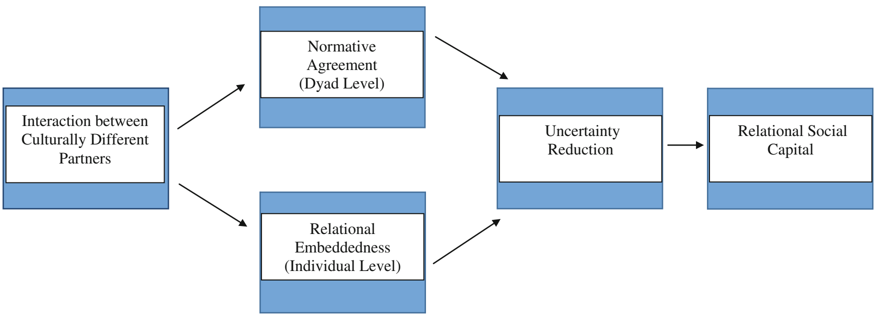

Fig. 7.1 Uncertainty and relationship development

on outcomes associated with the relationship (social attractiveness) and the manner in which the partners exchange (Cropanzano and Mitchell 2005), and are characterized by tacit understanding between exchange partners. Social exchange between strangers, of course, is regarded as risky because of an inability to predict the other's behavior. Without this ability to predict, social uncertainty is high, and individuals will be motivated to reduce it (Hogg 2012) or exit the relationship. As noted, two mediators capture the reduction process: normative agreement and relational embeddedness.

Mediating Processes and Uncertainty Reduction

Normative agreement. Normative agreement has been examined in prior research on interpersonal interactions and is similar to Ferris et al.'s (2009) notion of mutuality. Normative agreement in a relationship refers to a shared understanding of the exchange expectations in the relationship (Meeker 1971) that results in reduction in uncertainty (Hogg 2012). This agreement can be the product of a priori similarity and negotiation (Wilson et al. 2016), social identification (Hogg 2012), or status processes (Molm 2003), among others. Therefore, normative agreement is a dyad-level characteristic, specifying relational expectations, that is both discovered and created through a series of exchanges between individuals. Violation of these expectations is a source of uncertainty (and common in cross-cultural interactions; Burgoon and Hubbard 2005); therefore, the growth of normative agreement is essential to uncertainty reduction.

Relational embeddedness. The construct of embeddedness is rooted in the strategy and economics literatures and draws on social network theory to refer to the degree to which a broad array of social factors influences an actor's desire to remain in a given relationship (e.g., Granovetter 1985; Holtom et al. 2008; Uzzi 1997). In the management literature, embeddedness is often used to refer to intrafirm relationships (Uzzi 1997), relational embeddedness (Nahapiet and Ghoshal 1998), or job embeddedness at the individual level (Mitchell et al. 2001). Following Bermiss and Greenbaum (2015), we conceptualize relational embeddedness as an individual-level phenomenon, as did early research on this construct (Nahapiet and Ghoshal 1998). Although relational ties in an MNE context have firm- or other aggregate-level attributes, because our focus is on relationships between individuals, we consider these higher-level effects as outside our research scope. Arguably, organizational boundary spanners shape the relationships they build, and under some circumstances, have ownership over them (Bermiss and Greenbaum 2015; Sorenson and Rogan 2014). These boundary spanning roles include requirements for knowledge transfer and building of trust as their occupants seek to understand the exchange needs and interpersonal expectations of the other party, and such behaviors must be enacted by individuals (Bermiss and Greenbaum 2015). Given the social nature of embeddedness (Granovetter 1985), relational embeddedness is influenced by factors that are both internal and external to the dyadic exchange. Scholars have identified important dimensions of relational embeddedness to include trust, norms, obligations, and identification (Nahapiet and Ghoshal 1998).

Dyadic ties and uncertainty reduction. Dyadic exchanges represent one tie in each individual's social network, and as such, these ties create access to resources. Strengthening one tie is a trade-off that limits alternative ties, given that the strength of a tie is formed through a series of (ultimately constrained) exchanges and experiences over time (Granovetter 1973; Nahapiet and Ghoshal 1998). The level of embeddedness of each of the exchange partners is a result of their engagement with the exchange partner over time and reduces uncertainty through repeated interactions and increased knowledge of the social context surrounding the relationship. In addition, a focus on the ties individuals have in common is more likely to reduce uncertainty via both normative agreement and embeddedness, as ties are specified in terms of mutual expectations and behavior, and a multiplicity of ties reduces the likelihood that an individual will exit the network. Both relational and transactional features of the exchange influence normative agreement and exchange partners' long-term embeddedness, as discussed further ahead.

Relational Social Capital

Social capital has similar research roots to embeddedness, drawing from both economics and sociology in relying on rational behaviors and social influences (Coleman 1988). According to Coleman (1988), social capital arises through changes in relationships among people that facilitate action. Further, social capital originates in the structure of network ties, in the norms and values of such ties, and is influenced by the motivations of the partners (Kwon and Adler 2014). Therefore, it follows that as dyadic relationships change and grow over time, social capital will also experience dynamic changes (Nahapiet and Ghoshal 1998).

Most conceptualizations suggest that social capital requires the subordination of individual to collective goals (also referred to as associability), but that an individual is secondarily working toward individual goals (Harvey et al. 2005); thus, social capital benefits the partnership directly, and the partners indirectly (Leana and Van Buren 1999). Within a social network, trust is also an important component, based on the principle that if an individual acts predictably (with both reliability and integrity) the relationship will operate more effectively. Trust can generalize beyond the dyad level via adherence to norms even if other partners do not have personal knowledge of the actor, therefore enhancing the availability of social capital throughout a network. Ultimately, relationships serve as a means for developing relational social capital—assets created and leveraged through these relationships (Nahapiet and Ghoshal 1998), and the development of such capital serves as a process-oriented approach to understanding the value of cross-cultural (and other) relationships (Staber 2006).

In the next section, we describe phases that represent the processes through which relationships progress as exchanges are initiated and extended.

Relationship Development Phases

We utilize a basic framework of relationship evolution adapted from the literature [e.g., Ferris et al. 2009 (dyadic relationships); Dwyer et al. 1987 (buyer-seller relationships)]. This framework includes the following phases: (1) awareness of potential relationship; (2) initial interaction and exploration of relationship roles; (3) development of roles and expansion of relationship scope; and (4) engagement with the relationship over time. To better understand the nature of dyadic relationship development, we examine the characteristics of each phase of the relationship and how these characteristics influence exchange outcomes.

Prior to elaborating on these phases, we examine an assumption implicit in many previous models—that all relationships, based on the reciprocal nature of social exchange (Blau 1964), follow the same evolutionary pattern of reciprocal exchanges of goods or services throughout the relationship. We recognize, following Ballinger and Rockmann (2010), that relationships are distinct and dynamic, and can serve different means, while also understanding that dyadic exchanges have the capacity to evolve from a transactional approach to a relational approach and vice versa. We draw on many ideas rooted in the heart of social exchange theory, including the notion that relationships evolve and develop characteristics of affect and trust (Cropanzano and Mitchell 2005), while noting that the meaning of reciprocity may also take on different forms (Fiske 1991). Our view of this evolution is not deterministic or linear; that is, phases may be simultaneous, overlapping, omitted, and/or recursive.

Phase 1: Awareness of Potential Relationship

The first phase of relationship development is centered on the nature of the exchange and the attractiveness of the exchange partner. Potential exchange partners will become aware of their opportunity to exchange based on the attractiveness of the partner (Blau 1964). In a transactional exchange, this attractiveness is based on the mutually beneficial potential economic gains of the relationship (e.g., a buyer identifying a cost advantage through a supplier in a new geographic location). In a relational exchange, attractiveness is based on the mutually beneficial gains to the partners that stem from the potential relationship itself (e.g., friendship or social status; see also Cooper and Thatcher 2010 on self-concept influences on social motives). While the relationship ultimately develops at the dyadic level, it is important to note that this phase is very much rooted in the individual exchange partners' economic and/or social motives. Each of the partners must be attracted to the potential outcome(s) of the exchange for any further relationship development (Dwyer et al. 1987).

Inherent in this stage is the lack of a specific exchange, so the nature of the exchange (transactional or relational; norms of reciprocity) and many of the potential outcomes will be substantively uncertain as the focus is on information seeking. At the dyadic level, this stage is characterized by a lack of normative agreement. Without any specific exchange, individuals will not experience significant relational embeddedness in this phase. However, if relational exchange is desired, we expect that individuals may begin to project limited feelings of embeddedness in the potential dyad due to the nature of social outcomes (e.g., status) sought and their desire to identify with these outcomes. Applying uncertainty-identity theory to this phase (Hogg 2012), we posit that transactional motives will produce greater uncertainty than relational motives because each of the partners to a transactional exchange will consider the exchange based on a specific set of desired economic outcomes (upon which the dyad is not yet agreed), while partners in a relational exchange will consider the interaction based on identity-driven factors (Hogg 2012; desire to be a part of this specific relationship).

Phase 2: Initial Interaction and Exploration of Relationship Roles

Once one (or both) of the exchange partners determines that the exchange is worth pursuing, the partners must have an initial interaction. This interaction can take on a litany of shapes and forms and serves as an important signal for the viability of the exchange and the way that the partners will approach the exchange in the short run. The initial interaction sets the tone for the beginning of the relationship and will be the first step in establishing norms for the exchange. After the initial interaction, the exchange relationship has formally begun but is still unlikely to be clearly defined. This phase of the relationship is important to the development of affect (Barsade and Gibson 2007), trust (Cropanzano and Mitchell 2005), and exchange expectations. Affect refers to a broad range of feelings (both state and trait) that an individual experiences. Affective processes shape motivation in the relationship context (Barsade and Gibson 2007). Trust is the willingness to be vulnerable to another party (Mayer et al. 1995), and as the exchange relationship is built without previous interactions, trust has to be established between the partners in order for the exchange to be perceived as favorable (Cropanzano and Mitchell 2005).

These perceptions of affect and trust are important to the dyad because they influence judgments between the exchange partners about what each will contribute to the dyadic exchange and its potential success (Barsade and Gibson 2007; Cropanzano and Mitchell 2005; Nahapiet and Ghoshal 1998). After the initial exchange, uncertainty about the relationship starts to decrease (Hogg 2012) and individuals revise their beliefs about appropriate behavior (Bettenhausen and Murnighan 1985).

In transactional exchange, this is often characterized by formalized exchange contracts to define roles and expectations of reciprocity, quickly creating a level of agreement about norms (Meeker 1971), within a narrow scope of exchanges. As the partners make relationship-specific investments, such as contracts or agreements, their relational embeddedness (Bermiss and Greenbaum 2015) will increase dramatically through the second phase, and uncertainty will undergo a significant decrease.

In relational exchanges, individuals will rely on initial affect and trust to form judgments about their exchange partners. When affect is positive and trust is high, a greater level of uncertainty is removed in the relationship because individuals have generated enhanced perceptions of the relationship; however, uncertainty may be higher in relational than transactional exchanges in this stage because the exchange is still based on initial perceptions as opposed to a more formalized agreement, and the scope is still under investigation. If normative elements have been defined in a relationally motivated exchange, these agreements may fail to directly address broader relational concerns. Both normative agreement and relational embeddedness are higher for transactional, rather than relational, exchange in this phase of the relationship.

Phase 3: Development of Roles and Expansion of Relationship Scope

In this stage of the relationship, normative agreement is established through repeated interactions and dyadic experiences (Bettenhausen and Murnighan 1991), and relational embeddedness is driven by strengthening of the dyadic tie over these repeated interactions (Nahapiet and Ghoshal 1998). In transactional exchanges, this typically would mean a mutually agreed upon set of behaviors and outcome expectations for the exchange that serve as explicit exchange norms. In relational exchanges, implicit norms are more likely to dictate the nature and types of interactions of the partners, serve as interactive guides, and set relationship expectations. The behaviors and outcomes prescribed by the exchange norms may not be balanced between partners in relational exchanges, as a result of anchoring events (e.g., violations or altruistic behaviors) that produce strong affect and shift the balance of exchange; Ballinger and Rockmann 2010). Alternatively, they may not appear balanced in the short run as broader scope and timeframes are explored. However, in transactional exchanges, the behaviors and outcomes prescribed by the normative agreement will be more likely to be adhered to, as such anchoring events would be more likely to end the exchange or alter the nature of the exchange approach (Ballinger and Rockmann 2010). In either type of exchange, normative agreement is established and provides a more informed exchange structure than expectations from previous phases (Bettenhausen and Murnighan 1991).

The creation of normative agreement through repeated exchanges drives the development of the dyad (Bettenhausen and Murnighan 1991; Coleman 1988). Uncertainty continues to be reduced and the partners experience more relational identification (Hogg 2012) and greater relational embeddedness (Bermiss and Greenbaum 2015) through these enacted norms. Further reductions in uncertainty beyond the normative agreement of the dyad stem from the nature of the relationship itself. In transactional exchanges, relational embeddedness encounters an upper limit during this phase of the relationship. Because the exchange partners are concerned only with their own economic benefit from the exchange, the dyad does not develop beyond acceptance of exchange norms for specific economic outcomes, limiting additional role and scope expansion. Potentially, however, as individuals increasingly identify with the dyad to decrease uncertainty (Hogg 2012), the exchange can take on relational elements. In relational exchanges, the concern for and interest in the relationship does not limit embeddedness to such economic or tangible concerns, rather, the relationship is an outcome of interest, and can grow beyond mutual norms and expand in scope over time to include a greater variety of outcomes.

Phase 4: Engagement in the Relationship Over Time

Up to this point in the evolution of the dyadic exchange relationship, we have examined how normative agreement of the dyad and relational embeddedness of the individual partners unfold in different patterns based on the type of exchange. However, as mentioned, in Phase 3, there is an upper limit to the embeddedness that individuals experience and the relational social capital generated in a solely transactional approach to relationships. Once the uncertainty of the transactional exchange is removed, there is little room for either partner to seek anything more from the relationship and the dynamic development of the dyad diminishes and/or ceases.

Repeated interactions can result in efficient and hard to replicate dyadic exchanges as partners develop nuanced understandings of what each can provide and how the exchange functions best (Nahapiet and Ghoshal 1998), in terms of both transactional and relational resources. Recalling the definition of relational embeddedness as the nature of the relationship that develops subject to social forces over repeated dyadic exchanges (Bermiss and Greenbaum 2015), there may come a point where the dyad is no longer driven by the exchange transaction, but rather by the relationship itself. This final phase of the relationship framework is characterized by an engagement in the relationship over time and high levels of relational embeddedness for both partners. This engagement with the relationship necessarily departs from the distinction between the transactional and relational approaches, for the relationship must be driven by both partners' embeddedness in the relationship itself (not the specific exchange). It is important to note that this does not exclude relationships formed by transactional exchanges from reaching this phase of development, but rather that in order for transactional exchanges to reach the engagement phase and eliminate the embeddedness ceiling effect, the exchange partners must pattern their interactions using both transactional and relational elements. These more complex types of interactions provide for the continuation of the exchange of valued resources, but if exchange expectations are occasionally violated, the relationship additionally allows for forgiveness based on the value of the relational connection between the partners (Thompson and Ravlin in press).

Individualism and Collectivism and Relationship Development

In this section, we examine more specifically how individualism and collectivism influence relationship development through the four phases described above. First, we briefly review the constructs of individualism and collectivism as elements of individuals' cultural profiles. Second, we consider how individualists and collectivists may differ in the phases of relationship development. Third, we consider the case in which one member of the dyad is an individualist, and the other a collectivist. Because of their fundamental connections to uncertainty, we focus on two primary aspects of relationship formation (Reis et al. 2013): (1) perceptions of similarity and (2) issues in reciprocity. Table 7.1 provides a summary of the propositions presented in these sections.

Individualism and Collectivism as Individual-Level Cultural Values

The cultural dimensions of individualism and collectivism have been subject to a great deal of research, although these constructs still have some ambiguous qualities that provide opportunities for substantial further work in this area (e.g., Brewer and Chen 2007; Earley and Gibson 1998). For the current purposes, we consider these constructs as elements of individual cultural profiles: influenced by societal-level culture but held at the individual level (Thomas et al. 2003), as opposed to societal-level values (e.g., Hofstede 2001). These individual-level values are a source of within-nation or region variance in culture, and are more proximate influences on individual behavior and other responses. Therefore, they play important roles in relationship development by providing a priori normative expectations for how interactions should occur and progress. Individualism is defined as a set of value orientations emphasizing uniqueness, individual agency, and a separation from others, whereas collectivism beliefs focus on social

Table 7.1 Summary of outcomes of relationship phase

	Individualist partners	Collectivist partners	Cross-cultural dyad
1. Awareness of potential relationship			
Normative agreement	None	Low	Negative
Relational embeddedness	Low–none	Low	None
Type of exchange	None	None	None
2. Initial interaction and role exploration			
Normative agreement	Moderate, based on initial transactions	Moderate, based on relational exchange	Low normative agreement on transactions; no agreement on relational exchange
Relational embeddedness	Moderate, based on investments in transactions	Moderate, based on relational exchange	None–low based on investments in transactions
Type of exchange	Limited transactional	Moderate relational	Very limited transactional
Relational social capital	Low	Moderate	Low
3. Role and scope expansion			
Normative agreement	High, based primarily on transactions, some relational agreement	High, based first on relational agreement, secondary transactions	Moderate
Relational embeddedness	Moderate, based primarily on transactions	High	Moderate
Type of exchange	Primarily transactional; secondary relational	Primarily relational; secondary transactional	Primarily transactional moving toward relational
Relational social capital	Moderate	High	Moderate
4. Engagement over time			
Normative agreement	High; violations are tolerated within limited scope	High; violations are tolerated within broader scope	High, violations are tolerated within broad scope
Relational embeddedness	High embeddedness beyond exchange outcomes; connections to others in partner network	High embeddedness beyond exchange outcomes; connections to others in partner network	Very high
Type of exchange	Increased balanced transactional and relational exchange	Increased balanced relational and transactional exchange	Balanced transactional and relational exchange
Relational social capital	High	High	Very high

identification, group agency, and close relationships with others (e.g., Oyserman et al. 2002). These are self-concept conceptions, which provide a basis for exchanges with others (Markus and Kitayama 1991; Thomas et al. 2003).

Because individualists are focused on the outcomes of their behavior relative to individual goals, they tend to pursue relationships with market-pricing expectations (Fiske 1991). That is, they anticipate that relationships should be based on efficient exchanges of resources that support individual needs and rights, and based on standards defining appropriate contributions relative to resources received. This view of reciprocity emphasizes the role of the individual as an economic being and prioritizes individual achievement within work relationships. This value orientation is most consistent with the formation of transactional relationships, focusing on short-term, economic, or tangible exchanges in which the specific identity of the partner is irrelevant (Ferris et al. 2009).

Alternatively, collectivists regard their identity as grounded in a social aggregate and therefore attend more strongly to aggregate norms, obligations, and outcomes, as opposed to personal desires. They are more willing than individualists to make personal sacrifices for group welfare, and pursue or maintain relationships when the benefit may be unclear. Norms for reciprocity within the aggregate are drawn from communal sharing (Fiske 1991; Triandis 1995), in which members provide what they can and take what they need from the group. Therefore, interactions are focused on the longer term, breadth of scope, and maintenance of in-group harmony. Relational exchanges are consistent with collectivist values to the extent that the exchange is between members of the in-group. In comparison with individualists, collectivists tend to view out-group members with more hostility, and therefore, relational connections are an important component of building work relationships from their inception. Relational exchange emphasizes the value placed on the specific relationship (Cropanzano and Mitchell 2005), and non-tangible elements are exchanged, such as good will (Blau 1964), affection, and support (Wilson et al. 2010), all of which supports collectivist values.

Similarity between partners or potential partners has been the subject of substantial research in relationship science (e.g., Berscheid 1994) and cross-cultural management (e.g., Adair et al. 2009), noting that both perceived and actual similarity on a variety of dimensions enhances interpersonal attraction, relationship development, group cohesiveness, satisfaction, and other outcomes in many settings, and cultural distance (dissimilarity) tends to increase uncertainty about a partner (e.g., Ravlin et al. 2014). Although recent evidence also suggests that similarity may be a weaker predictor of relationship effectiveness than would be expected from looking at this literature as a whole (Montoya et al. 2008; Reis et al. 2013), it remains important to our understanding of how culturally different actors may engage with each other over time, particularly because interpretation of what similarity means may vary between individualists and collectivists, as discussed ahead. Considered from the standpoint of uncertainty-identity theory (Hogg 2012), similarity results in stronger ties and dissimilarity predicates desire for social distance. Relevant to our conceptualization of relationship development, this theory argues that motives for uncertainty reduction and belongingness indicate that individuals desire to be part of groups of similar people to create a sense of belonging or to fulfill affiliation needs, and that this sense of belonging acts to reduce social uncertainty (Hogg 2012). Additional interpretations of this similarity-attraction effect (Byrne et al. 1971) include the desire for self-validation (confirmation of beliefs, values, perceptions, and attitudes), common information processing, and the avoidance of conflict and miscommunication. All of these elements reduce uncertainty, reinforce identity, and create distance from those who are dissimilar.

However, what similarity means (or what conveys a perception of similarity) varies between individualists and collectivists. Based on individualistic perspectives, similarity is a function of partner observed characteristics, discovered shared beliefs, and socialization processes over time that bring perspectives into alignment. For the collectivist, however, attitudes and opinions are normative-contextual, in that they arise from the context, influenced by views of others in the context and the normative expectations the situation triggers (Reimer et al. 2014). The actor's existing network of relationships may be most important in determining what attitudes to express, not his/her personal beliefs. From a collectivist standpoint, similarity may therefore also be considered to focus on how many ties one has in common with the relationship target. That is, if a potential partner shares nodes in the same network, he/she may be expected to embrace similar understandings of the domain of interaction.

Based on these cultural distinctions, we next describe the development of work relationships through the individualist lens, followed by a collectivist conceptualization. In so doing, we examine differing cultural perspectives on reciprocity and similarity across the four phases of relationship development we identified, how these concepts relate to uncertainty reduction in the new relationship through normative agreement and relational embeddedness, and the resultant relational social capital.

Individualism Across Relationship Phases

Phase 1: Awareness of Potential Relationship. In this phase, contemplating initiating a new relationship triggers feelings of uncertainty, although the extent of this uncertainty may vary based on cultural profile (Hofstede 2001) of the actor and the perceived similarity of the target partner (Reis et al. 2013). For individualists, motivation to engage will largely be based on the initial perceptions of the opportunities likely within the potential exchange (Blau 1964), and additional information will be sought, possibly from third parties, regarding how a partnership could facilitate meeting personal goals (Markus and Kitayama 1991). Therefore, information seeking focuses on both information about similarity to reduce the uncertainty endemic in interacting with an unknown other, and about the human, financial, and social capital resources of the target relative to the purpose of the potential relationship. Because transactional exchanges are more strongly preferred by individualists (allowing for more autonomy in determining, engaging, and exiting the exchange), information about these resources, and likelihood of successful exchange, will be paramount in information seeking behavior, and other attributes of the potential partner will be relatively unimportant.

To the extent that similarity is perceived, the actor is more likely to proceed with contact (in Phase 2), given equal perceptions of resources of potential partners because choice of a similar partner helps to reduce uncertainty and suggests that greater trust is warranted through anticipated sharing of norms for exchange. For individualists, similarity means that that the target shares observed characteristics that signal similar values (Reimer et al. 2014). As noted above, individualists are likely to expect and prefer reciprocal exchanges based on what has been contributed by both parties. The timing of such interchanges is also expected to be more immediate, and to endure for a shorter time (Ravlin et al. 2012; Thomas et al. 2016). However, at this phase, no exchange (either transactional or relational) has yet occurred. Relational embeddedness has not been initiated because there is no relationship during this phase, and normative agreement as defined at the dyad level does not yet exist.

> *Proposition 1*. During Phase 1, individualist actors will seek out (a) information regarding the potential resources the target could bring to help meet actor goals, and (b) common social category memberships (similarity) to reduce uncertainty, assess potential for trust through common exchange norms and therefore the likelihood of enacting successful exchange.

> *Proposition 2*. For individualists, this information about potential resources and similarity of the target will influence the decision to move to the next phase of the relationship.

Phase 2: Initial Interaction and Exploration of Roles. Following the decision to interact with a potential partner to determine if role relationships can be developed, in Phase 2 individualists continue to gather information to reduce uncertainty about the utility of forming the connection. The relationship has begun, but initially is undefined, characterized by anticipations that may become, over the course of this phase, actual trust and exchange expectations. Similarity continues to influence this interaction. At this stage, individualists assess interactions with the partner for more cues about similarity and other attributes that indicate trust in the partner is warranted (Mayer et al. 1995), particularly looking for agreement about reciprocity norms. More information about how the target can help the actor reach his/her goals (resources available) is also sought. At this point, inter-connected behaviors create some common perceptions of the situation for both partners (Staber 2006), and initial roles begin to form. However, individualists may regard norms and roles about the conduct of the transaction as general orientations rather than strict rules for behavior.

During this phase of early interactions, individualists' emphasis on the self becomes apparent. Individualists tend to express their unique attitudes and autonomy in the relationship to convey an image of who they are and to help determine partner similarity (Reimer et al. 2014). Uncertainty should be reduced, as conceptions develop regarding how the target is likely to behave through responses to these expressions (Hogg 2012).

Proposition 3. In Phase 2, individualists seek to display their personal attitudes and beliefs to assess partner similarity. These behaviors create initial normative agreement regarding transactional elements of exchange, and reduce uncertainty.

Alternatively, given individualists' focus on the outcomes available within the relationship, in some cases they may move toward a contractual agreement very quickly. This strategy has the advantage of increasing relational embeddedness (Bermiss and Greenbaum 2015) and normative agreement about the tangible exchange and therefore reduces uncertainty for both parties. Similarity and trust between the partners with regard to transactional behavior and expectations is increased through the existence of a contract.

Proposition 4. Establishment of a contract during Phase 2 reduces uncertainty for individualists regarding the transactional components of the relationship, increases relational embeddedness, and creates a transactionally based area of normative agreement at the dyad level.

For individualists, the establishment of some successful transactional exchange at this phase, either through contractual arrangements or looser normative agreement, creates some minimal amount of relational social capital. Although the relationship is not well established, because individualists often rely on minimal acquaintanceships to leverage relationships, proceeding successfully to this stage leads to the initial development of relational social capital.

Proposition 5. In Phase 2, for individualists, successful, although limited, transactional exchange leads to initial development of relational social capital.

Phase 3: Development of Roles and Expansion of Relationship Scope. As the dyad transitions into this phase, research suggests that similarity is much less likely to play an influential role. Once face-to-face interactions begin, similarity has a weaker than expected effect in relationship effectiveness (defined as satisfaction with and stability of the relationship; Montoya et al. 2008), and early perceptions, as opposed to actual similarity, may have the most impact (Tidwell et al. 2013). In the domain of friendship research, Morry et al. (2013) observed that those who think of themselves in terms of close relationships are associated with higher friendship quality by all types of partners (i.e., it is self-construal, not similarity, that sustains the closeness of the relationship).

Based on these prior findings, we expect that for individualists the effects of similarity are primarily limited to phases 1 and 2 of the relationship development process. Similarity does not fully describe the social forces that embed an individual in a relationship or establish agreement about norms, and therefore is not a long-term predictor of interpersonal attraction in relationships. Social exchange models, of course, provide context for this finding, in that individuals tend to develop complementary (as opposed to similar) role relationships as they reach the role expansion stage. We argue that if the dyad progresses beyond phases 1 and 2, similarity diminishes in importance, and the nature and value of the exchange (based on its transactional and relational components) typically becomes the foundation of this process, predicting the further development and maintenance of ties. To the extent that exchanges continue to occur successfully (according to agreement), and expansion of the relationship continues, relational social capital will increase in value through Phase 3.

Proposition 6. As the Phase 3 expansion of the relationship and exploration of additional roles progress for individualists, relational social capital will increase.

Although social exchange theories primarily assume reciprocity between partners, Ballinger and Rockmann (2010) provide a perspective on how anchoring events may change the balance within a relationship using a punctuated equilibrium model. Anchoring events require an exchange in which one individual is dependent on another for goal accomplishment, expectations for the other's behavior are not met, and the other is considered to have controlled this event. These events are memorable because of their emotional intensity and their quality of being retriggered as interactions with the partner continue (Ballinger and Rockmann 2010) and therefore are more likely to appear in Phase 3 when emotional intensity increases with investment, and interactions appreciate in frequency. Affect is particularly important at this phase as it develops with regard to the specific partners and their specific interactions (Barsade and Gibson 2007), as opposed to being drawn from similar situations in the past.

To the extent that the events are negative (expectations are higher than outcomes), a new "set point" for the relationship is created that suggests that the relationship is not adequately fulfilling. After an initial spike, uncertainty is likely to be reduced for both partners as they recalibrate their expectations and form new perceptions of normative agreement, but possibly reducing their perceptions of relational embeddedness. Exchanges may, if not mandated by contractual or other enforcement, be reduced by the disadvantaged partner, both in terms of transactional and relational exchange, and the relationship may revert back to an earlier phase. Alternatively, the relationship may continue in its unbalanced state.

If an individualist encounters a violation of normative agreement of the transaction, he/she is most likely to experience dejection-related emotions, including anger toward and frustration with the other (Luomala et al. 2015), diminished relational embeddedness, a loss of normative agreement, and a general increase in uncertainty as to the instrumentality of the relationship. These emotions, however, are associated with a promotion focus (Luomala et al. 2015), which suggests that individualists should be more likely to attempt to mend the relationship at this stage if they perceive that satisfactory transactions could potentially continue in some form. Compensatory behavior (Burgoon and Hubbard 2005), which is enacted to pursue a relationship in the face of some type of withdrawal behavior on the part of a partner, is therefore likely to ensue.

Proposition 7. In Phase 3, individualists confronted with a violation of normative agreement experience promotion-oriented emotions, reduced relational embeddedness, and diminished normative agreement, and are likely to choose to attempt to mend the relationship.

Phase 4: Engagement in the Relationship over Time. Although we have thus far described the relationship development process in terms of macro-level phases that result in different levels of states having dyadic (emergent) properties (and have taken a somewhat "obstacle-oriented" view), the transitions that occur in micro-level interactions are perhaps a more useful lens for considering the ways that partners can adapt their behaviors and refine their relationships as they move to Phase 4. When individuals are attributed some agency over choices in behavior, and the focus is on how they enact their interpretations of what a relationship requires, attaining relationships with ongoing relational social capital is within reach (Staber 2006). Within a dyad, or larger network, behavior can create new social patterns that allow for the more fully engaged relationships (Phase 4) to develop.

Marks et al. (2001) provide a model of transitions between more stable, emergent states (e.g., normative agreement) by looking at interdependent acts as dynamic and cyclical. These actions are the processes by which communication occurs, conflict is resolved, or roles performed, and they occur within a larger context of situational cues. These behavioral cycles both create and change emergent states. Kwon and Adler's (2014) conceptualization of social capital also contributes to this thinking. Partners come to share some network contacts, when motives, norms, trust, and values within the relationship are consistent with the acquisition of enduring social capital, and the available resources within the partnership are valued by the dyad. We argue that these processes must originate, at the latest, in Phase 3 of the relationship's development.

As noted, in Phase 3, the opportunity to play multiple roles and to broaden the scope of the relationship becomes apparent. In investigating potential roles, both partners need to be able to reach beyond their most immediate needs for transactional and/or relational exchange (Ferris et al. 2009). To the extent that they can identify and assess all potential resources held within the dyad, consider alternative avenues for the relationship, and ultimately, evaluate how those resources and the individual partners who hold them might function in broader networks, the members of the dyad will be able to transition into Phase 4, engage more fully, and realize the benefits of the potential relational social capital available. The more information that is shared regarding resources, goals, and values, the more relational embeddedness should be achieved by the actors, and broader normative agreements, which allow for a more comprehensive set of exchanges, should be reached. As information sharing occurs repeatedly within micro-episodes with a view to seeking a broader understanding of the dyad and its context, the dyadic states will evolve (e.g., greater normative agreement, mutual trust, and ultimately shared, as opposed to individually held, relational social capital). However, if individualist tendencies to rely on transactional exchange continue to be enacted, Phase 4 and its accompanying more valuable relational social capital are less likely to be realized.

Proposition 8. Individualists who broaden relationship scope beyond transactional exchange to include relational components (exchanging with the welfare of the specific relationship and partner as a central focus) are more likely to transition to Phase 4 and increase the development of relational social capital.

Collectivism Across Relationship Phases

Phase 1: Awareness of Potential Relationship. During this phase, collectivists, like individualists, focus on seeking information from multiple sources that addresses the extent of similarity of the potential partner to both reduce the uncertainty endemic in interacting with an unknown other, and the uncertainty about the human, financial, and social capital resources of the target relative to the purpose of the potential relationship. Whereas these resources are of course important to them, research suggests that collectivists will be at least equally concerned about similarity. With preferences for relational exchanges in the work environment (Ravlin et al. 2012), similarity helps to reduce uncertainty, but is also a significant building block leading ultimately to relational exchange. Therefore, for collectivists, information about common social ties (Reimer et al. 2014; indicating that the target will be likely to express context-appropriate beliefs and demonstrate conformance to contextual norms) is extremely important in deciding whether to move to the next phase of relationship development. One path to identifying such potential partners is evaluating the extent to which social network nodes are shared, which also provides information about shared identity (Hogg 2012). Relational embeddedness is therefore relevant in this phase for collectivists, although it may be limited.

Proposition 9. During Phase 1, collectivists will seek out third party information regarding the potential resources the target could bring to the relationship and potential common network connections. The decision to move to the next phase of the relationship will be influenced both by perceptions of potential resources and number of connections in common (similarity).

Proposition 10. During Phase 1, collectivists who perceive a significant number of common connections will experience modest levels of relational embeddedness and uncertainty reduction, and will be likely to move to the next phase of relationship development.

Phase 2: Initial Interaction and Exploration of Roles. In this phase, collectivists seek more direct information on whether the target is connected to a common network and what perceptions, attitudes, and beliefs the other applies to the specific context, with the goal of determining the level of trust that should be invested in the relationship. They express relational values and demonstrate what they regard as context-normative behavior. Further, as the relationship is explored, collectivists expect tighter adherence to developing relational norms (e.g., Thomas et al. 2003), indicating the development of normative agreement and consequent uncertainty reduction.

Proposition 11. In Phase 2, collectivists are likely to experience reduction in uncertainty and increased trust through increasing normative agreement and relational embeddedness, and initial relational exchange will be established and consequent modest levels of relational social capital, although agreements regarding specific transactional exchanges are likely to be absent.

Phase 3: Development of Roles and Expansion of Relationship Scope. During Phase 3, once relational exchange has been initiated, collectivists turn attention more directly to transactional elements of the relationship. Because the relational exchange is now established with significant levels of relational embeddedness and normative agreement, the expansion of the scope of the relationship and exploration of additional roles is anticipated to progress smoothly. However, if the partner fails to live up to expectations, anchoring events (Ballinger and Rockmann 2010) can occur during this phase that may strain or terminate this relationship for collectivist partners. Emotions triggered during a negative event are more likely to be prevention oriented for collectivists (Luomala et al. 2015). A collectivist will lose face if normative agreement fails, as progress toward a harmonious relationship will have been jeopardized. This event leads to agitation-related emotions, including self-blame and shame, decreased feelings of relational embeddedness, and increased uncertainty. These prevention-oriented emotions indicate a higher likelihood of exit on the part of collectivists who experience them.

> *Proposition 12*. In Phase 3, when normative agreement is violated, collectivists are more likely to experience prevention-oriented emotions, reduced relational embeddedness, and increased uncertainty, and are more likely to choose to exit the relationship.

Absent major violations of normative agreement, relational social capital should increase substantially for collectivists during this phase as the growing transactional component of the relationship requires exchange of valued resources as well as relational agreement. The value of the relationship grows at this phase as scope expands and remaining uncertainty associated with the partnership continues to diminish.

> *Proposition 13*. As the Phase 3 expansion of the relationship and exploration of additional roles progress for collectivist partners, relational social capital will increase.

Phase 4: Engaging in the Relationship over Time. For collectivists, this phase is a product of a carefully built relational exchange accompanied in Phase 3 by transactional exchanges. From the Marks et al. (2001) transitions perspective, as collectivists prefer relational exchanges, they tend to engage in repeated cycles of interaction that support the continuance of a relationship that is broad in scope, long-lasting, and fluid, changing with the changing transactional needs of the partners. Because of this responsiveness to the target, the relationship tends to change when needed, but be resilient in the face of temporary challenges, as immediate exchange is not expected nor desired. This process provides a reliable and enduring source of valued relational social capital. As long as the dyad continues to exchange valued resources and supports a broad ongoing relational component, the partners will engage in the relationship over time.

> *Proposition 14*. For collectivist partners, transition to Phase 4 will be characterized by on-going interaction cycles in which flexibility in the relationship is built and the relationship maintained without increases in uncertainty, resulting in high levels of relational social capital.

Cross-Cultural Relationships Across the Phases

Our prior analysis has examined the processes associated with relationship development for both individualists and collectivists; at this point, we turn our focus to dyads composed of an individualist and a collectivist member (referred to hereafter as a cross-cultural dyad). Based on the differing individual cultural value profiles of these potential partners, we anticipate increased uncertainty and more potential hiccups throughout the development phases (e.g., Ravlin et al. 2014), but also argue that cross-cultural relationships that successfully reach Phase 4 generate higher levels of relational social capital than mono-cultural relationships.

Phase 1: Awareness of Potential Relationship

As partners look for or become aware of potential relationships in Phase 1, as noted above, they are subject to cultural influences in their quest for information. Both individualists and collectivists will be subject to high levels of social uncertainty during this phase, in part based on assumptions of difference and lack of common connections. Because of this increase in uncertainty, more preliminary information seeking should occur. Individualists will seek out those who share their views (and may be more likely to assume shared views in others with similar demographic characteristics: Brewer and Chen 2007), whereas collectivists enquire to see what others in their network believe is normative, and whether they know the relationship target, before expressing an opinion. In relationship formation, both partners will seek to determine what the other believes, but for different purposes—the individualist to assess similarity with their unique beliefs, and the collectivist to determine what attitudes are appropriate in this context.

Ultimately, in more homogeneous dyads, both processes would result in uncertainty reduction; however, in cross-cultural dyads, the result may be an initial increase in uncertainty and an increased emphasis on information about resources the potential partner has to exchange as the central influence on whether Phase 2 is initiated. Information on the potential reliability of the partner is, on average, harder to acquire (based on reduced perceived similarity and lack of overlapping social networks). This increased difficulty is likely to prolong Phase 1, and ultimately, reduce the likelihood of a decision to move on to Phase 2.

Proposition 15. In Phase 1, potential cross-cultural partners will experience higher levels of uncertainty, based on assumptions of difference and lack of information about the other, in comparison with homogeneous dyads.

Proposition 16. In Phase 1, potential cross-cultural partners will seek more preliminary information about the target prior, and encounter more difficulties in so doing, to making a decision whether to pursue the relationship, leading to an extended Phase 1 and more likelihood of withdrawal at this stage in comparison with homogeneous dyads.

Proposition 17. In Phase 1, potential cross-cultural partners will more heavily emphasize transactional resource information in the decision to move forward, in comparison with homogeneous collectivist dyads, as information about anticipated normative agreement and relational embeddedness is negative or lacking.

Phase 2: Initial Interaction and Exploration of Roles. In Phase 2, as initial exchanges occur and roles are developed, dyad-level expectations for behavior are all the more difficult to create in that not only are the partners unfamiliar or in disagreement with the general patterns of interaction each expects, but also have different standards about how to apply such norms of interaction (Koerner 2006). Information seeking continues through direct interactions with the potential partner. However, individualists express their beliefs to assess similarity with the other, whereas collectivists express context-normative beliefs (Reimer et al. 2014) and make efforts to understand the perspective of the other (Wu and Keysar 2007). Individualists appear selfish and self-centered in expressing unique beliefs to the other; collectivists may appear conformist. Therefore, in these initial interactions, perceptions between the partners may not be particularly positive, as for both, the other's responses may appear dissimilar and anti-normative. Further, as the relationship is explored, collectivists expect development of normative agreement, whereas individualists push ahead with transactional exchange. These differences will delay the development of initial roles and the exchanges that will ultimately build relational social capital.

Proposition 18. In Phase 2, cross-cultural partners directly seek further information about the relationship, but in different ways. These differing processes lead to perceptions of difference and less normative agreement, relational embeddedness, and uncertainty reduction than in homogeneous dyads.

As opposed to individualist partners, collectivists move from the transactional focus that may have influenced their decision to move ahead with the relationship to a relational focus they prefer (Ravlin et al. 2012), and regard as necessary for further relationship development. Individualists focus on specifying the resource exchange and make initial investments to that end. At this phase, therefore, collectivists attend to the still undeveloped relational aspect of normative agreement and regard embeddedness as fairly minimal (unless a contract is now in place). Expressions of relational beliefs, expectations of both compliance with any emerging norms and increases in similarity regarding beliefs, and perceptions about the relationship are likely to be unmet by an individualist partner, leading to diminished potential for trust on the part of collectivists.

Individualists focus on the transactions that are taking place, evaluate normative agreement based on these exchanges, and are somewhat more embedded as they see promising outcomes resulting. To the collectivist, a push for an early agreement about transactions, or even a contract, may be seen as a reason to lack trust in a broader domain, as the relationship has not been sufficiently built. From this perspective, the relationship may be viewed as less likely to evolve toward a relational exchange and broader scope going forward. Because dyad-level normative agreement is not taking shape, and relational embeddedness is low for the collectivist partner and modest for the individualist partner, uncertainty is likely to still remain high. Relational social capital is still low in that its value, and the ability to draw on the relationship as a resource beyond immediate exchange is unclear.

Proposition 19. In Phase 2, individualist members pursue transactional agreements, whereas collectivists pursue relational agreements, leading to lower levels of normative agreement than in homogeneous dyads, and minimal relational social capital based on initial transactions.

Phase 3: Development of Roles and Expansion of Relationship Scope. In this phase, cross-cultural dyads experience higher levels of remaining uncertainty than members of homogeneous dyads. Beyond differing scripts for interaction processes that continue to slow relationship development, attributions for salient events are likely to be made to the partner. Because he/she is culturally different, he/she is a target of attention, and considered to be acting in a counter-normative way (Mullen et al. 1992). Affective perceptions, understandings, and responses, while exhibiting some universalities, also differ across cultures (Shao et al. 2015), creating more potential issues between partners. Consistent with Ballinger and Rockmann's (2010) conceptualization of unbalanced reciprocity, these conditions are facilitative of anchoring events. As noted earlier, when confronted with unexpected negative outcomes, individualists have a greater tendency to try to mend the relationship, while collectivists tend to withdraw. At this point, the survival of the relationship may rest on the value of transactional exchange to both parties, and the extent to which few alternative partners are available with the desired resources to exchange, both of which enhance the relational embeddedness of the partners. If the transaction is of sufficient value, individualists, to a greater extent, and collectivists, to a lesser extent, may make increased efforts to explore the relationship further for ways to make it work, using perspective taking and considering multiple domains over which conflicts can be better resolved. Through these processes, the relationship may gain better traction, as more information is exchanged and possibilities explored.

Proposition 20. Cross-cultural relationships are more likely to experience anchoring events than homogeneous dyads, triggering episodes of unbalanced reciprocity and decreasing normative agreement, relational embeddedness, and uncertainty reduction.

Proposition 21. Value of the transactional exchange will moderate the relationship between increased uncertainty and role development and relationship expansion, such that a high level of exchange will motivate greater efforts of cross-cultural partners, particularly individualist partners, to explore relational exchanges to increase normative agreement, relational embeddedness, and uncertainty reduction, ultimately leading to higher levels of relational social capital.

Phase 4: Engagement in the Relationship over Time. Successfully dealing with the challenges of Phase 3 leads to this phase. Returning to the Marks et al. (2001) approach to transitions, we explore the enhanced value of cross-cultural relationships that provides benefits justifying their costs. Because the differences between individualist and collectivist partners are vast when considering interpersonal behavior, repeated exchanges over time reinforce the positive outcomes of Phase 3 and provide opportunities for continued dyad development in the form of new learning on multiple dimensions, ranging from comprehension of a broad range of culturally different behaviors to further knowledge of substantive business issues. Although areas of similarity and fit will doubtless be revealed over time, areas of new knowledge can also be built by the dyad. We anticipate that collectivists are more likely, at this stage, to feel more strongly relationally embedded, although the dual nature of the exchange at this point also indicates commitment by individualists as well. The flexibility this continuing engagement provides, changing over time and interactions in response to partner needs, should allow both parties to successfully exchange transactional and relational resources (Thompson and Ravlin in press). Furthermore, dyad members should build relational social capital. Because it draws on both parties' social networks and knowledge (less redundant and overlapping than in homogeneous dyads), this social capital is more valuable than that typically available in homogeneous dyads.

> *Proposition 22*. In Phase 4, cross-cultural relationships are more likely to maintain normative agreement and relational embeddedness, develop flexibility in response to member needs, and generate more valuable relational social capital in comparison to homogeneous dyads.

Discussion

Cultures emerge around differing, but limited solutions to problems that most, if not all, societies face (Kluckhohn and Strodtbeck 1961; Thomas et al. 2003). These solutions tend to be quite effective in their cultural context, but may fail to function when these contexts meet. Developing relationships between unknown others is a social problem of this type. Our analysis of the solutions provided by individualist and collectivist cultures shows how they tend to work well for homogeneous dyads, and the difficulties, and substantial value, encountered in heterogeneous dyads. This chapter has examined the formation of relationships between culturally homogeneous partners, and individualist and collectivist partners. We offered a number of propositions, based in the research literature, and discussed how these relationships might proceed. Characterized by substantial uncertainty beyond that typically encountered in homogeneous relationships, cross-cultural relationships present obstacles to effective global business, but also provide the opportunity to create more valuable relational social capital. Developed from an uncertainty reduction perspective (Hogg 2012), our model of relationship development provides a number of important conclusions.

First, although we might anticipate that uncertainty generated by developing interactions might be progressively reduced over phases in relationship development, we argue that this is not necessarily the case. For cross-cultural dyads, uncertainty may rebound for a collectivist because of an individualist partner's lack of focus on relational issues through the third phase of development. For an individualist, uncertainty may rebound when confronted by the collectivist partner's insistence on addressing relational issues (e.g., Thomas et al. 2016). The reduction in uncertainty depends on both dyad- and individual-level phenomena: normative agreement and relational embeddedness, respectively, and reaching such agreement or perceiving relational embeddedness with a culturally different other are both significant obstacles, even as the relationship may progress based on the value of more tangible transactions.

Second, similarity between partners, although primarily influential in reducing uncertainty during the first and second phases of a cross-cultural relationship, is conceptualized and processed differentially by individualist and collectivist actors (Reimer et al. 2014). For individualists, the goal is to find common ground, that is, "true beliefs" that are shared by members of the dyad and are likely to be a function of some common group membership. For collectivists, core beliefs and self-presentation are much more normative-contextual. Rather than work toward internal consistency in all situations and role relationships, the collectivist actor assesses what "most people" in his/her network would think was normative in context. Beyond this assessment, the collectivist would expect some degree of flexibility on the part of the individualist, not an insistence on personal consistency. These different processes exemplify how similarity works, to some extent at cross-purposes, in early stages of relationship formation in cross-cultural dyads.

Third, the culturally linked pursuit of different types of exchanges (e.g., Ravlin et al. 2012) has implications beyond uncertainty creation. For individualists, the biggest influence on the initiation of a work relationship is transactional exchanges, whereas a collectivist, as noted earlier, prefers some degree of relational exchange in order to determine how much to invest. Ultimately, the development of what we regard as the most valuable relational social capital requires the enactment of transactional and relational exchanges; however, individualists and collectivists are unlikely to be ready for these exchanges at the same point in relationship development.

Fourth, emotional reactions to unmet expectations or failure of attempted exchanges differ across cultures, rendering individualists more likely to attempt to repair transactional exchange, and collectivists more likely to withdraw their resources from the relationship (Luomala et al. 2015). Given some differences in emotional perception and understanding (Shao et al. 2015), important unmet expectations may create unbalanced relationships (Ballinger and Rockmann 2010) with different partner behavioral scripts for resolution.

Fifth, use of a recurring phase model (Marks et al. 2001) suggests how a dyad can move from one broader relationship phase to another, via repeated interdependent behaviors which can ultimately change emergent properties such as normative agreement. The fluidity suggested by this micro-level process model helped us frame the ultimate phase of relationship engagement over time, as to survive and to continue to generate valuable relational social capital, the relationship must have mechanisms through which the interactants can respond to changes in context and individual requirements. Actors adjust and adapt their behaviors to allow for potential interdependencies and changes in behavioral expectations through these repeated interactions. In turn, over time, behavioral changes can influence the beliefs, obligations, and self-representations associated with a particular relationship (e.g., Staber 2006). Here, we considered the nature of stasis and change over the course of relationship phases to elaborate on the transitions that occur once the relationship has reached the engagement level.

Contributions

This chapter makes a number of contributions to the international management, organizational behavior, and relationship science literatures. We started with a model of the influence of uncertainty, and the motive to reduce it, as a central driver of relationship behavior. Because relationships are most frequently viewed as based on agreed upon exchange norms (e.g., social exchange theory; Blau 1964), we explored the impact of a lack of agreement at the start of a relationship through the lens of uncertainty-identity theory (Hogg 2012). Choosing this approach demonstrates how different cultural norms can address this situation successfully, but also how obstacles arise when these cultural norms are not shared. By examining how individualists work through relationship phases with other individualists, and collectivists with collectivists, we provide a temporal view of how these cultural values influence relationships. Further, we provide that same view for cross-cultural dyads, exploring how the lack of shared cognition and behavioral patterns plays out over the phases of relationship development.

Additionally, we incorporated newer research on the role of similarity between partners as reducing uncertainty that indicates that not only is similarity evaluated in different ways in different cultures (Reimer et al. 2014), but that it probably is less influential after the first stages of interaction (e.g., Reis et al. 2013). Current thinking about exchange reciprocity (Ballinger and Rockmann 2010) also is incorporated here as a way of thinking about not only how relationships may change or be terminated, but also how culturally different partners may respond to a violation with different emotional and behavioral reactions (Luomala et al. 2015).

Lastly, we provide a more in-depth look at how these relationship phases, enacted by a cross-cultural dyad, can result in particularly valuable relational social capital. Because knowledge and connections are less likely to overlap, engaged cross-cultural relationships can provide greater value in terms of leveraging of connections and acquiring knowledge that will help build future relationships.

Limitations

Of course, in addition to these contributions, readers should consider the limitations of this chapter as well. The empirical literature does not provide direct evidence on all the inferences made here, and empirical research will be required to continue advancing our knowledge of how cultural values influence relationship development. We also limited this work to two values: individualism and collectivism, and constrained the processes that mediate uncertainty reduction to one dyadic element and one individual element. We were not able to provide an in-depth focus on each phase, instead focusing on those processes and variables that were expected to have the most impact. Lastly, boundary conditions were assumptions that the parties have something of value to exchange, and that they act essentially with good will as opposed to being opportunistic. These limitations could all be addressed in future research.

Future Research

In addition to researching the limitations noted, we note four additional topics that would be particularly useful in extending this work. First, our focus here was on uncertainty, in part because many other human motivations relate back to the need to predict outcomes of behavior. However, scholars have argued that the cultural dimensions of individualism and collectivism are also associated with variance in relationship motives (Cooper and Thatcher 2010). Individualists exhibit strong self-enhancement and self-consistency motives, and differing collectivist orientations suggest strong uncertainty reduction, self-expansion, and personalized and depersonalized belongingness motives (Cooper and Thatcher 2010). Clearly, these motivational distinctions come with important differences in understanding relationship development and maintenance.

In addition, we need to better understand what reference collective is at issue in relationship development. It is easy to consider the most important referent being the potential partner, but this may not always be the case. As noted by Marcus and Le (2013) in their meta-analysis of societal-level collectivism, the relationship between this level of collectivism and cooperation was actually negative, which they interpreted as suggesting that collectivism at the societal level may not relate to workplace relationships (e.g., work peers might not be part of the in-group if that group is defined by a kinship network). Disentangling this collective reference will be particularly important going forward in further developing our understanding of cross-cultural relationships (see also Brewer and Gardner 1996).

Lastly, as this stream of research progresses, universal cultural abilities, such as cultural intelligence (the cultural knowledge and skills of an individual plus the ability to reflect on one's knowledge and skills and to consider this within the context of the partner's knowledge and skills: Thomas et al. 2008), will need to be integrated into work on relationship development. Presumably, the extent to which one or both partners has higher levels of cultural intelligence should enhance the probability that the relationship will develop effectively and relational social capital will result.

Practice Implications

Although we believe this research is in a fairly early stage, managers may be guided by a few basic principles. First, it is clear that any contextual actions that can mitigate uncertainty for cross-cultural dyad development would be helpful. Protocols for engaging with cultural different others in initiating and building relationships should be provided and should include elements such as cultural knowledge regarding types of exchanges and responses to violations of expectations, time frames for anticipating the issues outlined here, and clear communication of why overcoming early difficulties is cost-effective in terms of the consequent relational social capital. Additional human resource practices can emphasize selection and/or training relative to expertise on these issues. Further, in guiding iterative cycles of interaction, a practical approach may be a modified strengths/weaknesses/opportunities/threats (SWOT) analysis. Characteristics such as cultural and emotional intelligence, which emphasize the requirement that actors be able to reflect on their and their partners' resources and weaknesses, provide avenues for adapting behavior in complementary ways, for considering multiple goals, and otherwise taking opportunities from the relationship. An interesting, often over-looked threat that could be exposed using this reflective SWOT heuristic is the frequently made assumption that partners who appear quite dissimilar hold significantly different beliefs and norms regarding behavior. In practice, if cross-cultural partnerships are subject to this type of SWOT analysis, relational social capital may be able to be more rapidly grown and potentially extended to larger networks.

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Part III
Relating Values and Behavior

Chapter 8
Value Instantiations: The Missing Link Between Values and Behavior?

Paul H.P. Hanel, Katia C. Vione, Ulrike Hahn and Gregory R. Maio

As described in this volume, abundant research has taught us a great deal about links between values and behavior. At the same time, however, one important puzzle remains unaddressed: When people arrive at a situation and have to decide how to act, how do they decide which values should guide their actions? In this chapter, we propose a model to explain this process.

The model we propose introduces value instantiations and suggests that they play a critical role in explaining the effects of values on behavior. That is, we propose that previous experiences and the context influence which behaviors are considered as prominent instantiations (examples) of a value, thereby determining which values guide action in the context. For example, the security of one's own family is considered to be important across the world (Schwartz and Bardi 2001). Most of us are eager to protect close relatives and to provide them with a good life. But what does protecting close relatives mean, which relatives are close, in which way are they close (emotionally, physically), and how exactly are close relatives to be supported and protected?

The specific ways in which we imagine family security may vary across cultures. In countries such as Brazil, family security pertaining to children may have a large safety component because thousands of people are shot dead every year. In countries such as the UK, family security pertaining to children may have a large social component, because of large differences in the cost and quality of schools.

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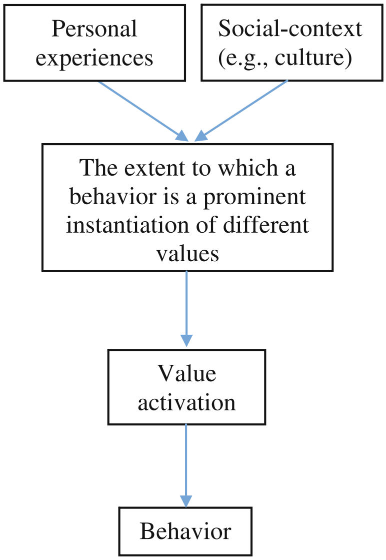

Fig. 8.1 Role of value instantiations in the process linking values and behavior

Although empirical evidence indicates that *family security* is considered to be an important value across countries (Schwartz and Bardi 2001), different actions promote family security in each location. This example helps to illustrate how our mental representations of values matter. Even if the same level of importance is attributed to a value, different people may produce different concrete instantiations for a specific value.

Our model of this process is depicted in Fig. 8.1. Personal experiences and social context influence the extent a behavior is seen as an instantiation of a value or set of values, which in turn determines the values that are activated in the context, and their relative importance then influences behavior. This pathway occurs alongside other independent influences not shown here, such as influences of social norms and control over behavior performance.

In this chapter, we first discuss general theory and evidence regarding the role of instantiation in conceptual categories, including evidence from cognitive and then social psychology. While cognitive and social psychology has shown some awareness of the importance of instantiations, their role has been underappreciated in the context of understanding values and value-guided behavior. This chapter will therefore turn to describing how and why consideration of value instantiations helps to understand past evidence and the role of value instantiations in bridging the gap between values and behavior. Finally, we describe a method for directly examining value instantiations and illustrate its utility by comparing value instantiations between two countries.

The Cognitive Psychology of Instantiations

Before explaining further why we consider instantiations of human values to be important, it is necessary to define instantiations and understand their role for general categories. Instantiating a rule or concept is its application to a concrete exemplar. “Instantiation” thus refers to a particular realization or instance of an abstraction or to the process of producing such an instance. Instantiation is consequently based on the relationship between general and specific, such as different levels in a conceptual hierarchy. Thus, *football* is an instantiation of the category *sport*, *red* is an instantiation of *color*, and *sunscreen* is an instantiation of the *things to take to the beach*.

It is a fundamental insight within cognitive psychology that levels in conceptual hierarchies such as “animal”-“dog”-“Doberman” are not psychologically equivalent (see, e.g., Rosch et al. 1976a). Specifically, the intermediate level (‘dog’) seems privileged in many cognitive contexts (such as concept acquisition or the likelihood or speed of naming), and empirical research has sought to determine exactly why that is (e.g., Rogers and Patterson 2007). At the same time, members of a category within a level are generally not equivalent. Instead, they vary in typicality, that is, the extent to which they are a good example (e.g., Rosch 1973; Rosch et al. 1976b). For instance, a robin might be considered to be a good (typical) example for the category bird, but a penguin may not.

All instances of a category within a level can be placed on a continuum of category representativeness named graded structure (Barsalou 1985). It starts with the most representative or most typical member and progresses to less typical members, and category boundaries (the boundary between members and non-members) are typically “fuzzy” (e.g., McCloskey and Glucksberg 1978). Fuzzy borderlines are prevalent in natural language categories (“cup,” “democracy,” etc.) and cognitive concepts such as human values. In general, the more fuzzy the borderline, the more instantiations are possible.

This “graded structure” of natural language categories appears to be a critical and universal property of categories and the process of categorization. Graded structure can predict performance on acquisition, exemplar production, and category verification (Barsalou 1985). That is, the location of the exemplar on the graded structure continuum can predict the ease with which it is learnt, produced, or verified as a member of the category. The most typical members tend to facilitate these processes (e.g., see Rosch 1973).

The most important determinants of graded structure are central tendency, ideals, and familiarity (Barsalou 1985, 1987). Central tendency refers to any kind of information based on average, median, or modal values of category instances. In contrast, ideals simply reflect characteristics that exemplars should have and therefore do not depend on actual existing exemplars (the “ideal democracy” might, for example, not actually exist). Finally, familiarity depends on how often a specific instance can be found across contexts; thus, familiarity is related to the frequency and intensity of how the exemplars are experienced or observed.

Graded structure has a broad influence on the acquisition of categories. Rosch (1973) carried out two studies with a sample of Dani participants in New Guinea, because their language does not have terms for basic colors. Thus, participants were completely new to the categories to be learned. Fictitious names, based on words in Dani language, were assigned to different colors and shapes. Rosch demonstrated that the names for natural prototypes of colors and shapes are learned faster than peripheral or "distorted" exemplars. For instance, the presumed natural prototype for color was represented by eight focal colors, and the remaining set of colors had a roughly longer or shorter wavelength in hue. The names of the natural prototypes (focal colors) were learned to criterion with fewer errors than the non-focal colors. Rosch also found that these prototypes may be identified by individuals as the defining, typical instances of a concept, enabling them to serve as cognitive reference points (Rosch 1975).

Subsequent evidence found that category graded structure can change depending on the specific context (Roth and Shoben 1983). For example, if the category animal is processed in the context of riding, horse and mule are more typical than cow and goat. However, if the context shifts to milking, then cow and goat are more typical. So there is a strong effect of context in instantiation.

Typicality effects are found even with concepts that have strict definitions, such as "odd number" or "even number" (Armstrong et al. 1983), suggesting they are pervasive in the human conceptual system. Furthermore, research suggests that they affect both concrete and abstract concepts. Concerning the latter, Hampton (1981) gave participants a list of eight abstract concepts (e.g., "a work of art, "a fair decision") and either asked them to list attributes of the concepts or to give examples of the concept. For instance, participants described "a work of art" as being "visual," "man-made," "pleasing," while using examples such as the "Mona Lisa," "A red painting," or "Covent Garden market." Hampton then had judges code the extent to which each example was a good instance of the concept (i.e., from "good examples," "atypical," "related non-example," to "unrelated non-example"). A subsequent group of participants then received a subset of examples that varied in their fit to the concept (equally from "good" to "unrelated"), and they were asked to rate the extent to which each example possessed one of 12–16 of the features that had been previously identified as being potential attributes of the concept. Results indicated that the better examples had a higher number of the attributes of the concept, particularly for five of the abstract concepts (work of art, science, crime, a kind of work, and a just decision), though the degree of variation in typicality varied.

Categorization in Social Attitudes and Behavior

There is evidence for the importance of the role of graded structure in social attitudes and behavior. For instance, in a study conducted by Lord et al. (1984), they observed that participants with favorable attitudes toward a university's social group were willing to interact with a prototypical target person to a greater extent than with a target person presenting only half of the attributes considered typical for members of that group. Participants in this research completed measures of their attitudes toward members of two eating clubs (of which the participants were not members themselves) and evaluated which attributes they considered typical for the members, and how much they liked them or were willing to interact with them. Approximately 3 months later, without mentioning the first part of the study, participants were asked to choose one student to work with on a project. They received descriptions of two students; each was identified as a member of one of the two eating clubs, with one member described using traits that were 100% typical according to the participant's own prior descriptions, and the other 50% typical. The authors observed greater consistency between attitudes and behavior when participants were confronted with a target person whose attributes were previously judged as typical for the members of that eating club. That is, participants who reported more positive attitudes toward members of the eating club were more likely to choose to work with the typical member than participants with less positive attitudes, but this relation was weaker when the member was described with only half of the typical attributes. Lord et al. (1984) replicated these findings in a study of attitudes toward a different target group, gay men. Thus, across two real social groups, attitudes were better predictors of behavior toward typical members of the groups than of atypical members of the groups.

A different set of studies points in a similar direction, but instead of using known social groups, the researchers investigated the role of experience that participants had with the target. Lord et al. (1991) found that the correlation between attitudes and behavior was more dependent on typicality when participants were less experienced and skilled regarding the social category. For instance, in one experiment, the researchers assessed attitudes to people with mental illness and examined willingness to interact with a target presenting signs of mental illness, either through typical or atypical characteristics. Students who knew or had prior contact with people who have mental illness displayed higher attitude–willingness consistency regardless of the typicality of the character. In contrast, students with relatively little prior knowledge or contact exhibited attitude–behavior consistency when the target individual was prototypical of people with mental illness than when the individual was atypical. Thus, the perceived typicality of a target affected the relationship between attitudes and behavior for participants who had less skills or experience with the category.

Subsequent research found that individuals apply social policy attitudes more consistently toward typical than atypical persons affected by the policy (Lord et al. 1994). For example, participants in favor of the death penalty tended to apply their opinions of the acceptability of the death penalty for a fictitious criminal only when the character was described with typical characteristics of murderers (e.g., impulsive), but not with atypical characteristics of murderers (e.g., not fearful, not domineering). However, participants who were against the death penalty were consistent with their attitudes, regardless of the presented character. Drawing from this pattern and similar mixed results in another study, Lord et al. (1994) suggested that social policy attitudes may invoke principles and contexts that lead to asymmetries and boundaries in the extent to which typicality moderates the connection between social policy and attitudes and other judgments.

Together, the evidence reviewed in this section illustrates the importance of knowing about the instantiations that are contained within people's mental representations of concepts. Some (typical) instantiations may be processed more easily, used as reference points, and contain more features belonging to a concept. In social contexts, this can lead to greater effects of attitudes toward a category on relevant judgments and behavior when people are considering typical instances of the category than when considering atypical instances. At the same time, however, the research on social category attitudes shows that the role of instantiations may be complex. In this context, the role of instantiations is influenced by attitude strength (i.e., high experience, knowledge) and attitude topic (e.g., death penalty, welfare).

Instantiations of Human Values

In this section, we describe how the above outline concept of instantiation applies to human values, and address some boundary conditions. Human values have, as any abstract concept, instantiations. One element of the graded structure, ideals, is especially important to goal-directed categories such as values. Ideals are the characteristics that exemplars should have to serve a certain goal; they tend to be an extreme representation and may never be reached (e.g., what does a perfect equal or free world look like?). The other two elements of graded structure, central tendency and familiarity, are also relevant to values, although it may be harder to spontaneously think about value instantiations in terms of them. Central tendency refers to the "average" properties of a given category, so they depend directly on the exemplars of that category, especially those that the person has experienced. Familiarity refers to how often the person has experienced certain instances across situations.

Politeness, for example, is a conformity value that is about courtesy and good manners. Being "respectful" could be seen as (part) of the central tendency because it is a highly probable property of situations that require politeness (esp. formal encounters), and what exactly counts as "respectful" (as opposed to obsequious, for example) will be determined by the range and distribution of relevant instances. "Saying hello' is a very familiar instantiation. Finally, not bothering people at any time could represent the ideal element because it is an extreme representation that may never be reached. Although this suggested example is speculative and may vary across cultures, it serves to illustrate the range of properties value instantiations might possess. An interesting and important exercise is to map value instantiations as a means of determining which examples serve different roles (e.g., as central tendency vs. familiar example), while documenting how these roles affect the psychological processes that encompass values. We return to this issue later in the chapter.

Another interesting issue is that values per se may differ in levels of abstraction. For instance, in Schwartz's (1992) model, protecting the environment might be perceived as a more concrete value than world of beauty, because protection of the environment implicitly circumscribes a restricted range of actions. It is conceivable that typical instantiations are more difficult to obtain for the values that are higher in abstraction. However, this does not mean that more abstract values have no instantiations, as this would be tantamount to saying that abstract values have no applicability to real-world situations and play no role in practice. The idea that abstraction is a reason for some variation in the number of available and accessible instantiations per value seems plausible to the extent that, all other things being equal, greater abstraction means greater scope, that is, more things a value could apply to. The question, however, is the extent to which the "all other things being equal" really applies in the values domain: It seems entirely possible that there are very abstract values that are drawn on infrequently, and that there are more specific values, which cover fewer distinct types of instances, that occur extremely often. In other words, abstraction may be a factor that gives rise to differences in typicality, but in all likelihood, the relationship between abstraction and typicality is not a simple, direct, one. We are not aware of any available method to assess level of abstraction precisely, making this an interesting question for future research.

Studying instantiations of values is particularly challenging because values have both a cognitive and a motivational aspect (e.g., Schwartz 1992). In contrast, the process of instantiation is, in the first instance, a cognitive one. However, we also propose that motivation matters to the process of instantiation. For example, people may be more willing to find an appropriate instantiation of a value in a context where the value is of greater importance and relevance to the situation. For instance, a person who cherishes protection of the environment may exert a lot of effort to decide which food choices are most environmentally sustainable in a new restaurant where the food options are unusual and unknown.

How Instantiations Help to Explain Past Evidence

Why do we consider instantiations of human values to be an important part in human value research, especially for bridging the gap between values and behavior? The importance of instantiation is twofold: methodological and theoretical. We start with methodological considerations. Following the example given at the beginning of this chapter, imagine, for example, a researcher who wants to investigate the relationship between the value of family security and behavior. Which behaviors should the researcher examine? As we saw in the example above, in an unstable and unsafe country, it may make sense to measure the amount of CCTVs on one's property, the "quality" of the fence (e.g., electric or barb wire), or access to a safe car for taking children to school. In a safe and stable country, it may make more sense to estimate the amount of financial support within a family, family stability, and harmony in family relationships instead. Consequently, a researcher who looks at the use of home security measures in a relatively safe and stable country might discover little connection to the extent to which the individuals' value family security, because the individuals mentally represent the value in a very different way. Without knowing the concrete instantiations that are most relevant to people's values, the strength of the relations between values and behavior might be underestimated.

To assess the relationships of values to behavior, it is necessary to take into account the extent to which the behavior is typical of any targeted values within a specific social context. An example of this approach occurred in research by Bardi and Schwartz (2003). They asked participants to generate behaviors that express each of the ten value types. Bardi and Schwartz found correlations between values and behavior that were higher than in studies where the behavior was chosen out of theoretical considerations, including studies of organizational citizenship behavior (OCB, Arthaud-Day et al. 2012) and intentions to support social action (Feather et al. 2012). Furthermore, studies have found lower correlations when they have employed a behavior measure developed in a different country. For example, Pozzebon and Ashton (2009) used Bardi and Schwartz's (2003) measure, which was developed in Israel and in Canada. Pozzebon and Ashton found somewhat lower correlation coefficients than had been obtained by Bardi and Schwartz. Although this trend could be attributable to diverse factors (e.g., sample characteristics, respondent conscientiousness), one possibility is that the behaviors assessed by Bardi and Schwartz were less typical of the values in the Canadian population than in the Israeli one.

Given the evidence for the typicality effect in social attitudes and behavior (Lord et al. 1994), a value is likely to predict only weakly behaviors that are not considered to be typical of that value (see Maio et al. 2009). For example, although it was postulated and found that specific value types like benevolence or achievement correlate with OCB (Arthaud-Day et al. 2012), there are other behaviors that are considered to be more typical of these values (see Bardi and Schwartz 2003, for examples). In other words, many participants would likely agree that OCB is related to benevolence, but would not come up with this example by themselves. The lack of a spontaneous association between the value and OCB should weaken the extent to which the value predicts this behavior, because the value may not be automatically activated when this behavior is contemplated (see Maio 2010). In other words, the strength of the correlation between a value and a behavior is likely to be moderated by the typicality of the behavior for the respective value: Value–behavior relations should be larger if the behavior that is measured is considered more typical for the specific value. This may help to understand the role of value instantiations in bridging the gap between values and behavior, especially for cross-cultural research.

The way in which instantiations bridge the gap between values and behavior is further illustrated in a research project that examined the effect of value salience on pro-environmental behavior (Evans et al. 2013). In two studies, the investigators manipulated the salience of different reasons for a pro-environmental behavior (car-sharing), emphasizing either a self-enhancing value orientation (i.e., save money) or a self-transcending value orientation (i.e., save the environment). Results indicated that the salience of the self-transcending value orientation (but not the self-enhancing value orientation) caused a spillover effect toward another pro-environmental behavior, namely recycling. As described later in this chapter, recycling is a typical example of pro-environmental behavior in the UK, where this study of reasons priming took place. Two other behaviors were measured: choosing scrap over new paper and choosing an energy-saving mode while using a computer. These behaviors are *atypical* examples of pro-environmental behavior in the UK. In the analyses of British participants' instantiations of protecting the environment described below, choosing an energy-saving mode on a computer and using scrap paper were not mentioned. These behaviors are not as strongly connected in memory to the value of protecting the environment. For these atypical behaviors, no significant effect of value salience was found. In sum, we found that raising the salience of a value had an effect on endorsement of behaviors that are consistent with that value, but the effect was limited to behaviors that are typical instantiations of that value. These results are in line with findings from social categorizations as described above (Lord et al. 1991).

This example illustrates the theoretical importance of considering value instantiation. Specifically, it is an inherent quality of basic values that they are abstract. This means that any application of such values needs to "bridge the gap" between the abstract level of the value and the specific situation or instance to which it is to be applied. This is fundamental to how values "work." The abstract nature of values enables widespread agreement about values themselves, while allowing for strong disagreement in actual practice. For example, the term "human dignity" is often used in international agreements like the Universal Declaration of Human Rights, because everyone can agree that this concept is important. However, different parties "can conceive human dignity as representing their particular set of values and worldview" (Shultziner 2003, p. 5), which is one reason why there are many differences across the world in how humans are treated by their governments. On an abstract level, human values barely differ between countries. Differences between nations explain on average only 2–12% of the variance between individuals (Fischer and Schwartz 2011). That is, the variance in values is much larger within than between countries. The differences between countries may therefore be much less about how they are regarded in the abstract than about how the values are exemplified (i.e., instantiated) in different cultures.

One important example pertains to the value *equality*. In many countries, women are still considered as unequal to men, and they are granted less in terms of rights and opportunities. People in these countries may attribute high important to treating all men equally and to treating all women equally, but may not apply egalitarian notions to the treatment of men as compared to the treatment of women, or may instantiate equality between men and women in a different way (e.g., according to perceived differences in needs, abilities, duties). If two cultures do not instantiate equality relating to men and women in the same way, then there may be strong differences in the treatment of men and women even when equality is viewed as highly important.

To illustrate this effect, we use data from the fourth round of the European Social Survey (www.europeansocialsurvey.org). This survey includes over 56,700 people from 31 countries who have responded to a variety of questions, including items from a short version of the Portrait Value Questionnaire (PVQ, Schwartz et al. 2001). One item assessed equality ("Important that people are treated equally and have equal opportunities") and was answered on a 6-point Likert scale (1 "very much" to 6 "not at all").

Participants from Turkey ($n = 2416$), a country that has been found to discriminate women on average more than other European countries (Tansel et al. 2014), agreed with the item virtually to the same extent as participants in the other European countries ($M = 2.06$, SD = 0.93 for Turkey; $M = 2.10$, SD = 1.06 for the 30 remaining countries; Cohen's $d = 0.05$). However, a comparison of the means of two items that explicitly asked about gender discrimination revealed more unequal attitudes within the Turkish sample. Specifically, using a 5-point Likert scale from 1 (agree strongly) to 5 (disagree strongly), participants rated their agreement with the statements, "A woman should be prepared to cut down on her paid work for the sake of her family" and "When jobs are scarce, men should have more right to a job than women." Turkish participants agreed with the first ($M = 2.14$, SD = 0.92) and second ($M = 2.20$, SD = 1.13) statements much more than participants in the 30 other countries ($M = 2.86$, SD = 1.18, $d = 0.77$, and $M = 3.61$, SD = 1.23, $d = 1.24$, respectively). Interestingly, the equality item was only weakly correlated with the two items about gender discrimination, in both Turkey ($r[2225] = 0.11$ and $r[2251] = 0.13$, ps < 0.001) and the rest of Europe ($r[52{,}007] = -0.01$, $p = 0.047$ and $r[51{,}659] = -0.06$, $p < 0.001$). Although weak, the correlations in Turkey were positive, indicating that those Turkish participants who endorse equality more were more in favor of discriminating women. In the 30 European countries, the correlations were small, but reliable in the opposite direction, further supporting the claim that gender discrimination is an instantiation of the equality values in Europe in general, but not in Turkey. This short analysis demonstrates that the instantiation of gender discrimination as being part of the value of equality differs between countries, both in terms of mean differences and correlations, even when the value of equality per se is held at the same level of importance.

The examples of instantiation we have discussed make clear that one cannot understand how values guide behavior without understanding how the *process* of instantiation takes place. Bridging the gap between abstract and specific, that is, both recognizing that a specific situation falls under a general value (or more likely several values) and working out the implications of this for action, is a complex cognitive task. Without understanding how people manage this task, we will neither fully understand the role of values in human behavior, nor be able to effectively change behaviors where this is desired.

For example, it makes little sense to try to tackle issues of gender equality by emphasizing equality per se in a place that sees little or no connection between gender equality and equality as a value. Similarly, it would not make sense to aim for less CO_2 emissions from poor house insulation by emphasizing the importance of environment protection in a place that sees no connection between protecting the environment and these emissions. Such attempts become feasible only when the value instantiations are brought into people's conceptualization of the value itself, through cultural change, information campaigns, education, or other means. For such attempts to be successful, a more detailed understanding of the process of instantiation is required. Given that this process has largely been overlooked in past research, there is a considerable need for future studies that manipulate value instantiations, that examine the factors that make it easy or hard for instances to be recognized as instances of a value, and that examine the effects of changes in value instantiation on value–behavior relations over time.

A Methodology for Examining Instantiations and Human Values

Studying the instantiations of human values necessitates the development of a methodology that takes into account the distinctive characteristics of values. We describe here in detail a measure we developed for a cross-cultural study, which allowed us to examine the effects of the social context along with the effects of typicality.

In 2014, we compared students from Joao Pessoa, Brazil, with students from Cardiff, United Kingdom (UK). Cardiff is a typical city in the UK or even typical for "Western" countries with regard to income and safety. Joao Pessoa, however, is considered to be one of the most dangerous cities in the world. There, more than 67 times as many people are murdered compared to the UK per 100,000 inhabitants (Office for national statistics 2014; Statista 2014), creating a heightened fear of violence (Monteiro 2012). This results in more gated communities, high walls with electric fences around the houses, and fewer people walking outside in many neighborhoods, especially after sunset.

It is informative to consider the role of these differences with regard to two values in Schwartz's (1992) model: protection of the environment and family security. The differences in violent crime suggest that the instantiations for the value family security may be quite different between inhabitants of Joao Pessoa, Brazil, and Cardiff, UK. Another difference between the two countries is that the UK focuses more heavily on protecting the environment through behaviors that reduce carbon emissions (e.g., solar panels, use of public transport), whereas Brazilians may focus more on the reduction of litter. (To our casual inspection, the streets in Joao Pessoa are, if anything, cleaner than in Cardiff.)

To explore instantiations of these values in both places, we asked 61 mostly postgraduate students from Joao Pessoa and 60 psychology undergraduate students or members of Cardiff University (students or staff from all disciplines) to take part in a survey of value instantiations. These samples were similar in age (early 20s), gender composition (67–80% female), and SES (18.50–18.60 on Kuppuswamy's Socioeconomic Scale, Sharma et al. 2012).

The samples considered 21 values in addition to the two discussed here. The whole questionnaire was in Portuguese for the Brazilian sample and in English for the British sample. Participants were asked to list typical situations in which they considered each value to be important. Furthermore, they were asked to include a "short description of the people in the situation and what they do." We consider these three aspects as a good representation for measuring instantiations. Nevertheless, we acknowledge that there may be other relevant aspects, for example, when one is interested in the role of instantiations in specific situations. The instructions provided two examples that pertained to two values not included in our measures and Schwartz's value model: "For example, the value "enjoyment" could be relevant during leisure time. Relevant people in the situation can be friends and the family. They could spend time together at the beach or playing games at home."

Participants were asked to list at least two to three instantiations for each value and up to 7 in total. From the 61 participants in the Brazilian sample, 30 responded to these questions for family security, 34 for protecting the environment, and 3 participants to both values. From the 60 participants in the British sample, 27 responded to family security, 35 for protecting the environment, and 2 participants to both values. The Brazilian instantiations were translated to English by an experienced translator and Portuguese native speaker.

Because the three open-ended responses for each value ("situation," "people in the situation," "what are they doing") are all part of the instantiations, we analyzed them together. We separately analyzed each value in each sample using the Open Access program, Iramuteq, which is designed for content analysis. For all the analyses, the option lemmatization was chosen: Very similar words (e.g., people and person) as well as different verb forms (e.g., recycle, recycles, recycled) were treated the same. Furthermore, only nouns, verbs, and adjectives were analyzed.

Next, words that were mentioned at least ten times were analyzed. These words were read in their original context. That is, we looked at the whole responses where the specific words were mentioned in order to find a common theme. Furthermore, we looked at the similarity of responses for which the same words were mentioned, that is, if the participants used a certain word with the same meaning or with different connotations.

The responses of the Brazilian participants were for each value on average almost twice as long as the responses from UK participants (561 vs. 299 characters). However, the number of words that were mentioned at least ten times barely differed between the samples.

Our analyses revealed interesting results for both of the values considered here. For family security, two of the Brazilian participants' typical instantiations entailed (a) providing support and advice (this was mentioned by 10 participants at least once) and (b) making sure every child is safe (5). For the British participants, typical instantiations also entailed (a) providing support and advice to family members, mostly after a negative event (16) and (b) making sure that the children are safe and staying in contact with family (mentioned by 6 participants). These two instantiations did not differ significantly between Brazil and the UK. However, as predicted, securing the family home against intruders (e.g., with electronic safety equipment, demanding more police on the street) was mentioned significantly more often in Brazil than in the UK (10 vs. 2, $\chi^2 = 5.33$, $p = 0.02$).

For protecting the environment, we found significant differences for four instantiations. Brazilian participants were more likely to mention saving water (11 vs. 3), $\chi^2 = 4.57$, $p = 0.03$ and planting trees (8 vs. 1), $\chi^2 = 5.44$, $p = 0.02$. In contrast, British participants were more likely to mention changing their personal mode of transportation (e.g., from personal car to car-sharing, cycling) in order to protect the environment (14 vs. 2), $\chi^2 = 9.00$, $p = 0.003$, and other means to reduce carbon emissions (i.e., general demands to reduce carbon emissions without specific examples; 7 vs. 1), $\chi^2 = 4.5$, $p = 0.03$. For four other instantiations, no significant differences were found: throwing garbage into a bin, recycling, switching off the light if not needed, and demanding that companies should be more concerned about the environment.

Overall, the instantiations or exemplifiers differed significantly between Brazil and the UK. For family security, electronic safety devices like electric fences or police on the street were mentioned in Brazil as typical instantiations, reflecting the (need for) different security standards between the two countries. These safety measures were not as frequently mentioned in the UK, but respondents in both countries mentioned close contact and support for children.

For protecting the environment, typical instantiations were again related to the local context. In the region of Brazil where we conducted our study, not wasting or polluting water was likely mentioned often because water is scarce in the local countryside. In contrast, freshwater is plentiful in Cardiff. In Brazil, it is also common that everyone plants at least one tree in their life. This may explain why planting a tree was more likely to be seen as a typical instantiation for protecting the environment in Brazil than in the UK. In contrast, there are more bicycle lanes, a safer and more comfortable public transport system, and more focus on car-sharing in Britain than in Brazil. Therefore, it is not surprising that choosing a more environmentally friendly mode of transportation was mentioned more often in the UK.

The main focus here was on differences between countries. However, we assume that is also possible to observe differences within a country, based on different individual experiences, socioeconomic status, religion, gender, and other variables (Greenfield 2014). For example, people with lower income have less freedom to provide their children a safe and stable environment. Therefore, it can be speculated that, for instance, electronic fences and other rather expensive safety devices would be more likely to be typical instantiations of family security among Brazilians who are relatively wealthy than among those who are poor.

The focus here was on two values, family security and protection of the environment, but we expect that instantiations can differ for other values as well. We chose these two values merely as illustrations of the general principle. Additional data in our cross-cultural comparisons suggest important differences in instantiations for a number of other values, such as creativity, wealth, and social power, to name a few.

Crucially, the differences in typicality do not merely indicate that particular instantiations are relevant in some places, but not in others. For example, Brazilian participants spontaneously mentioned “saving water” more often as a situation in which protecting the environment is relevant. Does this mean that saving water is for British participants unrelated to protecting the environment or is it just less typical for them? To address this question, we have conducted a second study in which we have given 70 Brazilian and 44 British participants (all were students) numerous instantiations and asked them to choose one out of six values from Schwartz’s (1992) model that is most suitable for the given situation. Overall, most instantiations were correctly “back-translated” to the respective value (i.e., the correct value was chosen from the list of six as being applicable by the majority of participants), independent of whether the instantiation was mentioned more often by participants from one than the other country. For example, saving water, recycling, and walking instead of using the car for short distances were recognized by participants from both countries as being related for protecting the environment; at the same time, installing electric fences around the house was identified as an instantiation of family security in both nations. We consider these behaviors as instantiations of the values in both countries, but as being more typical instantiations of the values in the country where they were mentioned more often in spontaneous responses to the values.

Overall, our results suggest that value instantiations are ordered along a graded structure similar to categories used in cognitive psychology (Barsalou 1985, 1987), with the most typical instantiations at one end of the structure and atypical ones (e.g., those that are mentioned only in another country) at the other end. The instantiations vary in how good of an example they are for each specific value, with individual and regional variation in this “best fit.”

Conclusions

This chapter has described a number of reasons why it is important to study instantiations of human values and presented a methodology to assess them. Value instantiations provide us with more information about cross-cultural differences than values measured solely on an abstract level. Furthermore, value instantiations can help to explain why some behaviors are more strongly associated with values than others. Value instantiations can also explain why people in some countries do not differ on particular values (e.g., equality), but show differences on relevant attitudes and behavior (e.g., gender discrimination). Finally, the process of instantiation, though central to the role of values in everyday life, has, as a cognitive process, been almost entirely overlooked (see also Maio et al. 2009). Although research on value instantiation is in its early stages, findings are promising and taking value instantiations into account will likely lead to deeper insights into the connection between values, attitudes, and actions.

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Chapter 9
Values and Affective Well-Being: How Culture and Environmental Threat Influence Their Association

Diana Boer

Human values as motivational guides impact our affective well-being. For instance, values drive attention to events that provide affective experiences. The links between personal values and affective well-being have not been researched extensively (for exemplary exceptions, see Hanel and Wolfradt 2016; Sagiv and Schwarz 2000; Sirgy 2012; see review in Sagiv et al. 2015). However, one could expect direct relationships between values and well-being, because people's striving toward the fulfillment of their personal values lead to affective experiences that impact well-being. For instance, religious ceremonies are likely to create positive affect in people holding traditional values and rock concerts are likely to be enjoyed by people holding self-direction values. This line of reasoning suggests that the general fulfillment of one's values contributes to affective well-being. Previous research, however, shows that some values create more happiness than others (Sagiv and Schwartz 2000), whereas some other were labeled the "dark side of values" as they contribute to clinical constructs such as anxiety (Hanel and Wolfradt 2016). Thus, the relationships of values and well-being are complex and are yet far from being well understood.

Some values may be universally beneficial for people's affective well-being. However, whether some other values end up being "bright" or "dark" is most likely determined by the cultural and environmental context someone is situated in. In this chapter, I discuss how the cultural and environmental contexts shape and interactively influence the association between personal values and affective well-being.

I argue that culture and the environment influence *what kind of* and *to what extent* values contribute to affective well-being. It is well established that culture as well as environmental factors, such as external threats, have impact on values (e.g., Cohen 2001; Gelfand et al. 2011; Inglehart 1997; Thornhill and Fincher 2014). Culture and environmental factors also influence well-being (e.g., Curhan et al.

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2014; Diener et al. 2010, 2013; Fischer and Boer 2011; Fischer and van de Vliert 2011; Oishi and Diener 2001). Interestingly, Diener and Diener (1996) showed that even in contexts of aversive conditions and in disadvantaged groups, people report well-being above the midpoint indicating that people are generally rather well (see also Kahneman et al. 1999). Possibly, this is due to personal motivational forces that help people feel well within a given cultural and environmental setting. More generally, depending on what culture and environment we are situated in, different values will make us happy or lead to actions that make us feel positive about ourselves. Or vice versa, depending on the context, other values will make us feel uncomfortable or lead to actions which provide less positive feelings.

In this chapter, culture is construed via cultural dimensions akin to Hofstede (1980, 2001), Schwartz (2006), Inglehart (1997), and GLOBE (House et al. 2004). Threats in this chapter refer to external, macro-contextual factors that are relatively stable, continuous, and quantifiable by objective measures. These include, among others, economic threats (poverty), climatic threats (demanding climates), and safety threats (disease stress, armed conflicts) (cf. Fischer and Boer 2015). Cultural values and social norms have developed in societies' history in response to historical threats (Gelfand et al. 2011), leading to rich and diverse sets of cultural values and traditions across the globe. Hence, cultural values and environmental threats are interrelated and create an interactive force in shaping individuals' behaviors and experiences.

The model proposed in this chapter offers three possible explanations for cultural and environmental influences on the links between values and affective well-being (see Fig. 9.1): (a) cultural affordance (cultural process), (b) protection against threats (threatening environment process), and (c) interaction between cultural and threat processes (regulate-threat process). These three processes are underpinned by mechanisms of contextual reinforcement or suppression of specific values via

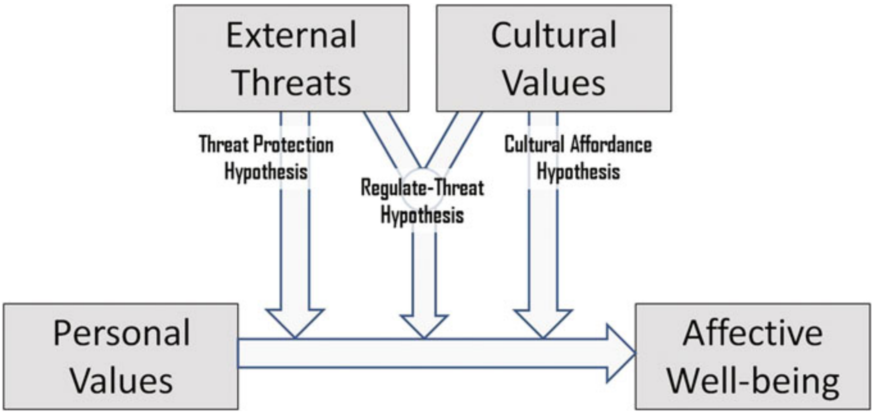

Fig. 9.1 Regulate-Threat Model of Affective Well-being

positive or neutral/negative affective experience. Importantly, culture and environmental factors are not independent. More precisely, these influences may affect value-well-being associations in concert, revealing a dynamic interplay of cultural regulation in response to environmental threats (cf. Fischer 2013).

One primary evolutionary function of culture is to protect inhabitants against external threats (e.g., Gelfand et al. 2011; Thornhill and Fincher 2014). Depending on the effectiveness of cultural threat regulation, individuals may engage in more or less self-protecting activities themselves in order to deal with external threats. Hence, the impact of external threats on individuals' values and their affective response may depend on the presence of cultural values that lead the culture to offer societal protections against threats. Under greater threat, individuals' striving toward protection values provides pathways to subjective well-being, and particularly so, if the societal context does not provide sufficient protection via embeddedness (or collectivism) values. In cultures emphasizing embeddedness (or collectivistic) values, individuals are embedded in collectives and devise meaning of life from social relationships, group identity, traditions, and shared goals (Schwartz 2006). I reason that societies emphasizing autonomy values, in contrast, focus on individual goals, autonomous feelings, and thinking. Cultural embeddedness, more than cultural autonomy, protects citizens against external threats (Gelfand et al. 2011; Thornhill and Fincher 2014), because sociality and behavioral guidance via shared goals and traditions reduce individual stress under threat.

This chapter zooms into affective elements of well-being in the form of emotions and feelings experienced within a given time frame, such as feelings of excitement, pride, alertness or distress, irritability, and guilt. Even though subjective well-being entails other elements such as cognitive elements in the form of life satisfaction, the proposed model focuses on affective experiences because values are assumed to lead people's actions toward specific behaviors that result in affective experiences. Cognitive elements and evaluations may be driven by more abstract connotations of values and not by behavioral and affective implications.

The theoretical argument proposes that cultural and environmental contexts determine which kind of value-based behaviors are facilitative of affective experiences. The underlying mechanisms are contextual constraints and reinforcements of such behaviors via their ascribed values. Moreover, research showed that affective and cognitive elements of well-being across cultures are predicted by different variables (Diener et al. 2013). Diener and colleagues (2010) found that affective well-being (assessed via positive and negative affect) was better predicted by the fulfillment of psychological needs, whereas life evaluations were more strongly associated with income. The authors conclude that economic and social prosperities predict different types of well-being (affective vs. cognitive or hedonic vs. eudaimonic well-being).

In this chapter, I will first review theories and empirical evidence on the ways personal values relate to subjective well-being. Furthermore, I will introduce and link two contextual mechanisms impacting value-well-being associations:

affordance and protection. The proposed mechanisms are summarized in the Regulate-Threat Model of Affective Well-being. Finally, a first empirical test of the model will be presented and discussed.

Personal Values and Affective Well-Being

Theoretical Perspectives

Various psychological factors can facilitate subjective well-being, including personality traits (Diener et al. 2003; Steel et al. 2008), goals (Oishi and Diener 2001), and needs fulfillment (e.g., Tay and Diener 2011). In particular, the study on needs has been fruitful for identifying universal facilitators of subjective well-being (Ryan and Deci 2000; Tay and Diener 2011).

Self-determination theory suggests that the satisfaction of three needs, such as autonomy, relatedness, and competence, is core to subjective well-being. The fulfillment of these needs (and lack thereof) steers human striving and goals, which then contributes to affective well-being. Intrinsic goals correspond to autonomous goal motivation whereas extrinsic goals are motivated by materialistic concerns. According to self-determination theory, striving toward intrinsic goals contributes positively to well-being, whereas striving toward extrinsic goals has negative effects on well-being (Kasser and Ahuvia 2002). Similarly, independent goals rely on autonomous goal selection whereas interdependent goals are compromised by negotiations with other people's goals and motivations; hence, according to self-determination theory, the former are expected to relate more strongly to well-being than the latter (Oishi and Diener 2001). In this perspective, "healthy" values are those that contribute to personal growth and self-actualization (Ryan and Deci 2000) and are therefore universally beneficial for subjective well-being (Sagiv et al. 2004).

Empirical Evidence

Ample empirical evidence supports the particular strong influence of autonomy in general for people's affective well-being (e.g., Chirkov et al. 2003; Fischer and Boer 2011). However, evidence on the association between personal values and well-being is still sparse (see review in Sagiv et al. 2015) with most studies showing relatively small but consistent associations between personal openness-to-change values and affective well-being. A summary of available empirical evidence is provided in Table 9.3.

Sagiv and Schwartz (2000) showed positive correlations between openness-to-change values and positive affect in four out of six samples from Israel and Germany. Conservation values were negatively associated with affective well-being in all six samples. Roccas et al. (2002) reported small positive associations of affective well-being with openness values and universalism, and negative links with power and conformity in an Israeli student sample. Haslam et al. (2009) found small to medium positive associations of positive affect with openness and self-transcendence value dimensions as well as with achievement, security, and conformity values in a student sample (assumably from Australia). Similarly, Bobowik and colleagues (2011) reported low but consistent associations between openness values and affective well-being indicators in representative European samples and an immigrant sample in Basque country.

Hanel and Wolfradt (2016) showed small negative associations between openness values (hedonism and stimulation) and clinical outcomes including depression, anxiety, and stress in a German sample, whereas achievement values were positively associated with depression and stress. Similarly, Maercker and colleagues (2015) found positive associations between openness values and positive mental health across three societies (Germany, Russia, and China). The authors also found correlations with self-transcendence and conformity values in Russia and China, and in addition a positive association between achievement values and positive mental health in these two societies. Kasser and Ahuvia (2002) showed in a Singaporean student sample that materialistic values relate negatively to anxiety and general happiness (particularly to the frequency of unhappy emotions) supporting the argument that intrinsic (as compared to extrinsic materialistic) values are healthy—well-being enhancing—values.

The studies reviewed above seem to suggest small but consistent evidence for positive associations between openness-to-change values and affective well-being. On the contrary, Joshanloo and Ghaedi (2009) found that Iranian students' achievement and tradition values were associated with hedonic well-being, whereas openness values were not. In a sample of international short-term students in Norway, Jamaludin et al. (2016) reported a significant positive latent path between subjective well-being (composite of positive affect, lack of negative affect, and life satisfaction) and universalism, whereas this path was not significant for long-term students. Openness values did not relate to subjective well-being.

In sum, different theories indicate striving for openness-to-change values facilitates affective well-being and this facilitation may be relatively independent of the prevailing context. The empirical evidence of most—but not all—studies underscores this hypothesis. So among all values, openness values seem to show the most consistent and universal links with affective well-being. At the same time, some studies suggest that this association is more likely to be qualified by context specific constraints. Besides openness values associations, the summary above (see also Table 9.3) indicates a large amount of other value associations, which may be determined to a larger extent by the specific contexts the samples come from. Next, I will discuss two possible contextual determinants of value-well-being associations: culture and environmental threats.

Cultural Affordance: Cultural Values as Moderators

Theoretical Mechanisms

The social and cultural contexts in which we live shape our affective experiences and value priorities. The more attuned an individual's personal values are with the social and cultural environment's value system, the more positive experiences this individual will have and the more positive she will feel about herself. Sagiv and Schwartz's (2000) seminal study on personal values and well-being offers three theoretical psychological arguments for the positive influence of value congruence on well-being. First, the cultural context permits individuals to express their values and follow their goals as long as these values and goals are aligned with the cultural values. These aligned values create positive affective experiences. In contrast, incongruent values are associated with less positive or even negative affective experiences, because these incongruent values and their behavioral implications are rejected by the larger context.

Closely related is the second mechanism of social sanctioning in response to values expressions and non-normative behaviors. Holding values that are incongruent with the cultural context questions the worldviews of others in the collective and may result in reduced social support for those individuals holding the opposing values. Reduced social support diminishes well-being, whereas social support received through congruent values leads to positive affective well-being. The third mechanism implies a feeling of internal conflict caused by values that diverge from others' values, because reinforcement and reconfirmation of one's views are lacking, thus hampering well-being.

Striving for congruent values is encouraged by cultural contexts by providing opportunities and positive affective experiences when congruent values are activated. At the same time, incongruent values are discouraged by cultural contexts by providing sanctions and neglecting positive affective experiences when incongruent values are activated.

Empirical Evidence

Various studies investigated the contextual affordance hypothesis of well-being. Focusing on motivational goal pursuit, Oishi and Diener (2001) investigated how independent and interdependent goal pursuits relate to well-being in samples of Asian American, Japanese, and European American students. Independent goal pursuit increased the benefit of goal attainment only among European American students and not for Asian American or Japanese students, whereas interdependent goals benefited the well-being of Asian American and Japanese samples. The authors conclude goals pursuit results in divergent affective consequences depending on the cultural affordance.

Besides limited evidence for macro-contextual cultural congruence, empirical studies have mainly used subcultural value congruence to investigate the impact of value congruence on well-being. Sagiv and Schwartz (2000) showed that business students' well-being was positively related to values reinforced by business contexts, namely achievement and power values, whereas psychology students' well-being was negatively associated with these values, because their context typically reinforces values relating to others' needs. Similar to Sagiv and Schwartz (2000), Vansteenkiste and colleagues (2006) tested whether business students' materialistic values would positively predict well-being compared to pedagogy students whose well-being was expected to be negatively associated with materialistic values. Results indicated associations of extrinsic values with reduced well-being, enhanced internal distress, and substance use in both samples. Moreover, reduced well-being and enhanced substance use of business students (in comparison with pedagogy students) were explained by their value orientations.

A number of studies operationalized value congruence more directly and assessed its impact on well-being. Sortheix and colleagues (2014) showed that group value congruence was related to better health in a longitudinal study in a Finnish community. Further consistent evidence was provided for business and psychology student samples from Argentina, Bulgaria, and Finland (Sortheix and Lönnqvist 2015). Again, value congruence with group values was associated with better affective well-being and this relationship was mediated by positive social relationships in support of Sagiv and Schwartz' (2000) argument that social support/social sanctioning facilitates the value congruence effect on well-being.

Predictions: The Cultural Affordance Hypothesis

The alignment of personal values with the values of one's social and cultural context is reinforced by the context via afforded positive affective experiences. Hence, if the values of a person are not supported by her cultural context, negative (or lack of positive) affective experiences are likely. The value affordance hypothesis has been generally applied to any context and its inherent value system. A pressing question emerging from this argument is: Which personal values are afforded by which cultural contexts?

Personal values have been universally systemized into a circular structure (Schwartz 1992; Schwartz et al. 2012) contrasting the higher order values self-transcendence versus self-enhancement values and openness-to-change versus conservation values (see Sagiv and Roccas, Chap. 1 in this book). Cultural contexts have been characterized in multiple frameworks of cultural dimensions (Hofstede 1980, 2001; House et al. 2004; Inglehart 1997; Schwartz 2006), all of which identify a dimension that contrasts societies' emphasis on individuals' autonomy versus social embeddedness (individualism vs. collectivism, Hofstede 1980; in-group and institutional collectivism, House et al. 2004; self-expression vs. survival, Inglehart 1997; intellectual and affective autonomy vs. embeddedness, Schwartz 2006). Cultural autonomy (vs. embeddedness) has already been identified as one major contextual driver of subjective well-being over and above societal wealth (Fischer and Boer 2011). Here, I focus on the effects of this dimension as a moderator on the value-well-being relationships.

I suggest that cultural autonomy versus embeddedness is a major facilitator of affective experiences via personal values. The ***cultural affordance hypothesis*** (see Fig. 9.1) here posits that contexts emphasizing cultural autonomy encourage their inhabitants to strive for the congruent values of self-direction, stimulation, and hedonism (higher order openness-to-change values)—this encouragement is likely to be exercised via afforded positive affective experiences. Contexts that emphasize cultural embeddedness on the other hand are likely to reinforce striving for conservation and self-transcendence values including tradition, conformity, security, and benevolence by creating affective well-being through these values. This hypothesis is in line with Oishi and Diener (2001), who found that independent versus interdependent self-construal moderates the effect of independent versus interdependent goals on well-being.

Implications for Cultural Continuity and Cultural Change

The contextual reinforcement of person-culture fit on well-being has implications for cultural continuity and change. They may reinforce cultural continuity because the values that continuously offer positive affective experiences for individuals are likely to remain active cultural components in a given context. Hence, social and collective reinforcement and sanctions are likely to determine which values are being transmitted across generations through the effects of value congruence on well-being (Boer and Boehnke 2016). This notion is akin to analyses drawn from sociological perspectives. Von Scheve (2016) argues that "feelings and emotions lie at the heart of how values and value commitments emerge and of how they influence social actions. […] affective processes that contribute to the emergence and consolidation of socially shared valuations do so through their influence on social action and interaction." (p. 177). Von Scheve (2016) attributed the emergence of values to affective responses and referred their emergence to the phenomenological values theory (Scheler 1973). This theory posits that value feelings emerge from universal values, which are made salient in cultural contexts leading to different combinations of these values and differences in their importance.

At the same time, contextual reinforcement mechanisms may also trigger cultural change: Novel values that offer positive affective experiences for individuals, at a specific time in history, are likely to become active cultural components in a given context. Such affective collective reinforcement may determine which values are being added to cultural contexts (e.g., zeitgeist values, Boer and Boehnke 2016). This suggests that affective responses to values function as a core mechanism of cultural maintenance and cultural change.

Threat Protection: Environmental Threats as Moderators

People behave more carefully in environments that are harsh or threatening in order to protect themselves. Holding specific values is one way to protect oneself, the family, and the community against threats. Theories on cultural emergence posit that cultural values developed as protection against external threats (Gelfand et al. 2011; Thornhill and Fincher 2014) among other functions. In this Section, I will first review what kinds of values are helpful as threat protection and I will argue that affective responses to these values are elevated in threatening environments.

Theoretical Mechanism

As is long known in the intergroup literature, stress enhances in-group bias in the form of strong in-group bonds (e.g., Dovidio and Gaertner 2010). For example, Cheon and Hong (2016) argued that in-group bias in the form of shared norms and institutions that reinforce cohesion by prioritizing the welfare of the in-group (over outgroup) occurred in contexts of greater environmental threats. In-group bonding, in turn, may reduce stress: Social support buffers against the negative well-being effects of stress and threats, for instance, by reducing neuroendocrine stress responses (e.g., Frisch et al. 2014). Thus, there are bidirectional relationships between stress and in-group bonding. Threat in environments elevates the pressure on the neurobiological systems that facilitate in-group affiliation and regulate-threat responses. In this theory, threat remains a rather open and unspecified concept. The links between threat and in-group bonds are also addressed with regard to specific threats, such as the threat of contagion and economic threats.

The parasite stress theory claims that the stress posed by potential contagion of diseases increases in-group sociality (collectivism) in order to protect the group against further risks of contagion introduced by outgroups (Thornhill and Fincher 2014). The parasite threat theory is supported by findings showing that contagion threat is associated with the activation of the behavioral immune system, including in-group assortative sociality, conservative lifestyles, lower levels of democracy, less emancipation, and cultural collectivism (Faulkner et al. 2004; Fincher et al. 2008; Thornhill et al. 2009, 2010; Schaller and Murray 2008).

The link between threat and in-group bonds is also addressed in the post-materialism hypothesis (Inglehart 1997). Threat due to limited economic resources focuses people on securing fundamental needs including safety of oneself and close ones. And vice versa, in affluent contexts, individuals do not have to worry about existential needs and can therefore focus on their individual goals and motivations (Inglehart 1997; Welzel and Inglehart 2010).

These theories in sum indicate that environmental threats enhance the meaning of conservation and collective values. In addition to elevated striving for those values, it could be argued that such environments reinforce the meaning of conservation and collective values by fortifying them via positive affective experiences leading to enhanced associations between these values and affective well-being.

Empirical Evidence

There are only few studies available that examined how threat or other restrictive contextual variable influences the relationships between personal values and other variables. Hence, I also review studies showing moderating effects of external threats on relationships between personal values and variables that are not directly related to well-being. Studies showed that environmental threat reduces the relationship between values and personality as well as between values and social attitudes. First, values were less strongly associated with personality traits in contexts of greater threat, be it financial, ecological, or social threats, whereas lower threat contexts enhanced the extent to which values and personality traits were aligned (Fischer and Boer 2015). Consistently, parasite stress attenuated the impact of conservation values on social attitudes (Boer and Fischer 2013). This finding may seem surprising at the first glance because conservation values are more important in highly contagious environments (Thornhill and Fincher 2014); however, the authors argue that conservation values and the aligned social attitudes evolved as collective mechanisms under threat and are not construed as expression of personal preferences or motivation in these contexts.

The moderating role of threat was also investigated in a study examining general living conditions. Sortheix and Lönnqvist (2014) investigated how associations between personal values and life satisfaction are influenced by the comfort versus harshness of the environment as captured by the Human Development Index. The Human Development Index captures a nation's livelihood according to its citizens' average income, life expectancy, and education; a lower score indicates that individuals live under harsher conditions where people are relatively poorer, live shorter lives, and receive less education. The authors found that universalism values contributed positively to life satisfaction in highly developed countries and negatively in less developed countries, whereas achievement values contributed positively to life satisfaction in less developed countries and negatively in highly developed countries.

In sum, previous findings suggested that external threats seem to suppress the expression of value-congruent social attitudes and behavioral traits, and that low human development enhances the impact of self-enhancing values (instead of self-transcendence or conservation values) for life satisfaction. These findings conflict with my argument; however, none of the previous studies has investigated value associations with affective outcomes. I argue that environmental threats enhance the affective responses to threat protecting values, which seems to rely on different—more affect-based—theoretical mechanisms.

Predictions: The Threat Protection Hypothesis

Previous theories suggested that group and security-oriented values function as protection against threats. These values include collectivism, tradition, benevolence, and conservation. In line with the threat theories, I suggest that self-transcendence values—in addition to conservation values—are indeed protective values, because they provide individuals with social comfort and connections which are existential for well-being particularly under threat. Macro-contextual theories claim that affiliation and community-oriented values receive more priority by individuals who live under environmental threat because community and social bonds provide security. I argue that the high priority of such values in threatening environments is sustained and contextually supported by affective reinforcement. In the ***threat protection hypothesis*** (see Fig. 9.1), I posit that self-transcendence and conservation values (in their function as personal protection values) are more strongly related to affective well-being in contexts of high threat compared to contexts of low threat.

Culture-Threat Interaction: Regulate-Threat Model

Protective values are not only more relevant in threatening environments, they are also more important for well-being in these environments. Threat functions as a specific environmental trigger of values that help individuals feel protected and safe under threat. Self-transcendence and conservation values create positive affective experiences, because they enhance social bonds and collective security. But this may be particularly the case in environments which require individuals to activate such personal protective mechanisms. Earlier, it was noted that culture in general and cultural values in specific have evolved as adaptive forces to provide safety and comfort for its inhabitants (Thornhill and Fincher 2014; van de Vliert 2013, 2009; Welzel and Inglehart 2010). At this point, it is important to distinguish between individual threat regulation processes (here, the association between personal values and affective well-being under threat; Threat Protection Hypothesis) and cultural threat regulation processes (cultural values buffering threat effects as explicated below in the Regulate-Threat Hypothesis).

Culture has evolved in interaction with the environment; hence, their interaction may impact meaningfully on psychological processes (Fischer and Boer 2016). However, such interactive effects have rarely been investigated or hypothesized. Van de Vliert's (2009, 2013) climate-economic theory of culture is a noteworthy exception. The author argued that climatic threat can lead either to the cultural challenge syndrome (including self-expression, agency, and democratic systems) if sufficient monetary resources are available or to the cultural threat syndrome (including in-group focus, survival values, and autocratic systems) if monetary resources are not available. Here, climatic threats only activate protective responses from individuals if contextual resources are not sufficiently available. Fischer and van de Vliert (2011) found empirical support for an interaction effect on various affect-based well-being indicators (general psychological well-being, burnout, and anxiety) between threatening climates and resources available to cope with the threats.

If cultures provide adequate protection against threats, individuals may not need to engage in personal protective mechanisms. Cultural embeddedness values, for instance, create strong social support, traditional collective rituals as well as personal and collective security. In such a cultural context, inhabitants would feel relatively safe and well under threat, and threat would not necessarily affect their value system and affective responses. On the other hand, if the cultural context does not provide such collective safety measures in highly threatening environments, individuals' affective well-being would only be positive if they engaged an individual protective value system, which then provides the necessary support and security. The ***Regulate-Threat Hypothesis*** in the Regulate-Threat Model (see Fig. 9.1) postulates an interaction between external threats and cultural values: Environmental threat only enhances the influence of protection values on affective well-being in contexts which do not provide protection against threats via cultural values (namely cultural embeddedness). The cultural value of embeddedness protects against threats and therefore diminishes the impact of threats on the value-affective well-being associations.

In sum, the Regulate-Threat Model postulates the following contextual influences on the associations between personal values and affective well-being: two direct moderator effects and one two-way interaction effect. The model suggests these influences unfold simultaneously as the current lack of empirical evidence does not yet qualify proposing a rank order of effects. In the following, I describe a preliminary empirical test of the proposed model.

Preliminary Test of the Regulate-Threat Model

Sample Selection and Design

The sampling procedure in this study aimed at high comparability across samples in terms of sample composition and population (e.g. education, age, gender). At the same time, the samples were sought to come from contexts that vary in cultural autonomy (vs. embeddedness) values and in external threats (high vs. low).

I selected participants from societies which varied in cultural autonomy (vs. cultural embeddedness) using a composite score based on data by Hofstede, Inglehart, Schwartz, and GLOBE[1]: two societies with cultural autonomy scores

[1]I used the scores by Hofstede (2001; individualism-collectivism), Schwartz (2006; embeddedness, intellectual and affective autonomy; average of student and teacher data), Inglehart (1997;

above the global midpoint (high autonomy: New Zealand: 0.91, South Africa: 0.13) and two societies with scores below the global midpoint (high embeddedness: Mexico: −0.71, Kenya: −0.67). Within each autonomy/embeddedness cluster, the two selected societies also varied systematically in external threat based on Fischer and Boer's (2015) composite overall threat score including resource threat, ecological threat, and restrictive social institutions: Mexico (high embeddedness, low threat) and Kenya (high embeddedness, high threat), New Zealand (low embeddedness, low threat) and South Africa (low embeddedness, high threat). It is important to note that the threat variation is relative within each embeddedness cluster. This means that Mexico has a lower external threat index compared to Kenya (0.61 vs. 1.72); South Africa has a higher threat index compared to New Zealand (0.51 vs. −0.95); however, threat levels cannot be compared across embeddedness clusters. This is due to the intercorrelation between contextual threats and cultural embeddedness. Since the two independent variables are categorically coded (Threat: high = 1, low = 0; high embeddedness/low autonomy = 0, high autonomy/low embeddedness = 1); nevertheless, this study design can test the independent effects of cultural embeddedness and environmental threats and their interaction. University students were selected as target population due to high comparability in age and educational level. An equal gender distribution was aimed for.

Participants

Four university samples were collected from New Zealand (N = 103), South Africa (N = 99), Mexico (N = 94), and Kenya (N = 107) with a total of 403 participants. Data was drawn from a larger research project[2] (RESPECT-Music Project; see for

(Footnote 1 continued)

survival vs. self-expression; most recent available datapoint in the World Value Survey before wave 6), and GLOBE (House et al. 2004; institutional collectivism; ingroup collectivism did not load onto the factor and was therefore omitted). Ecological factor analysis on all available country data was conducted in order to produce globally applicable scores (in total an average score for 111 countries is available from the author upon request). A single factor (58% variance explained) representing cultural autonomy versus embeddedness values (high individualism, high autonomy/low embeddedness, high self-expression/low survival, low institutional collectivism) was extracted, and an average score was calculated based on standardized mean values of the four value scores.

[2]Ethnic compositions of the sample are as follows: Kenya (16% Kikuyu, 9% Luo, 7% Giriama, 6% Kalenjin, 6% Chonyi, 5% Kisii, 26% other ethnicities, 26% not specified), New Zealand (59% Pakeha [New Zealander of European descent], 6% Maori, 1% Pacific Islander, 13% Overseas born, 5% Asian New Zealander, 11% New Zealander, 5% not specified), and South Africa (18% Black, 12% Colored, 26% White, Caucasian, English, 9% Indian, Asian, 7% African, 6% Zulu, 16% other ethnicities, 6% not specified). No information on ethnic background was collected in Mexico.

instance, Boer et al. 2012; Ferguson et al. 2016). Subsamples from societal samples were randomly selected. More female than male participants took part in this study in all samples (Mexico: 71%; New Zealand: 53%; South Africa: 68%; Kenya: 61%), and the gender distribution differed slightly across samples (*chi-square* (3) = 8.23, $p < 0.05$). The average age of participants was 20.39 years (SD = 2.82); Mexican participants were slightly older than the other samples (Mexico: 21.69 years, SD = 2.90; New Zealand: 19.45 years, SD = 3.12; South Africa: 20.31 years, SD = 1.55; Kenya: 20.23 years, SD = 2.98) leading to significant age differences across samples ($F(3, 397) = 11.34$, $p < 0.001$). The moderation analysis is controlled for age and gender of participants due to sample differences in these variables.

Measures

Personal Values: Values were measured using the Portrait Value Questionnaire with 40 items (PVQ-40; Schwartz et al. 2001) in New Zealand and Mexico and with 57 items (PVQ-R; Schwartz et al. 2012) in Kenya, and we used the Short Schwartz Value Survey with 10 items (SSVS, Lindeman and Verkasalo 2005) in South Africa. The PVQ assesses Schwartz's 10 value types using similarity ratings toward short descriptions of persons who hold certain values (e.g., "Thinking up new ideas and being creative is important to him/her") on a six-point Likert scale (1—Not like me at all, 6—Very much like me). The SSVS assessed personal values on 10 single value items derived from the definition of the 10 original values types (Schwartz 1992). Participants rate the personal importance of these 10 values on a scale from 1 (not important at all) to 6 (extremely important).

In order to overcome the limitation of having varying value scales, I operationalize personal values via the four higher order values such as openness-to-change, conservation, self-transcendence, and self-enhancement. Higher order values are calculated as means of the corresponding value types (openness-to-change: stimulation, self-direction, hedonism; self-transcendence: universalism, benevolence; conservation: tradition, conformity, security; and self-enhancement: power, achievement), irrespective of how many items contributed to the value types. This approach resulted in similar internal consistencies across value instruments and samples, with somewhat lower alphas in South Africa for conservation and self-enhancement values.

Affective well-being: Affective well-being was measured using the Positive and Negative Affect Schedule (PANAS; Watson et al. 1988). Ten items measured the frequency of positive emotions (e.g. alert, interested, excited), and 10 items measured negative emotions (e.g., upset, afraid, irritable) experienced within the last month. The internal consistency of both subscales was sufficient across samples (see Table 9.1). Following Diener et al.'s (1991) recommendation, the relative frequency of positive versus negative affective experiences was calculated as an indicator of affective well-being.

Table 9.1 Internal consistencies (Cronbach's alpha) of personal values and affect scales

	New Zealand	South Africa	Mexico	Kenya
Value instrument	PVQ-40	SSVS	PVQ-40	PVQ-R
Openness-to-change	0.76	0.61	0.73	0.73
Conservation	0.75	0.46	0.54	0.77
Self-transcendence	0.76	0.65	0.71	0.72
Self-enhancement	0.72	0.36	0.73	0.69
Positive affect	0.88	0.84	0.83	0.81
Negative affect	0.87	0.85	0.78	0.81

Table 9.2 Zero-order correlations between personal values and affective well-being

Cultural values	Overall	High autonomy		High embeddedness	
External threat		Low threat	High threat	Low threat	High threat
Sample		New Zealand	South Africa	Mexico	Kenya
N	403	103	99	94	107
Openness-to-change	0.22***	0.14	0.29**	0.23*	0.23*
Conservation	0.08	−0.17†	0.19†	0.06	0.26**
Self-transcendence	0.10†	−0.06	0.26*	0.02	0.17†
Self-enhancement	−0.03	−0.15	0.01	−0.10	0.12

$^{\dagger}p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Analytical procedure: Associations between personal values (four higher order value dimensions) and affect balance were analyzed. The analyses relied on raw scores of personal value, which were not corrected for scale use (ipsatization or partialling out the average across all values) due to the inherent psychological meaning of average value scores (for discussions of this issue, see Borg and Bardi 2016; Dobewall et al. 2014; He and van de Vijver 2015). Hypotheses were tested in moderation analysis using variables that were standardized within each cultural sample. Analyses were controlled for age and gender (missing values were replaced by sample means).

Results

Looking at the whole sample, affective well-being correlated significantly with openness-to-change values ($r = 0.22$, $p < 0.001$), whereas the other personal values were not related to affective well-being (conservation: $r = 0.08$, $p > 0.05$; self-transcendence: $r = 0.10$, $p > 0.05$; self-enhancement: $r = -0.03$, $p > 0.05$). The correlations between personal values and affective well-being are presented in Table 9.2.

Moderator effects of external threat: As predicted, the association between conservation and self-transcendence values and affective well-being varied in dependence of contextual threat. Contextual threat moderated the association between affective well-being and conservation values (interaction: $\beta = 0.28$, $p < 0.01$, $F(1, 396) = 8.12$) with stronger correlation in high threat contexts ($\beta = 0.22$, $p < 0.01$, $t = 3.10$) compared to low threat contexts ($\beta = -0.07$, $p < 0.01$, $t = -0.91$). Threat also moderated the association between well-being and self-transcendence values (interaction: $\beta = 0.24$, $p < 0.05$, $F(1, 396) = 5.52$) with a stronger correlation in high threat contexts ($\beta = 0.22$, $p < 0.01$, $t = 2.92$) compared to low threat contexts ($\beta = -0.02$, $p > 0.05$, $t = -0.32$).

There was no significant moderation of threat on the association between well-being and openness values (interaction: $\beta = -0.11$, $p > 0.05$, $F(1, 396) = 1.13$), with significant associations in low threat contexts ($\beta = 0.17$, $p < 0.05$, $t = 2.55$) and high threat contexts ($\beta = 0.28$, $p < 0.001$, $t = 3.77$). There was a trend of threat moderation on the correlations with self-enhancement values (interaction: $\beta = 0.19$, $p = 0.07$, $F(1, 396) = 3.33$) with a small negative association in low threat contexts ($\beta = -0.13$, $p = 0.06$, $t = -1.82$) compared to no association in high threat contexts ($\beta = 0.06$, $p > 0.05$, $t = 0.77$). These results indicate that conservation and self-transcendence values become only important to affective well-being in contexts of high external threats. These contexts seem to rely on the activation of personal protective values, and therefore, these values facilitate positive affective experiences.

Moderator effects of cultural embeddedness: Although cultural autonomy versus embeddedness did not significantly moderate the correlation between well-being and conservation values (interaction: $\beta = -0.16$, $p > 0.05$, $F(1, 396) = 2.08$), in high autonomy contexts, there was no correlation ($\beta = 0.005$, $p > 0.05$, $t = 0.07$) whereas a significant positive correlation was found in embeddedness contexts ($\beta = 0.15$, $p < 0.05$, $t = 2.14$), as predicted in the cultural affordance hypothesis. Contrary to the hypothesis, cultural autonomy did not moderate correlations between openness values and well-being (interaction: $\beta = -0.01$, $p > 0.05$, $F(1, 396) = 0.02$; high embeddedness: $\beta = 0.23$, $p < 0.01$, $t = 3.11$; high autonomy: $\beta = 0.21$, $p < 0.01$, $t = 3.17$). Furthermore, there were no moderation effects of cultural autonomy on the well-being correlations of self-transcendence and self-enhancement values (self-transcendence interaction: $\beta = 0.02$, $p > 0.05$, $F(1, 396) = 0.04$; high embeddedness: $\beta = 0.08$, $p > 0.05$, $t = 1.11$; high autonomy: $\beta = 0.11$, $p > 0.05$, $t = 1.43$; self-enhancement interaction: $\beta = -0.09$, $p > 0.05$, $F(1, 396) = 0.67$; high embeddedness: $\beta = 0.006$, $p > 0.05$, $t = 0.08$; high autonomy: $\beta = -0.08$, $p > 0.05$, $t = -1.13$).

Threat–culture interaction: Although none of the three-way interactions between cultural autonomy versus embeddedness, external threat, and value predictors were statistically significant (conservation: $\beta = 0.23$, $p > 0.05$, $F(1, 392) = 1.27$; self-transcendence: $\beta = 0.23$, $p > 0.05$, $F(1, 392) = 1.21$; openness: $\beta = 0.21$, $p > 0.05$, $F(1, 392) = 1.12$; self-enhancement: $\beta = -0.05$, $p > 0.05$,

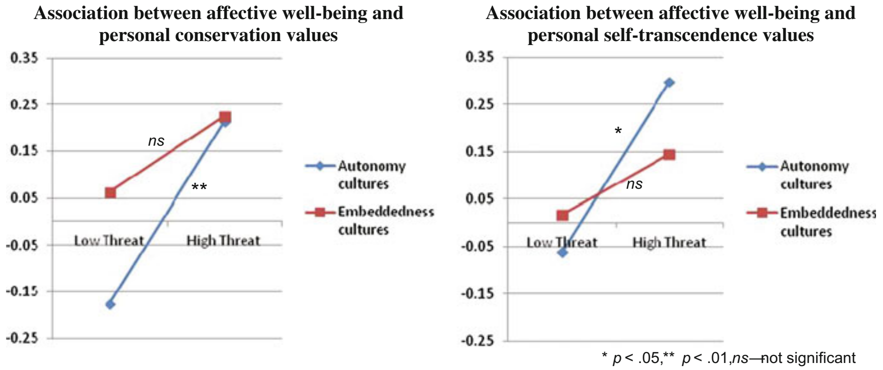

Fig. 9.2 Associations between personal protection values and affective well-being in dependence of cultural autonomy versus embeddedness and external threats (y-axis represents β-coefficients of value-well-being associations corrected for age and gender)

$F(1, 392) = 0.05$), some noteworthy results in line with the predictions for conservation and self-transcendence values were found. First, the threat moderation effect on conservation value association with well-being was only significant in high autonomy contexts ($\beta = 0.39$, $p < 0.01$, $t = 2.71$), whereas this effect was not significant in high embeddedness contexts ($\beta = 0.16$, $p > 0.05$, $t = 1.15$), as shown in Fig. 9.2. Similarly for the association between self-transcendence values and well-being, the threat moderation was only significant in high autonomy contexts ($\beta = 0.36$, $p < 0.05$, $t = 2.54$), whereas this moderation was not significant in embeddedness contexts ($\beta = 0.13$, $p > 0.05$, $t = 0.86$). These findings indicate that particularly in high autonomy contexts, external threat elevates the association between affective well-being and personal values, which provide security (conservation) and collective/social networks (self-transcendence). In contexts of embeddedness, these values already have a somewhat stronger association with well-being and external threats do not require the same extent of shift toward security and social values.

Discussion

What the Findings Can and Cannot Tell Us?

This chapter aimed to answer the question which personal values facilitate affective well-being and whether the answer to this question depends on the cultural and environmental context. The Regulate-Threat-Model proposes cultural and environmental factors and their interaction influence which personal values facilitate affective well-being. Findings of the preliminary empirical study provide some indication that the context may moderate the relationships between values and well-being. Although none of the moderator analyses suggest a significant difference in value associations between autonomy and embeddedness cultures, conservation values significantly correlated with affective well-being only in embeddedness contexts. In line with the cultural affordance hypothesis, embeddedness cultures reinforce aligned values such as tradition, conformity, and security by providing positive affective experiences via these values. Individuals who conform to cultural norms and practices are endowed with pleasurable feelings and positive social support in embeddedness contexts. This strengthened link between conservation values and affective experiences provides a cultural reinforcement of congruent values which is likely to underpin cultural maintenance processes. Findings showed that affective experiences based on self-transcendence values were independent of autonomy versus embeddedness cultures. In both cultural contexts, self-transcendence values had similarly low associations with affective well-being ($\beta = 0.08$–0.11, *p*s > 0.05). But these average associations may be misleading because the cultural affordance effects can be qualified by variations in external threat.

The threat protection hypothesis proposes that individuals need to activate more personal self-protecting values in order to protect themselves, their families, and close others in contexts of high external threats. These personal self-protection values are aided by positive affective experiences in contexts which require these personal protective measures. Preliminary findings supported the threat protection hypothesis as conservation and self-transcendence values are more strongly associated with affective well-being in contexts of high external threats compared to low threat contexts. These contexts seem to rely on the activation of personal protective values, and therefore, these values facilitate positive affective experiences. This hypothesis received most convincing support in this study. However, threat protection may not need to be activated to the same extent depending on the cultural protective measures.

The core and novel argument of the Regulate-Threat Model is the threat–culture interaction hypothesis: Depending on the effectiveness of cultural threat regulation via cultural embeddedness, the effect of external threat can be attenuated. This means that cultural characteristics can protect individuals to the extent that they may not need to engage in self-protective measures. Cultures or societies provide such protective measures to different degrees, and the cultural dimension of embeddedness is one such measure. Preliminary findings showed that in embeddedness cultures, external threat did not significantly change value associations (even though under high threat the associations between protective values and affective well-being were significant) whereas in autonomy cultures the presence of external threats indeed resulted in different value association. Self-transcendence and conservation values were positively related to affective well-being under threat, but they were negatively related to affective well-being in low threat contexts. Social support and caring for others, as well as valuing tradition, conformity, and security facilitate positive affective experiences under threatening conditions even if (or particularly so—in the case of self-transcendence values) the surrounding cultural contexts do not explicitly provide such values. Individuals' activation of such protective measures seems pivotal for their affective well-being in contexts that do not provide protective values.

Implications for Value–Behavior Links

Affective well-being is experienced and created in specific situations. One assumption of the model is that a behavioral experience precedes the actual affective response to it. Values are assumed to drive such behavioral experiences, which in turn create the link between personal values and affective well-being. I have argued that behavioral implications of values evoke affective experiences although these behavioral enactments have not been explicitly assessed. Enacted values provide much more well-being than values that are only held but not enacted (Sheldon and Krieger 2014). In addition to the value importance, behavioral enactment of values may mediate or strengthen the relatively small associations found between values and affective well-being.

The proposed model does entail these specific behavioral experiences by assumption, but not as explicit conceptual elements. The conceptual inclusion of behaviors in the model opens up multiple complex interpretative possibilities and associated empirical challenges. First, specific behaviors may be clearly linked to one or two values as Bardi and Schwartz (2003), Schwartz and colleagues (2012) and others have shown. These behavioral assessments were developed in linkage with specific values. The repertoire of selected behaviors represents the expression of Schwartz' (1992) values circle. However, some everyday life experiences and behaviors may be driven by different values for different people (see Hanel et al., Chap. 8 in this book). For instance, for person A, the purchase of a new SUV car could be driven by security and power values in a sense that the big car represents the affluence and social standing of its owner and it provides her with a secure means of transportation. For person B, however, the SUV may be best suited to support its owner's nature affinity and adventurous hobbies, because it can accommodate camping gear and canoe equipment. For person B, the purchase would be driven by openness and universalism values. In both cases, the behavior is driven by values and results in positive affective experiences, but the values that drive the behavior could stem from opposing ends of the values circle. Hence, certain everyday life behaviors can be driven by different values because they fulfill different needs.

The second challenge of including behaviors in the model arises from an enhanced complexity which would be difficult to assess in empirical tests. Behaviors play a mediator role, similar to traits (Haslam et al. 2009; Roccas et al. 2002), in facilitating the effects of personal values on affective well-being. The moderator effects proposed in the cultural affordance hypothesis and the threat protection hypothesis would need to be specified for three paths of the mediation model. Whereas these two-way interactions are still relatively easy to conceptualize and to compute, the Regulate-Threat Hypothesis would involve three-way interactions on three paths, leading to a rather complex (and multilevel) statistical challenge, particularly in terms of statistical power requirements. This would certainly be a stimulating task, and researchers are encouraged to take on the challenge by investigating behavioral value enactment as possible mediator as well as moderator.

The main argument of the Regulate-Threat Model, however, goes without the explicit assessment of behaviors, because affective well-being is by default linked to behaviors as they construe the affective response to them. Behaviors are accommodated in the Regulate-Threat Model by defining behavioral experiences as underlying implicit elements—rather than explicit ones—of affective experiences.

Regulate-Threat Model and Possible Ways Forward

Threat-culture interactions may be difficult to unravel empirically, and the presented preliminary evidence is only one humble step toward establishing empirical evidence for the proposed model. The study relied on cross-sectional student data under somewhat compromised reliability. The model requires further empirical testing, and extensions of the current study should investigate (a) other cultural dimensions in their effect on buffering threat effects, (b) effects of different threat types in interaction with different cultural values, (c) the perceptibility of threats and its mediating effect, and (d) treatment of cultural values and external threats as continuous macro-contextual rather than binary variables. Other cultural dimensions may also be important, for instance, the uncertainty avoidance. Particularly under threat, uncertainty avoidant cultural values may provide psychological safety so that personal values can be expressed more freely (Boer and Fischer 2013). Future research should extend the list of moderating cultural variables as well as environmental threats.

Regulate-Threat Model builds on and extends the cultural congruence argument of well-being-value associations (Sagiv and Schwartz 2000) by an important component of the external environment in which we are situated in: environmental threats. Threats in the exterior world influence peoples' lives negatively; at the same time, people adapt to the environment even under the harshest conditions and can live happy and pleasurable lives (Diener and Diener 1996). In addition to external threats, cultural characteristics provide comfort and security under threat and can therefore regulate aversive conditions like environmental threats. Cultural characteristics partially emerged in response to contextual and environmental conditions in a society's or community's history (Cohen 2001). Culture (conceptualized as cultural dimensions) hence coevolved with environmental changes and challenges. Nevertheless, culture and environmental conditions and their effects on psychological processes have up to now been largely investigated in isolation. The Regulate-Threat Model contributes to recent calls for integrated and more holistic frameworks on macro-contextual influences and their cross-level effects on human well-functioning (Boer and Fischer 2013; Fischer and Boer 2016). The model bridges theorizing on cultural emergence, environmental influences, and their interactive effects on psychological well-being processes and contributes to our understanding of value functions.

Individual and cultural values fulfill protective and adaptive functions, but they operate less in convergence than expected as indicated by the relatively small empirical support for the cultural affordance hypothesis. Rather, individual and cultural values seem to protect individuals in a complementary fashion. Cultural values buffer threat effects; individual protective values are activated and create positive affective well-being when protection is particularly needed: under high threat in cultures without threat protection via cultural values. External threats including demanding climates, contagion risks, and economic uncertainties have major implications for individuals. Their impact on affective responses to protective values may provoke cultural changes or the maintenance of traditional values. Cultural changes toward traditional or conservative values may be ignited by newly occurring external threats like the recent refugee crisis in Europe or the economic crisis in the beginning of the 2000s (Markovits et al. 2014), which both seem to trigger shifts toward conservative orientations. The maintenance of traditional values in the modern world has long inspired speculations (cf. Cohen 2001), and long-term external threats may provide answers into the mystery of adherence to old-fashioned lifestyles and traditional values. New and long-term threats have major implications for stagnating or progressing emancipation and egalitarianism as the stagnation seems driven by withheld positive affective experiences through values in support of emancipation and egalitarianism. The cultural regulation of external threats can free individuals from protective mechanisms and allow their enjoyment of open and tolerant lifestyles (Table 9.3).

Table 9.3 Summary of studies investigating the association between personal values and affective well-being

Paper	Study context	Outcome measure	Findings[a]
Bobowik et al. (2011)	(1) Europe (2) Spain (3) Basque country (4) Basque country (5) Immigrants in Basque country	Affect balance via general health questionnaire—GHQ (Goldberg) or Positive and negative affect scale—PNA (Bradburn)	• Openness (pos se): all samples • Conservation (neg se): samples 1, 2 and 5
Haslam et al. (2009)	Not stated (most likely Australia)	Positive and negative affect scale—PANAS (Watson et al. 1988)	• Hedonism (pos se), stimulation, self-direction (pos me): positive affect • Tradition (pos se): negative affect • Conformity, security: (pos se): positive affect • Benevolence, universalism: (pos se): positive affect • Achievement (pos me): positive affect
Hanel and Wolfradt (2016)	Germany	Depression, anxiety, and stress scale (DASS-21; Henry and Crawford 2005)	• Hedonism (neg se): all outcomes • Self-direction, stimulation (neg se): stress • Stimulation (neg se): anxiety • Universalism (posse): anxiety • Achievement (pos se): depression, stress
Jamaludin et al. (2016)	International students in Norway (1) Short term (2) Long term	Subjective well-being (Satisfaction with Life Scale, Diener et al. 1985, and PANAS)	Based on structural equation modeling: • Self-direction: sample 1 (pos me), sample 2 (pos le) • Stimulation: sample 2 (pos le) • Universalism (pos me): both samples • Achievement: sample 1 (pos se)
Joshanloo and Ghaedi (2009)	Iran	Affect balance (Mroczek and Kolarz 1998) and psychological well-being (Ryff and Keyes 1995)	• Self-direction (pos se): well-being • Tradition: well-being (neg me), aff. balance (neg se) • Conformity: well-being (neg se) • Benevolence: well-being (pos se)

(continued)

Table 9.3 (continued)

Paper	Study context	Outcome measure	Findings[a]
			• Achievement: well-being and aff. balance (pos se)
Kasser and Ahuvia (2002)	Singapore	Anxiety (Hopkins symptoms list), vitality (positive affective well-being), general happiness, time happy, and unhappy (Fordyce)	• Materialistic values: general happiness (neg se), vitality (neg se), time happy (neg se), anxiety (pos se), time unhappy (pos se),
Maercker et al. (2015)	(1) Germany (2) Russia (3) China	Positive mental health (Lukat et al. 2014)	• Self-direction and stimulation (pos se): all samples • Hedonism: sample 1 (pos me), samples 2 and 3 (pos se) • Conformity (pos se): sample 2 and 3 • Benevolence: samples 1 and 2 (pos se), sample 3 (pos me) • Universalism: sample 2 (pos se), sample 3 (pos me) • Achievement (pos. se): sample 2 and 3
Roccas et al. (2002)	Israel	Positive/negative affect scale (Bradburn)	• Self-direction: pos se • Stimulation: pos se • Universalism: pos se • Conformity: neg se • Power: pos se
Sagiv and Schwartz (2000)	(1) Israel (2) Germany (3) Germany (4) Israel (5) Germany (6) Germany	Positive affect scale (Bradburn)	• Self-direction (pos se): samples 1, 2, 3, 5, 6 • Stimulation: samples 1, 5, 6 • Hedonism (pos se): sample 6 • Security (neg se): samples 1, 3, 4, 5, 6 • Conformity (neg se): samples 1, 2, 3, 5, 6 • Tradition (neg se): samples 1, 2, 6 • Benevolence (pos se): sample 2 and 4 • Achievement (pos se): samples 1 and 6 • Power (neg se): samples 1 and 2

(continued)

Table 9.3 (continued)

Paper	Study context	Outcome measure	Findings[a]
Sortheix and Lönnqvist (2015)	(1) Argentina (psychology students) (2) Bulgaria (psychology students) (3) Finland (education students) (4) Argentina (business students) (5) Bulgaria (business students) (6) Finland (business students)	Positive and negative affect (Diener et al. 2009)	• Openness: –positive affect (pos se in samples 2, 3; neg se in sample 6) –negative affect (neg se in sample 3) • Self-transcendence: –positive affect (neg se in samples 3, 5; pos me in sample 6) –negative affect (pos se in sample 3; neg se in sample 6)
Vansteenkiste et al. (2006)	Belgium	Vitality index (positive affective well-being) and satisfaction with life combined into a well-being index	• Intrinsic values (growth, community, affiliation): pos se • Extrinsic values (financial success, fame, physical appearance): neg se

[a]Findings refer to the four higher order values (if reported) unless additional findings occur in 10 value types that are not already part of four higher order findings. Results are summarized according to effect sizes (Cohen 1992): se = small effect ($r \geq 0.10$); me = medium effect ($r \geq 0.30$); le = large effect ($r \geq 0.50$); neg = negative; pos = positive

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Chapter 10
From Values to Behavior and from Behavior to Values

Ronald Fischer

Values are commonly defined as abstract beliefs, as “guiding principles in people’s lives” (Schwartz 1992, p. 2) and “stable meaning-producing superordinate cognitive structure” (Rohan 2000, p. 257). These definitions imbue values with a causal importance of great significance: values structure people’s cognitive architecture and guide behavior and thought. Yet, the same definitions often refer to values as motivations, reflecting the needs of the individual and group within which the individual is embedded. Motivations are much more malleable and transient. Needs in particular are often best conceptualized as homeostatic, which means that motivations based on basic physiological and affiliative needs may be fluctuating in a cyclical fashion. In this case, behavior—that is the interaction of body with the physical and social environment—might be the causal factor that allows the satisfaction or frustration of needs and, therefore, may increase or decrease the importance of certain values over others.

What do we know about value–behavior links? Even a casual observer will quickly be strucked by the fact that actual behavior is largely absent from psychological research. When a colleague and I tried to summarize the available evidence of the value–attitude–behavior linkage (Boer and Fischer 2013), we soon realized that there were very few, if any studies that had examined the same type of behavior repeatedly. In order to make valid claims about any empirical fact, you need a substantive body of literature with multiple studies replicating proposed relationships. This is clearly not the case with values and behavior. There are isolated studies showing relationships with diverse constructs, but no substantive body of research that allows substantive claims. In the end, we could only analyze

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value–attitude relations, but not the relationship of values with behavior. Psychology after the cognitive turn appears to have abandoned the study of behavior, and psychologists now instead focus on what participant think, feel or believe they have done or want to do.

Problems with Self-reports

Surveys ask participants about self-reports of past behavior or intentions of future behavior. A long history of work has shown that attitudes are often poor predictors of behavior that are important (e.g., Griffeth et al. 2000; LaPiere 1934; Mesmer-Magnus and Viwesvaran 2005). Correlational designs often suggest high correlations between intentions and actual behavior (for a comprehensive review of this literature, see for example Sheeran 2002). Yet, these relationships cannot be seen as conclusive. First, since many studies are cross-sectional, it is a distinct possibility that the causal relationship is reverse—people may infer their intentions based on how they behaved in the past (Bem 1972; see below for further discussions of the theoretical mechanisms). Second, in cross-sectional designs, correlations might be inflated because people are often concerned with the need to appear consistent. This introduces a significant bias that is affecting intention–behavior correlations. Third, even though longitudinal studies are more powerful in detecting possible causal changes over time, they are not conclusive. Both intentions and behavior could be caused by an unmeasured third variable that is affecting both variables.

A number of studies have used more powerful experimental and controlled observational methods to examine the extent to which changes in intentions are causally related to changes in behavior. For example, Rhodes and Dickau (2012) conducted a meta-analysis of experimental studies targeting physical activity. Studies needed to include random assignment of participants to an experimental condition compared to a control group, interventions needed to have produced a detectable difference in behavioral intentions and, importantly, the behavioral measure had to be taken after the intention measure. They found a correlation of 0.07, which led them to conclude that passive correlational designs overestimate intention–behavior links and that monitoring and targeting intentions might be of little value for practical purposes. A subsequent analysis of the intention–behavior gap showed that the intention–behavior gap might be substantial (Rhodes and Bruijn 2013): 46% of a sample of 3899 participants did not follow through with their intentions. A larger meta-analysis (Webb and Sheeran 2006) found a correlation of 0.18 between intentions and behavior across 47 experimental tests. The direct effect of the intervention on behavior was still significant, indicating that other processes may translate interventions into behavior change. Hence, we have to be careful about generalizing from correlations between values and behavioral intentions to a possible link between values and behavior.

Focusing on correlations on self-reports of behavior with values, I already alluded to the problem of causality. It is a distinct theoretical possibility that people might infer intentions from their behavior. More problematic is the fact that questionnaire-based reports of behavior share the same method with the measurement of values, leading to problems of common method variance (Podsakoff et al. 2003). When the same method is used for assessing a set of constructs, the estimated correlations might be inflated because of the shared variance that is due to the method. These effects are particularly strong in areas where no objective criteria are available to assess the psychological construct (which is the case for values as subjective interpretations of what is important in somebody's life) (Moorman and Podsakoff 1992). One remedy that has been suggested is to use reports by others—for example, assess personal values in the target person and get another person to report on the behaviors of that individual. Yet, this does not solve the problem. We often socialize with those people who share our values (Boer et al. 2011). This then is likely to lead to rater biases when being asked to evaluate value-related behaviors (see Lee et al. 2009). Other possible biases include halo rater effects and social desirability responses when being asked to evaluate the behavior of others that we know well (Podsakoff et al. 2003). This is not to argue that this research is of limited value—I just urge some caution of an uncritical acceptance of these correlations. This self- or other-report research is useful to the extent that it provides some boundary conditions for examining value–behavior associations.

The only actual behavior that has been systematically studied is behavior within the context of economic games. These are typically studied to gauge social cooperation, so this evidence is reviewed in other chapters in this book (Sanderson and McQuilkin, Chap. 4; Arieli and Tenne-Gazit, Chap. 6). What other evidence is available? An interesting line of research that taps into actual behavior is public speeches, in which individuals refer to specific values in association with events and actions that they or others have taken or need to take. This is a more indirect window into value–behavior linkages, but obviously here the audience will modulate what values are being communicated. A further line of research that might be of relevance is an emerging program of research that examines cultural rituals and how they transform individuals over time. This research is limited by the fact that it is conducted within often messy field settings associated with religious performances.

I will briefly review some key studies within these different lines of research and combine and contrast the insights gained from these studies with the work that has been built on self-reports as well as neuroscience research on human values. This is not an exhaustive review but I aim to illustrate some key issues in the study of value–behavior linkages. I then propose an outline of a developmental theory of values and behavior and finish by discussing exciting research directions for the future.

Values and Paper–Pencil Reports of Behavior

Two major lines of research have examined value–behavior relations using questionnaires. First, values have consistently found to relate to behaviors that are thought to be motivationally congruent with values (Bardi and Schwartz 2003). Second, values correlate consistently with behavioral dispositions as measured by personality inventories (Fischer and Boer 2015; Parks-Leduc et al. 2015). These studies show that individuals who rate values also systematically report engaging in motivationally congruent behaviors. At the same time, three major patterns are evident in this data. First, observer ratings of behavior are consistently more weakly correlated with values than self-ratings of behavior (Bardi and Schwartz 2003). This implies that self-reports of behavior are possibly inflated and driven by method biases (the same individual gave ratings of his/her values and his/her behavior) as well as various memory and self-presentation biases. In defense of self-reports, sometimes observers might not be able to adequately assess whether a target person performs behaviors, whereas self-reports do not face this limitation. For example, typical items include 'study late at night before exams' or 'lend things to neighbors'. To overcome these issues, we need more actual behavior measures (which now are increasingly available through wearable technology, see below). Second, the strengths of the links between values and behaviors are not consistent across the spectrum. Behaviors that are more socially oriented (e.g., helping others) and potentially driven by normative concerns (Bardi and Schwartz 2003; see also Fischer et al. 2009) are less strongly correlated with self-reported values. This suggests that values might be mainly related to behaviors where fewer external social constraints are operating. Third, the meta-analysis by Fischer and Boer (2015) demonstrated that broad levels of constraints and threats (ecological, financial and institutional) moderated the strength of correlations between value and behavioral traits. Values were more strongly correlated with behavioral traits if the environment was relatively free of various threats.

Values in Public Speeches and Texts

Values in public speeches and texts are interesting because they can provide an indirect insight into the value–behavior relationship. They are obviously behaviors, because it is a vocalization or written behavioral manifestation that publicly endorses values. For this reason, it is similar to a value endorsement in a paper and pencil survey. At the same time, it is different in that the voicing of values in speeches or public texts is geared toward a specific audience; therefore, it is a public positioning of the speaker or writer in terms of the endorsed value. This by itself is an interesting component. The value in speeches or texts can become even more interesting if these endorsements are related to other behaviors or the larger context that indicates the necessity to take (different) actions.

Bardi et al. (2008) developed a value lexicon and then related the occurrences of the selected values in newspapers in the USA across a 100-year period with a small number of objective indicators. What was striking is that the selected three words per value type on average correlated quite highly with changes in objective indicators across this 100-year period. Self-direction, for example, was represented by independence, freedom and liberty, and the mentioning of these three terms (adjusted for number of words and other values) within a year correlated moderately with turnout of voters. Power was captured by the word triplet of power, strength, and control. The relative frequency of these three terms in newspapers correlated with the percentage of the US population enlisted in the army. Obviously, no causal relationship can be drawn from the relation between these two indicators, but the pattern suggests that values and behavior at a macro-societal level are indeed related.

Using a more restricted time frame, Suedfeld and Brcic (2011) monitored the public communications by terrorist groups (various branches of al-Qa'ida). They found that values in these communications fluctuated over time. Interestingly, universalism and self-direction values declined in communications when approaching a major attack. Since these attacks are often planned well in advance, this suggests that once a decision to attack is being made and the behavior is being carried out, certain values, especially those related to the caring about others and autonomy-related values, decline. This points to values following behaviors (at least to values being expressed in public speeches once a commitment to action has been made).

Portman (2014) focused more directly on public speeches by Finnish presidents and monarchs over a nearly 200-year period; therefore, this shifts the emphasis to individuals over time and allows greater insights into how contexts are correlated with values in public speeches by the same individual over time as well as an incumbent in the same position. A couple of patterns are noteworthy. Independent of the individual, speeches held for religious occasions showed different and relatively consistent value patterns in which spirituality, conformity, and tradition values were mentioned more frequently. The context, therefore, matters for what values are expressed in public.

Second, a number of national crises (wars, energy, and economic crises) were associated with differences in mentioned values. Specifically, security values tended to increase during a national crisis compared to before or after. For some of these crises (e.g., the energy crisis in the 1970s), conformity values also increased. Overall, this pattern again suggests that expressed values are somewhat reactive to situational demands. Rulers adjust their expressed value behaviors to fit perceived needs of the situation that the nation is facing.

A similar trend toward changes in expressed public values after some life changing event is also evidenced in the analysis of reports of astronauts after they returned from space (Suedfeld et al. 2010). After return to earth, astronauts used more universalism values and values geared toward the collective good. These values were geared toward humanity, but not toward individuals close to the astronauts (no change in benevolence values). Overall, achievement values were the most central values, probably reflecting the high selection pressure on this elite group of military personnel. There was also a strong increase in power values, driven by an increase in social recognition-related values.

The study of public speeches offers an important and interesting new avenue for value and behavior studies. At the same time, like all methods, there are certain problems with this approach. Most importantly and somewhat similar to survey studies, the selection of marker values is crucial. Given the diverse contexts and time frames, different marker values might be relevant and important. By focusing on a limited and typically small number of value markers, researchers may both over or underestimate the actual strength of the value–behavior relationship. Sampling theory would predict that the probability of committing Type 1 errors is increased due to having only a small set of values.

Second, the speeches are typically scored by humans, which introduces potential rater biases, similar to those discussed above. It is important to estimate interrater reliability, but this is only relevant to the extent that there is no systematic bias in the overall procedure (for example, if both raters share the same biases, interrater reliability is not going to identify this problem).

A third problem is the source and timing of the speeches and reports. Presidents may have speech writers, astronauts may read out prepared texts that were partly shaped by others, and online communication by extremist groups might be written by various individuals. Similarly, speeches are often given some time after they were written, leading to a gap between production and delivery. This is a significant challenge of this methodology. The limitation of timing is shared with questionnaire-based approaches, if a cross-sectional approach is used. The issue of shared authorship is a problem if the focus is on individuals. If the focus is on the value structure of groups (or leaders as representatives of a collective), this shared authorship is probably less of concern. It will depend on the focus of the analysis whether co-authorship is a major threat.

Values and Collective Ritual

The study of ritual has emerged as a major line of inquiry in the cognitive study of religion. These studies are typically motivated to test broad evolutionary claims about the functions of ritual, especially those ritualistic practices that involve significant costs on behalf of participants. Many religious and secular activities require considerable dedication of time, energy, and resources with limited return for the individual. Some ritual practices such as fire walking, ritualistic piercing, fledging, tattooing, or fasting are posing even larger puzzles in terms of the costs versus benefits for participants. Why do individuals engage in these actions that are painful and discomforting, since avoidance of pain and discomfort is one of the most central reflexes for any sentient biological being? The main argument is that such ritualistic practices have evolved over time as a costly signal that demonstrates commitment to the group and as a consequence leads to more cohesive and socially tight groups (Fischer and Xygalatas 2014; Henrich 2009; Irons 2001; Xygalatas et al. 2013). A number of studies have demonstrated that elements common in many rituals such as behavioral synchrony (joint chanting, marching, dancing, etc.) and discomfort (shared suffering or painful activities) increase prosocial behaviors both in the lab and in the real world (Bastian et al. 2014; Fischer et al. 2013; Reddish et al. 2013, 2014; Wiltermuth and Heath 2009; Xygalatas et al. 2013). The major assumption is that repeated enactment of these ritualistic practices gradually transforms individuals into more socially oriented group members. The key outcome variables have a close resemblance to the major two axes within the Schwartz value framework. We could expect that ritualistic actions shift value priorities of participants toward being more conservative (traditional group-oriented) and self-transcendent (overcoming selfish interests and desires). A number of studies are starting to test some of these implications. For example, Mogan-Naidu (2016) conducted an experimental study in which 40 participants were assigned to a joint breathing exercise (common in many types of religious practices and Eastern meditations) or a control condition (in which participants solved puzzle tasks). Values were assessed with the full version of the revised Portrait Value Questionnaire (Schwartz et al. 2012; see Schwartz, Chap. 3 in this book). The results suggested that individuals those were subjected to a joint breathing exercises reported greater conservation values and less self-directed values. Interestingly, Mogan-Naidu also reported lower universalism values (note the economic game studies described in Arieli and Tenne-Gazit, Chap. 6 this book), which may indicate that group rituals highlight parochial cleavages over universalistic inclusive cleavages.

In a field study in a high-ordeal ritual, Fischer and Roepstorff (2016) studied 137 participants in a large southeast Asian religious festival. Values were assessed with a shortened nine item measure of values (Boer et al. 2011). Despite the brief measure, the reliabilities were comparable to instruments that used longer value lists and a structural analysis using multidimensional scaling showed that all values (except one achievement related item) appeared in their theoretically predicted space. Randomly sampling individuals over a period of 11 days, Fischer and Roepstorff reported a gradual shift from self-centered toward more self-transcendent values among participants. This suggests that collective rituals transform basic human values of participants as they participate in large collective events. Repeated behavioral actions including chanting and praying together appear to shift individuals' values at a basic level.

In another recent study, Kesberg and colleagues (2016) sampled participants repeatedly over a 2-week period after they had joined a full-day ritual activity (e.g., a celebration of the Hindu festival of light). Values were measured every two to three days with a short 13 item measure of values that captured the four main value types. For all values (except for openness to change values), the reliabilities were above 0.70 in each wave. Openness to change values showed reliabilities of 0.60 or higher. Therefore, the reliabilities were sufficiently high (and in fact higher than for many value studies) to rule out unreliability as a major alternative explanation. Examining the changes over this 2-week period, there were substantive fluctuations of prosocial values with a shift toward benevolent and universalistic values (e.g., emphasizing the well-being of the in-group as well more distant groups, Kesberg et al. 2016). Even in individuals with relatively low level of belief in the religious element, the mere exposure to and participation in a religious ritual seems to trigger some general re-evaluation of basic values. Sampling values more frequently after some significant event seem to suggest greater variability in value ratings than the relative high test–retest correlations often found across longer time intervals.

These findings are interesting in the larger context of values and religiosity. In a meta-analysis of value-religiosity research involving studies of Jews, Christians, and Arabs in 15 countries ($N = 8551$), Saroglou et al. (2004) found that religious individuals reported more traditional values and much lower hedonism values. Religious individuals also had somewhat higher conformity and benevolence values and reported somewhat lower stimulation and self-direction values. The major differentiation between religious and non-religious individuals, therefore, was between an endorsement of conservative values that uphold the traditions and customs of one's society and religion versus endorsement of values that emphasize independent self-gratification, pursuing stimulating activities and ideas. A more recent meta-analysis by Boer and Fischer (2013) with data from participants in 21 countries ($N = 18{,}357$) showed the same picture. Religiosity was most negatively correlated with hedonism and showed the strongest positive correlations with traditional values. Their research also indicated that the ecological and cultural context moderated the strength of the relationship between values and religiosity. In less threatening environments and with populations that emphasized uncertainty avoidance and collectivism, links between values and religiosity were stronger.

Comparing the relative importance of values versus personality for explaining religiosity, Saroglou and Muñoz-García (2008) reported that in a study of Spanish Christians, values were unique predictors of religiosity and emotional ties to religion over and above personality traits. After accounting for values, personality did not predict much additional variance (in the case of overall religiosity) and no variance (for emotional bonds to religion) after taking into account the contribution of values. Therefore, the combination of experimental, field and correlational studies on religiosity suggest that there is a relative consistent pattern that engaging in ritualistic behaviors is related to a systematic shift toward in-group related values. Reliability might be an issue for some of the field studies discussed, but the experimental evidence to date suggests that any shift in value importance ratings might be due to the effect of behaviors on value ratings (instead being an issue of fluctuations due to diminished test–retest reliabilities). However, this is an emerging line of research and needs systematic replication.

An interesting extension of this research to the cultural realm is to examine the relative frequency of ritualistic activities in different populations around the world. Currently, there are no good data bases that track ritual activities globally. However, it is noteworthy that some of the activities that might induce strong tradition-focused values are more common in some religious contexts than others (e.g., the synchronized yogic postures in Islam). It could be speculated that the differential distribution of ritualistic behaviors is one part of the reason why we see different value distributions globally. Ritual practices might be a stabilizing force in the maintenance of cultural value differences between different populations. This is an intriguing avenue for further studies.

From Observations Back to Theory

What have we seen so far? Self-reports of decontextualized behavior are moderately associated with motivationally congruent values. Yet, these relationships seem to be strongest if there are few social and environmental constraints. Studies of economic games show moderately strong associations of universalism values with decisions that benefit others. This is the only reliable effect across a large number of studies. Here, the causal direction is often assumed to run from values to behavior. Studies of public speeches and texts provide some evidence of value–behavior linkages, but the causal relationship seems to point toward values-trailing behaviors and/or situational demands. The plausibility of this reverse causal relationship is also supported by recent evolutionary-oriented laboratory and field studies investigating effects of collective rituals on basic psychological processes.

How Do These Observations Fit with Relevant Theories?

Probably the most important theory for value–behavior relations is construal level theory. Originally developed by Liberman and Trope (1998), the central premise is that goal-directed activities and decision making of distant events involve high-level construal, that is, more distal decisions are driven by their desirability; whereas near future events are evaluated and acted upon in terms of their feasibility, that is a low level of construal. Values are desirable goals; therefore, it could be argued that values are more likely invoked in relation to distant events or goals. Indeed, Eyal et al. (2009) found that values are more relevant for behavioral intentions related to distant situations compared to proximate situations. Upon reflection, this makes intuitive sense. Values are abstract beliefs about desirable goals: Their very nature of being abstract beliefs should make values most relevant for distant goals that are not constrained by practicalities. In reverse, we can expect that values most likely have less relevance for understanding day-to-day activities as these are more strongly influenced by situational variabilities and feasibility considerations (cf. Schwartz 1992). Therefore, this theoretical account fits the general patterns observed in self-report studies of behavior and may also relate to the moderate correlations between universalism and highly abstract decisions within economic games.

A second theoretical account that appears highly relevant is self-perception theory (Bem 1967, 1972). To state it in Daryl Bem's words: 'individuals come to "know" their own attitudes, emotions, and other internal states partially by inferring them from observations of their own overt behavior and/or the circumstances in which this behavior occurs… the individual is functionally in the same position as an outside observer, an observer who must necessarily rely upon those same external cues to infer the individual's inner states' (Bem 1972, p. 2). Values are often poorly cognitively elaborated (Maio 2010), which makes it likely that individuals infer their values from their internal observations of their behavior. An important element of self-perception is that behaviors are only used as guides for updating internal states, if the behavior falls within a latent acceptance range (the behavior is not too inconsistent with other behaviors that an individual has engaged in previously) and the behavior cannot be attributed to external constraints or factors (Fazio et al. 1977). In other words, individuals are likely to infer their values from their voluntary actions, but only if these behaviors fall within the general latitude that the individual finds acceptable and the behavior is not induced or constrained by external factors. This theoretical explanation fits the patterns in experimental studies of ritual quite well. Repeated engagement in collective behavior seems to trigger internal updating of values that may transform values toward greater in-group-driven prosociality. Self-perception may also explain some of the patterns observed in textual analyses of speeches and public texts. People may downplay certain values once certain behaviors have been initiated (see Suedfeld and Brcic 2011).

Values and Behavior—A Neuroscience Perspective

Neuroscience has made much progress in helping us understand how human behavior is planned, executed, and evaluated across various diverse brain networks (Lindquist and Barrett 2012). There are first studies examining how values might be processed in the brain. Brosch and Sander (2013) review a number of these studies. The currently available evidence suggests that thinking about values activates reward networks (associated with making economic decisions, reward sensitivity and evaluating the valence of a reward) and social cognition-related networks (involved in forming impressions of others and evaluating the needs and goals of others, also called Theory of Mind). Some activations were also observed in networks involved in and linked to processes of behavioral inhibition and tracking errors after execution as well as areas that integrate self-related information and abstract long-term goals (note the link to construal level theory reviewed above).

These neuroscience studies provide an interesting new angle for evaluating the causal relationship between values and behavior. Brosch and Sander (2013, see also Brosch et al. 2011) argued in line with self-perception theory reviewed above, that value hierarchies in the brain are constructed and adjusted when repeated genetically or epigenetically driven behavioral predispositions are reinforced and anticipated outcomes of these behaviors are more positively evaluated. Once these value hierarchies are integrated in a coherent self, these mental representations may become self-rewarding even in the absence of concrete choice or reward situations.

The individual will then actively seek out situations associated with those values that are experienced as rewarding. This is an interesting developmental proposal that merits further examination.

Toward a Theory of Values and Behavior

To develop a theory of the value–behavior linkages, we need to study how values are first formed during socialization. The available evidence demonstrates that even preschool children clearly differentiate between human values in line with the Schwartz value theory (Döring et al. 2015). At the same time, both values and behaviors are likely to be driven by broad behavioral approach versus avoidance systems (DeYoung 2014). The neuroscience data reviewed above shows that values are connected to core processes of the behavioral approach versus avoidance system at the neural level. This makes it highly likely that both values and behaviors are driven by the same underlying neurobiological mechanisms (Fischer 2017). Obviously, values also include other neurocognitive processes (e.g., related to emotion processing and empathy). But core elements that are important for developing values as trans-situational life goals appear to be shared with systems regulating behavior. The question then becomes whether values are emerging earlier during the ontogenetic development path, or whether they trail behavioral dispositions. Obviously, once values are formed, disentangling the causal orientation becomes more experimentally demanding.

Drawing upon neuroscience studies of values and connecting it to behavioral research, the most plausible initial relationship between values and behaviors is from behaviors to values. Infants are likely to construct and adjust value hierarchies based on their own observations of their genetically and epigenetically driven behaviors (Bem 1972). An infant predisposed to be outgoing might observe herself to engage with other children and adults to a greater extent than other children and, therefore, form a concept that she values meeting others (a precursor to universalism). There is good evidence that stable behavioral dispositions emerge even within the first few months postpartum that predict personality traits later on in life (Caspi et al. 2003; Moffitt et al. 2011; Slobodskaya and Kozlova 2016). Similarly, caretakers might reinforce and reward certain types of behaviors ("It is so nice that you play with all the other children"), leading to implicit evaluations associated with observed self-behaviors.

As the cognitive and perceptual capacities of children develop, the value constructs become more clearly differentiated and increasingly integrated in an emerging sense of self. Continuing observations of behavior as well as reinforcements of these behaviors are compared with the internalized value hierarchy and periodically updated and revised. Especially as individuals move into different roles that require new types of behavior (see Gouveia et al. 2015), the associated values within the overall hierarchy need to be updated and readjusted (Heider and Fritz 1958). In all these examples, behavior is assumed to be driving value development and differentiation at the cognitive level. Many day-to-day behaviors are automated or strongly influenced by situational demands (Mischel and Shoda 1995). In line with both construal level theory and self-perception theory, values are unlikely to causally affect behaviors on a regular basis, unless they are seen as been associated with the same neurobiological mechanisms that also instantiate the behaviors.

At the same time, values may also influence the selection of long-term behavioral choices, once values are integrated into the overall system of a person's personality (DeYoung 2014). If values are central to somebody's core self-concept (e.g., I do care about others, this is why I would like to work in a profession where I can help others = Universalism), these values might guide conscious decisions about behaviors. In this sense, value hierarchies at the neural level become self-rewarding and an individual will seek out situations and roles that may reinforce and provide positive rewards (see Brosch et al. 2011). This can reverse the causal order, in that internalized value hierarchies now 'drive' behaviors because of the positive internal feedback (feeling good about oneself) that certain behavioral choices entail. Yet, these behaviors need to be consciously interpreted in evaluative terms. As implied by construal level theory, many day-to-day activities are probably more influenced by other psychological processes than values.

In summary, the causal relationship between values and behavior might change over the developmental trajectory. Initially, behaviors observed by the self might be taken as inputs to construct a conscious value hierarchy. This hierarchy will be updated and reinforced upon reflection of day-to-day behavioral choices. Once this value hierarchy is formed and integrated into a coherent self, values can start to also influence long-term behavioral choices, either through seeking social situations that allow an easier enactment of values congruent with the personal value hierarchy or through deliberate choices of long-term directed behaviors (e.g., selection of work place, behavior that is highly visible [e.g., vegetarianism], engagement with specific groups that engage in value congruent behaviors [e.g., political or civic groups]) that are consistent with a person's value hierarchies. This changed direction of causality from values to behavior might be primarily driven by internal reward feedback. However, it is important to note that current evidence suggests that both behaviors and values are related to the same neurophysiological and neurobiological systems (DeYoung 2014; Fischer 2017). If talking about causal order, it is related to differential conscious awareness of values (potentially during extended periods of deliberation and reflection about decisions that are central to the self). If behaviors are more automated, values are clearly secondary. In this case, post hoc evaluations of values in line with behavioral choices reflect either (a) the common neurobiological organization of behavior and value systems or (b) the need of individuals to present consistent narratives about oneself (the self-representation biases discussed above).

Moving Forward

Values and behavior should be linked by definition. Yet, the inherent ambiguity of the causal nature of the relationship within the definition of values—both as a guide of behavior as well as expression of internal motivations that underlie homeostatic processes—remain open to further empirical and theoretical development. Psychology overall has neglected the study of behavior and instead has focused on mental states that may or may not relate to actual behavior (behavioral intentions and recollections of past behavior). A number of large scale meta-analyses have demonstrated that behavioral intentions are a poor predictor of behavior in real world settings (Griffeth et al. 2000; Mesmer-Magnus and Viwesvaran 2005). Studying intentions or recollections of behavior is not going to provide us with a good understanding of how values relate to behavior. Insights into the value–behavior link require sophisticated studies of actual behavior in the real world as well as the laboratory. In the following, I briefly outline two avenues for observational studies as well as refer to ongoing experimental studies that can help to evaluate this proposed theoretical account and more generally shed new lights on the relationships between values and behavior.

First, the availability of mobile technology that captures important dimensions of behavior makes sophisticated value–behavior studies increasingly feasible. For example, using wearable sensors that track basic activity levels, correlations between general behavioral parameters and social interaction patterns over the period of a month can be related to basic personality dimensions (Olguin et al. 2009). Innovative use of big data available through wearable sensors in cell phones, fitbits or other devices open exciting opportunities for studying how basic human values are related to behavior in the real world. To what extent are daily behavioral choices guided by human values as studied in psychology? This is a most fascinating question awaiting empirical data.

Second, observational studies of targeted behavior (e.g., behavior ratings during interviews or specific activities) could be related to self-report of values (for a limited example from personality research, see for example, Gurven et al. 2012). The difference to current studies of observer ratings is that multiple raters judge specific behaviors instead of relying on memory or general impressions of the behavior of an individual. These behaviors can be studied in real-life contexts or in laboratory settings while participants engage in specific tasks.

However, these two methods are still correlational and cannot address the causal relationship between the variables. If these methods are used with longitudinal assessments of values via diary methods or experience sampling (Mehl and Conner 2012), we can start to unpack the causal relationship between values and behavior in real world contexts. An added advantage would be longitudinal developmental studies that can shed light on the developmental emergence of both values and behavioral traits. As indicated by the emerging neuroscience literature, examining value–behavior correlations in adults might be too late because the crucial windows for assessing the ontogeny and underlying causal development might have been missed. Ideally, we need long-term observational studies with infants that shed light on the behavioral patterns and the emerging values hierarchies during early childhood.

A critical observer of the literature may argue that values show relatively high stability across time, indicated by moderate-to-strong test–retest correlations (Bardi et al. 2009). What these correlation masks are systematic situational influences that are relevant and meaningful from a homeostatic relationship perspective (Mischel and Shoda 1995). Some people will always be higher or lower on general needs (this is what test–retest correlations are tracking), but these needs will fluctuate across situations. Preliminary work in our laboratory using more frequent ratings of values using dairy methods suggests relatively high day-to-day changes in values, even though there is a relative stability in the overall consistency of the value hierarchy. If there is a systematic linkage between values and behaviors, we need to capture these fluctuations and examine whether there are systematic patterns in the contextual salience of values and behaviors in that situation.

A second avenue for addressing the causal direction of any relationship between values and behavior is to study the link experimentally. The work by Greg Maio and his group is the most sophisticated in this context (for a general overview, see Maio 2010). Specifically, it would be informative to prime motivational goals and then test whether these experimentally primed goals influence both values and actual behavior in the laboratory or the real world. Importantly, it would be interesting to examine whether values do mediate the experimental priming effect on behaviors.

Examining the relationship between values and behavior in cultural context is a fruitful avenue for further systematic research. The self-report literature has indicated that there should be systematic links. Now, it is time to move into the realm of real behavior and examine the causal unfolding of this relationship across time and situations. Some tentative theoretical processes have been offered in this chapter.

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Chapter 11
Exploring the Complicated Relationship Between Values and Behaviour

Jan Cieciuch

Introduction: Values and Behaviour

In today's psychology, we know much about values. Not only do we know the content of the main values, but we also know their structure, that is, the rules governing the similarities and conflicts between values. A huge part of this knowledge has been generated through empirical research conducted using Schwartz's theory of values (Schwartz 1992; Schwartz et al. 2012), which was the starting point, or at least the reference point, for most chapters of this book. The literature presented in the chapters in this book is related to the use of value preferences, as a quite well-developed construct, to explain human behaviour. We already know much about inherent characteristics of values; it is therefore the time to show values in action, that is, to explore their role in explaining behaviour.

Explaining behaviour is considered the general aim of psychology. But, the attainment of this aim seems to be more shimmering in the distant horizon rather than tangible and within reach, because human behaviour is still largely mysterious and unpredictable for a psychological scientist. At the same time, explaining behaviour is a test of the quality and usefulness of the constructs proposed in various fields of psychology. If a particular construct or variable allows us, even to some extent, to explain behaviour, then that means it is worthwhile to have the construct in the scientific repertoire, and if such a construct does not help to predict behaviour, then it becomes useless and perhaps could be eliminated from the collection of psychological constructs.

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Values are undoubtedly a construct that can help to explain behaviour, in both the intuitive, common understanding and in scientific approaches. Many studies on the relationship between values and behaviour can be found, of which some have been mentioned in the chapters of this book, which in turn are also an important literature enrichment on the value-behaviour relationship.

Value preferences seem to be particularly good candidates for a variable explaining behaviour for theoretical and conceptual reasons. The definition of a value elaborated in the Schwartz (Chap. 3 in this book) and Sagiv and Roccas (Chap. 1 in this book) includes the term "guiding principles in life". Another aspect of the definition of values is that we can differentiate among values based on their motivational content which was also discussed in the Schwartz and Sagiv and Roccas (Chaps. 1 and 3 in this book), and its methodological consequences were presented by Roccas, Sagiv and Navon (Chap. 2). The motivation is directly related to behaviour. One can argue then that if we get to know the value preferences that are the "guiding principles in life", we will be able to predict behaviour.

A review of such research was presented in the Sanderson and McQuilkin (Chap. 4 in this book), Benish-Weisman et al. (Chap. 6) and Arieli and Tenne-Gazit (Chap. 7). It is difficult not to agree with the conclusions of these studies and reviews that values are important for behaviour in different contexts: private, (Boer, Chap. 9), social (Sanderson and McQuilkin, Chap. 4), professional (Arieli and Tenne-Gazit Chap. 6; Ravlin and Flynn Chap. 7) and many others. A second way to reveal the role of values in behaviour is to propose mechanisms that increase or decrease the influence. An exemplary mechanism is instantiation as described in the Hanel et al. (Chap. 8 in this book) or Regulate-Threat Model linking value preferences to affective well-being proposed by Boer (Chap. 9 in this book).

The chapters, however, also encourage a more general reflection on both elements of the value-behaviour relationship. It appears that in studies on the value-behaviour relationship, the assumptions about (1) the unity of values and motivation (because of the motivational content of values) and (2) the separation of values and behaviour (because we talk about the influence of values on behaviour) are used quite common. I would like to critically analyze both of these assumptions and consider the validity of the reverse assumptions of (1) the separation of values and motivation and (2) the partial unity of value preferences and behaviour. Maybe this perspective will allow for a better understanding of the role of values in behaviour and will give new impetus to future research.

Disentangling Values and Motivation

Numerous empirical studies, some of which are referenced in the Schwartz (Chap. 3 in this book), demonstrate that values, regardless of their specific distribution (4 higher order values, 10 basic values or 19 more narrowly defined values) are arranged in a circular structure. The theoretical basis of this circular system is motivation, and the values are described in dynamic motivational terms. Schwartz suggests that values *express* motivation and that motivation *underlies* values. Consequently, values are defined in terms of motivational goals that can be compatible with each other, which is graphically represented by a close, adjacent location or motivationally opposite to each other, which means they are located on opposite sides of the motivational circle. Sagiv and Roccas (Chap. 1) summarized the circular structure as "adjacent values reflect compatible motivations and opposing values reflect conflicting motivations" (p. 7), and the "value circle forms an integrated structure of motivations" (p. 8). In the description of values, Schwartz (1992) also uses another dynamic motivational category, i.e. needs, in particular, biological needs that underlie values. What is then the relationship between the motivational categories (needs and motivation) and values? What does it mean that values *express* motivation or that motivation *underlies* values? These are the key questions for the relationship between values and behaviour because behaviour is always caused by some kind of motivation.

The relationship between values, motivation and needs can be analyzed using the ontogenesis and phylogenesis of values differentiated by Cieciuch and Schwartz (2017). The phylogenesis of values describes how values were created in the development of the human race and culture, while the ontogenesis of values describes the way in which the hierarchy of values of each individual is shaped. In the phylogenetic perspective, values are the translation of biological needs into socially acceptable goals. Schwartz, in his theory (Schwartz 1992; Chap. 3 in this book), argues that values are grounded in three universal requirements of human beings: (a) the needs of individuals as biological organisms, (b) the requisites of coordinated social interaction and (c) the survival and welfare requirements of groups.

Generally, the very basic needs of human beings as biological entities are simply to live and survive. The chances to survive are higher inside a group than outside of a group. Being a member of a group, however, implies certain restrictions on human activity, and especially the need to coordinate and agree on the behaviour of individuals. Therefore, each individual is focused not only on personal survival, but also on the survival and welfare of the whole group, from which individual survival and the well-being of the individual derivate. The rules of coexistence among people are the foundation of cultures and continue to be embedded in them. They produce the hierarchy of values optimal for the survival of the group. According to this perspective, the biological needs precede and underlie values and the whole culture (Cieciuch and Schwartz 2017). The phylogenetic perspective averages the influences of biology on the value preferences promoted by the culture, and therefore there are, in fact, no differences in the preferred hierarchy of values in cross-cultural studies (Fischer and Schwartz 2011).

Therefore, at the top of the hierarchy are benevolence values, which promote cooperative and supportive relationships among group members, and self-direction values, which promote taking independent initiatives and generating new ideas and solutions that are required for the survival and prosperity of the individuals and groups (Schwartz and Bardi 2001). Extensive cross-cultural research conducted in many countries, including among representative groups, support this claims. Findings show that the hierarchy of values is relatively universal (Fischer and Schwartz 2011; Schwartz and Bardi 2001). In most countries, benevolence and self-direction are at the top of the hierarchy (Schwartz and Bardi 2001).

Schwartz (2014) introduced here the *latent culture* construct that, similar to a latent variable, expresses itself in different kinds of institutions. Values propagated by each institution may be different, but the differences are averaged at the country or culture level. For example, military service strengthens and promotes obedience, universities shape self-direction, a charity organization promotes self-transcendence and sport activities support striving for achievement; however, at the country level, benevolence is usually the most important value (Schwartz and Bardi 2001; Schwartz 2014).

This result could be surprising. If values are the principles guiding human life, and studies show that, regardless of culture, these values are at the top of the hierarchy, then it could be expected that our world is an extremely friendly world where people are concerned about other people (benevolence) while remaining independent and free entities (self-direction). No research is needed to recognize that our world does not look so idyllic. Note however that whereas at the societal level, the hierarchy of values is universal, there are individual differences in the importance of values, which are related to individual differences in behaviour. These differences are addressed in the ontogenetic perspective.

The ontogenetic perspective, in turn, explains the interpersonal differentiation in terms of a hierarchy of value preferences and describes how the individual hierarchy of values of each individual is shaped (Cieciuch and Schwartz 2017). People are differentiated by their biological underpinnings (temperamental, motivational and emotional) and by the context of the latent culture in which they live and the institutions to which they are connected where different values are propagated. Cieciuch et al. (2016) call the shaping of value systems a “trade-off between basic motivations and the latent culture” (p. 523). Individual value preferences are shaped in the process of socialization based on individual motivational tendencies.

Figure 11.1 graphically presents the relations between biologically determined needs, culture and individual values.

The grey figures represent the processes in ontogenesis where the individual hierarchy of values is formed as a result of the impact of both cultural and biological factors, particularly the biologically determined needs. The white figures, without any filling, represent phylogenesis where the structure and hierarchy of values are the results of the translation of biological needs into the language of socially acceptable goals. In such an approach, one can distinguish the biologically based motivation expressed in the needs and values that, at the cultural level, are the transformation of needs into an axiological language of values, and at the individual level, are the trade-offs between the individual biological personality and the social impact in an individual context.

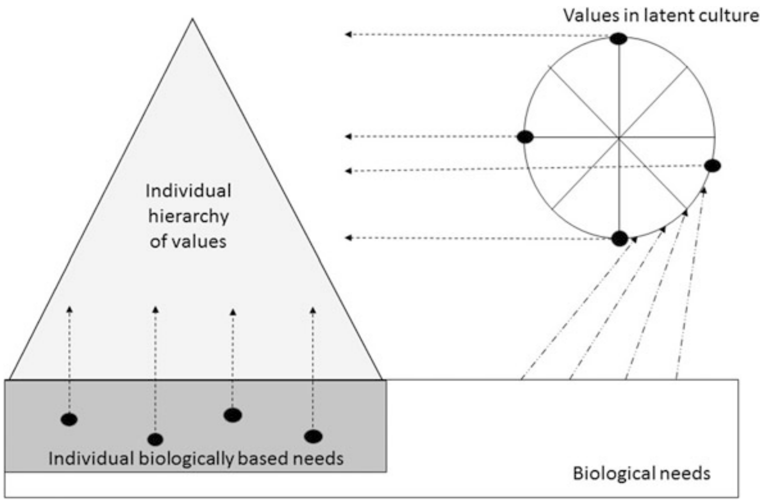

Fig. 11.1 Relations between biological needs, culture and the individual hierarchy of values

The key issue in this model is that value preferences are conceptually separated from motivation. They are built on motivation but they do not have to be compatible with individual motivation by definition. Imagine a person with a high need for stimulation. She or he can fulfil this need by engaging in a criminal behaviour or by transforming it into socially acceptable values such as extreme sports. The way of expressing and fulfilling this need for stimulation depends on the environment, families and institutions that offer the possibilities of such transformation and show ways for doing it. Sometimes, value preferences may even be in conflict with biologically based motivation. For example, the temperamental need for stimulation could occur along with the belief in the value of tradition, conformity and self-regulation because such values have been inculcated by their parents and surroundings. The subsequent behaviour would be influenced in opposing directions by the biologically based motivation and the value preferences.

One can say that the distinction between *desired* and *desirable* that is present in the literature (e.g. Rohan 2000) describes just such a situation in relation to values. Values as *desired* and values as *desirable* can be considered as two faces of value preferences. The values experienced as desirable are a derivative of the culture impact, the social environment's effect on the individual, while the values experienced as desired are grounded in the culture impact and/or in the biological needs and underlying personality. A situation in which the same values are both desired and desirable is possible, but a situation is also possible where desirable values are not really desired.

If we separate values from motivation, the key issue for the values-behaviour relationship is the congruence of value preferences with the biologically based motivation and needs. If the value preferences, as beliefs about what is important, are consistent with the prior biologically and personality-based motivation, such that desirable values are also desired, it is highly probable that behaviour will be consistent with value preferences. However, if the desirable values are not in accordance with biologically based motivation, the impact of value preferences on behaviour will be considerably reduced.

The literature emphasizes the impact of the whole system of values on human behaviour. Arieli and Tenne-Gazit (Chap. 6) write that "taken all together, our review of the literature supports the idea that the impact of values on behaviour goes through the entire value system, revealing the commonalities and differences between the value types" (p. 128). Values influence behaviour not only through the promotion of behaviour, but also through the inhibition (Schwartz et al. 2016). In this approach, everything occurs at the same level of equal forces acting in different directions, of which one eventually becomes more dominant. However, the distinctions proposed here introduce an additional level of analysis. Values and motivation can be congruent or incongruent, but they operate at different levels. In sum, conflicts are possible not only between different values as described by Schwartz (1992), Schwartz et al. (2012) model, but also between the different levels of motivation associated with values. Motivation generally underlies values (in phylogenesis) but not necessarily in every value preference of every human (in ontogenesis).

The importance of values as guiding principles in human life affects behaviour through the emotional-cognitive system. The value is experienced as something important and therefore begins to guide behaviour. How does the experience of the importance of a value work? It seems that considering the distinctions proposed above, this importance can be experienced in two ways. The first one is an activation, the desire to take action and consequently taking it (if no forces inhibiting the action appear) to pursue a given value. The second turn is the inhibition of motivation or desire, experiencing a kind of coercion, which commands one not to do what one would want, or, in the name of values, dominates over motivation. This kind of motivational conflict is, however, the conflict between the forces and motives at different levels. The former can be called a need, and the second can be called a value, although both have motivational power.

Whether the behaviour is driven by the motivational power of needs or the motivational power of values will depend on other contextual elements. The more distant the goal, the more difficult it is to estimate the costs, and the more time needed for thinking, the more chances there are for values to appear. It also depends on certain characteristics of the person such as for example the level of self-control.

Unpacking Relations Between Values and Behaviour

Fischer (Chap. 10 in this book) writes "after a cognitive turn psychology is interested in what people think and feel rather than what they do" (p. 219). This observation is obviously true if we examine what people think they will do, but not what they actually do, and we are interested in the particular about which behaviour we ask. However, it is different in the case of values. Considering value preferences as something different, separate from the behaviour, is not an exclusive option. In addition, it requires a precise definition of what behaviour really means, and in psychology, we still have a problem with the definition of behaviour (Baumeister et al. 2007; Furr 2009). Value preferences are not observable, but they are an essential part of human mental life, a cognitive-emotional act. It can, therefore, be argued that, in principle, the evaluation act itself is a behavioural act by simply claiming: valuing is doing. The question of why valuing does not always mean the coexistence or the cause of other behaviours, acts or actions is not a question about the usefulness of the value construct for predicting behaviour, but it is instead a question about the binding mechanism of one behavioural act with another one.

Value preferences are sometimes treated as one of the basic taxonomies of individual differences, in addition to personality traits (e.g. Roccas et al. 2014; Vecchione et al. 2011). However, even if this categorization is true, values are a quite different construct from traits. Can an individual often behave differently than his personality traits would describe? Generally, no. This different behaviour would mean undermining the legitimacy of the trait construct or at least make it an irrelevant description of that individual. Birds tend to fly and fish tend to swim. Therefore, we see birds fly, but we usually do not see them swim, and we see fish swim, but we usually do not see them fly. The world of personality traits is obviously more complicated and more differentiated, but the characteristics of the trait as a feature remain the same. A trait describes some typical behaviour, such that an individual behaves as described by the trait, although one cannot talk about it as a causal effect (i.e. a trait-causing behaviour).

Things look different in the case of value preferences. An individual may behave differently than his preferred values would suggest. This situation will occur every time the individual simply decides that he or she will behave contrary to their values. There can be many reasons for such decision, and some of them may make the individual regret his or her decision, which basically confirms the importance of preferred values. Others might not make the individual regret the decision or behaviour, because he or she will claim that it was forced (and they were not able to behave in accordance with their will and in accordance with their values) or that they recognized the supremacy of some other values. Finally, it is also possible to change one's own values by watching one's own behaviour caused by other factors. Fischer (Chap. 10) writes about the impact of behaviour on values.

If we split values into biologically determined needs and actual value preferences, the question regarding the mechanisms that bind value preferences and behaviour is ultimately a question of human freedom. Value preferences do not determine behaviour by definition as motivation does but are only a factor an individual may consider when making conscious decisions. The task for psychology is to show which conditions favour the consideration of values as motives for behaviour. However, together with the consideration of human freedom, we approach the limit of psychological causal explanations.

Meaning of Behaviour and Some Further Directions

In my previous points, I have used the concept of behaviour, assuming its intuitive understanding. However, let us actually think—what is behaviour? The question seems obvious at first glance, but when thinking about it, the evidence gives way to a doubt, similar to the question about the time of St. Augustine (Copleston 1958), who wrote that he knows what time it is as long as nobody asks, but when someone asks about it, he no longer knows. In psychology, there are different definitions of behaviour (e.g. Furr 2009). Most of them focus on the criterion of observation—behaviour is what can be observed. The problem with this kind of definition is that the set of behaviours includes, for instance, tics, but it does not include some intentional behaviour like for example mental prayer. Moreover, the criterion of observation, in principle, does not determine what the observer actually sees when watching someone else's behaviour. When we see someone give an object to someone else, we do not know if he really gave something, gave back a borrowed thing or lent something. Even if based on the context and the conversation, we conclude that he lent something, and we do not know if it is because he wants to achieve something (e.g. win sympathy), because he wants to help a person who is currently in need or because he just thinks that he should help, without feeling sympathy. These different possibilities are crucial for understanding behaviour, explaining its causes and anticipating further behaviour. These possibilities determine what might be called the *meaning of behaviour*, and the meaning of behaviour can only be described by considering the meaning a person gives to it.

Behaviour can obviously be defined by external criteria, as some kind of an objective event, commanded or prohibited. That is, it is known what it is and one can indicate the occurrence of a particular behaviour such as driving over the speed limit on a highway, theft or murder, purchasing a particular computer model or brand, being late for work or going to the theatre. Such behaviours are defined by external, objective criteria. However, to understand the meaning of these behaviours, the internal perspective should also be considered. Each of the above-mentioned types of behaviour may be caused by many factors. To predict the behaviour (and from a practical perspective, increase or decrease its frequency), it is necessary to understand its meaning. The meaning is not always known to the behaving person, but it is always psychological, considering human internal states.

An argument can be made that the value preferences not only influence behaviour, but also give behaviour a particular meaning. The same value may cause different behaviours, and similar behaviour may be motivated by different values in different individuals. Understanding the behaviour requires the consideration of both the objective dimension of behaviour and its meaning for the individual (e.g. Roccas and Sagiv 2010).

Explaining behaviour, in fact, means it is necessary to understand it. The categories of *explain* and *understand* refer to the division of science introduced by Dilthey (1922) on Natural Sciences (*Naturwissenschaften*) and Humanities (*Geisteswissenschaften*). The task for the former is to explain the phenomena, and the task for the latter is to understand it. Explanation occurs in terms of cause and effect, while understanding occurs in terms of the relations between the whole and the part. Modern psychology situates itself in a circle of natural sciences, with the indispensable role of explanation in terms of cause and effect. However, it is difficult to disregard the nature of the subject matter of psychology such as human beings who escape from strict explanatory categories, especially if the subject of analysis is not his fragmentary reactions but overall behaviour. The psychology of values touches on the problem that is at the junction of both types of sciences highlighted by Dilthey. Recognition of the value as motivation preceding behaviour, and therefore, as something separate, different and objective, provides many interesting results. However, it is difficult to claim that it explains behaviour in a satisfactory way, as the percentage of explained variance of behaviour in models explaining behaviour with values is not that large.

Even though values precede behaviour in their motivational aspect, they are also a *part of behaviour*. Valuing is doing and giving meaning to behaviour. This approach could be further developed in the hermeneutical paradigm, appropriate for the Humanities, in that it can offer some additional insight into the phenomenon investigated. Valuing is an element of behaviour. At the same time, it can be its cause and can give importance to behaviour because behaviour expresses something external, i.e. values.

Perhaps these reflections are too far-reaching, and other than the positivist vision of psychology that is in fact a social science, but under the umbrella of Natural Sciences in Dilthey's proposal, will lead to nowhere. At this point, however, it would be worthwhile checking the suitability of this perspective, which is clearly an interdisciplinary approach, in further theoretical and empirical analyses. Today, it is difficult to deny that, even though we know a lot about the relationships between values and behaviour, there is still a long way to go to reach full understanding. This book, no doubt, is a milestone on the way that guides us along this road and shows new horizons that wait for discovery. On the way to the future discoveries and understanding of the relationships between values and behaviour, it is worth taking various perspectives and testing various definitional and theoretical assumptions. Perhaps the possibilities of conceptual separation of values from motivation and binding values at the conceptual level with behaviour, as indicated in this chapter, are worth consideration and continuation.

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