# Back to the roots. The effects of personality traits and Personal values on participation in civic groups

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# Back to the roots. The effects of personality traits and personal values on participation in civic groups

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FACULTÉ DES SCIENCES SOCIALES ET POLITIQUES

INSTITUT D'ÉTUDES POLITIQUES, HISTORIQUES ET INTERNATIONALES

# Back to the roots.
# The effects of personality traits and personal values on participation in civic groups

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par

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**« Back to the roots. The effects of personality traits and personal values on participation in civic groups »**

Jean-Philippe LERESCHE
Doyen

Lausanne, le 30 novembre 2018

**Résumé**

Un nombre croissant de travaux s'intéresse à la relation entre les traits de personnalité et valeurs des citoyens et leur comportement dans les sphères sociales et politiques. Néanmoins, l'engagement associatif en tant que forme particulière de participation citoyenne n'a reçu que peu d'attention à cet égard, et les études incluant à la fois les traits de personnalité et les valeurs des individus comme prédicteurs de ce type d'engagement sont particulièrement rares. Cette thèse se propose de combler cette lacune en examinant les effets de cinq traits centraux de la personnalité (les « Big Five » ; Goldberg 1981) et de quatre types de valeurs fondamentales (Schwartz 1992) sur l'engagement dans différents types d'organisations (e.g. clubs de loisirs, associations de quartier, organisations caritatives, organisations de mouvements sociaux, partis politiques). L'argument central qui est défendu postule que certains traits de personnalité peuvent faciliter l'engagement associatif car ils dotent les individus en compétences et savoir-faire qui peuvent être utiles à la participation dans un collectif citoyen, tandis que les valeurs devraient fournir les raisons d'un tel engagement et ainsi motiver les citoyens à s'impliquer dans certaines associations. Sur la base de données d'enquête récemment récoltées dans le cadre du panel GESIS en Allemagne, ce travail démontre que les traits de personnalité contribuent essentiellement à expliquer le fait de participer dans une association, quelle qu'elle soit, alors que les valeurs apparaissent déterminantes dans le choix du type d'engagement – différentes priorités en termes de valeurs fondamentales menant à différents types d'engagement, en fonction du degré de compatibilité entre les valeurs de l'individu et les buts poursuivis par l'organisation. Ces résultats soulignent l'importance de tenir compte des dispositions et buts fondamentaux des individus lorsqu'il s'agit d'étudier l'engagement civique. Ils étayent également la thèse selon laquelle traits et valeurs ont des effets distincts et complémentaires sur le comportement des individus, suggérant dès lors qu'il s'agit de structures indépendantes qui ne peuvent ni ne doivent être confondues (Winter et al. 1998). Enfin, cette thèse apporte également un nouvel éclairage sur les similitudes et différences entre les individus engagés dans différents types d'organisations, un aspect encore relativement peu étudié.

**Summary**

A growing body of literature examines the relationship between personality traits and personal values, on the one hand, and citizens' social and political behavior on the other. Yet, group participation as a specific kind of civic engagement has been somewhat neglected and studies including both traits and values as predictors of associational involvement are even scarcer. This thesis attempts to fill this gap by uncovering the effects of the "Big Five" (Goldberg 1981) and four basic personal values (Schwartz 1992) on personal involvement in various forms of social and political groups (e.g. social clubs, humanitarian or charitable organizations, social movement organizations, political parties). The central argument is that traits may help enable people to participate by providing them with basic psychological skills valuable for group-based civic activities, while values might provide the reasons for such a personal involvement, and thus motivate citizens to participate. Using recent survey data from the GESIS Panel (Germany), it will be demonstrated that personality traits are somewhat better predictors of the overall group participation probability, whatever the group considered, whereas personal values are better predictors of specific forms of engagement – different value priorities leading to participation in different kinds of associations, depending on the degree of compatibility between one's own values and the goals the association strives for. Together, these results demonstrate the importance of taking into account individuals' core dispositions and goals when studying civic participation. They also give further evidence regarding the way traits and values might differently regulate behavior, suggesting that, in line with a complementary view of the two constructs, neither is reducible to the other (Winter et al. 1998). Finally, this thesis sheds further light on both the similarities and differences between participants of different groups, an aspect which has been somewhat understudied in the literature.

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Camille Reynolds
Geneva, December 2018

# Table of Contents

# Tables

# Figures

"*It was explained to me finally that 'You have a new personality now.' But this statement was no explanation at all. It puzzled me more than ever since I had no awareness at all of any 'old' personality. If they had said, 'You are a new personality,' it would have been much clearer. That would have fitted. They had made the mistake of thinking of a personality as some sort of possession, like a suit of clothes, which a person wears. But apart from a personality what is there? Some bones and flesh. A collection of legal statistics, perhaps, but surely no person. The bones and flesh and legal statistics are the garments worn by the personality, not the other way around.*"

Robert M. Pirsig

*Zen and the Art of Motorcycle Maintenance: An Inquiry into Values*, 1974

# 1. Introduction

In a famous movie directed by David Fincher[1] and adapted from the no less famous novel of Chuck Palahniuk, the main character, Tyler Durden, tells his Project Mayhem trainees "*You are not special. You are not a beautiful or unique snowflake. You are the same organic and decaying matter as everything else*". Revealing Durden's nihilistic attitude, this metaphor was recently re-popularized by the American alt-right who used it to mock the alleged narcissim, sense of uniqueness, and hypersensitivity of people – mostly young people, women, minorities, and/or liberals – who would feel too easily offended, notably by President Trump's "inflammatory rhetoric"[2]. Beyond the current political issues, this debate echoes a long-standing philosophical controversy among psychologists, and notably personality psychologists, between the proponents of an idiographic approach (i.e. emphasizing the uniqueness of the individual) and those of a nomothetic approach (i.e. emphasizing general, common characteristics among individuals). And somewhat ironically, the snowflake metaphor is actually a good one to illustrate how those two extreme views may be reconciled[3]. Indeed, the extraordinary degree of sophistication and the extreme complexity of each individual's personality suggest that, just like snowflakes, "*[t]he likelihood of two being identical is next to impossible*"[4]. But at the same time, a careful observer would have notice that, beyond uniqueness and infinite variety, in the world of snowflakes as well as in the world of human beings, order emerges. Due to the hexagonal structure of ice crystal, nearly all snowflakes share a common six-fold basic structure, from which peripheral branches sprout further. These side-branches may grow in virtually endlessly varying patterns, and in a more

[1] *Fight Club*, 1999
[2] https://www.theguardian.com/science/2016/nov/28/snowflake-insult-disdain-young-people (Retrieved July 18, 2018)
[3] It seems that I am not the only one to believe it, as the philosopher Lou Marinoff already noticed in a book published in 2003 that "*Every snowflake is unique, as is every wave in the sea. Yet all snowflakes, like all waves, are governed by the same immutable laws of nature. Human beings are like this too*" (Marinoff, 2003).
[4] Mariana Gosnell, author of "*Ice: The Nature, the History, and the Uses of an Astonishing Substance*" (2005), in an interview for the National Geographic monthly magazine (February 13, 2007).

asymmetrical and irregular way than suggested by many pictures in books. This is the combination of these singular side-branches which gives the snowflake its ultimate, and thus almost unique, specific shape. But the fact remains that every single snowflake shares with the others a similar baseline structure: their side-branches may vary in length and forms, some may be more developed than others, arranged in a symmetrical fashion or not, but they are always organized around the same fundamental six-fold structure. This is what allowed physicists to create order out of chaos and to study snowflakes as a whole, beyond the peculiarities of each of them.

In this sense, the field of personality research resembles those of snowflakes. Indeed, the baseline assumption of most contemporary psychologists is that, just as in the world of snowflakes, the seemingly infinite number of observable individual differences may be arranged around a few dimensions which together form basic, universal, mental structures. More precisely, they tend to believe that the origin of these structures is to be found in the very essence of human beings as they are thought to derive from basic human needs (Parks-Leduc et al. 2015: 5; see also Parks & Guay 2009 and Roccas et al. 2002). Of course, this is not to deny that, ultimately, each individual has a unique and complex personality, made up of a subtle combination of many different facets and sub-facets (eventually resulting in "*a beautiful and unique snowflake*"), but only to say that, like the side-branches of snowflakes, every facet of one's personality is organized around a limited number of broad, fundamental dimensions (the six primary branches of snowflakes). Neither does it mean that personality psychologists endorse a biological, deterministic view. As stated by Caprara and Vecchione (2013: 26), *"[p]eople do not consist of a set of tendencies that progress in a predetermined sequence toward inevitable end states*" and most contemporary personality psychologists acknowledge the crucial role of an individual's social environment in shaping the development and expression of his or her personality – just like the ultimate shape of snowflakes depends on numerous characteristics of the atmosphere they pass through on their way to the ground.

Of course, human beings are much more complex than ice crystals and there ends the comparison. Nonetheless, the search for universal structures organizing an extraordinary apparent diversity has long characterized research on personality (see next chapter). At the end of the 20th century and after decades marked by the so-called "*person-situation debate*"

(see for instance Kenrick and Funder 1988), those efforts have eventually led to the development of a comprehensive model for the study of personality traits on which a working consensus has been reached in the personality research community[5]. According to this model, known as the Big Five (Goldberg 1991) or Five-Factor model (McCrae and Costa 1985), "*the domain of traits can be described, at least at the broadest and most abstract level, by five factors or clusters of traits*" (Winter et al. 1998: 233). At about this time, in the field of social psychology, building on the pioneering work of Rokeach (1973), Shalom Schwartz and Wolfgang Bilsky proposed a theoretical model of what they called the "*universal psychological structure of human values*" (Schwartz and Bilsky 1987). The baseline assumption of this model is that ten basic value-types, organized in a circular way according to the degree of congruence between the abstract goals they encompass, sum up the three types of universal human requirements. Since then, the theory has been developed and refined several times (Schwartz 1992; Schwartz et al. 2012) and has received increasing empirical support over the years. As holistic models, both the Big Five and the Schwartz's value theory "*aim at comprehensive coverage of their basic domains of content [without] seek[ing] to specify every single value or trait*" (Roccas et al. 2002: 790). The identified structures are believed to be common to all human beings, but people then vary significantly in their trait levels and value priorities.

Both the Big Five model and the Schwartz' value theory offer unified frameworks which are valuable tools for the systematic study of core individual differences. Researchers of many different academic disciplines have thereby used these models to look at the effects of traits and values on a broad range of outcomes in fields as diverse as psychology, of course, but also economy, management, education, healthcare, or even sports. In political science specifically, the past two decades have seen the development of a burgeoning literature concerned with the role of the Big Five traits and the ten basic values in orienting citizens' political behavior. Yet, as it will be discussed in more details in the next chapter, group participation[6] has received scant attention in comparison with other civic outcomes, such as social and political preferences or voter turnout. That is unfortunate because voting

[5] This model is not undisputed, though, but it is nowadays the dominant model in personality research (see next chapter).

[6] All along this thesis, the terms "group participation" and "associational or organizational involvement" will be used as synonyms. Their conceptual definitions will be presented in chapter 3.

is only the minimal form of political participation and, at least according to the proponents of participatory democracy (e.g. Barber 1984), personal involvement in voluntary organizations is another crucial condition for fostering citizens' empowerment and allowing them to fully exercise their democratic citizenship. Moreover, as explained by Morales and Geurts:

> "*Associational involvement is in itself a resource and frequently affects the allocation of resources and the distribution of power. Thus, if this behavior is not equally distributed across social categories, participation in associations might contribute to increased social and political inequalities or, at best, reproduce the unequal representation of interests and preferences in the public sphere*" (Morales and Geurts 2007: 136; see also Verba and Nie 1972; Verba et al. 1995; Schlozman et al. 1999)

The question of who participate, and even more importantly who do *not* participate in social and political organizations is therefore of great importance for any democracy. Indeed, if some citizens, for whatever reasons, are left out from the civic life, they are at risk of being socially marginalized and politically disadvantaged. Even though great disparities exist between countries, this reality might be those of a substantial number of European citizens. According to data collected through a large cross-national survey in the early 21st century[7], the percentage of citizens who were not involved in *any* of the 28 types of association covered by the survey questionnaire make up almost half of the population in some democracies of Southern Europe (e.g. 42% in Portugal, 51% in Spain; see Morales and Geurts 2007: 138)[8]. Furthermore, another important aspect is not only whether citizens participate, but also in what kind of groups they do so. Indeed, as Steenvoorden (2018: 1) pointed out: "*[i]f different groups of citizens engage in different types of participation, the voices of those groups are only heard equally loud if all types of participation resonate to the same degree in the political arena, which is not the case"*. Thus, improving our knowledge of who become involved in what

[7] Citizenship, Involvement, and Democracy (CID) project, conducted in 12 European countries between 1999 and 2002. For more information, see Westholm et al. 2007.

[8] This percentage even reaches three quarters of the population in post-communist countries of Eastern Europe (e.g. 72% in Russia, 80% in Romania and Moldova). However, the history of those countries makes them special cases in regards to civic participation (see Howard 2003).

kind(s) of civic groups and why is of practical importance for researchers as well as political authorities who are concerned with democratic principles of social and political equality, and fair representation of citizens' interests and preferences.

The study of the individual determinants of civic participation is not a new research area, far from it. However, researchers, and especially political scientists, have long focused either on the role of individuals' social background as reflected by their sociodemographic characteristics (e.g. age, gender, class, income, education), or on the role of proximal political determinants (e.g. political interest, knowledge, or efficacy). The latter are obviously good predictors of citizens' political participation, but they have little informative value. Indeed, as nicely illustrated by Matthew Cawvey and his colleagues:

> "*If we want to identify the factors that influence why some people choose to drive red sports cars, a measure of whether people like red sports cars would not be especially useful. Liking red sports cars is undoubtedly correlated with driving them, but pinpointing that correlation would teach us little. Instead, it would merely raise deeper questions about why people like red sports cars. The identified relationship would provide the illusion of understanding, but in actuality it only would kick the can down the road.*" (Cawvey et al. 2017: 16)

On the other hand, regarding the former set of factors (i.e. social characteristics), research shown that "*the importance of SES, as far as political commitment is concerned, has declined significantly over the last few decades in most [Western democracies]*" (Caprara and Vecchione 2017: 253). This declining trend in the importance of individual's location in society in explaining participation is believed to be linked to modernization and individualization processes, which went hand in hand with the emergence and growth of well-educated middle-classes, on the one hand, and an increasing personalization of politics, on the other hand (e.g. Garzia 2013; Cross et al. 2018). To be sure, poverty and low educational attainment remain strong barriers to civic participation, but other personal factors are believed to have become more and more important regarding citizens' involvement in many West-European countries. More specifically, there is growing evidence that "*psychological resources and motivation, rather than material resources and social status, play a greater role than in the past in urging people to become involved in politics*" (Caprara and Vecchione 2017: 254). As illustrated by recent

works including cross-national comparisons in Europe (e.g. Hafner-Fink 2012; Roets et al. 2014), basic value priorities, notably, are especially important for political activism in old democracies, where the social and political institutions are believed to allow and even encourage citizens to fully develop and express their own personality. In these societies, collective norms and rules are thus believed to lose ground to personal likes and dislikes, interests, and aspirations in the explanation of people's social and political behaviors. This tendency does not apply only to individual forms of participation, such as voting, but also to collective action (e.g. Bennett 2012). Against this background, sociologists Antimo Luigi Farro and Henri Lustiger-Thaler, for instance, invite social scientists to rethink social movements in these terms:

> "*The collective is becoming more and more of an individualized phenomenon in its projected sentiments, expressions, practices, techniques, memories, and most importantly the personal values upon which individuals base their commitments. To understand the nature of the collective today is concomitant with better understanding the new culture of individualized action.*" (Farro and Lustiger-Thaler 2016: 3)

Political scientists are therefore urged to consider citizens' enduring psychological attributes when studying contemporary forms of civic engagement which are believed to be "*more often an expression of secular values and individual differences in personality*" (Bekkers 2005: 441). As explained above, the holistic models of the Big Five and the Schwartz's value theory offer powerful conceptual tools to investigate the "*psychological resources and motivation"* underlying citizens' involvement in society and politics. This is what the present thesis is concerned with: to understand how core individual differences in terms of traits and value priorities may translate into differences in group-based civic participation.

Thus, the research question at the core of this thesis is the following: *what are the effects, if any, of personality traits and personal values on group participation?* More specifically, both the question of whether citizens become involved in civic groups and those of which kind(s) of groups they decide to join will be addressed. The following sub-questions will then serve as guidelines for the next chapters: does citizens' likelihood of being involved in civic groups depend on certain personality traits and/or value priorities? Are all citizens affected

the same way by these "inner forces", or are those effects contingent upon other individual characteristics? And are these effects consistent across different types of groups or do differences in trait levels and value priorities lead to personal involvement in different groups? I will advance the argument that traits contribute to set citizens' potential for participation in civic groups, while values provide them with the motivation needed to translate this potential into action. Moreover, I will argue that some traits can help overcome a lack of traditionally important resources for civic participation and that value priorities mostly account for citizens' group choice. These assumptions will be empirically tested using recent data drawn from a nationally-representative German sample. This research will hence offer preliminary evidence that some personality traits and personal values foster citizens' participation in civic groups, while highlighting their distinct effects..

The thesis is structured as follows. In the next chapter, I will first discuss in detail the conceptualization of personality traits and personal values, with a special focus on the Big Five model and the Schwarz' value theory. I will then offer an overview of the state of the art of research on these two sets of core individual characteristics in the field of political behavior. It will allow me to pinpoint research gaps and to highlight the contributions of the present thesis to the existing literature. In particular, it will be shown that, in comparison with other outcomes, the effects of personality traits and personal values on participation in civic groups have been somewhat neglected and that the scattershot nature of this literature makes it difficult to fully understand the respective contributions of traits and values to the study of group participation..

A theoretical discussion about these contributions will be proposed in the third chapter, which introduces my theoretical framework. A conceptual clarification of the concept of group participation will first be provided, as well as the rationales for a further theoretical distinction between social and political groups, and among the latter, between parties and social movement organizations (SMOs). As a second step, capitalizing on findings from previous works conducted in various subfields of research on participation (e.g. volunteering research, party membership and social movement studies), I will discuss my main theoretical arguments regarding the mechanisms through which personality traits and personal values may account for individual differences in group participation overall

probability and specific group choices, respectively. I will argue that personality traits, may help enable people to deal with the basic requirements of participation in social as well as political groups, and therefore should mainly contribute to determining *whether one will participate in a group or not*. Personal values, on the other hand, are believed to serve as motivational factors which should powerfully shape people's willingness to participate and hence direct them to specific groups, contributing more importantly to determining *in what kind(s) of groups one will be involved*. Based on previous research on traits and values in the field of politics, I will then develop specific hypotheses for each of the Big Five traits and the four higher-order value types. My theoretical expectations are summed up at the end of this chapter.

Chapter 4 will be devoted to the presentation of the analytical framework used to test my working hypotheses. I will first introduce the survey data from the GESIS Panel on which subsequent analyzes rely and discuss the representativeness of my empirical sample. Then, I will present the operationalization of the main concepts of this research: group participation, personality traits, and personal values. Common methodological issues regarding the empirical assessment of these concepts will be presented and discussed in the case of the present research. In particular, I will explain the hierarchical measurement strategy designed to adequately address both the questions of whether citizens are engaged in a group and, if so, in what kind of groups. Three binary dependent variables built on samples nested within each other (somewhat like "Russian dolls") contrast successively all group participants with passive citizens (DV1), participants of political groups with those of social groups (DV2), and party with SMO activists (DV3). Furthermore, because the GESIS Panel data contains only very short measurement instrument for traits and values (i.e. the BFI-10 and an abbreviated version of the PVQ-R, respectively), a careful and critical assessment of the reliability of these measures will be undertaken. Control variables, i.e. classic individual-level determinants of group participation, will also be presented and a baseline model, including all those variables as predictors of the three dependent variables mentioned above, will be estimated. Finally, this chapter will also offer a short description of the statistical tools and procedures used to conduct the main empirical analyses of the two subsequent empirical chapters, as well as additional robustness checks.

The two next chapters will be dedicated to the empirical assessment of my hypotheses. Chapter 5 will address the effects of personality traits on group participation while chapter 6 will focus on the role of personal values. These two chapters are structured in a symmetrical manner, discussing first the contribution of traits (respectively, values) in predicting whether citizens participate in civic groups, and then their impact on the choice of a specific kind of group among those active citizens. The findings and their discussion will offer a complementary view of the distinct contributions of traits and values on group participation.

Finally, in the last chapter of this thesis, the effects of traits and values will be simultaneously estimated into a single model in order to assess the unique contributions of each of those psychological constructs, while controlling for the other. Their joint effects on group participation will also be empirically scrutinized. I will then recap the main findings of the thesis and discuss its contribution to the existing literature on traits, values, and associational involvement, as well as its practical implications for civic organizations. To conclude, a discussion of the intrinsic limitations of this research will allow me to pinpoint several avenues for future research in the promising interdisciplinary field of political psychology.

# 2. Personality traits & personal values in politics

*"Over the past decade, a quiet revolution has been occurring in personality psychology, and an age-old scientific problem has recently begun to look tractable."*

Goldberg (1992: 26)

## 2.1. Introduction

45 years ago, Raymond Cattell, a famous psychologist, declared: "*Personality is like love: everyone agrees it exists, but disagrees on what it is"* (Cattell 1973: 41). Half a century later, major advances in the field of psychology have been made and a relative consensus has been reached among scientists about the conceptualization of personality. At the same time, a similar agreement has been growing in the closely related field of social psychology on the way to theoretically represent human basic values. This first chapter introduces these two major concepts which are at the very core of this thesis. Based on a review of the existent literature in the fields of personality, social, as well as political psychology, it aims to provide readers with an overview of the theoretical foundations on which the present thesis rests. The first part of the chapter will focus on the conceptualization of traits and values, building on the recent theoretical developments which have been made by personality and social psychologists over the past decades. I will present in details the two integrated models which have become dominant in contemporary research on personality traits and personal values: the Big Five model (Goldberg 1981; McCrae and Costa 1985) and the theory of basic human values (Schwartz 1992, 2007a), respectively. Special attention will also be devoted to the conceptual similarities and, more importantly, differences between the two constructs. Those differences are of crucial importance for this thesis, given that they will serve as theoretical grounds for the construction of the hypotheses that will be put forward in the next chapter. Finally, a literature review of the most important works concerned with

the role of the Big Five traits and the Schwartz' values in explaining citizen's political behavior will report what social scientists do know about these relationships, as well as what is still to be discovered. This latter point will highlight the contributions of this thesis to our current knowledge, contributions which will eventually be summed up in the latter part of the chapter.

## 2.2. Personality traits and personal values: definitions and conceptual clarifications

### 2.2.1. Personality traits[9]

#### 2.2.1.1. Personality: an old and multifaceted research object

The study of personality traits is part of the broader field of differential psychology, which is concerned with the study of intra- and inter-individual differences. Differential psychology aims at describing the differences in terms of individual's capacities and/or observed behaviors and explaining their origins. The basic postulate of differential psychologists is that the variations observed between the performances of different individuals placed in a same given situation and responding to the same stimuli arise from genuine differences in psychological realities, rather than being just "noise" in the measures. Therefore, the idea that lies at the heart of the study of personality is that some psychological attributes (e.g. personality traits) constitute systematic factors of variation which are a source of inter-individual differences.

Personality is a very old concept and one of the oldest research objects in psychology. Indeed, the very first models of personality date back to ancient Greece. Philosophers like Plato, Aristotle, and Hippocrates, to name but a few, have all been interested in personality and they have each proposed different conceptual models. Plato, for example, proposed to identify the dominant facet of an individual's personality to determine his occupation. But Hippocrates is probably the one who carried out the most advanced work of

[9] This section is partly based on personal notes of the course "*Psychologie différentielle et de la personnalité*" offered by Dr. Thierry Lecerf at the University of Lausanne in 2015.

conceptualization at that time by distinguishing four "humors" resulting in a typology of four personality types (i.e. sanguine, melancholic, choleric, and phlegmatic). Nevertheless, it was during the twentieth century that personality truly became an object of study. Under the impulse of technological progress, particularly in the field of statistics, new theories have emerged, inspired by earlier ones but substantially more sophisticated.

Although there is hardly one consensual definition, personality can be broadly defined as "*the organization of mental structures and processes that characterize the relationship of the individual with the world, which gives consistency and continuity to his or her experience, and from which the sense of one's own individuality is derived*" (Caprara and Vecchione 2017: 47). From an epistemological point of view, as evoked in the introduction of this thesis, there are two major distinct approaches to the study of personality (as well as many other concepts in psychology). The first one is the idiographic approach, which emphasizes the complex personality structure of each individual and looks therefore for uniqueness and specificity. This is the approach privileged by most clinical psychologists, who mainly study individual cases through qualitative tools and methods (e.g. diary method, interviews). By contrast, the nomothetic approach emphasizes the commonness among psychological structures of individuals – or group of individuals – and looks for general constructs and principles that can explain inter-individual variations. This second view covers most of the contemporary research on personality traits[10] which, after having been quite strongly criticized (see for instance Mischel 1968), is now prevailing in the field of personality psychology (McAdams and Pals 2006: 207).

#### 2.2.1.2. The traits approaches and the "Big Five" model

Stemming from a dispositional perspective, traits refer to *"dimensions of individual differences in tendencies to show consistent patterns of thought, feelings, and actions"* (McCrae et Costa 2003: 25). As suggested by the term "dimensions", traits are conceptualized as – and measured along – continuums. In that sense, they differ from personality "types", which rest on a categorical

[10] It is not say, however, that psychologists deny the fact that the expression of a trait might slightly vary from person to person according to unique combinations of biological, psychological, and social factors. Yet, proponents of the trait approaches tend to focus on the establishment of general models of personality.

conceptualization aiming at establishing typologies. By contrast, according to the trait approaches, all people share a common psychological structure organized around a set of basic traits and individuals differ only in their levels in each trait. Therefore, traits should not be thought of in either/or terms (e.g. *'he/she is (not) extroverted'*) but in terms of degrees (e.g. *'he/she has a high (low) level of extraversion'*).

Furthermore, these *"foundational personality dispositions"* (Gerber et al. 2010: 111) have explanatory power because they influence how an individual will respond to external stimuli. In particular, they appear to shape everyday behavior but also the development of other psychological constructs, i.e. "*characteristic adaptations*" such as attitudes or interests (McAdams and Pals 2006: 208; Mondak et al. 2010: 2). In contrast to these "*middle-level units*" (Buss and Cantor 1989), traits are believed to be quite stable throughout an individual's life (e.g. Plomin et al. 1990; Bouchard and Loehlin 2001; van Gestel and van Broeckhoven 2003; McCrae and Costa 2003; Gosling et al. 2003; Caspi et al. 2005; Hatemi and McDermott 2012; but see Srivastava et al. 2003). It implies a twofold relative consistency, both intra-individual (i.e. stability over time) and trans-situational (i.e. stability across situations). On this point, traits differ also from the concept of "states", which refer to transient psychological conditions greatly depending on environmental features and therefore highly changeable.

However, it is important to note that most personality psychologists do not endorse a deterministic view. Looking for manifestations of an "*enduring internal, or psychological, structure*" (Mondak 2010: 6) when trying to explain systematic variations in behavioral tendencies across individuals is not to say that people cannot behave otherwise than they do, but only that they are more likely to exhibit certain behaviors under given social constraints and opportunities. To be sure, here there is no intent to support the idea that individual behaviors, whatever they may be, can be reduced to "pure" expression of psychological, partly genetically induced attributes. More modestly, the claim is that one should not overlook the role of these core dispositions – along with many other factors – in shaping "*how [individuals] respond to the vast array of stimuli they encounter in the world*" (Gerber et al. 2011b: 266). Almost all contemporary personality psychologists agree upon the idea that observed differences in behavior and attitudes result from complex interactions

between internal factors and the environment, and that any attempt to reduce them to one or the other of these fields of influence unavoidably leads to a partial and incomplete explanation. Or to put it in the words of Mondak and his colleagues talking about political behavior specifically: "*it would be folly to assert that the environment is inconsequential for political action or to put forth a similar claim about individuals' enduring, intrinsic tendencies*" (Mondak et al. 2010: 104).

Several models have been successively developed in the literature to account for the structure of personality traits. Gordon Allport, who introduces the very notion of "traits", is one of the first to have proposed such a model (Allport and Odbert 1936). On the basis of a psycho-lexical analysis, Allport and Odbert first listed all the terms commonly used to describe someone's personality – resulting in a "*semantic nightmare*" (Allport 1937: 354) of nearly 18000 words – and then classified them into 4500 traits from three different levels (i.e. cardinal, central, and secondary traits). Whereas Allport was not interested in discovering a universal structure of personality trait, it was Raymond Cattell's goal when he proposed a decade later, on the basis of Allport's previous work, a revised, more parsimonious trait model (Cattell 1946). Using various statistical tools (especially correlations and factor analyses), Cattell identified 16 underlying dimensions that he named "*primary factors*". He actually found that these 16 traits might be further reduced to 5 higher-order factors – which greatly resemble the later Big Five – but continued to argue in favor of the more extensive 16-traits model. The efforts towards parsimony were then notably pursued by Hans Eysenck who, in 1967, proposed a model based on only two broad dimensions: extraversion and neuroticism (Eysenck 1967). A third dimension, psychoticism, was added later (Eysenck and Eysenck 1976) and together those three traits form what has been called "*The Giant Three*" (Eysenck 1994).

Even though these successive models have marked personality research, they are rarely used today. Indeed, another model consisting of a five factor solution gradually became prevalent among personality scholars. This solution was repeatedly assessed in the second half of the twentieth century (e.g. Fiske 1949; Tupes and Christal 1961; Norman 1963; Borgatta 1964) and it eventually gained a widespread acceptance in the 1980s with the seminal contributions of Goldberg (1981) and McCrae and Costa (1985). In the following decade,

the Five Factor Model (FMM) – also known as "*The Big Five*"[11], a term coined by Goldberg – has been extensively tested and empirically validated (e.g. Goldberg 1981, 1990; Digman and Inouye 1986; McCrae and Costa 1987; Digman 1990; John 1990; Saucier and Goldberg 1996). The Big Five model shares some common features with its ancestors: it relies on a psycho-lexical approach and it is empirically derived (i.e. the five dimensions have been identified by using factorial analyses). The five dimensions are sometimes referred as O.C.E.A.N, an acronym for: Openness to experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism. Each trait is a continuum contrasting two poles (one positive and one negative), along which an individual's position may be estimated. The core traits are assumed to be independent of each other and each of them encompasses six main facets (see Table 1 below).

[11] It is worth noting that the adjective "big" was chosen to reflect the broad scope of each trait, rather than their "*intrinsic greatness*" (John and Srivastava 1999: 105).

**Table 1 – The Big Five factors and their main facets (Costa and McCrae 1992)**

| **Big Five Dimensions** | **Facets (and correlated trait adjectives)** |
|---|---|
| **O**penness vs. closedness to experience | Ideas (curious)<br>Fantasy (imaginative)<br>Aesthetics (artistic)<br>Actions (wide interests)<br>Feelings (excitable)<br>Values (unconventional) |
| **C**onscientiousness vs. lack of direction | Competence (efficient)<br>Order (organized)<br>Dutifulness (not careless)<br>Achievement striving (thorough)<br>Self-discipline (not lazy)<br>Deliberation (not impulsive) |
| **E**xtraversion vs. introversion | Gregariousness (sociable)<br>Assertiveness (forceful)<br>Activity (energetic)<br>Excitement-seeking (adventurous)<br>Positive emotions (enthusiastic)<br>Warmth (outgoing) |
| **A**greeableness vs. antagonism | Trust (forgiving)<br>Straightforwardness (not demanding)<br>Altruism (warm)<br>Compliance (not stubborn)<br>Modesty (not show-off)<br>Tender-mindedness (sympathetic) |
| **N**euroticism vs. emotional stability | Anxiety (tense)<br>Angry hostility (irritable)<br>Depression (not contented)<br>Self-consciousness (shy)<br>Impulsiveness (moody)<br>Vulnerability (not self-confident) |

*Source:* adapted from John and Srivastava 1999: 110

*Openness to experience* (as opposed to closedness) refers to a complex and rich mental life, bursting with originality. Individuals who score high on this trait are characterized by creativity and open-mindedness, which translate into a search for new experiences, a strong enthusiasm for innovative ideas, broad interests and a special concern for aestheticism. Moreover, these people tend to be curious about, and tolerant towards, others' feelings,

ideas and values – even when conflicting with their own. By contrast, less open people have greater difficulties in adopting or even understanding someone else's perspective.

Second, *Conscientiousness* (as opposed to lack of direction) refers to effective internal control. Highly conscientious people tend to show a deep sense of duty and, due to a great self-discipline, they are generally persevering individuals who are able to restrain the impulses that might otherwise distract their attention away from their tasks or goals (John et al. 2008: 138). They like order, structure and control, and they tend to behave responsibly and in a reflective manner. They are thus especially likely to feel annoyed by, and helpless in the face of, unexpected situations, when things do not go as planned.

The third dimension, *Extraversion* (as opposed to introversion), describes one's tendency to enjoy interactions with the external world in general (John et al. 2008: 120). Extroverts tend to be gregarious people who exhibit approaching behaviors. They are often described as talkative and outgoing individuals, who appreciate and look for the company of others. Furthermore, these energetic people are eager for sensations and are particularly receptive to positive emotions. Conversely, introverted, self-oriented people might be overcome with paralyzing shyness in situations inducing social interactions. Therefore, unlike their extroverted counterparts, they tend to avoid such situations, like crowded places or social meetings.

Like extroverts, people who are characterized by a high level of *Agreeableness* (as opposed to antagonism) tend to seek interactions, but their interpersonal relationships are then marked by trust, empathy and cooperation. The most agreeable people appear indeed deeply reluctant to view relationships from a competitive angle and they are generally careful not to offend anyone. This prosocial orientation goes hand in hand with kindness and humility, contrasting with the toughness of the uncompromising, less agreeable people.

Finally, *Neuroticism* (as opposed to emotional stability) indicates a high propensity to experience mood swings, and especially negative emotions (e.g. anger, sadness). People who score high on this dimension tend to feel easily anxious and threatened, being especially vulnerable to stress. They are also often characterized by a lack of self-confidence and are

particularly exposed to depressive disorders. But their negative emotions can also be directed towards others, and then neurotics often express hostility and mistrust. Combined with impulsiveness, it makes them individuals who are not easy-going. By contrast, emotionally stable people are even-tempered and therefore better equipped to deal with unpredictable or stressful situations.

As stated by John and his colleagues, "*rather than replacing all previous systems, the Big Five taxonomy serves an integrative function because it can represent the various and diverse systems of personality description in a common framework*" (John and Srivastava 1999: 103). This five-factor structure has been successfully replicated in many different contexts (e.g. Egger et al. 2003) and, although its content validity and reliability are still controversial[12], it is nowadays the dominant trait-model in personality research. Or, as stated by Caprara and Vecchione (2017: 52-53): "*the Big Five currently represent the most widely accepted model with which to address major individual differences in personality traits in manifold contexts, including politics*". Of course, these traits do not provide an exhaustive representation of an individual's personality and other core psychological constructs are believed to be important components of it (McAdams 1995). This is notably the case of personal values, which I will now present.

### 2.2.2. Personal values

#### 2.2.2.1. Between sociology and psychology: the long-established concept of values in social sciences

The value concept has been central in social sciences since the beginning of the discipline. Its widespread use across research fields as diverse as philosophy, sociology, psychology, anthropology, and political science has given rise to many different conceptualizations and, as stated by Hitlin and Piliavin the "*balkanized nature of the [value] research is striking*" (Hitlin and Piliavin 2004: 359, for a review see also Rohan 2000). Accordingly, it would be both

[12] Notably, some authors have criticized the lack of theoretical basis of the Big Five model as well as some methodological pitfalls (e.g. the use of self-ratings), and the exact number of traits to be distinguished is still a controversial issue (see Boyle 2008). On this latter point, some authors argue in favor of models with more dimensions (e.g. Lee and Ashton 2004 and the HEXACO model, 6 dimensions; Paunonen and Jackson 2000) whereas others allege that the Big Five might actually be reduced to fewer higher-order factors (e.g. Eysenck 1994; Digman 1997; Blackburn et al. 2004; Musek 2007).

difficult and futile to draw up a complete inventory here. It is nonetheless worth noting that while both sociologists – most famously Durkheim, Weber, and Parsons, but also others (e.g. Williams 1951, 1968; Kohn 1969; Wuthnow 2008) – and personality and social psychologists (e.g. Vernon and Allport 1931; Allport 1961; Rokeach 1973, 1979; Feather 1982, 1992; Schwartz 1992, 1994; Bilsky and Schwartz 1994) have shown a deep interest in values, they tend to adopt slightly different perspectives: the former most often conceptualize and scrutinize values primarily at the group level (often referring to them as "*cultural* values"), whereas the latter generally focus on the individual level (preferring sometimes the label "*personal* values"). Cieciuch and his colleagues summed up these two approaches as follows: "*[t]he psychology of personality treats value preferences as individual differences that permit a holistic description of the human being. Sociological approaches treat values as an aspect of culture and study their influences on the individual*" (Cieciuch et al. 2015: 41). Although this distinction is somewhat artificial because values more probably operate at both levels through reciprocal interactive processes – forming "*a bridge between the functioning of individuals and of society*" (Caprara and Vecchione 2017: 57; see also Caprara and Cervone 2000 and Hitlin 2003) – the conceptualization that will be used in this dissertation – i.e. personal values as conceptualized by Schwartz and Bilsky (1987) – is closer to the second approach. According to the proponents of this approach, who share a "*comprehensive and thereby inclusive conception of personality*" (Caprara and Vecchione 2013: 27), basic personal values, like traits and other psychological constructs, are thought to be part of broader internal psychological structures underlying enduring inter-individual differences in the way people interact with their environment (e.g. Vecchione et al. 2015: 85; Cieciuch et al. 2015). Of course, because personal values are learned through socialization, they are heavily influenced by the cultural context within which a person lives. Yet, as noted by Roccas and Sagiv (2010: 31), "*whereas societal members share some important values, they also vary considerably in their personal value hierarchies*". This notion of "value hierarchies" or "priorities" is at the core of the theory of basic human values developed by Schwartz, which I will now present.

#### 2.2.2.2. Schwartz's conceptualization of personal values

Schwartz and Bilsky (1987: 551) identified five common features emerging from the various definitions of the value concept in the literature: "*values are (a) concepts or beliefs, (b) about*

*desirable end states or behaviors, (c) that transcend specific situations, (d) guide selection or evaluation of behavior and events, and (e) are ordered by relative importance*". Building on these elements of definition and especially on the pioneering work of Rokeach (1973, 1979), Schwartz (1992) proposed a theory which specify both the content and structure of personal values. It is nowadays the "*most widely-used and most well-developed value theory*" (Parks and Guay 2009: 676).

### *Value content*

According to Schwartz, personal values express motivational goals which are themselves derived from three universal needs of all human beings and societies: "*needs of individuals as biological organisms, requisites of coordinated social interaction, and survival and welfare needs of groups*" (Schwartz 1992: 4). On this basis, ten distinct types of values have been identified[13]: power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security. Each of these basic value-types expresses a different kind of important, inherently desirable motivational goals which are briefly described in Table 2 below (I will return to the content of these values later on).

[13] Recently, Schwartz proposed a refinement to his theory which, in its new version, distinguishes between nineteenth value-types and allow thus for finer discriminations around the motivational circle (see Schwartz et al. 2012). However, as the data used for my research does not allow such a fine-grained conceptualization to be empirically assessed, I will not comment further on this last theoretical development. It is worth noting, though, that the new version of the theory does not contradict the original one but rather consists of a mere expansion of it with new value-subtypes distinguished (for instance, among self-direction values, independence of thought and action are separated in two distinct value-types).

**Table 2 – The ten value-types and their respective core goals**

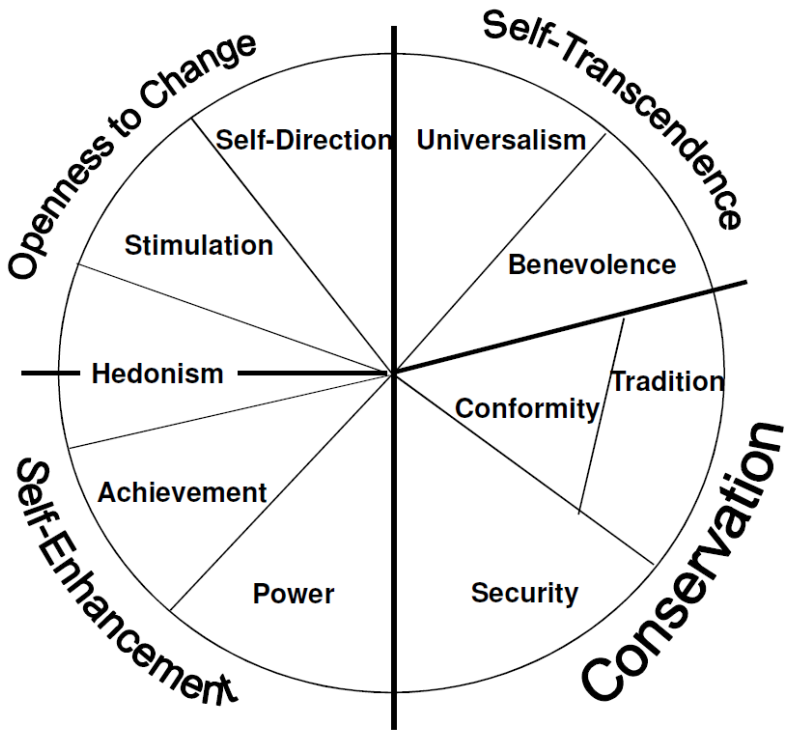
| | |
|---|---|
| **POWER** | Social status and prestige, control or dominance over people and resources |
| **ACHIEVEMENT** | Personal success through demonstrating competence according to social standards |
| **HEDONISM** | Pleasure and sensuous gratification for oneself |
| **STIMULATION** | Excitement, novelty, and challenge in life |
| **SELF-DIRECTION** | Independent thought and action-choosing, creating, exploring |
| **UNIVERSALISM** | Understanding, appreciation, tolerance and protection for the welfare of all people and for nature |
| **BENEVOLENCE** | Preservation and enhancement of the welfare of people with whom one is in frequent personal contact |
| **TRADITION** | Respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide the self |
| **CONFORMITY** | Restraint of actions, inclinations and impulses likely to upset or harm others and violate social expectations or norms |
| **SECURITY** | Safety, harmony and stability of society, of relationships, and of self |

*Source: Schwartz (2007a: 166)*

### *Value structure*

The most important and original aspect of the Schwartz's theory of value is the idea of a circular value structure. The basic assumption which underlies the proposed structure is that the ten value-types can be represented along a circular motivational continuum, organized according to the relations of (in)compatibility among the goals each of these values expresses (Schwartz 1992: 3). Accordingly, *"[a]ctions in pursuit of any value have psychological, practical, and social consequences that may conflict or be congruent with the pursuit of other values*" (Roccas et al. 2002: 791). The total set of these dynamic relationships can be represented graphically by the circular structure shown in Figure 1 below: the goals expressed by adjacent values are thought to be compatible, whereas those of diametrically opposed values are antagonistic. Consistent with the idea of a motivational continuum, the value correlations of any given behavior should thus "*decrease monotonically in both directions around the circle from the most positively to the most negatively associated value*" (Roccas et al. 2002: 791).

**Figure 1 – Theoretic model of relations among Schwartz ten basic value-types**




*Source: Schwartz (2012: 9)*

As shown in Figure 1, the ten motivational value-types can be subsumed within four higher-order ones (cf. the quadrants of the circle), which are themselves the poles of two orthogonal dimensions: the first one contrasts openness to change with conservation values, while the second one contrasts self-enhancement to self-transcendence values[14].

On the first dimension, "*openness to change*" encompasses self-direction and stimulation values, both expressing the importance of independence of thought and action, and novelty seeking for one's personal growth (Schwartz et al. 2012: 668). These motivational goals conflict with those of security, conformity, and tradition values, which are grouped under the label "*conservation*" and emphasize the need for preservation and order through individual self-restriction, risk avoidance, and obedience to established authority and rules. While both tradition and conformity values share the idea of individuals' submission to

[14] It may also be noticed that values on the right side of the circle mostly express concerns for others or collective institutions, whereas those on the left side are self-focused (Schwartz et al. 2012: 668).

broader social norms, the former refers to more abstract, symbolic objects (for instance, cultural or religious precepts) than the latter. Security values, on the other hand, emphasized concerns for both personal and collective safety. Those three motivational value-types are thought to express resistance to change with the goal of avoiding personal anxiety. The second dimension contrasts values which are motivated by concerns for others' welfare and interests with those emphasizing the importance of one's own personal success. Among the former (i.e. "*self-transcendence values*"), benevolence and universalism differ slightly from one another according to the degree of closeness of the relevant others: one's immediate circle in the case of benevolence, every human being (and even Nature) in the case of universalism. These motivations contrast with those stressing one's own achievements and power, that is, those of "*self-enhancement*" values, which underline the need of individuals for social recognition. Finally, from a theoretical point of view, hedonism values share motivational content with both openness to change and self-enhancement values, but empirically they have often been found to be closer to the former (Schwartz 2007a: 172).

This structure has been successfully tested in many different cultural contexts (Schwartz et al. 2001; Schwartz and Boehnke 2004; Schwartz 2005a, 2005b). Yet, as mentioned earlier, whilst the content and the structure of personal values might be nearly universal, individuals and groups greatly vary in the relative importance they attach to each of the (possibly conflicting) values discussed above.

### *Value priorities*

As explained by Schwartz (2007a: 163), *"[a]ny attitude or behaviour typically has implications for more than one value*". For instance, a career change for entrepreneurship might serve goals which are at the core of stimulation and self-direction values at the expense of conservation ones. In such a case where competing values are equally relevant, individuals have to make a trade-off between them. These trade-offs are made on the basis of individuals' value priorities, i.e. the relative importance attached by a person to the ten value-types (Schwartz 2007a: 163). People characterized by different value priorities are therefore likely to display different behaviors in a same given situation, because they will act in a way to attain or promote their cherished values. These priorities stem from "*each person's unique combination of*

*biological endowments, social experiences, and exposure to cultural definitions of the desirable*" (Roccas et al. 2002: 790). They are thought to be deeply rooted and thus relatively stable over the life course, though not immutable. Indeed, social as well as unique experiences might significantly affect one's value priorities (e.g. Feather 1985; Schwartz and Bardi 1997). Finally, it is worth noting that personal values do not operate in isolation. Rather, their effects are context-dependent and all values are not equally relevant in any situations. In order to powerfully shape an individual's behavior, values need to be of particular importance to him or her and to be cognitively activated by the specific situation (Verplanken and Holland 2002)[15]. If this latter condition is met, personal values, because they are hierarchically ordered, can then be used as criteria to "*select and justify actions and to evaluate people (including the self) and events*" (Schwartz 1992: 1).

In sum, personal values as conceptualized by Schwartz and colleagues refer to mental representations of "*desirable, trans-situational goals that vary in their importance as guiding principles in people's lives*" (Roccas et al. 2002: 790). Accordingly, values differ markedly from other related constructs. At the group level, although they share a common sense of "oughtness", values and *norms* must be distinguished (see Marini 2000). As explained by Freese: "*[t]here is an inside–outside differentiation between values and norms; values (I live my values) are inside the person, whereas norms and cultural practices are perceived to be outside the person (I conform to the norms)*" (Freese 2015: 1328). It follows that normative pressure cannot be assimilated with internal, value-based inclination, even if the two may well be correlated. Moreover, norms often apply to specific situations, whereas values, as stated above, are assumed to be trans-situational (Hitlin and Piliavin 2004: 361; Sagiv et al. 2011: 65). At the individual level, their abstractness also distinguishes personal values from *political values* and *attitudes*, even though these concepts have often been conflated (Bergman 1998). Regarding the former, researchers have argued that "*personal values [are] the crucial grounding of ideology*", beyond the common left-right – or liberal-conservative – ideological divide (Caprara et al. 2006: 2; Caprara and Vecchione 2013: 37; see also Schwartz 1994, 1996; Barnea and Schwartz 1998; Schwartz et al. 2010, 2014). Because personal values refer to general and abstract standards

[15] The idea of a necessary contextual activation is similar to those emphasized in the literature on identity theories (e.g. Carter 2013).

(Rokeach 1973; Williams 1979), they are likely to guide not only political but also many others, non-political decisions in an individual's daily life. This contrasts even more sharply with *attitudes*, which are always object-specific (e.g. Eagly and Chaiken 1993). Accordingly, "*values hold a higher place in one's internal evaluative hierarchy than attitudes"* (Hitlin and Piliavin 2004: 361), involving notably a fewer number of the former (Bem 1970). Moreover, unlike personal values which tend to remain quite stable over time, attitudes appear to be more volatile (e.g. Konty and Dunham 1997; but see Hatemi and McDermott 2016). Finally, whereas personal values can be ranked according to their relative importance, this is not (necessarily) the case of attitudes (Schwartz 1992: 4). But more importantly for this research, personal values also differ from *personality traits* in several important ways.

### 2.2.3. Conceptual commonalities and differences, and relationship between traits and values

As it is clear from the conceptual definitions above, personality traits and personal values share a number of conceptual similarities. Indeed, both the Big Five and the ten motivational value-types distinguished by Schwartz are thought to be deeply rooted in psychological structures which contribute to "*mediate the relation of the individual with the environment and account for what a person is and may become*" (Caprara and Vecchione 2017: 16). While the basic structures of traits and values are believed to be universal (e.g. Schwartz 1992, 1994; Schwartz and Sagiv 1995; McCrae and Costa 1997; for a review, see Church and Lonner 1998), people differ from each other in their trait levels and value priorities, which develop relatively early in life and then tend to remain fairly stable, though not immutable, over time (e.g. Parks and Guay 2009: 676-678). Hence, these core personal attributes may account for enduring individual differences in patterns of thoughts, feelings, and behaviors across various situations and over time. In this sense, as stated above, many researchers considered both traits and values as antecedents of middle-level constructs, such as political values, attitudes, beliefs, or motives (e.g. Rokeach 1973; Mitchell et al. 1993; Costa and McCrae 1994; Barnea and Schwartz 1998; van Hiel et al. 2000; Mondak 2010; Smith et al. 2011; but see Verhulst et al. 2012 and Hatemi and McDermott 2012, 2016 and Verhulst et al. 2012).

On the other hand, theorists have emphasized several conceptual differences between traits and values (for reviews, see Bilsky and Schwartz 1994; Roccas et al. 2002; Hitlin and Piliavin 2004; Parks and Guay 2009; Parks-Leduc et al. 2015). First, values are inherently desirable and vary in their subjective relative importance (from minimal to supreme), whereas traits may be positive or negative and vary in degrees or intensity (Roccas et al. 2002: 790). Second, values, but not traits, serve as standards to evaluate the legitimacy or worthiness of situations and actions. Therefore, people usually refer to them to select (*a priori*) or justify (*a posteriori*) their own choices and behaviors, as well as to form judgements on those of others (Bilsky and Schwartz 1994; Roccas et al. 2002). Third, some researchers have proposed a further distinction between traits and values on the basis of their origins (e.g. Olver and Mooradian 2003). Indeed, as mentioned earlier, there is ample empirical evidence that traits are endogenous, innate dispositions, notably influenced by genetic factors and therefore partly heritable (for reviews, see McCrae and Costa 2003: 193-197 and Mondak 2010: 36-47). By contrast, value priorities are most often conceived as "*learned adaptations"* deriving from early socialization processes in culturally-specific social environments (Olver and Mooradian 2003: 109; Rokeach 1973). As suggested by Parks-Leduc and her co-writers, this distinction should not be overstated because some studies have shown that traits can also be slightly influenced by environment and life experiences – especially during childhood and adolescence, but not exclusively (see e.g. Boyce et al. 2013) – and that value orientations might also be partly rooted in genetics (see also Parks-Leduc 2015: 5). As for many other psychological constructs, the most plausible explanation lies in complex interactions between genes and environment. Nonetheless, researchers tend to agree on the idea that traits are more deeply anchored in one's personality and thus more stable than personal values – suggesting that the two constructs tend to "*address* nature *and the interaction of* nature and nurture*, respectively*" (Olver and Mooradian 2003: 109-125, original emphasis).

Despite these differences, and probably because of the difficulty of drawing actual empirical boundaries between traits and values, the distinction between the two is sometimes blurred and the practice of using those concepts interchangeably is not rare (see 2.3 below for some examples). Historically, many researchers have endorsed what Winter and colleagues (1998)

called a *"subsuming view"* of traits and values[16]. According to such a conceptualization, traits have motivational components and tend to subsume values (Buss 1989; see also Borkenau 1990; Read et al. 1990; McCrae 1994; Goldberg 1994; Hofstee 1994; Ostendorf and Angleitner 1994; McCrae and Costa 2008). In a less extreme form, an alternative but close perspective suggests that traits and values are indeed fairly similar constructs, but which exist at different levels of abstraction in the personality hierarchy. This latter approach typically considers traits as antecedents to values and tend to see the latter as mere derivatives of the former. Thus, from this *"traits as primary"* perspective, it is assumed that traits ultimately cause all behaviors and characteristic adaptations (including values), implying that values would mediate the effects of traits on most outcomes – or that the relationships found between values and outcomes would actually be spurious ones (Hudson and Roberts 2014: 70)[17]. As it will be highlighted in the next section (see 2.3 below), this ontological view, whether made explicit or not, is still widely shared among political scholars.

Of course, as nicely pointed out by Winter and his colleagues (1998: 234): *"[w]hat could be more obvious than that 'extraverted' people, who are outgoing and report that they enjoy and seek out the company of others, must want to be affiliative? Therefore, one would think, they must be high in 'affiliation motivation'"*. Yet, this kind of automatic relationships and overlap between traits and motivation is not undisputed. Among others, Roccas and her colleagues emphasized that traits and values differ in another, fundamental way: traits are *"enduring dispositions"* describing *"what people are like"*, whereas values are *"enduring goals"* referring to *"what people*

[16] Actually, the authors talk about motives, not values. Nonetheless, I believe their point applies as well to values. Indeed, values and motives share a similar motivational purpose for actions, and according to the authors, "*[m]otives represent fundamental goals or desires*" such as "*achievement, affiliation, and power motives*" (Winter et al. 1998: 238, based on a taxonomy developed by McClelland 1985). Motives and personal values are thus conceptually close, the main difference being that "*unlike needs and motives […] values are inherently desirable and must be represented cognitively in ways that enable people to communicate about them*" (Roccas et al. 2002: 789).

[17] Endorsing a somewhat similar view but from a "values primacy" perspective, others have proposed a reverse causation; from values to traits (e.g. Carver and Scheier 1981; Kluger and DeNisi 1996; McCabe and Fleeson 2012). Accordingly, values – along with other factors – would ultimately cause traits and therefore traits would mediate the effects of values on behavior. Yet, given the extensive empirical evidence of the biological roots of traits and their higher relative stability mentioned above, this view is rarely encountered in the literature and there seems to be little, if any, empirical support for such a conceptualization.

*consider important"* (Roccas et al. 2002: 790)[18]. It follows that traits are first and foremost – though not necessarily exclusively – descriptive (or in Allport's words, "stylistic") constructs, whereas values *"express a person's motivations that* may or may not be *reflected in behavior"* (Parks-Leduc et al. 2015: 5, my emphasis). It does not mean, however, that traits and values are totally unrelated. Indeed, people tend to avoid personal distress and cognitive dissonance (Festinger 1957) by making their behavior and cherished values coincide closely with each other (i.e. by valuing what they do and/or doing what they value). In this sense, traits and values may mutually influence each other because, on the one hand, *"people who consistently exhibit a behavioral trait are likely to increase the degree to which they value the goals that trait serves [what] permits them to justify the behavior"* and, on the other hand, *"people try to behave in ways consistent with their values"* (Roccas et al. 2002: 791). Nonetheless, discrepancies between the two are common, as confirmed by the traditionally low statistical correlations found in empirical research interested in the relationship between traits and values (Parks 2007; Parks-Leduc et al. 2015). Hence, from this perspective, traits and values are thought to be ultimately separate components of personality[19], which serve different purposes and overlap only partially (e.g. McAdams 1994, 1995; McAdams and Pals 2006; Roberts and Wood 2006). It implies that neither traits nor values would mediate the effects of the other, but rather that they would independently and simultaneously predict behavior. Based on a similar assumption of conceptual independence and arguing for a *"complementary view"* where *"traits furnish the particular structures and resources to implement (sometimes also to limit or constrain) the goals specified by motives"*, Winter and colleagues went further and proposed that traits and motives might interact to predict behavior because *"each affect the ways in which the other is expressed in behavior"* (Winter et al. 1998: 237-238). In this sense, the authors go so far as to suggest that the joint effects of traits and motives are likely to exceed the effects of each construct studied alone.

In sum, as highlighted by the above discussion, there is no real consensus about the conceptualization of traits, values, and their relationship in the literature. In particular,

[18] Expressing the same basic idea, Caprara and Vecchione (2013: 27) talk about *"executive-behavioral functions"* in the case of traits and *"evaluative-motivational functions"* in the case of values.

[19] Actually, some proponents of this approach even consider that values are ultimately not part of "personality", which would be thus solely define by traits (e.g. Parks and Guay 2009).

although most – though not all – contemporary personality researchers agree on the idea that traits and values are indeed distinct constructs, the degree to which they overlap, as well as the very nature of their relationship are still a matter of debate. Depending notably on whether traits are conceived as having strong motivational components or not, and on the level at which values are thought to operate, researchers took different positions regarding the way they should relate to each other and, ultimately, impact behavior. In this regard, the two most prominent views which can be distinguished can be broadly summarized as follows[20]. According to the former, both have fairly similar motivational components but traits are causally prior to values, implying that the effects of traits are likely to be mediated by values – at least in the case of traits and values whose content is closely related. From this perspective, the conceptual difference between traits and values is somewhat more a matter of degree (or level) than of kind, and similar arguments tend to be put forth to interpret their respective effects. By contrast, proponents of the second approach take a more radical stance and contend that traits and values are entirely separate constructs, which are likely to exist at the same level of abstraction but differ by their nature (*"dispositions"* and *"goals"*, respectively), serve distinct purposes (defining the *"manner of expression"* and the *"direction"*, respectively), and hence have unique impacts in predicting behavior. As it will be made explicit in the next chapter, the present thesis relies upon this second approach. After having investigated separately the effects of traits and values on group participation, an empirical test of their joint effects in the last chapter will allow me to assess the relevance of such a complementary view of those two sets of core individual characteristics. Beyond these theoretical issues, both personality traits and personal values have been proven to be influential in shaping people's thoughts and behavior in a wide variety of situations and contexts (for a review, see e.g. Ozer and Benet-Martínez 2006). Of particular interest, solid empirical evidence now exists demonstrating the role of traits and values as distal predictors of citizens' preferences and participation in the political arena. The review of this body of research in the next section will show, however, that there are still grey areas which deserve further investigation. As it will be shown, the influence of traits and values on group participation is one of them.

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[20] In the interest of clarity, the differences between the two approaches in the following description are deliberately exaggerated to describe the archetypes of each of them. In reality, of course, most researchers adopt more subtle views of the relationship between personality traits and personal values.

## 2.3. Personality traits and personal values in the political arena: state of the art and research gaps

### 2.3.1. The Big Five traits

Political scientists have long been interested in the study of personality. During the second part of the twentieth century, scholars have thoroughly investigated the personality of political leaders and its influence on the policies they advocated (for a review of those works, see Winter 2003). On the other hand, at the mass level, research has long been limited to "*a single line of inquiry, the link between personality and adherence to democratic values*" (Mondak and Halperin 2008: 337). The classical work of Adorno and colleagues (1950), *The Authoritarian Personality*, inspired by Freudian psychoanalysis[21], is probably the most prominent contribution to this line of research – and it is often considered as the first systematic study to explore the personality basis of political ideology (Cichocka and Dhont 2018: 323). A few years later, other scholars emphasized the need to take personality into account in general models of political participation (e.g. Levinson 1958; Milbrath 1965). Yet, the lack of a comprehensive and unified framework for the study of personality rapidly became the field which Sniderman (1975: 16) called "*a jerry-built appearance*" (Mondak et al. 2010: 86). Using the biblical metaphor of the Tower of Babel, John and Srivastava (1999: 102) similarly noted that, within the field of personality research, "*systematic accumulation of findings and communication among researchers has become almost impossible amidst the Babel of concepts and scales*".

Since the Big Five model reached a relative consensus among personality psychologists in the last decade of the twentieth century, systematic research on those five personality factors and their influence on various outcomes has flourished. Ten years ago, John and his colleagues analyzed this publication trend and concluded that "*by 2006 […], the number of Big Five publications exceeded 300 per year*" (John et al. 2008: 117). Since then, this number has certainly increased further and, therefore, it would be virtually impossible to offer an

[21] Even beyond the work of Adorno et al. (1950), the early works on personality and politics were largely influenced by psychoanalytic theories, emphasizing unconscious mental mechanisms behind political behavior (e.g. Lasswell 1930).

exhaustive and detailed review of the existing literature. In the specific field of politics, a similar profusion of empirical studies linking the Big Five with various outcomes has been observed over the last decades. These studies may be grouped into two broad categories, according to the nature of the outcome investigated: the first category comprises studies linking traits to political *preferences* (e.g. ideology, attitudes, vote choice or party preference), while the second category encompasses studies linking traits to political *participation*[22].

Studies included in the first category are among the earliest and most important works analyzing the role of the Big Five in the political arena (Gerber et al. 2011b: 269). They are also the ones which offer the more consistent findings. Most notably, scholars have highlighted the crucial role of the Big Five regarding ideology or vote choice, as well as various social and economic attitudes (e.g. McCrae 1996; Caprara et al. 1999, 2006; van Hiel et al. 2000; Gosling et al. 2003; Jost et al. 2003; van Hiel and Mervielde 2004; Alford and Hibbing 2007; Schoen 2007; Schoen and Schumann 2007; Carney et al. 2008; Mondak and Halperin 2008; Mondak 2010; Gerber et al. 2010, 2011b; Vecchione et al. 2012; Gallego and Pardos-Prado 2013). In particular, these studies have documented the strong relationships existing between openness to experience and liberal views, on the one hand, and conscientiousness and conservatism, on the other (Gerber et al. 2011b: 269; Caprara and Vecchione 2013: 31-32). These findings appear to be consistent across a wide range of studies and measures, from broad ideological stances to specific issue attitudes in various domains (e.g. abortion, public expenditures, immigration). Moreover, many studies focusing on partisanship and vote choice further confirm the close link between these traits and political affiliations: openness to experience tends to be systematically associated with an inclination towards left-wing parties or candidates, while a high level of conscientiousness leads to a greater probability of supporting right-wing political actors (e.g. Caprara et al. 1999; Caprara et al. 2006; Schoen and Schumann 2007; Barbaranelli et al. 2007; Mondak 2010; Mondak & Halperin 2008; Gerber et al. 2012a). By contrast, the three other traits, i.e. extraversion, agreeableness, and neuroticism, seem to be more loosely related to political preferences, although some studies suggest that high levels of extraversion and emotional stability might be associated with a more conservative

[22] For good reviews, see Gerber et al. 2011b, Schoen 2012, and Cichocka and Dhont 2018.

ideological stance (e.g. Caprara et al. 1999, 2006; Carney et al. 2008; Mondak 2010; Gerber et al. 2010).

More recently, scholars have begun to explore the relationship between the Big Five (or related) personality traits and civic participation *regardless of the ideological content of the participatory act*. When reviewing recent empirical studies published in English or German[23] which link personality traits to the question of whether and/or to what extent citizens participate in civic affairs – excluding therefore those studies which are solely interested in contrasting *ideologically different* participatory outcomes (e.g. vote choice, party preference) – several trends emerge[24].

First, as for the whole field of research, the preeminence of studies carried out in the American context is striking (e.g. Carlo et al. 2005; Anderson 2009; Mondak and Halperin 2008; Mondak 2010; Mondak et al. 2010; Omoto et al. 2010; Curtin et al. 2010; Hibbing et al. 2011; Gerber et al. 2011a,b,c, 2012a,b, 2013; Cooper et al. 2013; Kim et al. 2013; Weinschenk 2013; Weinschenk and Panagopoulos 2014; Wang 2014; King et al. 2015; Dawkins 2017). Arguably, Jeffery Mondak and Alan Gerber are the two first and most prominent figures of the development of these studies in the English-speaking world. By comparison, fewer empirical studies have attempted to link the Big Five with the extent to which citizens are civically active in the European context. In Germany specifically, to the best of my knowledge, only a few scholars have taken this path (i.e. Huber and Rattinger 2005; Best 2011; Steinbrecher and Schoen 2012; Schoen and Steinbrecher 2013; Opp and Brandstätter 2010; Brandstätter and Opp 2014; Johann et al. 2015; see also Bakker et al. 2015).

[23] Despite my efforts, I was unable to identify one single French study to include in this category. More generally in the French field of political science, to the best of my knowledge, only one recent publication from Amengay, Durovic and Mayer (2017), looking at the gender gap in the vote for Marine Le Pen in 2017, includes a measure of the Big Five.

[24] The following discussion will only give an overview of this literature, in order to pinpoint research gaps. A detailed discussion about the effects of personality traits revealed by the mentioned studies is to be found in the following chapter.

Second and more importantly, different forms of participation have not benefited from equal attention. Unsurprisingly, voter turnout has been occupying a central place and many studies focus exclusively on this elementary form of participation (e.g. Huber and Rattinger 2005; Fowler 2006; Fowler and Kam 2006; Denny and Doyle 2008; Anderson 2009; Blais and St-Vincent 2011; Mattila et al. 2011; Schoen and Steinbrecher 2013; Wang et al. 2017; Gerber et al. 2013; Wang 2014). In other words, even if one does not take into account studies on vote choice specifically, participation through electoral channels seems to remain at the core of the research on personality traits and citizens' participation.

Comparatively, less attention was paid to other, non-voting forms of participation. Non-electoral participatory acts are often merely viewed as "side events" and therefore analyzed along with voter turnout (e.g. Mondak and Halperin 2008; Mondak 2010; Mondak et al. 2010; Gerber et al. 2011a; Gallego and Oberski 2012; Ha et al. 2013; Cooper et al. 2013; Weinschenk and Panagopoulos 2014; Johann et al. 2015; Dawkins 2017). Moreover, scholars generally measure non-voting participation either by using numerous, disconnected items tapping very specific participatory acts – such as attending a local meeting, signing a petition, wearing a badge stating a political message, or writing a letter to an elected official (e.g. Mondak and Halperin 2008; Mondak 2010) – or, on the contrary, by merging all these various items into broad composite indexes (e.g. Fowler and Kam 2007; Vecchione and Caprara 2009; Gerber et al. 2011a; Quintelier and Theocharis 2013; Kim et al. 2013; Russo and Amnå 2016a, 2016b; Dawkins 2017)[25]. Even though it typically yielded interesting, significant effects, each of these "extreme" measurement strategies has its drawbacks: the former produces highly scattered results, which are sometimes difficult to connect with each other in order to get a comprehensive view of the influence of a trait, while the latter, somehow "mixing apples and oranges", prevents us from distinguishing different forms of engagement (e.g. individual vs. collective) and therefore makes it difficult to understand the underlying mechanisms linking traits to participation. In my view – among other reasons – this could partly explain why "*[i]n contrast to the findings regarding ideology and partisanship […], research on Big Five traits and political participation has yielded*

[25] Some studies adopt both measurement strategies (e.g. Mondak et al. 2010; Ha et al. 2013; Weinschenk 2013; Johann et al. 2015).

*inconsistent findings*" (Gerber et al. 2011b: 274). Apart from the very specific questions which appear sporadically, along with many other participatory outcomes in the works cited above, research on the influence of traits on group participation strictly speaking looks less developed and highly fragmented – somewhat reflecting the academic compartmentalization of knowledge in the broad field of civic participation.

Research on formal volunteering[26], on the one hand, is probably the one which paid closest attention to personality – probably due to the large number of psychologists among volunteerism scholars. Several studies have indeed linked personality traits and voluntarism (see Hustinx et al. 2010 and Wilson 2000, 2012 for good reviews), but many of them did not use the holistic model of the Big Five (e.g. Smith 1966; Smith and Nelson 1975; Burke and Hall 1986; Spitz and MacKinnon 1993; Omoto and Snyder 1995; Penner and Finkelstein 1998; Carlo et al. 1999; Penner 2002; Handy and Cnaan 2007). Moreover, scholars in this field tended to focus only on a few specific traits or even facets (e.g. altruism, empathy, helpfulness), or on a specific combination of them into a personality type (the so-called "prosocial" personality; Penner et al. 1995). The usefulness of these studies is thus limited outside the specific field of volunteering, given that "*if different teams of scholars each focus on the one or two traits seemingly most pertinent to their research questions, those scholars inevitably will speak past one another*" (Cawvey et al. 2017: 16). Furthermore, most of the studies in this field have been based on case studies, often relying on convenience and/or small samples, drawn from a specific population (e.g. Atkins et al. 2005; Okun et al. 2007; King et al. 2015) or a specific (set of) organization (e.g. Burke and Hall 1986; Penner and Finkelstein 1998).

On the other hand, whilst the Big Five traits have been found to influence protest participation (e.g. Mondak et al. 2011; Ackermann 2017; Gallego and Oberski 2012; Steinbrecher and Schoen 2012), the number of studies investigating the role of personality traits in the field of social movements is very limited (for a notable exception see the work

[26] The term of "volunteerism" suffers from a great conceptual fuzziness and its meaning varies notably across theories and disciplines (see Hustinx et al. 2010: 410-411). In a broad sense, it refers to "long-term, planned, prosocial behaviors that benefit strangers, and usually occur in an organizational setting" (Penner 2002: 448), but here I use this term in the narrower sense of personal involvement in social, non-political civic groups (e.g. charity, religious organizations).

of Opp and Brandstätter 2010 and its follow-up Brandstätter and Opp 2014). Actually, this subfield of research is marked by a strong sociological tradition and the socio-psychological perspective – which recently made its comeback into the field nearly half a century after the early theories of collective behavior and relative deprivation (Turner and Killian 1957; Smelser 1962) – seems to be mainly concerned with other concepts, such as identity (e.g. Stryker et al. 2000) or emotions (e.g. Goodwin et al. 2001)[27].

Similarly, in the literature on party membership, empirical studies investigating the role of the Big Five are virtually non-existent. Despite the encouraging results of studies which have highlighted the influence of traits on the strength and/or stability of party identification (e.g. Mößner 2005; Schoen and Schumann 2005; Ackermann and Freitag 2015; Gerber et al. 2012a; Bakker et al. 2015), party scholars have paid scant attention to personality traits. In fact, it seems that the call of Granik (2005), more than ten years ago, for a multidisciplinary approach including notably personality traits among other predictors of party membership have gone unheeded by scholars of this field – at least in a purely participatory perspective (i.e. regardless of the parties' specific ideological stances).

Nonetheless, although "*little political science research has been done on the association between personality attributes and joining civic groups*" (Weinschenk 2013: 3), a few studies deserve specific mention as they focused on the influence of the Big Five personality traits in joining (different kinds of) social and political groups.

First, Carlo, Okun, Knight and de Guzman (2005) linked traits to prosocial motives to volunteer, and *in fine* to effective volunteering in many different organizations, including both political and non-political groups (Carlo et al. 2005: 1296). But unfortunately, the authors did not empirically distinguish between these different kinds of group participation, without giving a theoretical justification for this choice. A similar limitation applies to the work of Omoto, Snyder and Hackett (2010), who compared a measure of individuals'

[27] As an example, in the chapter "*Individuals in Movements: A Social Psychology of Contention*" of the last edition of the Handbook of Social Movements Across Disciplines (van Stekelenburg and Klandermans 2017), the terms "personality" or "traits" are not even mentioned, whereas a significant part of the chapter is dedicated to emotions, social cognition, and group identification.

overall involvement in group-based activities with one specific kind of volunteerism (i.e. AIDS activism), as well as to those of Weinschenk (2013), who estimated the effects of the Big Five traits on the total number of civic groups respondents are affiliated to. Even though these studies have demonstrated the relevance of personality traits to predict group participation in general, the exclusive use of broad, aggregated measures is of little help in understanding the observed relationships. Are all kinds of organizational involvement affected the same way by personality traits? Or do core dispositions lead to different types of participation? In this respect, René Bekkers (2004, 2005) is probably the one who made the greatest contribution. He investigated the effects of the Big Five – along with other predictors – on participation in several voluntary organizations in the Netherlands. Moreover, he compared involvement in different kinds of organizations – e.g. political or not (Bekkers 2005), religious or secular (Bekkers 2007) – and therefore addressed both the questions of "*whether [citizens decide] to volunteer or not, and, if so, for what kind of association(s)*" (Bekkers 2007: 106), two questions which are at the core of this dissertation (see next chapter). Of particular interest is the fact that, although the strength of the effects varies across the types of organizational involvement (i.e. non-political, (quasi-) political, or both), all the Big Five traits show fairly consistent patterns of associations – either positive (e.g. openness, extraversion) or negative (e.g. conscientiousness) – with the different kinds of groups considered (Bekkers 2005: 445). Finally, one can mention the recent work of Dinesen, Nørgaard and Klemmensen (2014) which, based on a nationally representative Danish survey, shed further light on the contribution of traits regarding membership in different kinds of groups. Yet, again, the authors offer little theoretical tools to understand the logical pattern underlying the numerous observed relationships.

### 2.3.2. Personal values

The fact that, as discussed earlier, the "*definitional inconsistency has been epidemic in values theory and research*" (Rohan 2000: 255) makes it almost impossible to review literature on values broadly defined and citizens' participation. Instead, I will focus here on those studies which investigated the role of personal values as conceptualized by Schwartz in the field of civic participation. Literature concerned with this line of inquiry is somewhat less developed than those concerning the Big Five traits, but interestingly, similar prevailing trends emerge.

First, empirical studies looking at the influence of personal values on citizens' *preferences*, whether expressed in the form of attitudes, ideology, or electoral choices (e.g. Rokeach 1973, 1979; Mitchell et al. 1993; Schwartz 1994, 1996, 2012; Knutsen 1995; Barnea and Schwartz 1998; Devos et al. 2002; Feldman 2003; Caprara et al. 2006, 2008; Schwartz et al. 2010, 2014; Piurko et al. 2011; Goren et al. 2016; Rathbun et al. 2016; Caprara et al. 2017) considerably outnumber those focusing on social and political participation. This body of research yielded fairly consistent results regarding the relationship between value priorities and preferences for left-wing or right-wing ideological outcomes. In particular, it has been shown that liberals tend to give a higher priority to self-transcendence and, although to a lesser extent, openness to change values, whereas more conservative people attach, quite logically, greater importance to conservation and self-enhancement values (Caprara et al. 2012: 268). This pattern of relationship is reminiscent of the strong correlations found by personality traits researchers between openness to experience, conscientiousness, and people's ideological stances (see section 2.3.1 above). In fact, because values often trump traits in explaining political orientation, some researchers have proposed that value priorities might mediate the relationship between personality traits and political orientation, relying on more or less explicit assumptions about the search for congruence between behavioral patterns influenced by traits and motivational goals reflected by value priorities (e.g. Caprara et al. 2006, 2008, 2009; see also Lewis and Bates 2011; see also section 2.2.3 above). This mediating hypothesis has received further empirical support from recent studies interested in predicting more specific policy attitudes (e.g. Pötzschke et al. 2012; Vecchione et al. 2012).

Besides voting, empirical research on the effects of personal values on citizens' participation is remarkably rare – much more than those on the Big Five traits, probably because values are thought to be more loosely related to behavior than traits. While the role of values broadly defined has historically been emphasized by social and political scientists – whether they have been called "values", "goals", "interests" or even "motives" – a limited number of empirical studies on citizens' involvement in society and politics have considered basic personal values as conceptualized by Schwartz (Augemberg 2008: 2). Moreover, for a while, such studies have mostly relied on small, convenience samples and tended to focus on very specific kinds of participation – most notably human rights and pro-environmental activism

(e.g. Stern and Dietz 1994; Karp 1996; Stern et al. 1999; Spini and Doise 1998; Cohrs et al. 2007). Even though those studies have emphasized the importance of certain personal values (e.g. self-transcendence, and especially universalism values) to predict political activism, their findings are thus limited in their scope.

Only very recently have scholars begun to systematically investigate such links across a broader empirical scope. The vast majority of those studies relied on data provided by the European Social Survey (ESS) – the European large-scale multi-topic survey which first included questions designed to measure the Schwartz' values – and the authors have usually merged data from many different countries, resulting in samples of tens of thousands of people (e.g. Schwartz 2007a, 2010; Vyrost et al. 2007; Hafner-Fink 2012; Purdam and Tranmer 2012; Firat 2014; Roets et al. 2014; Miles 2015; Pacheco and Owen 2015; Vecchione et al. 2015; Morselli and Passini 2018). Those studies reported many meaningful and significant effects[28] – probably partly boosted by their large sample sizes – confirming the idea that "*political activism attracts people who give high priority to certain values (universalism and self-direction) and low priority to others (conformity and security)*" (Caprara and Vecchione 2017: 279). Nevertheless, the widespread use of broad composite indexes of participation, just as in the case of the literature on traits, often prevents distinguishing different forms of engagement (e.g. social and political, conventional and unconventional, individual and collective). Yet, when making such distinctions, most scholars then noted important significant differences between the effects of value priorities on, notably, conventional and unconventional forms of political participation (e.g. Roets et al. 2014; Pacheco and Owen 2015; Chrona and Capelos 2017; see also Vecchione et al. 2015: 102). For instance, self-enhancement value-types, which most of the aforementioned works found to be typically unrelated to political activism, seems to display, in fact, opposite effects on conventional and unconventional forms of political engagement, which could at least partly explain the null-findings of previous research. Similarly, Plagnol and Huppert (2010), who further extended the analysis to personal work for voluntary or charitable organizations, found that a high priority given to achievement values (which belong to the self-enhancement higher-order value-type) significantly predicts this kind of non-political associational involvement.

[28] For a more detailed discussion of these effects, see next chapter.

Inconsistencies across different types of participation have also been found regarding tradition and conformity values – which have been shown to positively impact one's probability of being engaged in community activities (Augemberg 2008), but seem negatively related to unconventional forms of participation specifically (e.g. Vecchione et al. 2015; Chrona and Capelos 2017). In sum, as noticed by Sanderson and McQuilkin in a recent review on values and prosocial behavior, it appears that "*values predict not only the strength of our involvement in political activism, but also the type of political activism we pursue*" (Sanderson and McQuilkin 2017: 82). Yet, the scarcity of empirical studies addressing *directly* the question of how personal value priorities predict specific forms of engagement, as well as the tendency of scholars to focus solely on those personal values which appear to be the most easily linked to their research object (e.g. Cohrs et al. 2007; Schwartz 2007b; Plagnol and Huppert 2010; Purdam and Tranmer 2012; Hafner-Fink 2012; Roets et al. 2014) makes it difficult to draw firm conclusions and more research is needed to understand how different value priorities might effectively lead to different types of civic participation.

Finally, probably because "*[t]raits and values are rooted in different intellectual traditions, the former in personality psychology and the latter in social psychology*" (Caprara and Zimbardo 2004: 590), it is worth noting that, apart from the works mentioned above regarding the mediating hypothesis between traits, values, and political choices, only a few studies have "*placed values, together with traits, among the major determinants not only of political preferences but also of political participation*" (Caprara and Vecchione 2017: 268). To the best of my knowledge, there are only two published empirical studies which consider simultaneously the influence of the Big Five traits and Schwartz' basic values on the extent to which citizens' are socially or politically involved.

The first one is a study conducted by Zukauskienė and Malinauskienė, two Lithuanian researchers, in 2009. The authors investigated the independent roles of personality traits and personal values on societal involvement in adolescence. 490 Lithuanian students aged 18-19 were asked about their intentions for future volunteerism/community involvement and social involvement, including participation in civic groups. Based on the strength of these intentions and using cluster analyses, Zukauskienė and Malinauskienė then compared the mean scores of those students on the Big Five traits and the ten value-types of the

Schwartz' value theory. Means comparisons revealed significant differences between groups. For instance, students who were the more likely to be civically involved scoring notably higher on extraversion and openness to experience traits (Zukauskienė and Malinauskienė 2009: 103). Yet, the fact that those students display higher scores on *all* but one personal values is quite suspicious given the dynamic relations of (in)compatibilities between values along the circular structure of the value system – and the authors do not comment on this point. It may indicate that they failed to make the necessary adjustments to control for scale use (see Chapter 4), and therefore did not measure values' *relative* but absolute importance. This would be problematic as this is the trade-offs between relevant and competing values that guide behaviors, not the absolute importance attached to one particular value (Schwartz 2007a: 163). Moreover, the authors used composite scales merging very different kinds of participatory acts – without clearly distinguishing, for instance, between social and political participation.

The second study, designed by Kanacri, Rosa, and Di Giunta (2012) makes such an empirical distinction between what the authors call "*civic associationism*" (i.e. social, non-political) and "*political associationism*" (but without contrasting directly one with the other). They examined the predictive power of individual differences in terms of traits and values regarding Italian youth civic engagement, broadly defined as "*involvement in different kinds of groups (e.g., cultural, religious, and recreational), voluntary associations, more formal activism, and political engagement*" (Kanacri et al. 2012: 9). 564 youths from the residential community of Genzano took part in the study and, after having compared different models, the authors found statistical evidence for values mediating the influence of traits on both civic and political associationism (the former being positively associated with benevolence values and the latter with power values). Yet, the fact that Kanacri and her colleagues included only two out of five traits (openness and agreeableness) and three out of ten value-types (benevolence, universalism, and power) is an important limitation to their results. Again, as stressed by Sagiv and colleagues (2011: 65), because *"most behaviors have implications for multiple [competing] values […] to understand and predict behavior, it is thus important to consider the full spectrum of values*". The exclusion of extraversion, for instance, is particularly unfortunate given the strong empirical evidence existing for this trait in previous research on both social and political participation (Gerber et al. 2011b: 274). The use of binary variables assessing

formal group membership is also a restrictive way to assess civic participation, as will be discussed more thoroughly in the next chapter.

Together, the findings of these two studies are encouraging, regarding the simultaneous study of both traits and values in participatory contexts. Nonetheless, they suffer from several methodological and theoretical weaknesses – e.g. small and very specific samples, very few controls (i.e. none in the first, gender only in the second), few theoretical explanations for the distinct effects of traits and values – which call for more research on the specific effects of personality traits and personal values on social and political participation. The present research will therefore contribute to advancing our understanding of these effects.

## 2.4. Conclusion

Since the recent renewed interest in the study of personality traits and personal values in the political arena, empirical evidence is accumulating that those enduring individual characteristics do matter for civic life and thus deserve special attention. As stated by Mondak and Halperin, "*[w]hen personality has been included in research on political behaviour, those efforts typically have yielded significant effects*" (Mondak and Halperin 2008: 338). Yet, as shown by a brief review of this burgeoning literature, this field of research appears somewhat chaotic and several research gaps have been pinpointed.

First of all, the lack of unified frameworks for the study of personality traits and personal values has, for a long time, created great conceptual confusion and gave rise to common "*jingle and jangle fallacies*" (Block 1995: 210) – researchers investigating a same construct but calling (and measuring) it differently, or, on the contrary, investigating distinct constructs yet using a common label. Regarding this latter point, despite the critical conceptual differences between traits and values (see section 2.2.3 above), the distinction between those two constructs has sometimes been blurred. To take just one recent example, in their study on the link between "*Openness*" and political orientation as well as activism, Roets, Cornelis, and van Hiel discuss indistinctly the effects of openness as a *trait* and openness as a *value*, whilst their analyses are based exclusively on a measure of the latter. Although the

researchers acknowledge this limitation, mentioning that "*the Openness construct measured through values might show imperfect fit to the Openness personality construct in terms of the FFM. Future research could aim to replicate these findings with FFM measures of Openness*" (Roets et al. 2014: 61), their main concern seems to be, first and foremost, a methodological one. Yet, as explained earlier in this chapter, traits and values are thought to differ importantly from a *theoretical* point of view and it is somewhat surprising that whilst researchers increasingly agree on the idea that personality traits and personal values are indeed distinct constructs, these conceptual differences are often disregarded when it comes to empirical research. This is problematic because traits and values may impact differently individuals' behavior, and thus if we are to understand their effects, we would gain by avoiding such a conceptual confusion. Given the state of the art, and especially the paucity of studies on civic participation including both of them as individual predictors of a same given participatory outcome, the distinct and unique contributions of traits and values remain somewhat uncertain. Furthermore, even after the theoretical development of comprehensive frameworks for the study of traits and values (i.e. the Big Five model and the Schwartz' theory, respectively), a number of studies still focused on the one or two dimensions – or sub-dimensions – most obviously related to the outcome of interest (e.g. Cohrs et al. 2007; Handy and Cnaan 2007; Plagnol and Huppert 2010; Curtin et al. 2010; Blais and St-Vincent 2011; Purdam and Tranmer 2012; Roets et al. 2014), instead of looking for the whole pattern of correlations with the integrated system of traits/values (Mondak and Halperin 2008: 338). As a consequence, it is sometimes difficult to see how those numerous findings connect with each other, and one needs to pull together all the piecemeal results to try to "create order out of chaos".

Second, studies addressing the effects of personality traits and *a fortiori* personal values on political participation are still rather scarce in comparison with the extensive literature linking these core individual characteristics with political preferences. Moreover, among those studies concerned with participatory outcomes, few have focused on group participation as an integral part of citizens' societal involvement. Participation in civic groups fall in-between distinct subfields of research (e.g. volunteering, prosocial behaviors, party membership, SMO activism), themselves being influenced by different traditions of research, and as noted by Bekkers (2005: 440), "*sociologists, political scientists, and psychologists*

*have studied civic engagement in relative isolation*". The unequal attention paid to traits and values across the bodies of research reviewed in this chapter exemplifies this relative impermeability of the disciplinary boundaries (see also Miles 2015: 682). Indeed, the spreading of personality research has not equally impacted all the fields of research concerned with citizens' participation. While research on formal volunteering is probably the one which devoted more attention to these constructs (and was the first to do so), probably because of the stronger psychological tradition in this field, research on participation in political groups (e.g. party or SMO activism) paid much less attention to traits and personal values. Given the proximity of their research objects, the relative lack of cross-references between scholars working in those subfields is striking (see also Granik 2005). This is all the more remarkable that, regarding political activism specifically, the decline of party membership and the concomitant rise of social movements over the last decades have led some authors to consider these alternative forms of participation in terms of a competition between parties and new participatory organizations like SMOs for a same (supposed) political supply market – the former having lost ground to the latter (e.g. Richardson 1995; Seyd and Whiteley 2004: 357-358; see also Della Porta 2009: 63; van Deth 1997; Norris 2002). Yet, with a few exceptions (e.g. Bekkers 2005, 2007), previous research concerned with the effects of personality traits and personal values on civic and political participation has hardly *directly* contrasted participants of different kinds of groups with each other. Among the few studies investigating different forms of participation, most of them addressed only indirectly the question of the group choice by estimating these effects separately, i.e. by successively contrasting people involved in the activities of a group with those who are not (e.g. Mondak et al. 2011; Steinbrecher and Schoen 2012; Purdam and Tramner 2012; Firat 2014; Dinesen et al. 2014; Roets et al. 2014; Chrona and Capelos 2017; see also Omoto et al. 2010). Although those studies suggest that personality traits and value priorities might indeed affect differently distinct forms of participation, the question of whether the "differences-in-differences" are statistically significant remains largely unanswered. In other words, the lack of robust empirical tests of whether people involved in different civic groups significantly differ over traits and values prevents us from adequately addressing the question of whether there is only one single "political market", that is, whether parties and SMOs – and one might add non-political associations – really compete for the same potential participants (Ramiro and Morales 2014: 507).

The main contribution of this thesis is therefore to help bridge the gap between different fields of research which have developed in relative isolation so far. On the one hand, by looking at the effects of both citizens' personality traits and personal values on similar outcomes, it will help to highlight the respective contributions of each of these two psychological constructs in shaping individuals' behavior. On the other hand, by considering simultaneously different kinds of group participation as alternative forms of civic participation – and especially by successively contrasting all participants with non-participants and participants of different groups with each other – it will shed further light on both the commonalities and differences between citizens playing a collective role through different participatory channels. These two contributions will be made possible by breaking down personal involvement in civic groups into two major questions: (1) whether one would get involved in such a group, and (2) if so, in what kind(s) of groups. Building on this distinction and on the conceptual differences between traits and values described earlier in this chapter, I will thus theoretically argue and try to empirically demonstrate that, in order to fully understand how personality traits and personal values, two major sets of core individual characteristics, are related to associational involvement, one needs to consider their respective impact on the *"if"* and the *"what"* questions of group participation, respectively. Doing so will highlight substantial differences regarding the influence exerted by traits and values on different aspects of group participation. A theoretical framework accounting for such distinct effects will be proposed in the next chapter.

# 3. Personality traits, personal values, and group participation: theoretical model and expectations

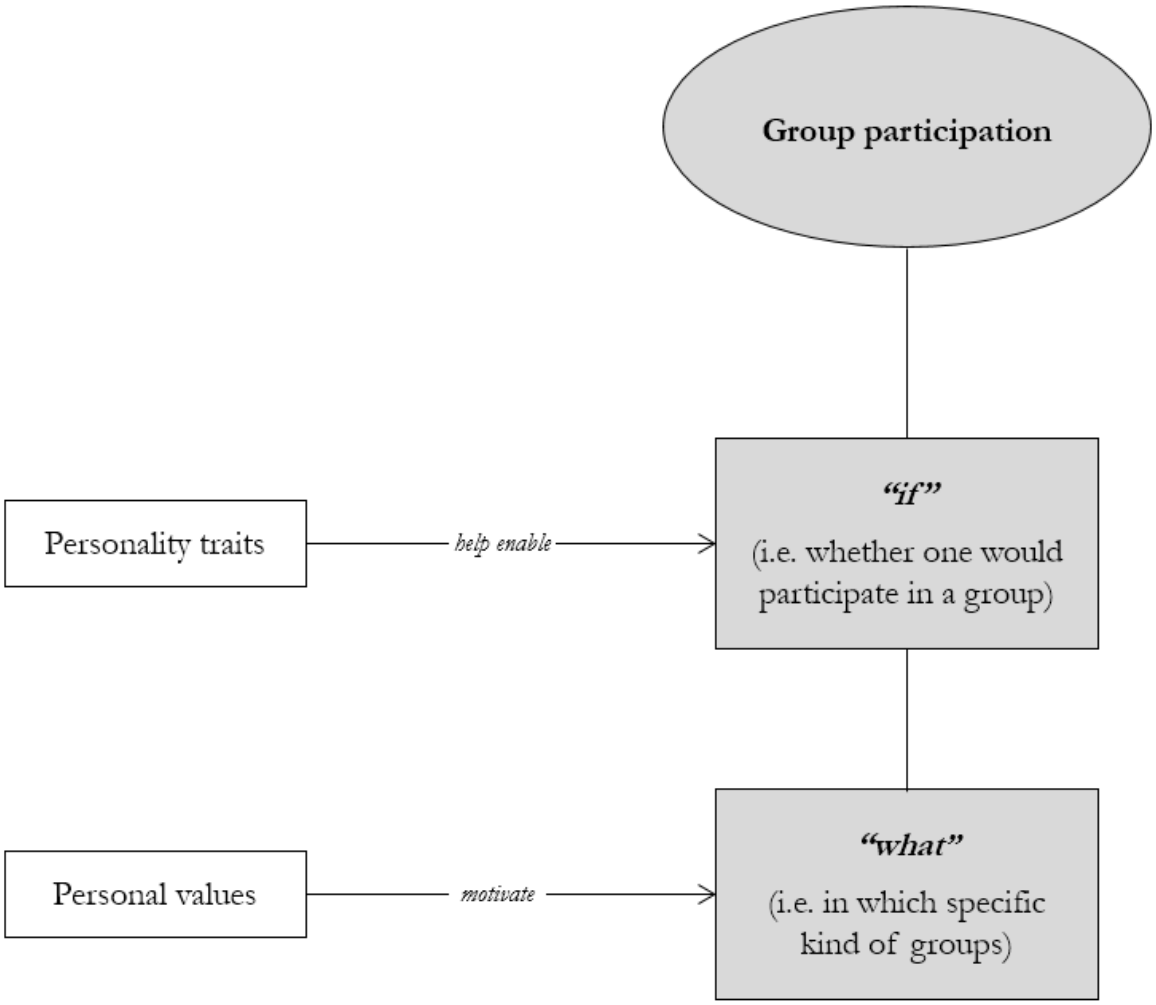
## 3.1. Introduction

After having assessed the relevance of an empirical investigation of the effects of personality traits and personal values on group participation, I shall now propose a theoretical framework for such a study. Two central claims of this dissertation on which the further empirical analyses will be built will be exposed in detail in this chapter. First, I will introduce the analytical distinction between what I have called the *"if"* and the *"what"* questions of group participation. As I will argue, *whether* citizens decide to take part in the activities of a group and, if so, in *what kind(s)* of groups are two related but distinct dimensions of group participation which need to be theoretically and empirically distinguished in order to be correctly assessed. I will notably contend that the former mostly addresses the question of one's ability to take part in the activities of a group, something that might depend, first and foremost, on one's personal resources, whereas the latter is more closely related to the question of one's willingness to participate, what should be contingent upon personal attitudes and motives, on the one hand, and the incentives provided by the group on the other[29]. Based on this analytical distinction, I will then put forward my central argument regarding the effects of traits and values. Following the intuition of Caprara and Vecchione, I will argue that "*[w]hereas personality traits set the potentials that predispose people to engage in political action, basic values provide the reasons that sustain the motivation to become politically engaged*" (Caprara and Vecchione 2017: 276). In the case of group

[29] This distinction is made for analytical purpose. Of course, in reality, reasons for participating are manifold and much less clear-cut. Notably, resources and motivations are likely to be linked to each other and I agree with Morales when she says that "*[t]he lack of motivation for participating in public affairs is, generally, not independent from socio-economic resources and socialization*" (Morales 2009: 29).

participation, it implies that traits may make it easier for certain citizens to participate in the activities of a group, while values may serve as motivational factors to do so. Hence, my baseline assumption is that personality traits should be related, first and foremost, to the *"if"* question of group participation, whereas values should be stronger predictors of the *"what"* question (see Figure 2 below). I will then develop specific hypotheses regarding the effects of each of the Big Five and four-higher order value-types on the overall group participation probability and the choice of a specific kind of group, respectively. But before that, I will start off by giving a conceptual clarification of the very notion of "group participation" and briefly review the classic individual-level predictors which have been highlighted by previous research on social and political participation.

**Figure 2 – The differentiated effects of personality traits and personal values on the *"if"* and the *"what"* questions of group participation**



# 3.2. Group participation

## 3.2.1. Conceptual clarification

### 3.2.1.1. Definition

As stated in the previous chapter, I use the term "group participation" as a synonym for organizational or associational involvement[30], as well as individual participation in civic groups. As the conceptual definitions of all those terms suffer from a lack of consensus in the extensive literature on participation, I propose the following definition for "group participation" as understood and further analyzed in this dissertation: *a personal involvement in a collective structure formally organized and civically oriented*. This definition allows me to specify the characteristics of the two main elements: group and participation.

First, as indicated by the terms "participation" and "personal involvement", I chose to *not* rely on (group) "membership". The reason behind this choice is that formal membership is becoming less and less relevant in the world of civic engagement and looking solely at this classical affiliation form tends to underestimate citizens' involvement in groups (Morales and Geurts 2007: 137; Scarrow 2014: 3). Indeed, many associations and especially political ones – because they face the challenge of declining membership numbers (e.g. parties) or because they want to attract people unlikely to be politically involved in a traditional way (e.g. SMOs) – increasingly offer looser options of affiliation. As stated by Gauja and van Haute (2015: 190) about party membership specifically, "*the establishment of formalized supporters' networks and additional categories of affiliation beyond formal membership is a development that has the potential (at least in theory) to challenge the relevance of formal party membership as the dominant category of organizational affiliation*". Even in Germany, where party participation

[30] In her book *Joining political organizations* (2009), Laura Morales discusses the conceptual differences between the terms "organizations" and "associations". Although the two are closely related, she explains that the latter can be viewed as a subset of the former. Indeed, organizations broadly defined are "*a set of stable social relations deliberately created, with the explicit intention of continuously accomplishing some specific goals or purposes. These goals or purposes are generally functions performed for some larger structure*" (Stinchcombe 1965: 142, cited in Morales 2009: 32)", whereas associations refer to those "*formally organized named group[s] most of whose members – whether persons or organizations – are not financially recompensed for their participation*" (Knoke 1986: 2, cited in Morales 2009: 24). Despite her book's title, Morales argues in favor of the narrower concept of association when studying citizens' civic participation.

remains a rather formal engagement and therefore those who take part in party activities do not heavily outnumber actual members, "*all the established parties have now introduced some sort of temporary guest membership, with reduced rights and no fees or substantially reduced fees*" (Spier and Klein 2015: 88). Hence, for the sake of clarity and in order to take into account every possible way one can participate in a group, I will focus on individual *participation* – whether formal or not – instead of membership status. "Participation" here refers exclusively to behaviors, as opposed to mental dispositions such as "*having an interest in, paying attention to, or having knowledge, beliefs, opinions, attitudes, or feelings about*" (Barrett and Brunton-Smith 2014: 6). It is also worth noting that this participatory conceptualization somewhat leaves out the less demanding forms of associational involvement, like financial contribution, and focuses instead on more active forms of engagement, which are thus at the core of this dissertation. Although the distinction between active participants and passive supporters is slightly less relevant in Germany than in other well-established democracies of northern and central Europe (e.g. Norway and Switzerland) – because "*German citizens are more inclined to be active in the associations they engage in*" (Morales and Geurts 2007: 147)[31] – this is something that should be kept in mind as it will inform the following discussion about the hypothesized effects of traits and values on group participation, as well as the interpretation of the empirical results presented in the next chapters.

Second, the very notion of "group" deserves some clarification. As reflected in the proposed definition, an obvious but central component of group participation is the *collective* nature of this specific kind of engagement – as opposed to individual acts such as voting or buying food for ethical reasons, for example. Hence, the idea that ordinary citizens join together and cooperate with each other in producing a specific (set of) outcome(s) is at the very heart of group participation as defined above. Furthermore, I am only interested here in groups that are *formally organized* – i.e. groups whose members are connected with each other and with the organization itself by formal, more or less rigid ties, in opposition to social groups or other informal groups (e.g. family or friends) – and *civically oriented*. The latter dimension refers to the broader concept of "civic engagement" and allows

[31] As an illustration, financial donation is the least common form of associational involvement in Germany (Montero et al. 2007: 426).

distinguishing groups whose main purpose is to foster "*citizen[s'] participat[ion] in the life of the community in order to improve conditions for others or to help shape the community's future*" (Adler and Goggin 2005: 241) from for-profit organizations. The latter, of course, are not part of the groups analyzed in this dissertation. Finally, it is worth noting that in the way I defined it, participation in civic groups encompasses personal involvement in a broad range of associations, including both political and non-political groups[32]. I will now comment in detail this further important distinction.

#### 3.2.1.2. Different types of groups

***Social vs. political groups***

In the literature on civic participation, different typologies of associational involvement have been proposed (e.g. Almond and Verba 1963; Verba et al. 1978; Boix and Posner 1996; van Deth 1997; Wessels 1997; Warren 2001; Lelieveldt et al. 2007; Roßteutscher and van Deth 2002; Morales 2009; van der Meer et al. 2009). As stated by Morales and Geurts (2007: 145), "*different typologies of associations may be helpful for different purposes*" and therefore none of these typologies is intrinsically better or more accurate than another. But despite the great variety of the proposed classifications, one recurrent major distinction is the one between social and political associations. Where one draws the line between political and non-political associations may have substantial implications for theoretical understanding and empirical assessment of group participation, but "*the definition of which associations are to be considered political is a tricky one*". (Morales 2002: 508; Morales 2009: 49). In this respect, researchers have generally two main alternatives to establish such a distinction: either empirically or theoretically. The first option consists of asking respondents to evaluate themselves the political character of the group they belong to. Then, only the organizations – or organization-types – declared "political" (i.e. taking stands on public issues) by more than 50 percent of the respondents are classified as political ones (Morales 2009: 48). Given that such questions were not posed in the survey data used for the further analyzes (see

[32] In the literature on participation, some authors oppose "civic" and "political" participation, while others consider the latter as a subcategory of the former (for a good overview of the way these two terms have been employed, see Adler and Goggin 2005 and Ekman and Amnå 2012). In this dissertation, I follow the second approach.

next chapter), it leaves me with no choice but to rely on "*theoretically-defined clusters of associations*" (Morales and Geurts 2007: 145), based on predefined criteria.

Drawing on an extensive review of previous studies, Morales (2009) did a careful conceptual work and offered the following definition of political associations: "*those formally organised groups that seek collective goods (whether pure public goods or another type of collective goods) and which have as their* main *goal to influence political decision-making processes, either by trying to influence the selection of governmental personnel or their activities, to include issues on the agenda, or to change the values and preferences that guide the decision making process*" (Morales 2009: 25, original emphasis). By contrast, social or non-political[33] associations are therefore "*those that pursue private goods […] or which, while still pursuing public goods, do not 'primarily' aim at influencing the political arena*" (Morales 2009: 48). Thus, social and political groups, while sharing a common basic organizational feature, fulfil fairly distinct purposes and must be consequently analytically distinguished.

As it is clear from the above, the main criterion used to establish the conceptual distinction between social and political organizations is the (main) kind of *goals* pursued by the association. In addition, I propose to draw a further distinction among political organizations, based on the preferred *means* of these associations for achieving the aforementioned goals. In doing so, it is possible to compare and contrast two main political organization-types: parties and social movement organizations (SMOs).

### *Parties vs. SMOs*

According to Rucht (1998: 30), a social movement "*ultimately struggles for or against a new societal order [and] is based on a broad network of groups and organizations*". Hence, parties and SMOs do share an essential political orientation in their primary goals: they are both engaged in a struggle over the formulation of "*shared meanings*" (Monsch 2014: 45), they pursue collective goods, and they seek to influence political outcomes – at least in a given policy field. Yet, the two political structures differ fundamentally on the means used to strive for these goals: while parties, as major institutional actors, act as an integral part of the political decision-

[33] I use the two terms interchangeably.

making process, SMOs seek to influence it from outside. Indeed, SMOs are by their very nature "outsiders" and therefore act as challengers who address political claims by putting pressure on the government while remaining outside institutional channels. On the contrary, parties are State bodies *par excellence* and thus act at the very heart of the State apparatus. Based on this essential difference, scholars in the field of political participation have tended to consider party activism as a conventional (or "institutional") form of political participation, whereas involvement in SMOs is generally described in terms of unconventional (or "extra-institutional") participation (Kaase and Marsh 1979: 42; Inglehart 1977; Newton and Montero 2007; van der Meer and van Ingen 2009)[34]. As explained in the previous chapter, parties and SMOs are often viewed as the two main rival organization-types in the contemporary field of citizens' political participation (e.g. Barnes and Kaase 1979; Norris 2002).

One may argue that another kind of organization, trade unions, should be distinguished in the realm of political associations. Yet, the political nature of unions is a bit less obvious as those of parties and SMOs, because the former also serves an important purpose of providing their members with individual services (e.g. legal aid to workers engaged in litigation against their employer). Hence, it is not absolutely clear whether trade unions are fully-fledged political actors, just like parties and SMOs, or if they are economic providers of private goods (i.e. welfare services), serving, first and foremost, their own members (van der Meer et al. 2009: 229; Lelieveldt et al. 2007). The answer is probably a combination of the two, but given this ambiguity and because this research is a first step in the study of the differentiated effects of personality traits and personal values on group participation, I have chosen to focus here on the two most obvious contemporary alternative forms of political participation: party and SMO activism. Trade unions will therefore be left out of the further

[34] Because of the rise of social movements over the last decades and the fact that some of the so-called "unconventional" acts (e.g. signing a petition, participating in a demonstration) have become increasingly mainstream and socially acceptable, some authors reject the distinction between conventional and unconventional participation (see Lamprianou 2013: 27). Yet, in this research, this distinction serves primarily an analytical purpose by distinguishing between institutional, traditional political organizations (i.e. parties) and outside challengers (i.e. SMOs).

empirical analyses, but for sure, future research should investigate the effects of core individual dispositions on this specific form of associational involvement too.

In the following pages, I will therefore attempt to build a theoretical framework for the study of personality traits and personal values regarding group participation in social and political associations as defined above, the latter being exemplified by party and SMO activism specifically. I will first briefly present the classical individual-level determinants of group participation highlighted by previous research, on the basis of which I will then draw my theoretical expectations regarding the effects of traits and values.

### 3.2.2. Classic individual-level determinants of group participation

In the voluminous literature on participation, a great number of explanatory factors have been put forward, essentially at three different analytical levels: the macro, the meso, and the micro level (Norris 2002: 10; van Haute 2009: 72). The former typically focus on systemic variations between countries – and within countries over time – and emphasize the importance of structural factors, notably in terms of institutional frameworks (e.g. political regime, party system) and the opportunities they provide for citizens' participation, as well as, in a historical perspective, the role of major cultural and societal changes (e.g. modernization) in encouraging or inhibiting participation (see for instance Lipset 1959, Tilly 1986, Tarrow 1994, Lijphart 1999). Similarly concerned with the importance of the opportunities offered to citizens to participate, explanations at the meso-level further emphasize the role of the organizations themselves, as well as those of social networks in which citizens are embedded. As regards the latter, many researchers have stressed the importance of people's "*structural availability*" (Snow et al. 1980: 792; see also Smith 1957; McAdam 1986; Verba et al. 1995; Passy and Giugni 2001; Passy 2003; Schussman and Soule 2005). Notably, asking why some citizens do *not* participate, Verba and colleagues (1995), in their famous *"Civic Voluntarism Model"*, proposed that part of the explanation could lie in the fact that those people "*are outside the recruitment networks that bring people into politics*" (Verba et al. 1995: 269). While the authors of the *"Civic Voluntarism Model"* primarily emphasized the *"structural-connection"* function of social networks in the recruitment process, which are thought to increase the chances that people will be asked to participate, Passy (2003) further

argued that, in addition, social networks are important in explaining why some citizens participate because they are *"envelopes of meanings able to create a structure of meanings about the future commitment of individuals"* (Passy 2003: 43). Those theoretical models thus form a bridge with the last group of explanatory factors which have been put forward in the literature and which are of special interest for this research: the micro-level determinants of civic participation.

Many individual characteristics have been proven to enhance one's likelihood of becoming involved in an association – either social or political – and it would be both very difficult and pointless to offer here an exhaustive list of all the typologies that have been developed over time to categorize them. Furthermore, these typologies and the labels used vary greatly across disciplines among the broader field of participation research (see Hustinx et al. 2010 for a good overview). Yet, almost all these typologies rest on two basic preconditions for associational involvement: the *ability* and the *willingness* of citizens to participate in groups[35]. The idea that citizens need to be able and motivated to participate in society and politics is a basic assumption which pervades all the subfields of participation research, whatever the specific kind of group studied, and it has shaped all the typologies which have been successively developed at the micro level to attempt to explain citizens' participation. As a result, despite the different research traditions of each subfield, "*many of the factors that appear in explanations of political participation are also encountered in those that attempt to account for organisational involvement*" (Badescu and Neller 2007: 160). In her book on party membership, van Haute (2009: 73-83) offers a comprehensive overview of these factors in the context of political participation[36]. Without going into too much detail, I will now briefly describe them.

[35] These are actually the two other dimensions of Verba and colleagues' *"Civic Voluntarism Model"* mentioned above (see Verba et al. 1995: 269).
[36] Regarding volunteering specifically, similar reviews can be found notably in Wilson (2012: 179-195) and Hustinx et al. (2010: 420-423).

#### 3.2.2.1. Enabling citizens to participate: the role of personal resources

Regarding the ability of citizens to be active in social and political life, researchers from various subfields have highlighted the crucial role of personal *resources*. The so-called "resource model" is the first and probably most agreed-upon set of individual factors which have been linked to citizens' participation (Verba and Nie 1972; Verba et al. 1978, 1995; Barnes and Kaase 1979). Based on the assumption that participation is costly, the basic idea of this theoretical model is that citizens with higher socio-economic status (SES) are more likely to participate because they have a better access to social, economic, and cultural resources and therefore will face lower costs for taking part in society and politics – social and economic inequalities leading then to political inequalities (Badescu and Neller 2007: 160). These resources may be material, such as money, as well as immaterial, such as education or social ties (Sundeen et al. 2007). In addition to these classical resources, Verba and his colleagues added time-availability and civic skills, which refer to "*organizational and communications capacities*" (Verba et al. 1995: 271; Brady et al. 1995), and still other researchers have highlighted the role of other general sociodemographic characteristics such as age, gender, and ethnicity in influencing one's personal resources for participation (van Haute 2009: 74). I will not develop here the underlying mechanisms linking each of these factors to social and political participation as they are not at the core of this dissertation[37] – and besides, some of them are still hardly understood (van Haute 2009: 74; Bauknecht 2012: 80). Yet, this explanatory model is one of the most popular in the literature on participation and a huge body of research has empirically confirmed the positive correlation between individuals' economic, cultural, and social capital, on the one hand, and social as well as political participation on the other (for a review of these studies, see van Haute 2009: 75; Hustinx et al. 2010: 422-423; Wilson 2012: 183-188). In the specific field of social movement studies, while the so-called "*resource mobilization theory*" (McCarthy and Zald 1977; Edwards and McCarthy 2004) mostly considered the role of resources at the meso-level, other scholars have nonetheless emphasized the importance of participants' individual resources. Notably, the concept of "biographical availability", coined by Doug McAdam and defined as "*the absence of personal constraints that may increase the costs and risks of movement*

[37] But see next chapter for a more in-depth discussion of the role of some resources which will be used as control variables in the further empirical analyses.

*participation, such as full-time employment, marriage, and family responsibilities*" (McAdam 1986: 70) closely reflects the view of the scholars cited above. Similarly, scholars concerned with formal volunteering in political as well as social organizations have also underlined the importance of people's human, social, and cultural capital to explain volunteer work for civic groups (e.g. Wilson and Musick 1997).

In sum, resources are thought to help *enable* citizens to participate in civic organizations, according to the basic idea that the greater the "*stockpile of resources*" (Verba et al. 1995: 8) one can rely on, the lower the costs for participating in public life, and therefore the greater one's likelihood of being involved in social and political groups. Conversely, beyond the myth according to which "where there's a will there's a way", a lack of personal resources will most probably prevent, or at least discourage, participation because of effective and/or perceived barriers to involvement (Sundeen et al. 2007). Thus, as stated by Musick and his colleagues in the specific context of volunteering, "*without resources people* cannot *volunteer*" (Musick et al. 2000: 1541, my emphasis).

#### 3.2.2.2. Motivating citizens to participate: attitudes and incentives

In addition to be able to participate, citizens need to be willing to do so. In this regard, researchers have noted the role of a number of social and political attitudes regarding social and political participation. The general idea of this "socio-psychological model" (van Haute 2009: 76) is that "*people are more likely to participate if they feel informed, interested and efficacious; if they care strongly about the outcome and if they think that they can make a difference*" (Norris 2007: 629). Hence, political interest, subjective efficacy, interpersonal as well as institutional trust, and satisfaction with democracy have been shown to be important predictors of organizational involvement (e.g. Verba et al. 1995; Putnam 2000). Even though, by their very nature, these attitudes are closely related to the political realm[38], they are believed to be associated with citizens' involvement in social, non-political organizations as well. It is worth noting that, contrary to most of the individual factors presented above in the

[38] Significantly, Verba and colleagues, in their famous *Civic Voluntarism Model*, talk about "*psychological engagement with politics*" (Verba et al. 1995: 272). More generally, this category of predictors is sometimes referred to by the label "*political engagement*" (see e.g. Schussman and Soule 2005).

"resource block" (cf. SES), these attitudes are viewed as proximal determinants of participation (Caprara and Veccione 2017: 267). This proximity with the outcome makes the direction of causality sometimes difficult to ascertain. A typical example is the level of social or interpersonal trust (Badescu and Neller 2007: 163). Whilst some scholars, following the Tocquevillian approach (see section 3.2.3 below), see social trust as a product of associational involvement (e.g. Putnam 1995), others see it as an antecedent of citizens' participation – those with higher levels of trust being more likely to become involved in social and political groups (e.g. Inglehart 1990). The confusion stems from the fact that "*just as participation can be fostered by trust, trust can be enhanced by participation*" (Bauknecht 2014: 84), and although empirical evidence seems to slightly favor the second approach (e.g. Stolle 1998; Uslaner 2002), many authors support the more plausible view of a reciprocal causation (e.g. Putnam 1995: 665, 2000: 137; Brehm and Rahn 1997: 1001-2). Similarly, using longitudinal panel data, Finkel (1985: 894) has demonstrated the existence of a comparable virtuous circle between external efficacy – but not internal one – and political participation (voting and campaigning). Thus, while these attitudes are generally presented in the literature on participation as explanatory variables, reciprocal causation, or even reverse causality, cannot be ruled out altogether. Nevertheless, social and political attitudes are generally thought to provide citizens with the motivation to become involved in civic, and especially political, groups.

In a rational choice perspective and building on the seminal writing of Olson (1965) regarding the paradox of collective action – according to which "*self-interested individuals will not act to achieve their common or group interests*" (Olson 1965: 2) – scholars have also emphasized the role of different kinds of incentives in motivating citizens to participate in social and political groups (see van Haute 2009: 81 and Passy 2013). Olson himself came up with the idea of selective incentives, i.e. "*private goods made available to people on the basis of whether they contribute to a collective good*" (Olivier 2013: 1), but in Olson's view these incentives were restricted to material goods (e.g. paid positions within an organization). Later on, other scholars extended the notion of incentives to include many other, non-material kinds of individual and collective inducements (e.g. Clark and Wilson 1961; Rose 1962; Gaxie 1977,

2005; Seyd and Whiteley 1992)[39]. While many of these theoretical developments have been suggested in the context of research on party activism, scholars working in the field of social movements have also stressed the importance of incentives for protest participation (e.g. Klandermans 1984; Muller and Opp 1986; Brandstätter and Opp 2014) and in the specific field of volunteering research, personal motives to volunteer have also been widely studied (see Wilson 2000, 2012; Hustinx et al. 2010). The well-known "*Volunteer Functions Inventory*" (VFI) (Clary et al. 1998; Clary and Snyder 1999) has notably been used by many scholars to identify personal motives for volunteering in organizations (see Mannino et al. 2011 for a good review of these studies). While the two seem to have developed somewhat independently[40], it is interesting to note that the six types of "*functional motives*" identified by the VFI are very close to the purposive (e.g. express one's altruistic values), solidary (e.g. develop and strengthen social relationships), and material (e.g. boost one's career development) incentives identified previously by scholars in the political field (Clark and Wilson 1961: 134-135). Thus, whatever the scholarly domain considered and its historical research tradition, previous research suggests that the expected benefits derived from one's participation within an organization – whether self-focused or altruistic, individual or collective, material or intangible – are important in explaining why people might be motivated to join (and remain involved in) civic groups.

### 3.2.3. Preliminary conclusion: the *"if"* and the *"what"* questions of group participation

When reviewing previous research on micro-level determinants of group participation, despite the relative lack of close dialogue between academically distinct disciplines, the similarity of the factors identified as antecedents of citizens' involvement in various and diverse organizations (e.g. social as well as political groups, parties as well as SMOs) is striking. And besides, there is indeed a well-known covariation between social and political

[39] Again, this is not the place to give a detailed description of these various typologies, but for a very good overview of the works cited above, see van Haute (2009: 110-114).

[40] It is striking that in the seminal writing of Clary and colleagues (1998) who first designed the VIF, there is no mention at all of the concept of "incentives", let alone the pioneering works of Olson (1965) and Clark and Wilson who, in their article "*Incentive Systems: A theory of Organizations*", proposed a typology of material, social, and purposive incentives more than thirty years earlier (Clark and Wilson 1961).

participation in modern democracies (Verba et al. 1978, 1995). As explained by Armingeon (2007: 360), different, competing theories can help explain this correlation, one of which is the so-called "social capital theory" (Putnam 2000). Following Tocqueville's classic view of democracy, proponents of this theoretical approach argue that voluntary associations are "schools of democracy" where citizens acquire, develop and exercise civic skills and attitudes valuable for further political participation. According to this view, citizens' involvement in social associations is hence an antecedent of political participation due to a *socialization* process (e.g. Putnam 1995, 2000; Brady et al. 1995; Verba et al. 1995). Yet, against the "*social spiral argument*" (Lichterman 2005: 11) of the neo-Tocquevillians, findings of recent empirical studies pointed to another, more plausible explanation: those of a *selection* process, according to which both social and political participation are determined by a similar set of factors (e.g. Newton 1997, 1999; Stolle 1998; Uslaner 2002; Hooghe and Stolle 2003). For instance, by analyzing the data of 13 European countries – including Germany – Armingeon (2007) demonstrated that the correlation between involvement in non-political associations and participation in party and protest activities is to a large extent a spurious one. Actually, as stated by the author: "*the co-variation between social and political participation in modern democracies is due in large part to the fact that both are explained by the same individual characteristics*" (Armingeon 2007: 382). Using another data set covering 17 European countries, van der Meer and van Ingen (2009) reached a similar conclusion and therefore argue that, rather than being schools of democracy, voluntary associations would be more accurately described as "*pools of democracy*" (van der Meer and van Ingen 2009: 303; van Ingen and van der Meer 2016). In other words, the positive correlation observed between social and political participation would be mainly due to the fact that both share common predictors.

But, then, how can we explain the weak overlap between the different types of associational involvement? For instance, members of social groups generally greatly outnumber those of political groups (Morales and Geurts 2007: 144). If, as suggested by proponents of the self-selectivity of associations, (some) citizens are almost equally likely to participate in any of these organizations' activities because of shared individual characteristics, how can we explain that some organizations (e.g. social ones, SMOs) appear far more popular than others (e.g. political ones, parties)? Besides, as stated by Badescu and Neller (2007: 167),

"*[p]revious research has shown that important differences can be found when different types of associations are compared*".

In order to understand this apparent paradox and reconcile the different views on associational involvement, I argue that one should distinguish between the two major dimensions of group participation: the *"if"* and the *"what"*. The former aspect refers to the question of *whether* one would join any group, while the latter refers to the subsequent question of *what kind* of groups one would choose to join. As highlighted in the previous chapter, "*the 'tradeoffs' between types of participation […] are rarely discussed*" (Leighley 1995: 183, cited in van Haute 2009: 83). More precisely, scholars who did study citizens' involvement in different groups have most often successively compare members of each group with non-members (Maloney et al. 2008: 263). This way of proceeding, I argue, prevents us from effectively disentangling the *"if"* and the *"what"* of group participation – as the reference groups of "non-members" in those models comprises both passive citizens and members of other, different groups. In particular, in order to adequately address the *"what"* question, one needs to directly contrast people involved in different (kinds of) groups with each other, a path which has been taken by only a few scholars – *a fortiori* regarding different forms of political group participation. Among them, Maloney and his colleagues compared members of a broad range of social and political associations in two distinct cities, Aberdeen and Mannheim (Maloney et al. 2008). The authors found that these organizational members have fairly similar social profiles (in terms of e.g. age, gender, income, education, employment status), while a few differences can be noted regarding the social and political attitudes (e.g. political interest, satisfaction with democracy, generalized social trust) of those engaged in different types of groups. Similarly, Ramiro and Morales, contrasting members of Spanish Green parties with those of politically-oriented Civil Society Organizations (CSOs), including new SMOs, concluded that "*Green party members do not differ much from political CSO members in their social background […] However, there are sharp differences in the attitudinal outlook of both types of activists*" (Ramiro and Morales 2014: 513). This finding echoes results of previous research which have shown that *"[t]he social backgrounds of protest activists generally reflect the propensity of groups to participate through conventional means as well"* (Norris 2002: 221), whereas there is more ambiguity in the literature about the effects of attitudes

such as political efficacy, institutional trust, and satisfaction with democracy on (political) participation (Badescu and Neller 2007: 165).

Put together, the findings of these studies tend to confirm the selection process described above regarding the social background of members of social and political groups – or members of parties and SMOs – but suggest somewhat less congruence between the social and political attitudes of citizens involved in different groups. In other words, while all citizens involved in a civic group seem to share a common social profile which significantly differs from those of their passive counterparts, their societal views seem to be less homogeneous across the broad range of associations considered. Furthermore, although this aspect has barely been systematically explored in the literature (van Haute 2009: 82-83), previous research suggests that citizens engaged in different modes of political participation tend to express different kinds of motivations (e.g. Bäck et al. 2011; see also Morales 2009: 25), supporting the findings of Verba and colleagues' pioneering studies according to which "*different acts provide different gratifications and are inspired by different issue concerns*" (Schlozman et al. 1995: 9; see also Verba and Nie 1972 and Verba et al. 1995).

I argue that the similarities found in the social profile of members of different groups might reflect the primary role of individual *resources* regarding the *"if"* question of group participation, while the attitudinal differences found among members of different kinds of groups might be related to the diverse *motivations* which may underlie associational involvement[41], therefore referring, first and foremost, to the *"what"* question of group participation. Indeed, as explained in the previous section, resources are thought to help enable citizens to participate in social and political organizations. Because all forms of group participation share some basic common features that lie at the very heart of its definition (see section 3.2.1.1 above), a minimum amount of basic personal resources might be almost equally valuable whatever the specific kind of association considered. Of course, slight variations are likely to be found between members of different kinds of groups – because of the varying cost structures of their activities (see Morales 2009: 16) – but, *ceteris paribus*,

[41] Of course, attitudes and motivations are two distinct sets of individual-level factors. Nonetheless, contrary to resources, attitudes are thought to motivate, rather than enable, citizens to participate in groups (see section 3.2.2 above).

they should be marginal when compared to differences between members of *any* association and their passive counterparts. By contrast, because social and political associations differ greatly in the goals they pursue – or in the course of action used to reach those goals in the case of parties and SMOs – and because "*[c]onsiderable congruence is anticipated between the predominant organization goals and the character of its incentive systems*" (Knoke 1990: 112), it would come as no surprise that their respective members are holding different social and political views, and are ultimately inspired by different motives. Or, in other words, "*[w]hile being effective in civics and in politics may require similar skills, they do not necessarily rest upon the same motivations*" (Caprara and Vecchione 2017: 263).

In a nutshell, I argue that *resources*, because they help *enable* citizens to participate, are mainly related to the overall probability of group participation (cf. the *"if"* question) and therefore should more strongly differentiate group participants from "purely" passive citizens. On the contrary, *attitudes*, because they contribute to *motivating* citizens to participate, are likely to foster participation in specific kinds of associations (cf. the *"what"* question), and therefore should more strongly differentiate participants of different groups from each other.

What does it mean for the influence of personality traits and personal values? As a reminder, I emphasized in the previous chapter the conceptual differences between traits and values, suggesting that, as core *dispositions* and *goals*, respectively, they are likely to regulate behaviors through distinct mechanisms. As explained, this argument relies on a "*complementary view*" of traits and values (McAdams 1994; Winter et al. 1998), which assumes that "*conceptually, traits furnish the particular structures and* resources *to implement (sometimes also to limit or constrain) the* goals *specified by motives*" (Winter et al. 1998: 237, my emphasis). Parks and Guay (2009) later advanced a quite similar argument when they proposed that "*values should relate to the goals that individuals choose to pursue [whereas] personality, in contrast, should relate to goal striving, or the amount of effort and persistence that individuals put forth in their goal pursuit*" (Parks and Guay 2009: 682-683). More specifically in the field of political activism, Vecchione and colleagues (2015) similarly argued that *"[b]asic personal values may provide the reasons to become politically engaged, reasons whose expression in political action depends upon behavioural traits"* (Vecchione et al. 2015: 85). Besides, Lukes and Stephan (2012), in a comparative study of leaders of for-

profit organizations and non-governmental nonprofit organizations, found that both groups indeed exhibit similar general and entrepreneurship-specific personality traits but differ significantly regarding their motivations. Thus, in the following pages, I will argue that some personality traits, similarly to personal *resources*, may help *enable* citizens to participate in groups and should therefore be mainly related to the *"if"* question of group participation. On the contrary, personal values should *motivate* such a personal involvement in an association striving for goals congruent with one's own values – hence influencing the *"what"* question. I will now describe further the rationales for these basic assumptions and offer specific hypotheses regarding the influence of each trait and value-type.

## 3.3. Traits as valuable dispositions for group participation

As stated in the previous chapter, personality traits refer to endogenous dispositions which "*manifest themselves in enduring patterns of thoughts, feelings, and habitual behaviors*" (Caprara and Vecchione 2017: 51). Traits thus contribute to shape who and what people *are*, and how they tend to behave (Mondak 2010: 6). As suggested by Winter and colleagues, traits "*affect the availability, accessibility, and intrinsic pleasure associated with behavioral options*" (Winter et al. 1998: 233). Consequently, these inner dispositions can either facilitate or impede certain kinds of behavior, depending on the nature of the act, and therefore delineate the scope of activities in which an individual is likely to engage. It follows that a same action would not be perceived as equally *feasible* by people characterized by different levels of openness to experience, conscientiousness, extraversion, agreeableness or neuroticism. This might apply to daily life as well as less ordinary activities, such as those of civic participation. As said by Mondak, "*[a]ll of us know people we simply cannot imagine going door to door on behalf of a petition drive or getting up and speaking in public at a city council meeting or during local appearance by a member of Congress. All of us know people […] who would not hesitate for an instant before engaging in these same actions*" (Mondak 2010: 151). Although the examples given by Mondak are drawn from political actions, one can easily extend them outside the strict boundaries of the political realm. Participation in the activities of groups, even 'purely' social ones, almost always involves a minimum level of social interaction, cooperation, compliance with rules, and tolerance towards others. In this regard, high levels of extraversion or openness, for

instance, appear to be valuable qualities and thus people characterized by an excessive shyness or close-mindedness are likely to avoid such situations.

In short, personality traits shape, first and foremost, one's *capability* to perform particular tasks. Thus, like personal resources, they might play an important role in facilitating participation in the activities of social as well as political groups. It is not to say, of course, that personality traits do not have any motivational implications. Certainly, "what kind of person" one is contributes, at least indirectly, to shaping what one might want (or not want) to do – and actually, most contemporary researchers investigating the effects of traits on individuals' behavior stress this motivational component (see Roberts and Robins 2000; Fischer and Boer 2015). As such, slight variations between participation in different kinds of groups are not unlikely. But given the above discussion and the either/or nature of the *"if"* question of group participation, I contend that an initial self-selection guided by citizens' personality dispositions is likely to occur at this very first stage of the participation process, conditional on one's personal ability to deal with the basic requirements of any group-based civic participation. Even if he does not talk about personality traits, Armingeon (2007: 374) indirectly paved the way to such a hypothesis when he claimed that "*some citizens are more sociable and outward directed than others. Due to their individual characteristics they are more active in political as well as associational life. Their political participation is not caused by the socialising effects of active involvement in associations. Instead, both are caused by their individual traits*" (Armingeon 2007: 374). Therefore, I expect traits to be, first and foremost, related to the *"if"* question of group participation, and conversely to be less important regarding the different forms that associational involvement can take. This baseline assumption forms my first hypothesis:

> ***H1**: Personality traits are primarily related to the overall group participation probability, regardless the kind of group considered.*

I will now specify my theoretical expectations regarding the effects of each of the Big Five traits (i.e. openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism) on the overall group participation probability.

### 3.3.1. Personality traits and the "if" question: the effects of the Big Five on the overall group participation probability

#### 3.3.1.1. Direct effects

***Extraversion***

Extraversion is undoubtedly the Big Five trait which is the more easily theoretically linked to group participation, because of the strong social interaction component of the latter (Mondak 2010: 57). As explained in the previous chapter, extraversion "*implies an energetic approach toward the social and material world*" (John et al. 2008: 120). More specifically, extroverts are sociable and outgoing people who enjoy the company of others and are thus usually embedded in large networks of friends and acquaintances (Mondak 2010; Kim et al. 2013). Therefore, they should be especially likely to participate in group activities. And indeed, this trait is the one which has shown the most consistent pattern of findings in previous research on personality and both social and political participation (see Gerber et al. 2011b: 274). In the political arena, it has been demonstrated that a high level of extraversion is consistently related to higher rates of participation in various political activities and especially those which entail social interactions, such as attending meetings or rallies, campaigning, or contacting officials (Mondak and Halperin 2008; Mondak 2010: 150-181; Mondak et al. 2010; Gerber et al. 2011a; Gerber et al. 2011b; Steinbrecher and Schoen 2012; Ha et al. 2013; Weinschenk 2013; see also Vecchione and Caprara 2009 and Dawkins 2017). Moreover, researchers have found that, because they are talkative and assertive people, extroverts tend to hold strong opinions and to have little difficulty in expressing them (Mondak and Halperin 2008; Mondak 2010; Mondak et al. 2010; Gerber et al. 2011b), even in a confrontational manner – for instance by taking part in political protests (Mondak et al. 2010; Gallego and Oberski 2012; Steinbrecher and Schoen 2012; Ackermann 2017). Therefore, as stated by Mondak and his colleagues, it seems that "*extraversion functions as a critical determinant of the individual-level propensity to join in group-based forms of political engagement*" (Mondak et al. 2010: 102). There is no reason to think that this would not apply to participation in other social, non-political groups. Indeed, although high levels of extraversion has been found to be positively related to political participation, or even more simply to political discussion (e.g. Anderson 2009; Mondak 2010: 100; Gerber

et al. 2012b; Hibbing et al. 2011; Mondak and Halperin 2008; Cooper et al. 2013), some studies interestingly failed to find comparable relationships between this trait and political attentiveness or knowledge (e.g. Mondak 2010: 102-110; but see Johann et al. 2015). Furthermore, research on political preferences suggests that one's level of extraversion is somewhat unrelated to ideological inclinations (Schoen 2012: 51). This could indicate that extroverts display, on average, higher rates of political participation not so much because of a keen interest for political matters, but rather because, more fundamentally, they "*like to do and organize things with other people*" (Bekkers 2004: 131) and, I might add, because they are good at this. This would also be in line with the contrasted null findings regarding the effect of extraversion on more "*passive or individualistic forms of participation*" (Gerber et al. 2011b: 274; Bekkers 2005; Dinesen et al. 2014), such as donating money to groups or candidates (Mondak 2010: 160). Hence, thanks to the usually good social and communicative skills of extroverts, a high level on this trait should increase one's overall group participation probability, whatever the specific nature of the association. Besides, research outside the political realm has shown that extraversion does increase citizens' likelihood of participation in social voluntary organizations as well. This positive relationship between extraversion – or some facets of it (e.g. "*happy-go-lucky*", "*positive emotionality*") – and social volunteering has been long established, and empirically confirmed, in numerous studies (Smith and Nelson 1975; Burke and Hall 1986; Herzog and Morgan 1993; Spitz and MacKinnon 1993; Elshaug and Metzer 2001; Pushkar et al. 2002; Atkins et al. 2005; Carlo et al. 2005; Bekkers 2007; Okun et al. 2007; Omoto et al. 2010; Mondak et al. 2011; Weinschenk 2013; Dinesen et al. 2014; King et al. 2015). By contrast, shy and inwardly reflective people may find it difficult to deal with situations involving social interactions with (unknown) fellow participants of a group, whether political or not. They are likely to simply avoid such situations where they have to express themselves openly. Finally, where introverts may lack energy and therefore feel reluctant to take extra time out of their potentially busy schedules to participate in voluntary associations, extroverts, as enthusiastic and dynamic people, should be better equipped to do so. Therefore, following previous research on associational involvement (e.g. Bekkers 2004, 2005; Dinesen et al. 2013; Weinschenk 2013), I expect extraversion to be positively related to one's overall likelihood of group participation:

***H1$_a$:*** *The more extroverted an individual is, the more likely he is to be involved in the activities of a group.*

### *Openness to experience*

Quite similarly to extraversion, previous research has shown that "*to the extent that Openness to Experience predicts participation, it is associated with higher rates of participation*" (Gerber et al. 2011b: 274; see also Schoen 2012: 51). Indeed, consistent with the idea that people who score high on this trait *"look for stimulating activities that break up routine*" (John et al. 2008: 120), many empirical studies on political participation have linked it to a various set of political activities, including voter turnout (e.g. Mondak et al. 2010; Gallego and Oberski 2012; Steinbrecher and Schoen 2012; Johann et al. 2015) as well as non-voting political participation (e.g. Mondak and Halperin 2008; Mondak 2010; Gerber et al. 2011a; Ha et al. 2013; Weinschenk 2013; Brandstätter and Opp 2014; Johann et al. 2015; Dawkins 2017). Yet, because of the "*strong cognitive component"* (Parks-Leduc 2015: 6) of this trait, one may wonder if the results of the studies cited above are not due, at least partially, to the specifically political *content* of the participatory acts. Indeed, other studies have found that higher levels of openness are associated with special attention to politics (e.g. Mondak and Halperin 2008; Mondak 2010; Curtin et al. 2010; Cooper et al. 2013) and besides, openness has been consistently linked to (liberal) political preferences (e.g. Carney et al. 2008; for a review of this body of research, see Gerber et al. 2011b: 269; Schoen 2012: 50). Nonetheless, it seems that this trait is also positively associated with the 'purely' *participatory* component of political participation, given that research on volunteering in non-political organizations has found similar positive effects for this trait – or some of its facets, like "*imagination*" (e.g. Spitz and MacKinnon 1993; Bekkers 2005; Mondak et al. 2011; Kim et al. 2013; Dinesen et al. 2014; van de Vyver and Abrams 2017). This could be explained by the fact that people who score high on this trait are often characterized by an inquisitive mind; they usually enjoy encountering novel ideas, meeting new people (something that has been shown to predict group participation, see Smith 1966), and debating and sharing ideas with others, whether agreeing with them or not. Open-minded people are generally highly receptive to these forms of intellectual stimulation. On the contrary, it would most probably make their close-minded counterparts very annoyed. Their lack of "diplomatic skills", or "*cognitive flexibility*" (DeYoung et al. 2005) – that is, curiosity and above all tolerance towards

others' opinions, two desirable qualities in group-based activities which require people to cooperate with each other – may well be an impediment to associational involvement. Hence the following hypothesis:

> ***H1b:*** *The more open to experience an individual is, the more likely he is to be involved in the activities of a group.*

### *Neuroticism*

Neuroticism is the third trait that I expect to be significantly related to group participation. Yet, contrary to extraversion and openness, I expect it to be *negatively* associated with one's overall probability of taking part in the activities of a group – or, in other words, I expect emotional stability, not neuroticism, to be a valuable psychological disposition for associational involvement. While it is true that previous research has yielded few and somewhat ambiguous results regarding the influence of this trait on political participation (Gerber et al. 2011b: 274), research on volunteering in non-political associations found more consistent negative effects (e.g. Omoto et al. 2010; King et al. 2015). More specifically, it has long been established that social anxiety is associated with a lower likelihood of volunteering (e.g. Howarth 1976; Handy and Cnaan 2007), whereas optimism and emotional regulation predict active involvement in voluntary organizations (Smith 1966; Fretz 1979; Atkins et al. 2005). These results make sense from a theoretical point of view. As a reminder, neuroticism is the personality dimension which "*contrasts emotional stability and even-temperedness with* negative emotionality*, such as feeling anxious, nervous, sad, and tense*" (John et al. 2008: 120, original emphasis). Neurotic people often experience mood swings but overall, negative emotions tend to prevail. This makes them particularly vulnerable to stress as well as psychological distress, a major disadvantage regarding one's (sustained) organizational involvement – whether in the economic, political, or social sphere. Thus, as argued by Mondak and Halperin, "*social distress among the person low in emotional stability might compel avoidance of [group] settings altogether*" (Mondak and Halperin 2008: 345). In comparison, their more even-tempered and easy-going counterparts should be much better equipped to cope with the sometimes stressful situations of associational life over which one has little control. As well, they should be seen as more reliable partners for the necessary cooperation among group participants working together towards a common goal. This should facilitate

their acceptance and integration in the group – be it social or political – whereas neurotic people may well be perceived as unmanageable, disturbing participants who stir up personal animosity. Undoubtedly, it would lead those people to not feel welcome, further increasing their hostility and negativity – a vicious circle. Thus, a higher level of emotional stability should help people to deal with the requirement of associational involvement, and consequently I propose the following hypothesis:

> ***H1c:*** *The more neurotic an individual is, the less likely he is to be involved in the activities of a group.*

### *Agreeableness*

Theoretical expectations regarding the effect of agreeableness on overall group participation probability are less self-evident, due to the potentially contradictory effects of some specific facets of this trait. On the one hand, very agreeable people are characterized by "*a prosocial and communal orientation*" which translates into high levels of trust, empathy, and helpfulness (John et al. 2008: 120). These three facets should greatly help an individual to build and maintain harmonious relationships with others, and therefore facilitate social interactions in general and social cooperation in particular. Because these are core aspects of group participation, one should thus expect agreeable people to be very likely to be active in civic groups. And indeed, previous research on voluntarism has shown that both trust (e.g. Smith 1996; Spitz and MacKinnon 1993; Elshaug and Metzer 2001) and empathic concern (e.g. Penner and Finkelstein 1998; Penner 2002; Bekkers 2005; Einolf 2008; Wilhelm and Bekkers 2010; but see Omoto et al. 2010: 1721), as well as the broader trait of agreeableness (e.g. Elshaug and Metzer 2001; Carlo et al. 2005; Graziano et al. 2007; King et al. 2015; but see Bekkers 2005), are almost always positively associated with (social) volunteering. Yet, on the other hand, political researchers contend that "*individuals high on Agreeableness are particularly reluctant to participate in ways that are likely to involve conflict*" (Gerber et al. 2011b: 274; see also Gerber et al. 2011a). Accordingly, this might create a tension which can be summed up as follows: "*[o]n the one hand, the co-operative tendencies of people high in agreeableness should incline them towards group participation. […] On the other hand, however, political participation is rooted in disagreement to an extent unmatched by many other forms of collective effort, and this may be off-putting to the person high in agreeableness*" (Mondak and Halperin 2008: 346). The

most agreeable people are therefore expected to avoid participation in political groups in particular. However, empirical evidence is not as clear-cut as anticipated. For instance, regarding attendance at political meetings, Ha and his colleagues indeed found a negative association with agreeableness (Ha et al. 2013), but Mondak and Halperin (2008) found a slightly *positive* association in one sample and still others failed to find any significant relationship (e.g. Mondak et al. 2010; Gerber et al. 2011a). Moreover, even in the case of the most confrontational form of collective political action, i.e. protest participation, findings are rather inconsistent: some authors found it to be – as expected – negatively affected by high levels of agreeableness (e.g. Mondak et al. 2010; Ha et al. 2013; Brandstätter and Opp 2014), but Gallego and Oberski (2012) found this relationship to be significant only in the case of *illegal* protests, and Steinbrecher and Schoen (2012) failed to replicate any of these results. Given the lack of solid evidence for a substantial negative impact of agreeableness on collective forms of political participation, I doubt that the *"possible distaste for politics*" mentioned above (Mondak and Halperin 2008: 346) would be sufficient to offset the great positive influence of an agreeable disposition on overall group participation probability. As explained above, trust, empathy, and helpfulness are almost prerequisites for effective cooperation within any group, be it social or political. Moreover, very agreeable people are likely to be perceived as loyal and valuable allies as their tendency towards modesty and compliance (King et al. 2015: 694) makes them people who "don't rock the boat". On the contrary, those who tend to be judgmental, quarrelsome, and who are inclined to *a priori* consider others as untrustworthy adversaries would most probably experience considerable difficulty in being fully integrated into cooperative networks such as associations (Morales and Geurts 2007: 136). In the case they would like, nonetheless, to do something for the community, less agreeable people are likely to rather "play alone". Thus, as far as the *"if"* question of group participation is concerned, I argue that the effect of agreeableness, if any, should be positive.

> ***H1d:*** *The more agreeable an individual is, the more likely he is to be involved in the activities of a group.*

### *Conscientiousness*

The last Big Five factor, Conscientiousness, is probably the least easy to connect with group participation. On the one hand, from a theoretical point of view, conscientiousness, which refers to "*socially prescribed impulse control that facilitates task- and goal- directed behavior*" (John et al. 2008: 120) may well be a valuable psychological disposition for group participation. Indeed, the self-discipline and organizational skills of those who score high on this trait may well facilitate teamwork in organizations (e.g. Smith 1966). Moreover, highly conscientious people generally display dogged perseverance, even when facing unpleasant situations, because they tend to be driven by duty rather than by desire. Yet, this is precisely where things get complicated. Indeed, previous research has shown that the political behavior of people characterized by a high level of conscientiousness is "*strongly shaped by a sense of the task's importance*" (Mondak et al. 2010: 97). In other words, conscientious people are likely to become involved if, and only if, they believe that the issue at stake is important, or if they are convinced that their participation is needed and/or effective – because of their tremendous sense of duty (Mondak 2010; Mondak et al. 2010; Gerber et al. 2011). But on the contrary, if they do not feel concerned or morally obliged to do something, they are just as likely to turn away. As a consequence, it is quite difficult to predict the effect of conscientiousness on various behavior – in or outside the political arena – and it certainly partly explains the inconsistencies found in the literature on participation regarding this specific personality trait (Gerber et al. 2011b: 274)[42]. Besides, as noted by Bekkers (2005: 448) regarding group participation, "*conscientiousness has rarely been studied in the literature on civic engagement and prosocial behavior*". In his own analyzes within a Dutch sample, the author found a negative impact of this trait on both social and political membership but confesses that he does not really know how to explain this unexpectedly *negative* relationship and that future research should investigate it further (Bekkers 2005: 448). Since then, however, only a few studies have found a significant effect of conscientiousness and involvement in civic groups and these findings mostly remain inconclusive. For instance, Dinesen and his colleagues found this trait to be *positively* correlated with passive involvement in sports club

[42] The only association somewhat consistent across studies is a negative one with the likelihood of participation in demonstrations specifically (e.g. Mondak et al. 2010; Steinbrecher and Schoen 2012; Gallego and Oberski 2012; Weinschenk 2013; Johann et al. 2015).

or cultural associations and with active (rather than passive) membership in trade unions, and no effect at all regarding other organization-types (Dinesen et al. 2014: 146). Still other research failed to find any significant effect of conscientiousness on group participation (e.g. Omoto et al. 2010; Weinschenk 2013). Given this lack of consistent empirical evidence, as well as the most probably conditional effect of this trait theoretically suggested, I do not expect any direct effect, one way or another, of conscientiousness on the overall group participation probability.

So far, I have presented my theoretical expectations regarding the independent, direct effects that some personality traits might have on group participation by providing citizens with psychological skills valuable for associational involvement. Yet, as stated by Bekkers (2004: 133), "*[i]t is unlikely that the effect of individual differences and resources are not contingent upon each other*". In particular, as I will now discuss, on theoretical grounds, there are reasons to believe that the effects of traits on group participation might further *moderate* those of a number of personal resources emphasized in the literature on participation (see section 3.2.2.1 above).

#### 3.3.1.2. Interaction effects: trait-resource substitution hypotheses

In a recent paper, Cawvey and his colleagues called scholars' attention to conditional effects of personality traits, arguing that we should "*devote careful consideration to the ways in which psychological factors and other sorts of variables may magnify or mute one another's effects*" (Cawvey et al. 2017: 15). Indeed, research in the field of personality and individual differences suggests that social environment characteristics and personality can interact with each other in the prediction of various outcomes (Laceulle and van Aken 2018). Different theoretical models have been proposed to account for such "person-environment transactions" and one of them, the theory of resource substitution, is of particular interest to this dissertation. In the perspective of cumulative effects[43], the so-called "resource substitution hypothesis" refers

[43] This perspective is notably to be distinguished from those of sequential effects, which focuses on mediation – instead of moderation – effects between personality and social environmental characteristics (Laceulle and van Aken: 250-251). To be sure, this alternative kind of personality traits interactive effects does exist in the social and political field and literature on participation is full of such examples. However, here I will focus on the more consequential cumulative, moderating effects.

to the idea that "*individuals may particularly benefit from 'adaptive' personality traits (e.g., low neuroticism, high conscientiousness) if they have fewer social resources (e.g., social disadvantage, low socioeconomic status)"* (Laceulle and van Aken 2018: 250). Recent empirical studies on life outcomes such as educational-level, occupational status, or even income, have shown that personality can indeed help compensate for a background disadvantage (e.g. low parental socioeconomic status) – even though it does not always lead to full catch-up effects (e.g. Shanahan et al. 2014; Damian et al. 2015). Ayoub and her colleagues recently offered a meta-analysis of these studies and found evidence for the resource substitution hypothesis, implying that "*alternative resources, such as personality, become increasingly important at low levels of [parental socio-economic status]*" (Ayoub et al. 2018: 339).

In the case of group participation, one can imagine a similar trait-resource substitution. In particular, extraversion and openness to experience are likely to help compensate for a disadvantageous social background regarding associational involvement. Some authors have proposed that these two traits may reflect a single second-order factor called "Beta" (Digman 1997), or in a more meaningful way "Plasticity" (DeYoung et al. 2002; DeYoung 2006), and conceptualized as follows: "*a broad dimension reflecting the degree of individuals' social and experiential engagement, which entails active and enthusiastic participation in life activities. Individuals who exhibit high levels of engagement are likely to demonstrate intense and vital involvement in activities*" (Olson 2005, cited in Vecchione and Caprara 2009: 491). Thus, extraversion and open-mindedness might be two sub-dimensions of an overall basic disposition, which is likely to be a major asset regarding personal involvement in civic group activities and thus could help compensate for a lack of personal resources. Nonetheless, as emphasized by DeYoung himself, it does not imply that extraversion and openness to experience fully overlap and are conceptually undistinguishable. More precisely, as made clear from the previous discussion on direct effects of traits on group participation, there is a subtle difference in the level at which each dimension is thought to operate: "*Openness/Intellect [is conceptualized] as a more cognitive or abstract exploratory tendency – as opposed to the more behavioral or concrete exploratory tendency associated with Extraversion*" (DeYoung et al. 2005: 832). Hence, the strong cognitive component of the trait openness makes it more likely to act as a substitute for a lack of *cultural* capital specifically, while the approach behavior fostered by high levels of extraversion may benefit especially people who do not enjoy a strong social anchorage (i.e.

a lack of *social* capital). In addition, the "energy" facet of extraversion may also be of importance regarding another crucial resource for associational involvement: time. As extroverts tend to be highly energetic people who do not dread being overbooked, extraversion may help compensate for a limited time availability. Thus, important well-known resources for associational involvement might be somewhat less important for people benefiting from valuable inner dispositions towards engagement.

In each of the cases described above, the resource substitution theory predicts that personal resources will be weaker predictors of group participation at higher levels of extraversion or openness. Or, in other words, citizens who are otherwise disadvantaged should benefit from personality dispositions fostering associational involvement to a greater extent than those who have more cultural, social, or time-related resources. Given the above, I will therefore test the three following hypotheses:

> ***H2$_a$:*** *A low probability of any group participation due to a lack of cultural capital can be, at least, partly offset by a high level of openness to experience.*

> ***H2$_b$:*** *A low probability of any group participation due to a lack of social capital can be, at least, partly offset by a high level of extraversion.*

> ***H2$_c$:*** *A low probability of any group participation due to a lack of time available can be, at least, partly offset by a high level of extraversion.*

In sum, personality traits are expected to make it easier for certain citizens to participate in group-based civic activities, regardless the kind of groups considered. In some cases, it is expected that they might even help compensate for a lack of certain resources which have been found to be strong predictors of group participation in previous research. But this tells only part of the story. Being able to participate is one thing, being willing to do so is quite another. In order for one's individual potential to translate into actual personal involvement in a civic group, one should be motivated to participate in such a group. This is where basic personal values should come into play.

## 3.4. Values as motivational factors for group participation

As explained in the previous chapter, personal values differ fundamentally from traits because they refer to enduring goals (Roccas et al. 2002: 790) which "*may or may not be reflected in behavior*" (Parks-Leduc et al. 2015: 5). Thus, the motivational nature of values stands in contrast to those, merely descriptive, of traits. Moreover, personal values are guiding principles which people use as criteria for judging an action's legitimacy and worthiness (Schwartz 2007: 163). Whether something will be perceived as good or worth the effort depends on one's value priorities and the extent to which the act in question is compatible with one's cherished values. Or, as explained by Cieciuch and his colleagues, "*values influence choices because people act in order to attain, affirm, or preserve the goals that their important values express*" (Cieciuch et al. 2015: 45). Hence, values profoundly shape what people *want* and a same action would not be perceived as equally *desirable* by people characterized by different value priorities. As for traits, there is no reason to expect that this should not apply to citizens' behavior in the social and political arenas. In line with the expectancy-value theory (Feather and Newton 1982; Klandermans 1984), a costly personal involvement in a civic group may well seem valuable if one believes that it will help in the promotion or attainment of the goals one pursues. As an example, transposing the VIF to the study of party membership, Granik (2008) found that the values functional benefit, that is, "*the desire of individuals to be able to act on their beliefs, to express their own values in a meaningful way, and to serve a cause which has some personal meaning for them*" (Granik 2008: 74) is indeed a good predictor of personal involvement in the activities of the Plaid Cymru, a political party based in Wales. Thus, as summed up by Caprara and Vecchione (2017: 276), it is likely that "*[v]alues determine, first, whether politics is perceived as worthy of personal involvement; second, the course of action; and third, the efforts to be undertaken*".

The direct implication for the study of group participation is that, unlike traits which help enable people to participate, personal values should be much more related to their *willingness* to do so, by *motivating* (or failing to motivate) them to get involved in a group's activities. More precisely, basic values should underlie personal motives for participation given that the former refers to "*cognitive representations of motivations in the form of goals and objectives*" (Roccas et al. 2002: 793). Yet, as explained earlier in this chapter (see sections 3.2.1.2 and

3.2.3), different kinds of groups strive for (very) different goals and/or consider different means as the best or more legitimate way to achieve these goals. Accordingly, they are likely to offer their members different kinds of incentives and, therefore, value-based motives for associational involvement are likely to greatly vary across the broad range of organizations. Therefore, individual differences in value priorities should lead to personal involvement in different kinds of associations, depending on the adequacy between one's own value profile and the goals or course of action an organization-type pursues[44]. This would be consistent with the findings of Augemberg, which the author summed up as follow: "*[v]alues were found to be better predictors of specific engagement modes, than of overall civic and psychological political engagement. In addition, different values were found to predict different engagement modes*" (Augemberg 2008). In a nutshell, I expect personal values to be mainly related to the choice of a specific kind of group – that is, the "*what*" question of group participation. Hence, my baseline assumption concerning the effects of values on group participation:

> ***H3:*** *Personal values are primarily related to specific forms of engagement, rather than to the overall group participation probability.*

As noted in the previous chapter, studies which examined the relationships between personal values and group participation are rather scarce. However, their findings are relatively consistent and unambiguous. Based on these previous works, I will now discuss my theoretical expectations regarding how the two orthogonal dimensions on which is based the integrated value structure should be related to the choice between social and political groups, and among the latter, between parties and SMOs.

[44] While the importance of the congruency between one's motivational goals and those pursued by an association is fairly evident, one may express more skepticism regarding the expected link between personal values and the course of action chosen by an association. Yet, previous research has found that values are powerful in this regard as well. For instance, Cohrs and colleagues found that, while universalism values increase human rights endorsement, a higher priority given to power values significantly predict support for military enforcement of human rights specifically (Cohrs et al. 2007: 461). Thus, the question of how to attain a specific goal is also likely to be shaped by one's value priorities.

### 3.4.1. Personal values and the "what" question: the effects of the higher-order value types on specific kind of groups

#### 3.4.1.1. Conservation vs. Openness to change

The first dimension of the circular value structure which is likely to shape individual motivations to participate in a civic group is the one which contrasts conservation to openness to change higher order value-types. As a reminder, the former encompasses security, conformity, and tradition values, all of them emphasizing "*self-restriction, order and resistance to change*", whereas the latter includes values which refer to "*independent action, thought and readiness for new experience*" – that is, self-direction, stimulation, and to a lesser extent hedonism values[45] (Schwartz 2007a: 167). Empirical studies which investigated the influence of personal values on political activism found it to be strongly, negatively related with conservation values (especially conformity) and positively associated with openness to change values (especially self-direction and stimulation) (e.g. Schwartz 2007a; Vyrost et al. 2007; Vecchione et al. 2015). The reasons behind these associations are fairly obvious. As explained at the beginning of this chapter (see section 3.2.1.2 above) political groups are defined as those whose main goal is to influence political decision-making processes, for instance by putting issues on the agenda (*agenda-setting*) or, more generally, by attempting to "*change the values and preferences that guide the decision making process*" (Morales 2009: 48). Thus, politics is about societal change, whatever the nature of the desired changes[46]. Citizens who especially cherish openness values should therefore perceive involvement in a political group as a way to attain their goals of making new and exciting experiences (cf. stimulation values). Moreover, becoming involved in politics seems fully compatible with the importance attached by those people to self-expression, given that it allows them to raise their voice and to take an active part in important public decision-making processes (cf. self-direction values). Furthermore, those motivations for political participation among

[45] Hedonism values are thought to be also part of the self-enhancement value-type (see previous chapter).
[46] One may argue that this statement applies first and above all to left-leaning political participation. To some extent, I agree with such a critical remark and it seems highly likely that right-wing activists place less emphasis on openness to change values than their left-wing counterparts, given the close relationship between this value dimension and the traditional left-right ideological divide (see previous chapter). Nevertheless, I argue that even the more conservative parties or movements claim for some political changes, if only by calling for a return to past situations. In my view, there are no "stagnating" active political groups which do not, at any time, put forward proposals to change the status quo.

citizens who give priority of openness over conservation values should be especially relevant for SMO activism. Indeed, as already noted (see section 3.2.1.2), by their very nature, SMOs are political outsiders which are challenging the State and other established authorities through extra-institutional channels. This course of action is likely to curry favor with citizens who value self-direction and stimulation. They would probably view this as a great way to promote autonomy and independence of thought and action, as well as an opportunity to take up exciting challenges. Those citizens should therefore be willing to engage in such political participation.

By contrast, the goals pursued by political groups in general scarcely fit those of people who attach higher relative importance to conservation values. Indeed, for those people, risk avoidance, compliance with established rules, norms, and social expectations and, above all, harmony and stability of society are of crucial importance. And as stated by Caprara and Vecchione, *"it is reasonable to assume that challenging existing arrangements, which could lead to unexpected and uncontrolled outcomes, might therefore be perceived as threatening to one's security*" (Caprara and Vecchione 2017: 277, see also Vecchione et al. 2015: 89). One can also imagine that people who give priority to conservation values, because of their special attachment to respect for authority and social hierarchy, might see citizens' involvement in the political process as a kind of "unwarranted interference". In this sense, participation in social groups should be much more in line with the goals pursued by these people given the well-known role of those groups in fostering social cohesion and solidarity among citizens. Besides, this would be consistent with the findings of Augemberg (2008) who studied the influence of value priorities on different modes of political engagement in the US and found that conformity and tradition values were positively related to engagement in community activities (but not to electoral activities). Finally, those value conflicts should be further exacerbated in the case of social movements, given the low degree of social and political conformity of many SMOs from the post-industrial sector. These "new" organizations, regarding both the form and the substance of their claims, often break social conventions and norms – not to mention laws – in their attempt to put pressure on State actors. Citizens who give priority to conservation values are likely to see the actions of these organizations as a special threat to public order and social harmony, leading to a strong disagreement with those unconventional forms of participation. Besides, Vecchione and colleagues found that

valuing tradition was specifically negatively correlated, in most countries, with unconventional activism (Vecchione et al. 2015: 102). In comparison, participation in political parties, and especially long-established traditional ones, appears to conflict somewhat less with conservation value priorities. Given the above, my theoretical expectation regarding the dimension of the value structure opposing conservation to openness value-types can be summed up as follow:

> ***H3$_a$:*** *The higher the priority given to Conservation values (as opposed to Openness to change values), the lower the probability of political participation, and especially of SMO activism.*

#### 3.4.1.2. Self-enhancement vs. Self-transcendence

The second dimension which organizes conflicts and congruities around the circular motivational value structure contrasts self-enhancement with self-transcendence higher-order value-types. As noted in the previous chapter, the former emphasizes "*the pursuit of one's own relative success and dominance over others (power and achievement)*", whereas the latter denotes "*acceptance of others as equals and concern for their welfare (universalism and benevolence)*" (Schwartz 1994: 25). In previous research on personal values and political activism, self-transcendence value-type – and especially universalism values – has been proven to be a powerful motivator for political activism (e.g. Schwartz 2007; Vyrost et al. 2007; Augemberg 2008; Vecchione et al. 2015). This is probably due to the fact that political groups, by seeking (pure) public goods, bring intrinsically collective benefits, which faithfully echoes the "other-oriented" goals of people who give high priority to universalism and benevolence values. Those people should be willing to participate in political associations because they might see it as a way to promote interests which transcend their own[47]. This congruence between the collective nature of the goals pursued by political groups and the self-transcendence higher-order value-type is likely to be even stronger in the case of SMO activism specifically because, as suggested by Schwartz, social justice and environmental preservation, two major goals covered by universalism values, are also "*the goals of much recent activism*" (Schwartz 2007a: 186). Moreover, many of these "new" social

[47] Of course, activists are then likely to vary in their identification of the relevant others, as well as in their conception of others' interests.

movements intend to make the "voice of the voiceless" heard, that is, to serve the interests of minorities or disadvantaged groups (e.g. immigrants, LGBTIQ people, women, or even animals)[48]. As stated by Caprara and Vecchione (2017: 277), "*[e]ngaging in such activities […] may entail sacrificing personal resources and interests for the sake of others*". This is something that those who attach higher relative importance to self-transcendence values are likely to endorse, but that those who give higher priority to self-enhancement values are very likely to avoid. Consistent with this idea, Vecchione and his colleagues found that, when splitting political activism into conventional and unconventional participation, self-enhancement values show a slightly positive association with the former but a negative one with the latter (Vecchione et al. 2015: 102). The positive correlation found for conventional activism may be explained by the fact that "*this type of activism often takes place within organizations aimed at producing and distributing resources […], where activism may serve as a means to obtain power*" (Caprara and Vecchione 2017: 277). Indeed, joining a party may be viewed as an opportunity to acquire social status and prestige, as well as control over people and resources, because parties, unlike SMOs, operate at the heart of the political decision-making processes. However, a strong emphasize on achievement and power values should discourage political activism in the first place, given that it involves a costly personal investment for only limited, uncertain, and collective benefits. People who are primarily motivated by their own accomplishment may therefore not want to waste time in political groups. By contrast, they should be more receptive to the "*provision of services, material benefits and social incentives [which] are much more important in [non-political associations]*" (Morales 2009: 25; see also Knoke 1990: 135). Accordingly, my last hypothesis is:

> ***H3b:*** *The higher the priority given to Self-enhancement values (as opposed to Self-transcendence values), the lower the probability of political participation, and especially of SMO activism.*

[48] Again, it is clear that this argument is somewhat biased towards left-leaning activism. But as it will be made clear in the next chapter, SMOs covered in the further empirical analyzes of this research are likely to be mainly left-wing organizations. Of course, this is a limitation to the generalizability of the results to right-wing movements (see the last chapter for a further discussion).

## 3.5. Summary of the theoretical expectations

My theoretical expectations are summarized in Table 3 below. I expect personality traits to be primarily linked to overall group participation (cf. the "*if*" question), rather than particular types of it. More precisely, I argued that some personality traits may foster participation in social as well as political groups by providing citizens with valuable personal dispositions for dealing with the basic requirements of group activities (e.g. social interactions, cooperative behaviors). According to this baseline assumption, certain citizens are expected to be better-equipped to cope with the organizational settings of associational life, whatever the kind of groups considered. In particular, high levels of extraversion and openness to experience should lead to higher group participation probabilities. To a somewhat lesser extent, low neuroticism and high levels of agreeableness are also expected to be positively associated with personal involvement in civic groups. On the contrary, because of a relative lack of interpersonal skills deeply rooted in their personality, introverts, close-minded people, neurotics, and disagreeable people are likely to be more socially isolated. Finally, because of the theoretical and empirical ambiguity regarding the effects of conscientiousness on participatory outcomes, I do not expect any direct effect of this trait on group participation probability.

Still regarding the influence of personality traits, I proposed a further additional hypothesis which does not appear in Table 3. Built on the resource substitution theory, this hypothesis predicts that traits favoring participation in civic groups can moderate the effects of classic personal resources, such as social or cultural capital, or even time-availability. More precisely, higher scores on traits positively associated with group participation should decrease the predictive power of resources (see section 3.3.1.2 above), psychological favorable dispositions superseding then "social" resources.

**Table 3 – Summary of the theoretical expectations**

| | ***"If"*** | ***"What"*** | |
|---|---|---|---|
| | **Any group participation** *(vs. no participation)* | **Political participation** *(vs. social, non-political participation)* | **Party participation** *(vs. SMO participation)* |
| **Personality traits** | | | |
| Openness to experience | + | | |
| Conscientiousness | 0 | | |
| Extraversion | + | | |
| Agreeableness | + | | |
| Neuroticism | - | | |
| **Personal values** | | | |
| Openness to change | | + | - |
| Conservation | | - | + |
| Self-Enhancement | | - | + |
| Self-Transcendence | | + | - |

Finally, personal value priorities should orient citizens' involvement towards specific kinds of groups (cf. the "*what*" question of group participation). This baseline assumption rests on the idea that one's motivation to take part in the activities of a civic group is contingent upon the compatibility between, on the one hand, one's cherished values and, on the other, the goals and course of action pursued by the group. If the two are in line with each other, one may see personal involvement in this (kind of) group as a way to attain or promote one's own values – offering thus great motivation to do it. Otherwise, one is likely to turn away. On the basis of a discussion about the degree of congruence between different personal value-types and different kinds of goals for which specific groups can strive, as well as their preferred means to achieve those goals (see section 3.4.1 above), I put forward two hypotheses according to which people who give higher priority to conservation (vs. openness to change) and self-enhancement (vs. self-transcendence) values should be less likely to participate in the activities of a political group, and especially a SMO.

Chapters 5 and 6 will be dedicated to the empirical assessment of these sets of hypotheses. But before presenting analyzes and their results, I will discuss, in the next chapter, methodological choices which have been made in terms of data, measurement, and methods used to carry out these analyzes and thus empirically assess the role of personality traits and personal values on both the *"if"* and *"what"* questions of group participation.

# 4. Analytical framework and methodological issues

## 4.1. Introduction

The previous chapters aimed at laying the theoretical foundation of my research. I will now discuss methodological issues raised by the transposition of my theoretical framework at the empirical level. This chapter is therefore dedicated to a detailed presentation of the data, measures and analytical tools used to carry out the empirical analyses that will be further presented in the next chapters. I will describe the methodological challenges I faced throughout this research, choices that have eventually been made, and their possible impact on the empirical findings. I will start off by presenting and discussing the data used, then I will describe how the main theoretical concepts were operationalized and which statistical tools and procedures were used to test my hypotheses. Finally, I will conclude with some general remarks about the methodological strengths and weaknesses of this thesis.

## 4.2. Data: the GESIS Panel Longitudinal Core Study

### 4.2.1. A general overview of the GESIS Panel

Finding an "up-to-date" public survey dataset which simultaneously includes questions about personality traits, personal values, and civic or political group participation in European countries is not an easy task. The first big challenge relates to personality traits themselves. Firstly, the development of proper methodological instruments to assess the Big Five personality dimensions only dates back to the late 20th and collecting data from large and representative samples of given populations requires a lot of resources, the most important of them being time. Secondly, the initial measurement instruments developed by psychological researchers in order to capture such a complex and abstract

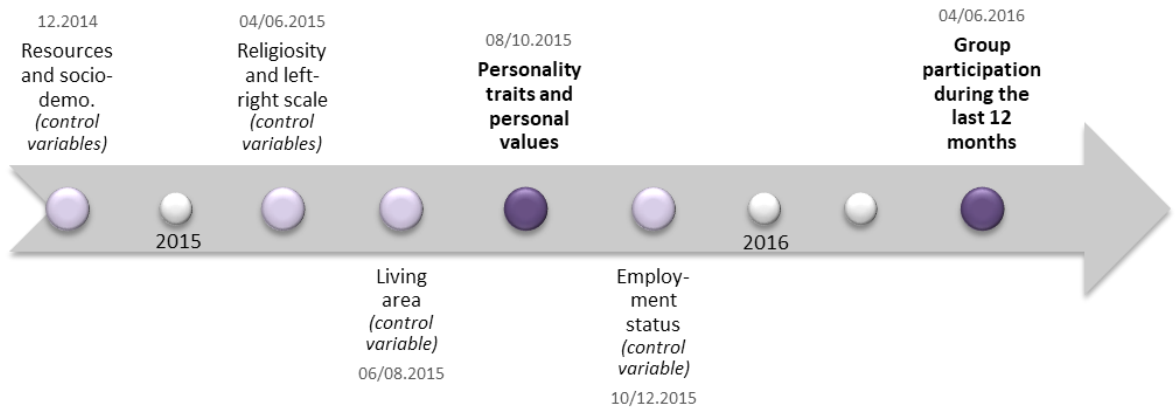
structure were far too long to be included in larger surveys that are not primarily interested in the study of personality but rather aim at covering a number of other social, economic, political, etc. topics (see section 4.3 below for a more detailed discussion about measurement instruments). It is only in the last few years that shorter instruments (i.e. comprising fewer items) were developed, empirically tested and validated, and then increasingly included in large-based surveys. Thirdly, as discussed in chapter 2, while "*the big wave of studies using the Big Five personality traits has started about ten years ago*" (Ackermann 2016: 15) this literature has developed primarily in the US context. Finally, databases which contain indicators of *both* personality traits and basic personal values are rare, given that those concepts have developed within separate research traditions (Caprara et al. 2006: 3). For all those reasons, datasets which include all the variables I am interested in, outside the American context, are still scarce.

Yet, the recent establishment of the GESIS Panel offers European social scientists an opportunity to study the impact of both traits and values on various political and social outcomes. This open probability-based panel was created by the *GESIS – Leibniz Institute for the Social Sciences* located in Mannheim (Germany), and started officially at the beginning of 2014 after 6 months of recruitment interviews. It works on a bi-monthly basis and within each wave of interviews (6 per year), apart from questions submitted by external researchers, a few minutes are reserved for rotating thematic modules and submodules developed by the GESIS team (namely, the GESIS Panel Longitudinal Core Studies). There are six different thematic modules which are thus alternately submitted to panelists every two months, resulting in one data collection per year for each thematic unit. Among those six modules, one is devoted to personality traits and personal values and another covers political and social participation. This database is therefore particularly adapted to my research topic and all the quantitative analyses that will be presented in this dissertation rely on these data (GESIS 2016)[49].

[49] To the best of my knowledge, no study using these data to explore the effects of the Big Five traits and Schwartz' personal values on political behavior has been published so far.

Nonetheless, it was necessary to combine 6 different waves in order to get all the variables that are of interest for my research (personality traits, personal values, group participation, resources, and other socio-demographic controls). The field period covered by the selected waves began in December 2014 and ended in June 2016 (about 18 months). Figure 3 below displays an overview of the timeline framework of the data collection waves used for the further empirical analyses.

**Figure 3 – Schematic overview of the six data collection waves used for the analyses**




Such a time lapse between different data collection points in time is not unusual when one uses panel data, but it may raise concerns about the representativeness of the final sample as only the respondents who successfully took part in each of these six waves were included. Fortunately, the response rate of each wave was sufficiently high (90% on average)[50] to ensure a large final subsample (N=3'042) and to reduce the risk of strong selection biases. But still, attrition and sample composition biases are always a matter of concern when using panel data and, therefore, I now turn to a discussion of these critical issues and their consequences on representativeness of both the GESIS Panel data as a whole and my specific subsample resulting from the selection of the six waves mentioned above.

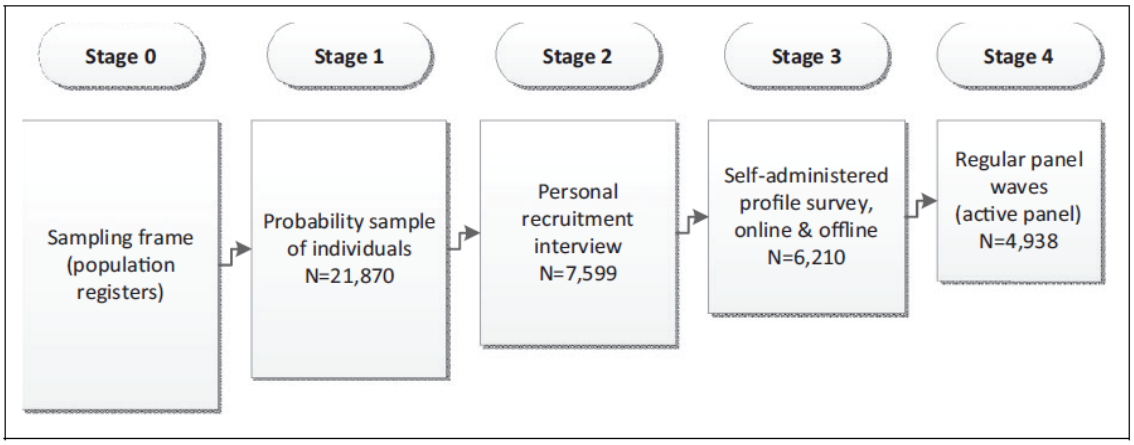
[50] The response rates of each waves were calculated by computed the ratio between invited respondents and actual participants.

### 4.2.2. Representativeness and the issue of sample composition bias[51]

As a probability-based survey, the GESIS Panel aims at being representative of the German speaking population aged between 18 and 70 years (at the time of recruitment) and permanently residing in Germany. Yet, as any large-scale survey, it may suffer from sample composition biases impacting its representativeness (Chang and Krosnick 2009). In this respect, three survey characteristics are critical: the recruitment process, the administration procedure, and the issue of panel attrition.

To begin with, the *recruitment process* may lead to distortions in the final sample as, at each stage of it, some respondents drop out and the sample size decreases (see Figure 4 below).

**Figure 4 – Overview of the multistage recruitment process of the GESIS Panel**




*Source:* Bosnjak et al. 2017: 4

Bosnjak and colleagues measured the degree of mismatch between the GESIS panel sample composition and the German Microcensus (GMC; the German national benchmark) on eight basic socio-demographic variables: gender, age, citizenship, marital status, household size, place of birth, education, household income (Bosnjak et al. 2017: 7). Only two variables actually showed a significant lower match (citizenship and place of birth) at the end of the recruitment process, leading the authors to conclude that "*the*

[51] This section is largely based on the survey report of Bosnjak and colleagues (2017) and the information provided by the website of the GESIS Panel (www. gesis.org).

*specific recruitment strategy did for most of the variables not induce selective dropout, although the sample composition became more homogeneous in terms of German citizenship and Germany as the place of birth*" (Bosnjak et al. 2017: 10). Fortunately, migration does not lie at the core of my research and hence this specific sample composition bias is not of major importance for me – nevertheless, the under-representation of foreigners among panelists should be kept in mind as it could lead to an overestimation of party activists for instance (see section 4.3.3 for a further discussion).

Another important aspect of the GESIS Panel is its *mixed-mode access*. At the time of recruitment, participants were asked to choose between online and off-line participation modes. Among the 4'938 active panel members, about 65% chose the web-based option and the remaining 35% opted for paper questionnaires (a composition fairly similar to the one of my subsample). Although online surveys have many advantages, they may also yield biased results due to the specific profile of web users among whom "*men, young, better educated, and politically involved persons"* are often over-represented (Schoen and Faas 2005: 327). These distortions are especially likely in fully open web-based surveys, but a careful examination of the GESIS Panel data (not shown here) revealed that, indeed, online and offline participants differ on several individual characteristics[52]. Yet, all the relevant individual characteristics along which online and offline participants differ will be included as covariates in the further analyses (see section 4.3.4). Moreover, estimation with and without control for the mode of participation yielded virtually identical results[53].

Finally, selective *panel attrition* is a matter of concern for any longitudinal survey (Behr et al. 2005). In the GESIS Panel, in addition to respondents who explicitly requested to be removed from the sample (i.e. "voluntary attrition"), those who did not participate for 3 consecutive waves were excluded (i.e. "involuntary attrition"). As stated before, the response rates of the six waves I am interested in were high, which somewhat reduces

[52] In particular, those who participated offline tend to be significantly older, less educated and poorer. Moreover, in comparison to the online group, they seem to be somewhat more "isolated", from a geographical as well as social point of view (i.e. they tend to live far from big cities, without children, and to be out of the labor market).

[53] The results of these further analyses are not shown here but they are available on demand.

the risk of major selection biases. Nevertheless, at the time of the last wave used to build my empirical subsample (June 2016), the overall attrition rate stood at 24.38% (Schaurer and Struminskaya 2016: 13), meaning that about a quarter of the 4938 active panelists had been removed in the meantime. In addition, for the purpose of the statistical analyses, respondents who did not participate in all the six selected waves were excluded, resulting in a subsample of 3042 respondents. As shown in Table A1 in appendix, all of this resulted indeed in some deviations to the German population's census figures. Except for the geographical living area (former East/West Germany), those deviations appear to increase monotonically over time. In particular, the aforementioned underrepresentation of foreigners is especially pronounced in my final subsample. To a lesser extent, young and single people are also increasingly underrepresented in comparison to their older, respectively married, counterparts[54]. One way to correct these sample composition biases would have been to use weights. Yet, I decided not do it, for three main reasons. First, my research has no descriptive purpose; I do not ultimately aim at giving an accurate description of the German current population. Second and most importantly, a comprehensive set of socio-demographic characteristics are included in the further empirical analyses[55]. Finally, building weights can be tricky and "*sometimes the bias persists even after weighting or, in rare cases, is a result of weighting itself*" (Voorpostel et al. 2017: 34).

In a nutshell, the representativeness of the GESIS Panel initial sample, as well as those of my specific empirical subsample, is obviously not perfect but remains acceptable. Deviations from the German reference population do exist, but they do not prevent statistical correlational investigations and, moreover, a full battery of individual controls will be systematically included in the further analyses. Nonetheless, where relevant, readers will be reminded of potential biases.

[54] Of course, the trend regarding age is at least partially due to the normal ageing of the sample. Yet, an additional self-selection mechanism cannot be completely ruled out.

[55] Three notable exceptions are citizenship, federal living area (former East/West Germany) and marital status. The successive estimations of all models with and without these three additional control variables yielded results which are remarkably similar, thus for reasons of readability I will show here only the latter. Fully controlled estimations are available on demand.

## 4.3. Measures: from theoretical concepts to empirical indicators

The use of secondary data – that is, data originally collected for a different purpose but which are made available for reuse by other researchers – constrained greatly the selection of indicators used to measure theoretical constructs. Moreover, given the data collection strategy of large-scale multi-topic social surveys like the GESIS Panel (i.e. collecting data on a large number of variables) interview time and the questionnaire's succinctness are critical factors that prevent the use of lengthy measurement instruments, such as those formerly developed by psychological researchers in order to assess personality traits and value priorities. Thus, during the last decades, researchers have developed ultra-short scales designed to overcome these problems. Without doubt, more detailed measures would give more accurate portrayals of individuals' core dispositions and the use of these very brief measures are not problem-free. Yet, since they were created, their psychometric properties have been tested and validated throughout many empirical studies, allowing researchers to have relative confidence in the validity and reliability of these convenient measures. In the GESIS Panel, the so-called BFI-10 and a slightly modified version of the PVQ-R are used to assess respectively the Big Five traits and the four higher order value dimensions. I will now present both of these measurement instruments in detail, as well as the main issues raised by the use of such ultra-short measures.

### 4.3.1. Personality traits: the ultra-short "Big Five Inventory" (BFI-10)

The 10 items used to assess the Big Five personality traits in the GESIS Panel are shown in Table 4, along with key summary statistics (range, missings, mean, and standard deviation). For each item, respondents have to indicate to what extent the statement applies to them on a five-point scale (1 "*Does not apply at all*" to 5 "*Fully applies*"). Scale scores are then computed by calculating the mean of the two items tapping the same dimension, after having reversed one of the two.

**Table 4 – Descriptive statistics of the BFI-10 items in the GESIS Panel**

| | Wording | Range | Missings | M | SD |
|---|---|---|---|---|---|
| **The Big Five** | *Inwieweit treffen die folgenden Aussagen auf Sie zu?* (= To what extent do the following statements apply to you?) | | | | |
| Openness to experience | *Ich habe eine aktive Vorstellungskraft, bin fantasievoll* (= I have an active imagination) | 1-5 | 19 | 3,62 | 0,94 |
| | *Ich habe nur wenig künstlerisches Interesse (R)* (= I have little artistic interest) | 1-5 | 27 | 3,06 | 1,23 |
| Conscientiousness | *Ich erledige Aufgaben gründlich* (= I do a thorough job) | 1-5 | 33 | 4,16 | 0,74 |
| | *Ich bin bequem, neige zur Faulheit (R)* (= I tend to be lazy) | 1-5 | 26 | 3,66 | 1,05 |
| Extraversion | *Ich gehe aus mir heraus, bin gesellig* (= I am outgoing, sociable) | 1-5 | 30 | 3,34 | 1,00 |
| | *Ich bin eher zurückhaltend, reserviert (R)* (= I am reserved) | 1-5 | 25 | 2,95 | 1,05 |
| Agreeableness | *Ich schenke anderen leicht Vertrauen, glaube an das Gute im Menschen* (= I am generally trusting) | 1-5 | 34 | 3,18 | 1,00 |
| | *Ich neige dazu, andere zu kritisieren (R)* (= I tend to find fault with others) | 1-5 | 29 | 3,03 | 0,91 |
| Neuroticism | *Ich werde leicht nervös und unsicher* (= I get nervous easily) | 1-5 | 39 | 2,76 | 1,01 |
| | *Ich bin entspannt, lasse mich durch Stress nicht aus der Ruhe bringen (R)* (= I am relaxed, handle stress well) | 1-5 | 32 | 3,02 | 1,01 |

(R) denotes reverse-scored item.
Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.
N=3042.

#### 4.3.1.1. What is the BFI-10 and where does it come from?

The BFI-10 is an abbreviated version of the longer *Big Five Inventory* (BFI) which was formerly developed in the early nineties by John and colleagues (John et al. 1991). This first version of the BFI encompassed 44 short-phrase items – in English – assessing the five dimensions of the Big Five personality traits model. At that time, most of the inventories in use were much longer, sometimes comprising hundreds of items (see for instance Goldberg 1992). Even the NEO-FFI, a short form of the original 240-item *NEO Personality Inventory – Revised* (NEO-PI-R; Costa and McCrae 1985, 1992), which was the major measurement instrument in personality research at that time, still included no fewer than 60 items (12-item scales per each trait). The BFI-44 was then created in response to the need for shorter instruments, in order to "*allow efficient and flexible assessment of the five dimensions when there is no need for more differentiated measurement of individual facets*" (John et al. 2008: 129).

But, as noted by Rammstedt and John (2007: 204), "*time has changed*" and what was seen as a short personality measure almost three decades ago is now regarded as an inconvenient, time-consuming survey instrument. In particular, the increasing interest in the consequences of personality traits for various social, economic and political outcomes (i.e. outside the boundaries of personality psychology narrowly defined) has led to a rise in the demand for ever shorter instruments that could be included in large, multi-topic surveys with strong time constraints. The BFI-10 was thus developed in order to meet this growing demand for ultra-short measures (Rammstetd and John 2007; Rammstedt et al. 2012, 2013)[56].

[56] It should be noted that the BFI-10 is not the only "ultra-short" measure of the Big Five personality traits. Among the most established ones are the Ten Item Personality Inventory (TIPI) and the Five Item Personality Inventory (FIPI), both developed by Gosling and colleagues (Gosling et al. 2003). These two instruments differ from the BFI-10 in that they are not based on the original items of the BFI, but rather "introduced new adjectival items based on a review of the existing Big Five instruments" (Rammstedt and John 2007: 209). The psychometric properties of the TIPI are broadly comparable to those of the BFI-10, except regarding the discriminant validity which seems to be slightly better in the case of the BFI-10, resulting in a clearer five-factor structure (Rammstedt and John 2007: 209).

The first step toward the development of the BFI-10 as it appears in the GESIS Panel was the translation of the 44 short-phrase English items in German (Rammstedt 1997; Lang et al. 2001). Then, Rammstedt and John (2007) selected two items for each Big Five traits. The authors describe the item selection process as follows:

> *"(1) We represented both the high and low pole of each factor, so that each BFI-10 scale would consist of one true-scored and one false-scored item. (2) We covered as broad a bandwidth as possible for each scale by selecting two items that both measured core aspects of a Big Five dimension but were not highly redundant in content. (3) We constructed identical English-language and German-language versions, so that the resulting instrument would be usable for cross-cultural research and to minimize capitalizing on chance. (4) To the extent that there still were item choices to be made, we selected items on the basis of two empirical criteria, namely their corrected item-total correlations with the full BFI scales (thus favoring more central over more peripheral item content) and the simple-structure pattern of their loadings in factor analyses of all 44 items (thus favoring items related uniquely to one factor and not to the other four factors)."* (Rammstedt and John 2007: 205)

#### 4.3.1.2. A critical evaluation of the BFI-10

Although there is empirical evidence for the validity of the BFI-10 to measure the Big Five personality traits, and particularly importantly in my case regarding the German version of it (e.g. Rammstedt and John 2007; Rammstedt et al. 2012)[57], its wide use – as well as those of other ultra-short scales – is not free from criticism and it is important here to say a few words about ongoing debates in the literature on the Big Five instruments' psychometric properties. I do not aim at being exhaustive and giving all the details of what is ultimately a highly complex statistical discussion – which goes well beyond the scope of my dissertation – but I want to give a brief overview of the terms of the debate in order to be fully transparent about the controversial nature of different Big Five measurement instruments and the issues raised by the use of the BFI-10. Indeed, ultra-short measures like the BFI-10 have been criticized by authors arguing that these instruments do not adequately capture the Big Five traits (e.g. Credé et al. 2012; Ryser 2015). In particular, they pointed out that the Big Five factor structure often emerges

[57] More precisely, it has been demonstrated that the BFI-10 reached adequate levels of "*retest reliability, structural validity, convergent validity with the NEO-PI-R and its facets, and external validity using peer ratings*" (Rammstedt and John 2007: 203).

only in an indistinct way, and that many Big Five scales show unusual low internal reliability. Advocates of the Big Five theory have addressed these concerns by emphasizing (1) the influence of the statistical technique used to investigate the five factor structure, (2) the possibly disturbing effect of acquiescence response styles in respondent's use of the scales, and (3) the necessary tradeoff between internal consistency and content validity when using a very small number of items per scale. I will now quickly review each of these three discussion points and then I will discuss the implications for my own empirical analyses.

It is a fact that, more often than not, regular Confirmatory Factor Analyses (CFA) fail to accurately reflect the expected structure of the Big Five when measured by ultra-short scales – at best, only two or three factors emerge, generally extraversion, neuroticism, and conscientiousness (e.g. Reiser 2011; Ryser 2015). By contrast, Exploratory Factor Analyses (EFA) generally perform substantially better and show fairly acceptable model-to-data fit, with most of the time the emergence of a clear five factor structure (Aichholzer 2014). EFA is, therefore, widely used among the Big Five community but some opponents remain skeptical about such a statistical choice. For instance, Ryser argues that "*[EFA] are not the most appropriate method to evaluate the psychometric properties of these scales [because] they do not have an a priori hypothesis about the structure of the factors or patterns of measured variables, whereas the Big Five personality traits theory has a strong assumption about the structure of the scales*" (Ryser 2015: 8). This literal interpretation of EFA as "purely" exploratory and CFA as "purely" confirmatory, however, is challenged in the literature (see for instance Browne 2001: 113). More importantly, it hides the most fundamental difference between EFA and CFA, i.e. the fact that the former allows cross-loadings and factor matrix rotations while the latter does not (Marsh et al. 2014: 87; see also Morin et al. 2013). Thus, the poor fit obtained with regular CFA is mainly due to the highly restrictive condition of the clusters of items' independence implying that "*indicators perfectly measure only one target trait*" (Aichholzer 2014: 1), which is a strong and quite unrealistic assumption – regarding the Big Five, but also many other psychological constructs and measures (Asparouhov and Muthén 2009: 398). As a consequence, a

growing body of literature now uses Exploratory Structural Equation Modeling (ESEM), an integration of CFA and EFA approaches, to investigate the Big Five structure[58].

Another explanation of the sometimes blurred structure emerging from observed data relates to the presence of an acquiescence bias: the tendency for some respondents – especially the less educated (Narayan and Krosnick 1996; Rammstedt et al. 2010) – to systematically agree with items, regardless of their content. Such "*non-content-related response styles*" (Danner et al. 2015: 119) may distort the factor structure of personality ratings in self-report questionnaires (Rammstedt et al. 2010; Rammstedt and Kemper 2011; Rammstedt and Farmer 2013; Aichholzer 2014). Danner and colleagues found that acquiescence "*accounts for about 4% of the variance of personality items*" (Danner et al. 2015: 127), a proportion in line with previous research (e.g., Aichholzer 2014; Billiet and McClendon 2000; Rorer and Goldberg 1965). The authors recommend then to control for acquiescence, which can be done in a variety of ways. For instance, by treating the Acquiescence Response Style (ARS) as an individual random intercept factor within the traditional EFA structure, Aichholzer (2014, 2015) demonstrated that the fit of personality models[59] is substantially improved (see also Billiet and McClendon 2000). Another appropriate way of dealing with acquiescence bias is the use of semantically balanced items – as in the case of the BFI-10 – acquiescence being logically removed when mean scale scores are computed (Danner et al. 2015: 127; see also Billiet and McClendon 2000; Ferrando et al. 2004; Rammstedt et al. 2010).

Finally, some authors have rightly pointed out the usually low inter-items correlations yielded by brief measures of the Big Five – especially for the Agreeableness items which are often poorly correlated, leading to (very) low internal consistency of the overall scale (Cronbach's alpha <.4, or even lower). Yet, the blind faith in the alpha coefficient as a sufficient reliability measure has long been criticized by psychometricians, and despite its

[58] ESEM allows cross-loadings and factor loading matrix rotations, which are features of traditional EFA, while sharing at the same time many characteristics with CFA (e.g. residual correlations, model fit indices, measurement invariance tests). See Marsh et al. (2014) for a good review of ESEM applications in clinical and social science research.

[59] In this case, the German versions of the BFI-44 and the NEO-FFI.

huge popularity among the scientific community, many authors have warned against its (mis)use (e.g. Loevinger 1954; Schmitt 1996; Kline 2000; Woods and Hampson 2005; John and Soto 2007; Sijtsma 2009; and even Cronbach himself 1963, 2004). Actually, the unusually low internal reliability of scales produced by ultra-short personality inventories reflects two things: the need for a very small number of items on the one hand, and the fact that priority was given to validity over reliability when choosing the items indexing the five dimensions on the other hand (Gosling et al. 2003: 516). To avoid redundancy and retain content validity, the few selected items tap distinct facets of each of the Big Five (which is sometimes called "item content heterogeneity"), covering then a broader range of content and leading necessarily to less internally consistent scales (at least as indexed by Cronbach's alpha)[60]. Many authors, therefore, warn researchers against relying (solely) on internal consistency indexes like the Cronbach's alpha and argue instead for the use of other reliability estimates, like the test-retest correlations (Gosling et al. 2003: 516; McCrae et al. 2011: 47).

These methodological issues continue to be disputed in the literature on the psychometric properties of ultra-short personality measures. Again, I do not pretend to go into all the ins and outs of these highly sophisticated debates as I am not qualified to do so and, above all, this is not the subject of this dissertation. Nevertheless, I think it is important to be aware of and transparent about the limitations – but also the advantages – implied by the choice of one specific measurement instrument, in my case the BFI-10.

Then, to what extent do the critical points mentioned above (potential cross-loadings, acquiescence bias, low inter-items correlations) affect my "own" measures of the Big Five? Following the advice of Ryser (2015: 29), I thoroughly examined the Big Five structure in the sample I used for empirical analyses and its key statistical features are reported in appendix (see Table A2 to Table A4). It largely coincides with the content of the discussion above: despite a low internal reliability of the Big Five scales as indexed by traditional coefficients (e.g. Pearsons' R, Cronbach's alpha), the five factor structure

[60] This is the so-called "*attenuation paradox*" (Loevinger 1954): at some points, an increase in reliability comes hand in hand with a decrease in validity. High alphas may therefore, in some cases, "*indicate undue narrowness or item redundancy*" (McCrae et al. 2011: 29).

emerges "*with textbook-like clarity*" (Rammstedt et al. 2013) from an EFA with varimax rotation. By contrast, the CFA shows a poor and significantly lower fit, even when controlling for acquiescence bias, and required several model constraints or auxiliary settings to eventually make the model converge. Finally, and in line with previous research (e.g. Mondak and Halperin 2008: 351; see also Tsaousis 2002; Saucier and Goldberg 2002), extraversion and agreeableness are respectively the more and less robust scales of the Big Five dimensions. These elements must be kept in mind when interpreting the empirical analyses that will be discussed in the next chapters, as it may marginally impact the results (for instance, particularly low scale reliability could eventually attenuate correlations with any outcome, increasing then the risk of Type II error). The main descriptive statistics of the final scales used for the measure of the big five in the analyses that will be presented in the next chapters are shown in Table 5 below.

**Table 5 – Descriptive statistics of personality traits measures (independent variables)**

| | **Missings** | **Range** | **Statistical summary** |
|---|---|---|---|
| Openness to experience | 14 | 1-5 | *MEAN = 3.34 / SD = 0.87* |
| Conscientiousness | 12 | 1-5 | *MEAN = 3.91 / SD = 0.71* |
| Extraversion | 12 | 1-5 | *MEAN = 3.15 / SD = 0.89* |
| Agreeableness | 13 | 1-5 | *MEAN = 3.11 / SD = 0.71* |
| Neuroticism | 14 | 1-5 | *MEAN = 2.89 / SD = 0.82* |

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany. N=3042.

Obviously, the shorter the instrument, the lower its psychometric properties, and the BFI-10 is far from perfect. Nonetheless, while being aware of the weaknesses of this instrument, it is reasonable to say that it performs surprisingly well given its extreme brevity and the covered conceptual breadth. It seems to be sufficiently robust to give a first insight into the influence of personality traits on group participation and, above all, this is the best measurement model that can be provided by open-access secondary data collecting within the frame of large, general, multi-topic surveys like the GESIS Panel. As discussed in the last chapter, future research should use more fine-grained measures

to understand all the intricacies of the complex relationship between personality and group participation.

### 4.3.2. Personal values: an abbreviated version of the revised "Portrait Values Questionnaire" (PVQ-R)

In the GESIS Panel, the four higher-order value-types are measuring by three (e.g. Conservation) to five (e.g. Self-Transcendence) items. Each item consists of a short verbal portrait describing a person's desires, goals or aspirations that are specifically related to one value-type. For each of them, respondents have to indicate how similar the person is to them on a six-point scale (ranging from 1 "*Not at all*" to 6 "*Very similar*"). The descriptive statistics of the 17 value items in my empirical subsample are displayed in Table 6 below.

**Table 6 – Descriptive statistics of the adapted version of the PVQ-R items in the GESIS Panel**

| | Wording | Range | Missings | M | SD |
|---|---|---|---|---|---|
| **Higher-order value types** | *Wie ähnlich ist Ihnen diese Person? Es ist ihr/ihm wichtig, …*<br>(= How similar is this person to you? It is important to him/her…) | | | | |
| **Conservation** | *…in einem starken Staat zu leben, der seine Bürger verteidigen kann.*<br>(= to live in a strong state which can defend its citizens.) | 1-6 | 25 | 4,14 | 1,26 |
| | *…traditionelle Werte und Überzeugungen zu bewahren.*<br>(= to preserve traditional values and convictions) | 1-6 | 39 | 4,11 | 1,22 |
| | *…alle Gesetze zu befolgen.*<br>(= to obey the law) | 1-6 | 26 | 4,23 | 1,17 |
| **Self-Transcendence** | *…sich um jedes Bedürfnis der Menschen zu kümmern, die ihr/ihm am Herzen liegen.*<br>(= to take care of the needs of people who matter to him/her) | 1-6 | 21 | 4,46 | 1,16 |
| | *…den Menschen zu helfen, die ihr/ihm am Herzen liegen.*<br>(= to help people who matter to him/her) | 1-6 | 31 | 5,33 | 0,80 |
| | *…dass alle Menschen gerecht behandelt werden, selbst die, die sie/er nicht kennt.*<br>(= that all people, even strangers, are treated fairly) | 1-6 | 31 | 4,78 | 1,03 |
| | *…sich um die Natur zu kümmern.*<br>(= to take care of nature.) | 1-6 | 29 | 4,23 | 1,10 |
| | *…tolerant gegenüber vielen verschiedenen Menschen und gesellschaftlichen Gruppen zu sein.*<br>(= to be tolerant towards other people and social groups.) | 1-6 | 49 | 4,67 | 1,07 |

| | Wording | Range | Missings | M | SD |
|---|---|---|---|---|---|
| **Openness to change** | *…sich immer eine eigene Meinung zu bilden.*<br>(= to always form his/her own opinion.) | 1-6 | 35 | 4,77 | 0,98 |
| | *…dass sie/er die Freiheit hat, zu wählen, was sie/er tut.*<br>(= to have the freedom to choose what he/she wants to do) | 1-6 | 27 | 4,97 | 0,93 |
| | *…eine Vielzahl von neuen Erfahrungen zu machen.*<br>(= to make a lot of new experiences) | 1-6 | 28 | 4,84 | 0,92 |
| | *…ihr/sein Wissen zu erweitern.*<br>(= to expand his/her knowledge) | 1-6 | 36 | 4,56 | 1,02 |
| | *…dass sie/er den Dingen selbst auf den Grund geht und sie versteht.*<br>(= to get to the bottom of things and to understand them) | 1-6 | 29 | 4,78 | 0,96 |
| **Self-Enhancement** | *…dass die Menschen ihre/seine Leistung anerkennen.*<br>(= that others recognize his/her achievements) | 1-6 | 29 | 4,27 | 1,19 |
| | *…diejenige/derjenige zu sein, die/der anderen sagt, was sie tun sollen.*<br>(= to be the one who tells other people what to do) | 1-6 | 28 | 2,92 | 1,19 |
| | *Es ist ihr/ihm wichtig, reich zu sein.*<br>(= to be rich) | 1-6 | 34 | 2,73 | 1,14 |
| | *…zu zeigen, dass ihre/seine Leistungen besser sind als die Leistungen anderer.*<br>(= to show that his/her own achievements are better than those of others) | 1-6 | 41 | 3,12 | 1,25 |

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.
N=3042.

#### 4.3.2.1. What does the abbreviated version of the PVQ-R look like and where does it come from?

As for the BFI-10, the revised Portrait Values Questionnaire (PVQ-R) is an adapted version of previously established measurement instrument (Schwartz and Cieciuch 2016). Historically, the first instrument that has been developed to measure values based on the Schwartz (1992) theory was the Schwartz Value Survey (SVS). Itself inspired by a previous instrument developed by Rokeach almost twenty years earlier (the Rokeach Value Survey (RVS); see Rokeach 1973), the SVS consisted of 56 value items divided into two lists (one of 30 nouns for terminal values and one of 26 adjectives for instrumental ones)[61] (Schwartz 1992, 1996). Respondents had to rate each of these value items according to their importance in their life. Those "guiding principles" overlapped the 10 different basic value types distinguished in the Schwartz value theory. Although the SVS has been proven to be a valid instrument to measure basic values across different cultures (e.g. Schwartz 1994; Schwartz and Boehnke 2004), it suffered from two major disadvantages. First, as was the case for the first personality traits inventories (see above), the length of this instrument precludes its use in any general, multi-topic surveys where interview time is limited. Second, and most importantly, it has been shown that young people and people with lower levels of education have difficulty in responding to it, probably because of its high level of abstraction (Schwartz 2012: 11). Yet, the failure to properly measure values for this specific segment of the population can lead to important bias in empirical results.

The so-called "Portrait Values Questionnaire" (PVQ) was then developed as an alternative to the SVS. It was designed to measure the same ten basic values orientations but in a much less complex way (Schwartz 2003: 273). Indeed, unlike the SVS, it measures personal values *indirectly* by presenting respondents with a few short verbal portraits (40 in the original version) describing in a more concrete way a "*person's goals, aspirations, or wishes that point implicitly to the importance of a single value type*" (Schwartz 2012: 11).

[61] Terminal values refer to desirable end-states, goals that a person would like to achieve during his lifetime (e.g. an exciting life) whereas instrumental values refer to preferable ways of acting in order to achieve the terminal values (e.g. self-controlled) (Rokeach 1973).

Respondents have to indicate how similar the person in the portrait is to themselves on a 6-point scale, ranging from (1) "*very much like me*" to (6) "*not like me at all*". Asking the question in this way (i.e. asking respondents to compare the described person to themselves, and not the other way around) ensures that the self-reported similarity judgment is solely based on the value dimension, and then allows researchers to infer the respondent's own values (Schwartz 2003: 274). Moreover, this is a relatively simple task for respondents because of the natural tendency for individuals to compare others to themselves – something people do in everyday situations. Different versions of the PVQ exist, depending on the number of items (e.g. 20, 21, 40) included and consequently the number of values it ultimately measures (Schwartz and Cieciuch 2016: 115), but all of them have been shown to adequately reflect the circular motivational structure as theoretically conceptualized (e.g. Davidov et al. 2008; Bilsky et al. 2011; Cieciuch and Schwartz 2012; Sandy et al. 2017). Notably, these instruments have been tested and validated across many different geographic areas (e.g. European, African, South- and North-American, Middle-East and Asian countries), languages (more than 20), subpopulations (e.g. men, women, students, disabled), ages (e.g. elderly, adolescents) and using various surveying methods (e.g. face-to-face interviews, telephone interviews, internet surveys) (Schwartz 2003: 275).

In 2012, when Schwartz and colleagues refined the value theory by extending the value circle from 10 to 19 value types, a new psychometrically improved version of the PVQ was developed: the PVQ-R (Cieciuch et al. 2014a, 2014b). The psychometric properties of the PVQ-R were scrutinized and its discriminant validity was confirmed in 15 samples from 10 different countries (Schwartz et al. 2012). But, like its SVS predecessor, the excessive length of this instrument (57 items and a completion time of up to 8 minutes; Schwartz et al. 2012: 115) prevents it for being included in any general survey. Therefore, an abbreviated version of the PVQ-R was developed, comprising a total of 17 items. This is the value instrument used in the GESIS Panel.

The shortening of the scale was made by purposefully reducing the number of constructs assessed instead of the number of items for each of them – in order to maintain reliability. The 17 PVQ-R items have also been selected according to the same logic: rather than

trying to cover the specific content of each of the 19 value types, the best indicators of the four higher-order value dimensions were chosen. What seems to be a reasonable decision has, however, a downside: the abbreviated version of the PVQ-R does not discriminate the 10 nor the 19 value-types, but only the four higher-order ones[62]. This limited loss of accuracy is acceptable given the specific purpose of my research and its partly exploratory nature. However, future research should investigate in a more detailed way how specific value-types are related to various forms of activism (see the last chapter for a further discussion).

#### 4.3.2.2. Empirical assessment of the value structure

Although the validity of the instruments used to measure the basic values as conceptualized by Schwartz seems to be less disputed in the literature than that of the Big Five scales, I think it is important to critically evaluate it before any further empirical analyses, *a fortiori* when dealing with the new abbreviated version of the PVQ-R included in the GESIS Panel (hereafter: the PVQ-R-17). Indeed, unlike the original PVQ-R, whose validity has been established across different countries (e.g. Cieciuch et al. 2014a, 2014b), its newly developed 17-item version has not been systematically scrutinized so far[63]. Furthermore, as any other ultra-short instrument (17 instead of the 57 original items), its capacity to properly measure value priorities is a crucial issue. In that respect, the same critical remarks as those formulated regarding the Big Five short scales (i.e. a blurred factor structure and a low reliability of the scales) may apply as well to the PVQ-R-17. Without going into too much detail, I will thus say a few words about how these concerns have been addressed by Schwartz and colleagues and eventually the value structure emerging from my own GESIS subsample will be carefully examined.

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[62] Actually, discriminating the 10 value-types is also problematic when using the more traditional 21-items version of the PVQ (cf. European Social Survey). As already discussed in this chapter, assessing abstract constructs with no more than two items per latent variable is always a methodological challenge and a loss in terms of validity and reliability is an almost inevitable result of scale shortening.

[63] In the value measurement section of the GESIS manual, though, it is noticed that "*there is strong empirical evidence that [its] measurement properties (reliability, factorial validity, convergent and discriminant validity, predictive power) are satisfactory*" and that *"[i]n a heterogeneous German online panel sample (N=520), the reliability estimates for the four scales were found to be satisfactory for the four higher order value scales and for group comparisons*" (GESIS Panel 2016: 158-159).

Firstly, regarding the discovery of the expected value structure, Schwartz emphasized that traditional EFA is not an appropriate statistical tool because it cannot reveal the dynamic relations (i.e. "*the pattern of relations of conflict and congruity*" (Schwartz 2003: 268)) among values. In other words, EFA is not suited to the circular structure of basic values. Rather, two other statistical analytical strategies are suggested in the literature: CFA (see previous section for a detailed discussion about this statistical technique) and Multi-Dimensional Scaling (MDS). The latter is an alternative statistical technique of (non-linear) dimensionality reduction aiming at visualizing the relations between variables based on measurements of their (dis)similarities (Borg and Groenen 1997, 2005). By depicting them on a Euclidean space (usually a two-dimensional space), it thus enables researchers to "*literally 'look' at the data and to explore their structure visually*" (Borg and Groenen 2013: 3). Previous research has demonstrated that, contrary to the EFA, this statistical tool is particularly suited to the investigation of the circular value structure.

Secondly, like the Big five – and many other constructs – value measurement may be subject to bias, especially social desirability or acquiescence bias. Using the raw values of items may therefore distort the factor structure of basic values and ultimately the results of any empirical analyses. Most importantly, such response styles may obscure the real measure of interest, that is the *relative* importance of competing values for an individual (i.e. value priorities). This stems directly from the theoretical conceptualization of values according to which "*it is the tradeoff among relevant values, not the absolute importance of any one value that influences behavior and attitudes*" (Schwartz 2007a: 171). It is therefore necessary to correct individual differences in respondents' use of scales. In order to do so, Schwartz recommends centering each respondent's response on his own overall mean score (Schwartz 1992, 2007a). By converting absolute value scores into relative ones, response tendencies are taken into account and value priorities are then accurately reflected.

Finally, the third methodological issue mentioned in the previous section about ultra-short Big Five scales (i.e. low internal reliability) applies equally to the short versions of the PVQ-R (e.g. 17 or 21 items). Schwartz put forward the same arguments as those offered by the proponents of the Big Five short scales:

> "*[The low reliability of the value scales] reflects two facts. The items in the indexes were selected to cover the different conceptual components of the value, not to measure a single concept redundantly. For example, the power value items tap both wealth and authority, and the universalism items tap understanding, concern for nature, and social concern. Moreover, each of these indexes is based on only two to four items*." (Schwartz 2003: 277).

The relative lack of internal consistency of the value scales in the abbreviated versions of the PVQ-R is thus related to the same challenge of measuring broad and multidimensional theoretical concepts with only a small number of items (i.e. a case of validity/reliability trade-off). Again, researchers are warned against relying (solely) on internal consistency indexes like the Cronbach's alpha, and other reliability estimates (e.g. the test-retest reliability coefficient) should be computed whenever possible.

In sum, the use of the abbreviated 17-item version of the PVQ-R raises almost the same methodological concerns as the BFI-10 – and other ultra-short scales – in terms of measurement validity and reliability. Therefore, I conducted several statistical checks in order to evaluate the capacity of the PVQ-R-17 to adequately reflect the theoretically expected value structure in my own sample (results are reported in appendix).

The results of the CFA (see Table A6) indicate an acceptable fit for the four higher-order value model, especially when controlling for response styles by treating it as an individual random intercept factor. This confirms the importance of correcting scales for response tendencies. Regarding MDS, the graphical representation of the calculated proximities between the 17 items on a two-dimensional space (see Figure A1) is not as clear-cut as expected and shows a suboptimal fit. However, those items have not been selected in order to discriminate the 19 (nor the former 10) value-types, but only the four higher-order ones. This could explain the quite blurred circular structure emerging from the proximal scaling, as some of the value-types may simply not be measured by any of the 17 items. Nonetheless, four distinct geographical areas stand out and Figure A2 confirms that two dimensions effectively structured the relationships among value items: the first one contrasts Self-enhancement with Self-transcendence values, the second one contrasts Conservation with Openness to change values. All in all, the measurement of the four

higher-order value-types in my sample is not perfect, but it appears to be sufficiently satisfactory to conduct further empirical analyses. The descriptive statistics of the resulting scales as used in the next chapters are shown in Table 7 below.

**Table 7 – Descriptive statistics of personal values measures (independent variables)**

| | Missings | Range | Statistical summary |
|---|---|---|---|
| Conservation | 13 | -3.18 – 2.75 | *MEAN = -0.13 / SD = 0.71* |
| Self-Enhancement | 13 | -3.47 – 1.59 | *MEAN = -1.03 / SD = 0.71* |
| Openness to change | 9 | -1.67 – 2.41 | *MEAN = 0.49 / SD = 0.42* |
| Self-Transcendence | 8 | -2.2 – 1.88 | *MEAN = 0.40 / SD = 0.47* |

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany. N=3042.
Non-integer values are due to the use of each respondent's response centered on his/her own overall mean score.

Another warranted check regarding the Big Five scales and the value scales relates to their empirical correlations. The complementary approach of traits and values developed in the previous chapter assumes that there are clear conceptual differences between those two distinct constructs which refer respectively to what people are and what they consider important (Roccas et al. 2002: 790). Accordingly, despite individuals' need for consistency and their efforts to reduce discrepancies between the way they behave and their core values, the two should overlap only to a limited extent. An empirical investigation of the bivariate correlations between the Big Five and the four higher-order value-types in the sample confirms this (see Table A7 in appendix). Indeed, with coefficients ranging from -.24 to .29 and an absolute mean of .11, correlations between traits and values are negligible (Hinkle et al. 2003). The most consistent pattern of associations concerns the trait openness to experience, which is positively related to self-transcendence and openness to change values and negatively related to those of self-enhancement and conservation. This is probably due to the fact that, in comparison with the other traits, openness to experience has a strong cognitive component (Pytlik Zilig et al. 2002: 854). As underlined by Dollinger and his colleagues, "*more than the other dimensions of personality, openness to experience best accounts for what people value in their lives*" (Dollinger et al. 1996: 23) and besides, this is the only trait which is measured in the BFI-10 by an item

pinpointing personal interest rather than behavioral tendency (i.e. "*I have little artistic interest*"). It is also in line with meta-analyses of the relationships between the Big Five and Schwartz values which had previously shown that "*of the five traits, openness to experience ha[s] some of the strongest correlations with values*" (Parks-Leduc et al. 2015: 22). Also in line with previous research, agreeableness and the *self-transcendence – self-enhancement* value dimension are consistently related (positively as regards the former pole, negatively in the case of the latter), what makes sense given that both address the question of individuals' concern for others. Furthermore, regarding conscientiousness, results confirm that this trait *"operates on the Self-Enhancement/Conservation end of the value circumplex"* (Olver and Mooradian 2003: 115). Yet, as stated above, all those correlations are rather low (Pearson's $r < .3$) and the two last dimensions, extraversion and neuroticism, show even lower and/or less consistent correlations with the value system. In sum, these results appear to confirm that *"although values are meaningfully linked to traits, the two constructs are distinct"* (Parks-Leduc et al. 2015: 24) and it seems that respondents were not confused about the difference between the two when filling in the survey questionnaire.

Finally, one last concern regarding trait and value measures relates to the issue of panel attrition mentioned above and its consequences for the distribution of data in the sample at hand. Indeed, recent works have shown that, across many different studies, panel attrition tends to be significantly related to personality (Saßenroth 2013; Lugtig 2014; Satherley et al. 2015; Ward et al. 2017; Cheng et al. 2018; Hansson et al. 2018; but see Richter et al. 2014). Thus, it appears important to carefully check for personality-related selective attrition, because such a mechanism could have harmful consequences for both the representativeness of the final sample and the statistical power of the analyses which will be performed. Indeed, too little variation in trait or value predictors can lead to imprecise estimates and hence can prevent the detection of small effects in standard regression analyses. Therefore, using data collected during the very first year of the GESIS panel[64], I empirically investigated the extent to which drop-outs significantly differ on trait levels and value priorities from panelists who remain active until the last

[64] The first data collection regarding the module devoted to personality traits and personal values took place in August/October 2014, one year before those used to build the empirical subsample upon which the present research relies.

wave of interest for my research. Table A8 in appendix reports their means, standard deviations, as well as the results of statistical tests used to detect significant differences between the two subsamples.

Interestingly, regarding personality traits, results show that drop-outs are significantly less conscientious and more extroverted than the remaining respondents. As regard conscientiousness, it is of little surprise that those who usually do things thoroughly and appear to be highly self-disciplined and organized people are at the same time loyal respondents in long-term surveys. The negative relationship found with extraversion is a little more puzzling, but Ward and colleagues suggested the following convincing explanation: *"[g]iven that extraverts have been shown to be more active and impulsive in comparison with their introverted counterparts (Watson & Clark, 1997), it is possible that the long length of the survey, lack of social interaction, and potential for environmental distractions played a role in extroverts' behavior"* (Ward et al. 2017: 427). This last point (i.e. environmental distractions) might also partly explains why those who attrited appear to be slightly – though not significantly ($p$ = 0.22) – more open to new experiences. Furthermore, those meaningful results replicate those of previous works interested in the individual predictors of long-term commitment in longitudinal studies (e.g. Lugtig 2014; Satherley et al. 2015; Ward et al. 2017; Cheng et al. 2018). While fewer studies have included personal values among such predictors, as a notable exception, Satherley and colleagues (2015) investigated the role of altruistic (i.e. self-transcendence) and self-enhancement values on panel attrition (see also Loosveldt 2002). The latter were significantly associated with a greater probability of leaving the study prematurely, just as results in Table A8 indicate. As noted by Satherley and her colleagues (2015: 6-7), participation in public surveys is a rather time-consuming task offering only limited incentive – 5€ per wave in the case of the GESIS Panel (Bosnjak et al. 2017: 4) – which could dissuade people who are driven, first and foremost, by self-enhancement values to sustain such a commitment over time. In addition, in the GESIS sample, drop-outs also seem to attach significantly less importance to conservation values than regular participants. This could be explained by the fact that such values emphasize stability goals through individual self-restriction and obedience to established authorities, rules, and procedures, which appears hardly compatible with defection.

It is worth noting, however, that although significant and meaningful, those differences remain fairly small and in fact, taken together, the personal characteristics of the respondents in the subsample used in this research closely resemble those of the initial sample. In particular, panel attrition did not seem to have reduced variation in trait levels and personal values to such an extent that it would prevent the detection of any small or medium effect in further regression analyses. Hence, one can be reasonably confident about the statistical power of those analyses and their capacity to pin down the relationships between personality traits, personal values, and group participation. I will now discuss the operationalization of this latter concept.

### 4.3.3. Group participation

As stated above, one of the rotating thematic modules of the GESIS Panel is dedicated to social and political participation. More precisely, this module aims at measuring "*citizens' active engagement in and attitudes towards social and political phenomena*" (GESIS Panel 2016: 182). Among many other measures, various forms of group participation (10 + 1 residual category) are assessed under the label "*participation in organizations*". Respondents have to indicate how often they participated in each of the listed association types during the last 12 months. They could answer it by choosing one of the following response categories: 1 "*Never*", 2 "*Rarely*", 3 "*Sometimes*" and 4 "*Often*". The descriptive statistics for all of these 10+1 items in my subsample of the GESIS Panel data are shown in Table 8 below.

**Table 8 – Descriptive statistics of the group participation items in the GESIS Panel**

| Wording | Range | Missings | Median | 3rd quartile |
|---|---|---|---|---|
| *Wie häufig haben Sie sich in den vergangenen 12 Monaten in den folgenden Verbänden, Vereinen und Organisationen beteiligt?* (= How often have you participated in the following associations and organizations over the past 12 months?) | | | | |
| *Sport- oder Freizeitverein* (= Sports or leisure association) | 1-4 | 42 | 2 | 3 |
| *Kirchliche oder religiöse Organisation* (= Church or religious organization) | 1-4 | 60 | 1 | 2 |
| *Verein für Kunst, Musik oder Kulturelles* (= Art, music or cultural association) | 1-4 | 60 | 1 | 1 |
| *Soziale Bewegung (z.B. Friedens- oder Umweltorganisation etc.)* (= Social movement (e.g. peace or environmental organization, etc.)) | 1-4 | 63 | 1 | 1 |
| *Politische Partei* (= Political party) | 1-4 | 56 | 1 | 1 |
| *Gewerkschaft** (= Trade union) | 1-4 | 61 | 1 | 1 |
| *Jugendorganisation (z.B. Studentengruppe, Pfadfinder, Jugendclub etc.)** (= Youth organization (e.g. student group, boy-scouts, youth club, etc.)) | 1-4 | 59 | 1 | 1 |
| *Humanitäre oder Wohltätigkeitsorganisation* (= Humanitarian or charity organization) | 1-4 | 63 | 1 | 1 |
| *Eltern- oder Schulverein* (= Parents' or school association) | 1-4 | 70 | 1 | 1 |
| *Andere Verbände, Vereine oder Organisationen** (= Other associations, clubs or organizations) | 1-4 | 61 | 1 | 2 |

* Items left out for the final measures of group participation.
Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.
N=3042.

#### 4.3.3.1. Methodological challenges of group participation measurement: subjective measures and the importance of the question wording

Group participation is not a straightforward concept, nor is its measurement. As acknowledged by Verba, Schlozman and Brady many years ago: "*[m]easuring involvement in organizations – especially in political organizations – is complicated. What appear to be relatively technical decisions have implications for both the definition of the subject and the results obtained*" (Verba et al. 1995: 59). Two decades later, things have not really changed and Verba and colleagues' remark is still relevant. Although the literature on party membership specifically is maybe the one which addressed this issue the more in-depth, most of the methodological challenges emphasized by party scholars equally apply to other forms of group participation. I will therefore use this literature as a starting point to a brief discussion about the issue of empirical assessment of group participation.

The use of data coming from a population survey like the GESIS Panel necessarily implies a reliance on subjective, self-reported participation measures – as opposed to objective measures obtained from the organizations themselves (van Haute and Gauja 2015: 9). Such measures are included in most large-scale surveys (e.g. European Social Survey, World Values Survey, International Social Survey Programme) and offer clear benefits to researchers. Among others, and of particular interest to me, are the availability of the data and the opportunity to jointly study a broad scope of associational involvement, as well as many other social outcomes. Nonetheless, it does not come without cost. The main difficulty lies in the high sensitivity of these subjective measures to the very meaning of group participation (van Haute and Gauja 2015: 9). In this regard, the question wording is crucial and many authors have already demonstrated that even minor changes in the exact words of the question could lead to a great variability in the yielded results (e.g. Ponce and Scarrow 2011, 2016). Of course, this is particularly problematic for research having a descriptive and/or a comparative purpose, which is not the case of my own. Nevertheless, I shall comment briefly on the question wording of the GESIS Panel measures and its concrete implications for further empirical analyses.

In line with my theoretical conceptualization (see Chapter 3), the GESIS Panel indicators ask respondents about the frequency of their participation in associations, not if they are members of those associations. This contrasts with many large-scale surveys (e.g. the ESS, the WVS) which generally include questions about formal membership status, allowing for more or less nuanced responses[65]. Sometimes, this question is completed by another one asking respondents about the voluntary work they may have done for the organization. Yet, both these questions reflect "*the traditional narrow conception of involvement as measured by membership and voluntary work only*" (Morales and Geurts 2007: 139) and this way of assessing group participation is problematic for at least two reasons.

First, the very meaning of membership is likely to vary from individual to individual – as any self-perceived status – and above all, across different social and political contexts (Morales 2009: 36). Neither all associations nor all countries share the same conception of membership, quite the contrary. The rights of members and the obligations placed upon them greatly vary from one association to another in a given country (not to mention sub-national settings), as well as from one country to another for a same organization-type. Because of the wide range of existing affiliation terms, asking directly about membership may yield unreliable and hence inconsistent results.

Second, as discussed in chapter 3, contemporary civic organizations increasingly offer citizens informal ways of participating in their activities and these less rigid organizational ties cannot be adequately captured by a question restricted to (formal) membership[66]. One may argue that asking about voluntary work done for an association may avoid this pitfall. However, because it is a highly time-consuming task which, moreover, may

[65] For instance, some surveys offer multiple options by distinguishing between current and past membership (e.g. "have been but not anymore") and/or between different membership levels (e.g. "inactive member" vs. "active member") (see Ponce and Scarrow 2016 for a good review of existing variants in membership measurement and their concrete implications).

[66] It is true that in the specific case of Germany, where the number of citizens involved in an association tends to be very close to the number of members of the association (Morales and Geurts 2007: 138), asking about membership only would probably not underestimate participation as dramatically as it would do in other countries, such as Switzerland or Nordic countries. Nonetheless, personal involvement and formal membership figures never wholly overlap and the use of the former to assess group participation is a more conservative measure. Indeed, if statistically significant effects on group participation are found when including both full-right members and non-officially affiliated supporters who nonetheless participate in the party activities, chances are that the effects on "real" members only are even stronger.

sometimes require sophisticated skills, voluntary work is probably the most demanding form of participation. Volunteering has been empirically proven to be performed only by a handful of citizens (generally the more active formal members) in most associations of many different European countries (Morales and Geurts 2007). Measuring group participation by asking about voluntary work for the association would therefore be no less restrictive than asking directly about membership.

In sum, both of these question wordings tend to underestimate the degree to which citizens effectively participate in associations (Morales and Geurts 2007: 137-139). This is all the more problematic if one relies on a general population survey to study participation in organizations which are struggling to attract members, as parties are (see the next section for a further discussion on this point). Consequently, questions about the frequency of respondents' participation in associations – just like those of the GESIS Panel – are increasingly preferred to questions restricted to formal membership or voluntary work only. Finally, it is worth noting that participation in all types of groups is measured using the exact same question wording – only the labels of the organizations vary. This is an important prerequisite for the comparison of distinct forms of group participation, what is the subject of the following section.

#### 4.3.3.2. Empirically distinguish different types of groups: social vs. political associations, parties vs. SMOs

The associations listed in the GESIS Panel survey are those traditionally used to assess civic participation in the literature (e.g. Inglehart and Norris 2004: 249). Party and SMO activism are directly assessed, and a number of other organization-types are further listed. As a reminder, I theoretically distinguished between social and political groups on the basis of the main goals pursued by the group. In particular, social groups were defined as "*those that pursue private goods […] or which, while still pursuing public goods, do not 'primarily' aim at influencing the political arena*" (Morales 2009: 48). According to this definition, sports and leisure associations, religious organizations, art, music and cultural associations, parents' and school associations, and humanitarian or charity organizations can reasonably be regarded as social, non-political organizations. Regarding the latter, one may argue that

humanitarian organizations do pursue public goods, and then should be analytically treated like political entities. However, unlike human rights organizations, challenging power holders and influencing the political decision-making process is not the *primary* purpose of humanitarian groups. Finally, the vagueness of the residual item proposed in the GESIS questionnaire (i.e. "*other associations, clubs or organizations*") prevents me from determining the political or social nature of such groups. To a certain extent, the same is true for youth organizations, which may refer to social clubs as well as youth wings of political parties. Consequently, I decided to leave those two items out of my group participation measures.

The total percentage of individuals involved in one or another association is remarkably high in my sample, as almost three-quarters (72%) of the respondents indicated that they have participated – "*rarely*", "*sometimes*" or "*often*" – in at least one of the listed associations during the last 12 months[67]. This somewhat relativises Putnam's (2000) famous "*bowling alone*" thesis where the author bemoaned citizens' social disengagement and the negative consequences for the community life. At least in Germany – and according to the subsample studied here – the picture does not look so bleak. A further examination of participation's rate in the different associational types suggests that the biggest share comes from the so-called social groups. Consistent with previous research (e.g. Morales and Geurts 2007: 144, 2004; Maloney et al. 2008: 267), involvement in these associations is by far the most common form of civic engagement. Things change when one looks specifically at political engagement: fewer than one in five respondents (19%) declared having participated during the last year – even only "*rarely*" – in the activities of a SMO or a party. It is even worse for party participation specifically where the percentage drops dramatically to 9% of the total sample. Yet, chances are that party activists are still overrepresented in my subsample. To draw a comparison, Delwit estimated the German "*membership density*" (i.e. the ratio of party members to the electorate) at about 2.4% in 2006 (Delwit 2011: 31), van Biezen and colleagues at 2.3% in 2011 (van Biezen et al. 2012: 28), and according to Spier and Klein, this rate has dropped to just over 2% in 2013

[67] Moreover, for reasons mentioned above, this figure does not take into account participation in the activities of trade unions, youth organizations and "others", non-defined associations.

(Spier and Klein 2015: 90; Spier 2014). It should be noticed that these measures of party participation are far more restrictive than my own: it takes into account only formal members as registered by political parties themselves. As previously explained, this is not the way party activism is measured in the GESIS Panel. In my sample, every individual who indicates having participated in one way or another (i.e. regardless the frequency or the formal nature of the engagement) in a political party activities during the last 12 months is considered as a party participant. Thus, it includes not only formal members but also sympathizers who are not full rights members. This may explain in part why I get a higher rate of party activists than figures in the existing literature. Indeed, a closer look at the intensity of party engagement seems to confirm this: only 1.5% of the total sample indicate having "*often*" participated in a party (2.7% "*sometimes*" and 5.2% "*rarely*"). It is likely that those 1.5% are the full-rights party members, while others – especially those of the "*rarely*" category – may be ordinary citizens who participated only sporadically as sympathizers. Though, beyond these differences in measurement, an overrepresentation of party activists is still likely because of the selective attrition mechanisms – and notably the underrepresentation of foreigners in my subsample – discussed in a previous section (see 4.2.2), as well as the highly politicized period during which data was collected, which could have mobilized people who are usually not involved in politics (see section 4.5 below).

Furthermore, the sum of the participation percentages associated with each association-type taken separately heavily outnumbers the overall percentage of people engaged in at least one association (94% against 72%, respectively), indicating that multi-engagement is widespread. It means that many citizens participate in more than one type of group. But a closer examination reveals that multi-engagement displays an asymmetric pattern and follows a specific "top-down" cumulative logic. Indeed, the vast majority of people involved in a party are simultaneously participating in other organization-types but the reverse is not true: among non-political associational participants, only 19% and 12% are also involved in a SMO or a party, respectively. Similarly, 96% of SMO activists participate simultaneously in the activities of a social association but only one in three are involved in a party. That confirms the specificity of political and especially party

participation in the broader field of associational involvement[68]. Thus, to build my three dependent variables described in the section below, I applied an exclusive hierarchical logic. First, every individual who participated in a political party (i.e. the rarer form of associational involvement) was considered as a party activist, *regardless of his or her potential simultaneous participation in other associations*. Then, among people who did not participate in the activities of a party, those who did so in a SMO (i.e. the second rarer form of associational involvement) were considered as SMO activists, *regardless of their potential simultaneous participation in social associations*. Finally, people who were not active in a party or a SMO but who did participate in social groups (i.e. the more common form of associational involvement) were considered as participants of the latter. All other respondents were considered as inactive citizens from an associational involvement point of view.

#### 4.3.3.3. Final measures of overall group participation, political participation and party participation

In order to assess the *"if"* question of group participation (i.e. whether one is involved in a civic group or not), I computed a first binary variable where all respondents who indicated that they have participated – "*rarely*", "*sometimes*", or "*often*" – in at least one association, whether social or political, during the last 12 months were coded 1, the others being coded 0. Thus, this first dependent variable contrasts group participants – either social or political – with passive citizens (i.e. those who did not participate in any association).

Then, to assess the *"what"* question of group participation (i.e. in what kind of groups one is involved), I further computed two additional binary variables which contrast citizens involved in the activities of different kinds of groups with each other. The first variable contrasts participants of *political groups* (i.e. parties and SMOs), coded 1, with those of *social groups*, coded 0. The second variable further contrasts *party* activists, coded

[68] This trend cannot be (solely) attributed to the higher number of non-political associations (i.e. 5 different types) as the patterns of results are fairly similar when examining separately each of them. Moreover, a similar dissymmetric pattern has previously been noted by other scholars (e.g. Pacheco and Owen 2015: 229).

1, with *SMO* activists, coded 0. Hence, the three binary dependent variables are built following a "Russian dolls" logic, each one being a subsample of the previous one (see Table 9 below).

**Table 9 – Descriptive statistics of group participation measures (dependent variables)**

| Dependent variable | N | Statistical summary |
|---|---|---|
| 1. Any group participation | 3004 | (0) *None = 27%*<br>(1) *Any group participation = 73%* |
| 2. Political participation | 2134 | (0) *Social, non-political participation = 73%*<br>(1) *Political participation = 27%* |
| 3. Party participation | 561 | (0) *SMO participation = 49%*<br>(1) *Party participation = 51%* |

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.
N=3042.

As stated above, and confirmed by the percentages shown in Table 9, participants of political associations may be in fact simultaneously involved in social groups, and similarly party activists may be in fact simultaneously active in a SMO, but they are nonetheless coded 1 in the second and third dependent variables, respectively. This is not particularly problematic as it does not prevent me from understanding the influence of individual characteristics on the probability of being involved specifically in a political group and, even more specifically, in a party – regardless of any additional forms of associational involvement. Actually, this is again a conservative measure because if an effect is found on party participation when including both exclusive and multi-engaged participants, the results for exclusive participants only are likely to be all the more impressive. The three variables described above are, therefore, the three outcomes that will be predicted in the further statistical analyses. I will now discuss a last set of variables which will be included in these analyses as control variables: personal resources and socio-demographic characteristics.

### 4.3.4. Control variables: classic individual determinants of group participation

Before examining the effects of personality traits and personal values on the three outcomes described in the above section, I first estimate a baseline model with variables that previous research has determined to be important predictors of associational involvement and whose effects have therefore to be controlled for. As explained in the previous chapter, it is possible to group them under two different headings: resources, on the one hand, and attitudes and motivations, on the other. Yet, as suggested above and supported by previous works, the latter are proximal determinants of participation which, as "*characteristic adaptations*" or "*middle-level units*", are likely to be themselves highly influenced by traits and above all values (e.g. McAdams and Pals 2006: 208; Mondak et al. 2010: 2; Caprara and Veccione 2017: 267; see also Rokeach 1973; Mitchell et al. 1993; Costa and McCrae 1994; Barnea and Schwartz 1998; van Hiel et al. 2000; Mondak 2010; Smith et al. 2011; but see Verhulst et al. 2012 and Hatemi and McDermott 2012, 2016). As such, attitudes are likely to *mediate* the relationships between traits/values and group participation and thus it would make little sense to control their effects when investigating those relationships – because, in this sense, those indirect paths would actually be part of the total effects of traits/values and to estimate the effect of the latter while controlling separately the mechanisms through which they are likely to operate can lead ultimately to interpret counterfactual situations and *"ask what the data would be like if they weren't what they are"* (Anderson 1963: 170, cited in Wurm and Fisicaro 2014: 46). Moreover, in addition to partialling out most of the variation in trait levels or value priorities and increasing multicollinearity, controlling by too many covariates could entail a risk of *"capitalizing on the idiosyncrasies of the sample at hand"* (Babyak 2004: 411), especially regarding small subsamples like those of political activists (N=561), which would pose a threat to the reliability of the results. Consequently, only situational variables reflecting citizens' social background – and hence "*stockpile of resources*" in line with Verba and colleagues' conceptualization (Verba et al. 1995: 8) – and other classic socio-demographic characteristics will be considered in the following models. I will now briefly present them. A detailed description of the original and recoded variables is to be found in appendix (see Table A9) and Table 10 below shows the descriptive statistics of the latter.

**Table 10 – Descriptive statistics of resources and socio-demographic measures (control variables)**

| | Missings | Range | Statistical summary |
|---|---|---|---|
| **Resources** | | | |
| Level of education | 158 | 0-2 | *No degree = 64.6%*<br>*University of cooperative education/University of Applied Sciences degree = 18.7%*<br>*University degree = 16.7%* |
| Income | 464 | 0-2 | *Low-level household income (<2300€) = 35.5%*<br>*Average household income (2300-4000€) = 38.9%*<br>*High-level household income (>4000€) = 25.6%* |
| Age | 32 | 1-4 | *18-30 years old = 13.5%*<br>*31-50 years old = 35%*<br>*51-64 years old = 35.4%*<br>*65+ years old = 16.1%* |
| Employment status | 119 | 1-3 | *Unemployed/not at the workplace = 29%*<br>*Part-time or irregularly employed = 23.9%*<br>*Full-time employed = 47.1%* |
| Parenthood | 28 | 0-1 | *None = 75.4%*<br>*1 and more = 24.6%* |
| Religiosity | 27 | 1-4 | *MEAN = 1.96 / SD = 0.93* |
| **Other socio-demographic characteristics** | | | |
| Gender | 12 | 0-1 | *Male = 47.5%*<br>*Female = 52.5%* |
| Living area | 21 | 0-2 | *In a large city center or under 10 km = 29%*<br>*10-40 km = 41.7%*<br>*More than 40 km = 29.3%* |

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.
N=3042.

#### 4.3.4.1. Measuring resources: individual's social background

Respondents' resources in terms of cultural, economic, and social capital will be respectively measured by their level of education, monthly net household income, and level of religiosity. The latter acts as a proxy as it does not measure directly – nor exclusively – social capital, but many authors have documented the relationship between religious practice and civic engagement (Verba et al. 1978: 182-192; Verba et al. 1995: 40; Bekkers 2004, 2005; Traunmüller 2011: 352-353; Campbell 2013: 38-39; Lewis et al. 2013), while emphasizing the crucial role of religiously based social networks. Indeed, as stated by Wuthnow (1999: 334), religious people "*are more likely to have social capital in the form of ties to fellow congregants that can be used to mobilize their energies, and they are more likely to be aware of needs and opportunities in their communities"*. In a similar vein, Putnam and Campbell (2010) found that "*social networks are the secret ingredient to explain churchgoers' civic involvement in both religious and secular activities*" (Campbell 2013: 39). According to the so-called "resource model" (see previous chapter), education, income and religiosity levels should be positively associated to associational involvement.

A second set of resources variables relates to citizens' biographical availability and encompasses three different variables: age, employment status, and parenthood – three "*common proxies for biographical availability*" (Beyerlein and Bergstrand 2013: 1). Because of the importance of free time and social and psychological availability assumed by a biographical approach of civic engagement, people employed on a full-time basis should be less likely than their part-time or unemployed counterparts to participate in the activities of an association. For the same reasons, parents of young children still living at home should be less likely to engage in such activities. Regarding age, from a biographical availability point of view, a curvilinear relationship is likely to be found as life constraints change throughout the life cycle. Therefore, I recoded the original scale variable measuring age in a new categorical one which accounts for the different life circumstances of young, middle-aged and elderly people (see Table A9).

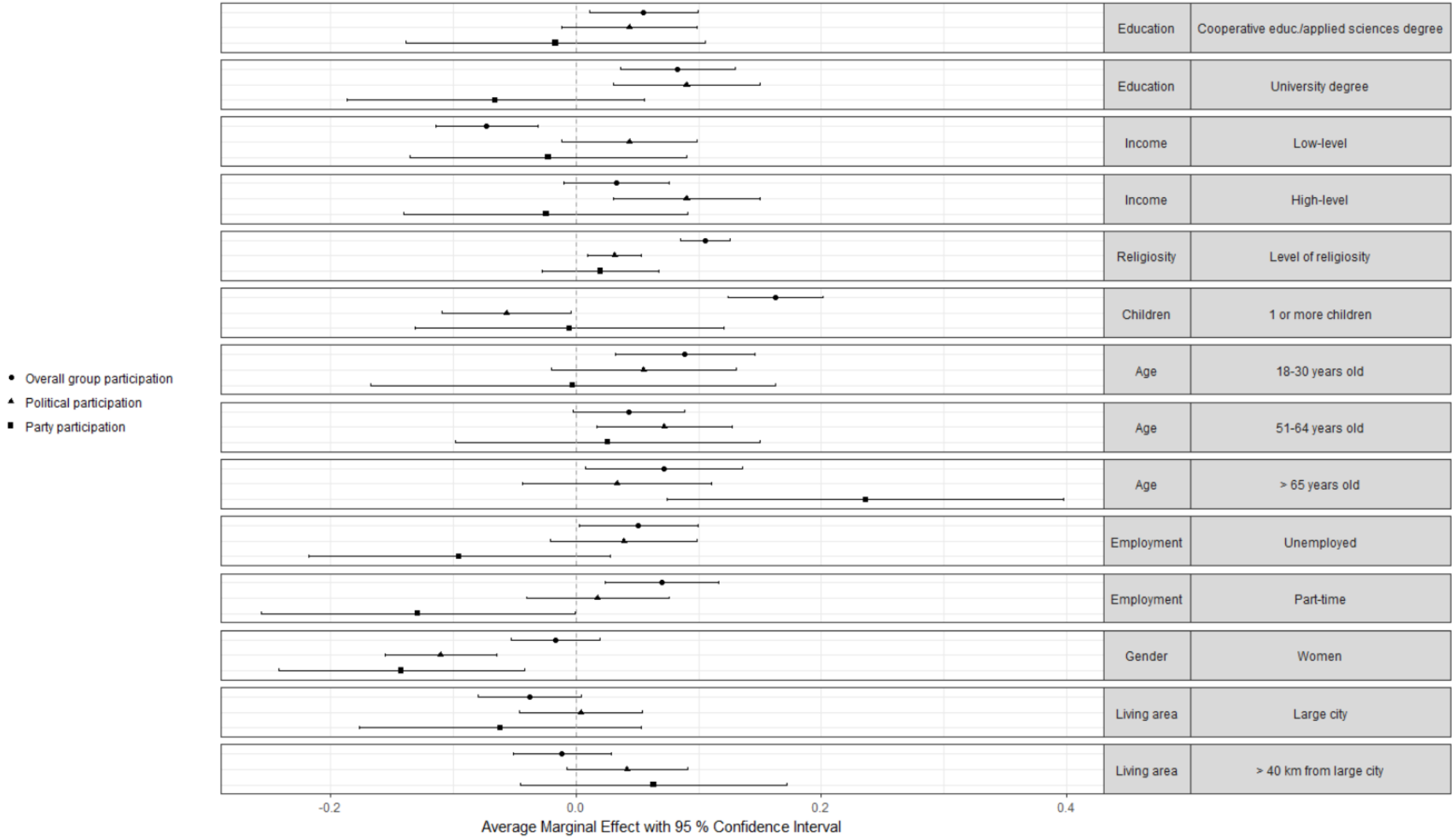
Finally, although they are not, strictly speaking, resources, gender and living area provide additional socio-demographic control as previous research has demonstrated their influence on civic engagement and political participation (e.g. van Deth and Kreuter 1998; Curtis et al. 1992; Putnam 2000; Pachenco and Owen 2015).

As discussed in the theoretical chapter, individual resources (e.g. time, money) are almost equally valuable whatever the type of association one engages in. Therefore, according to my theoretical conceptualization, resources should be stronger predictors of the overall group participation probability (i.e. the *"if"* question), and less important in discriminating different types of associational involvement. I now turn to an empirical assessment of this assumption in my sample.

#### 4.3.4.2. A first empirical look at the influence of citizens' resources on group participation

Using the three dependent variables described in section 4.3.3.3, I ran successive binary logistic regressions in order to examine the influence of the variables described above on the three different outcomes distinguished here. Results are presented in Figure 5 below. As robustness checks, I also conducted Firth's penalized likelihood regression and two multinomial logistic regressions whose results are reported in appendix (see section 4.4.1 below for a further discussion about the purposes of these additional statistical tests). As these are only preliminary analyses which are not at the core of this thesis, I will briefly comment on the main effects without going into too much detail.

**Figure 5 – The effects of classic individual-level determinants of group participation**




Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Regarding the influence of citizens' cultural, economic, and social capital on associational involvement, results are fairly consistent with the resource model expectations. Indeed, a higher level of education is, as expected, positively associated with associational involvement, with people having a college or university degree being respectively and on average about 5 to 8 percentage point more likely to participate in an association than those who do not have a higher education degree. In line with previous research, university graduates are also especially likely to be involved in a political group, be it a party or a SMO. Regarding the effect of citizens' financial resources on their group participation probability, those who are living on below-average incomes are, as expected, less likely (about 7 percentage point) than their more fortunate counterparts to participate in any association. Yet, the reverse is not true: people who have a high-level household income are not significantly more likely to get involved in a group than those with an average one (the reference group). This may indicate a kind of threshold effect, implying that the effect of economic capital on group participation probability is not linear. Nonetheless, the results confirm that a lack of economic resources can indeed impede associational involvement. Finally, religiosity – which has been used as a proxy for social capital – shows a highly significant and strong positive effect on the overall group participation probability, meaning that people who attach great importance to religion in their life and who are thus likely to be embedded in large networks are more likely to participate in associations (the average expected difference in group participation probability associated with a one-unit level increase on the religiosity scale being more than 10 percentage point). This effect may be inflated by the fact that church and other religious organizations – as well as charitable organizations, many of which have religious roots (e.g. Diakonie, Caritas) – are part of the measure of social groups (cf. section 4.3.3). Yet, the effect seems too strong to stem only from this measurement feature. Moreover, it is especially strong regarding political activism (see also Table A12 in appendix). This may be due to the importance of religious cleavages that have structured the German political system for decades, as those of many other Western democracies (Weßels 2010: 126). There may also be a cumulative effect in the sense that the extensive social networks in which religious people tend to be embedded increase their likelihood of being involved in social as well as political activities – something that cannot be revealed by the statistical analyses presented here. Be that as it may, results for religiosity are pretty much in line with the assumptions of the resource model.

Regarding the importance of biographical availability for group participation, results are again fairly in line with my theoretical expectations, except for parenthood. Quite surprisingly, raising children actually strongly *increases* the probability of being involved in an association. All other things being equal, parents of young children still living at home are about 16 percentage point more likely than childless people to participate in group-based activities – making parenthood the more powerful predictor of group participation as a whole. The reason might be that social inclusion is facilitated by the very fact of having children, given that "*[t]he number of children in a household influences the amount of time that can be allocated to volunteering, but also serves as a means of connecting the family members to local child-serving organizations and is thus a measure of potential integration into the community*" (Sundeen et al. 2007: 283; see also Smith 1994: 250 and Wilson and Musick 1997: 699). Children, and especially young ones, usually take part in many social and cultural activities (sport clubs, art or musical associations, etc.). Parents may therefore be willing to participate in the social clubs their children are active in. This becomes even more obvious when one considers parents' school associations, which are part of my measure of social engagement. Furthermore, this explanation is supported by the fact that the effect of living with young children is considerably attenuated – and even turns negative – when it comes to predicting political commitment among group participants. Consequently, the indicator of parenthood probably reflects less respondents' biographical availability than the social capital provided by a strong community anchorage. In this sense, it remains consistent with the postulates of the resource model of civic engagement. Regarding the effect of citizens' employment status, it goes in the expected direction: the probability of associational involvement of people working on a full-time basis is 7 and 5 percentages points *lower* than it is for their part-time and unemployed counterparts, respectively. It confirms that time availability is an important resource for group participation. Being part-time rather than full-time employed seems also to significantly impact the choice of party engagement specifically when contrasted with SMO activism, what is more surprising and difficult to explain. A similar unexpected effect on the party choice comes from the fact that participating in a party seems to be almost self-evident among politically active people aged 65 and over. While it is indeed difficult to explain that in terms of biographical availability, this specific result is nonetheless in line with the broader literature on party membership. Parties are kind of "old-school" organizations and the mean age of party members is quite high – around 50

years old in Europe between 1999-2004, and increasing over time (Marien and Quintelier 2011: 53) – whereas social movements, and especially "new" or post-industrial ones, have developed more recently and seem to have performed better in attracting younger people (Jenkins and Klandermans 1995: 9). Moreover, the interest of elderly people for political parties especially makes sense in the light of the German political context. Indeed, people aged over 65 at the time of the survey were born before 1950 and grew up during the second half of the twentieth century. As explained by Spier and Klein, this period was one of great political mobilization for parties in Germany: "*due to the highly politicized 1970s, membership reached its second post-World War II peak in 1980, with about two million party members in Germany*" (Spier and Klein 2015: 91). At that time parties were the major organizations around which political life was organized. Then, the higher probability for political activists over 65 to be active in a party specifically reflects probably more a generational effect rather than a life-cycle. Nevertheless, the curvilinear pattern displayed by age in the first model predicting the overall group participation probability is consistent with the premises of a biographical availability approach. All in all, the 31-50 years old (the reference category) tend to be the least likely to participate in any association. People under 30 – and to a lesser extent those over 50 – have a greater chance of becoming involved in an association than their middle-aged counterparts. It makes sense from a biographical point of view as the latter are probably more constrained by private and/or professional responsibilities, implying higher costs associated with participation (e.g. Wiltfang and McAdam 1991).

In sum, despite the need for qualifications highlighted by some unexpected effects, the results discussed above tend to confirm the importance of material and immaterial resources for group participation as a whole (i.e. the *"if"* question of group participation). People who have no higher education degree, those who lack financial resources, those who face tight life or time constraints (i.e. middle-aged and full-time employed people), and those who are less likely to be embedded in large social networks (i.e. non-religious and childless people) appear to have a significantly lower probability of taking part in the activities of any association, either social or political. Against this background, I will further test my core assumptions regarding the effects of personality traits and personal values in the next two chapters. But before moving on, let me say a few words about the statistical procedures that will be used to carry out these analyses.

## 4.4. Statistical tools and procedures

### 4.4.1. Robustness checks: multinomial and penalized likelihood regressions

As previously discussed (see section 4.3.3.3 above), three dummy variables were computed to measure, on the one hand, the overall group participation probability and, on the other hand, the choice of a specific kind of group. The latter is measured by two distinct variables; one contrasting political with social group participation and another contrasting more specifically party with SMO activism. It follows that the second and the third dependent variables were built upon two different subsamples, each made up of one of the two categories of the preceding outcome. This hierarchical measurement has two major consequences that will be taken into account in the further statistical estimations.

First, when merging different kinds of associational involvement in a single level of a categorical variable (e.g. "group participation" in the first dependent variable including indistinctly all association-types), there is a risk that the overall estimates produced by statistical procedures like binary logistic regressions overshadow substantial differences between the groups which are merged. This is all the more problematic if one of them clearly outnumbers the others, as it is the case, for instance, of people participating in the activities of social associations (N=1565) compared with party participants (N=285), both merged into a single category. Therefore, in addition to the binary logistic regressions presented and discussed in the body of the paper, multinomial regressions were systematically run as robustness checks to verify the impact of merging different groups in a single category. The results of these supplemental analyses are reported in appendix and explicit references to them will be made when substantial differences between the merged categories are found (e.g. when an overall effect appears to actually hold true especially for one kind of group).

The second consequence of the hierarchical logic applied to measure different forms of group participation is linked to the previous point. More precisely, because of the "top-down" cumulative logic of multi-engagement mentioned in section 4.3.3.2 above,

participants of political associations are clearly outnumbered by those of social, non-political associations. It follows that my second dependent variable, contrasting the two with each other, is rather unbalanced – besides, the first dependent variable measuring the overall group participation is similarly unbalanced due to the high number of respondents active in at least one association (see Table 9). To refer to such situations, statisticians use the terms "rare events data", which are characterized by "*binary dependent variables with dozens to thousands of times fewer ones (events (…)) than zeros ('nonevents')"* (King and Zeng 2001: 138). When studying rare events, the well-known sensitivity of maximum-likelihood estimation to small-sample bias (e.g. Nemes et al. 2009: 57) can lead to substantively smaller estimates for the event probabilities. The risk of using conventional logistic regression is therefore to "*sharply underestimate the probability of rare events*" (King and Zeng 2001: 138). Several alternative estimation methods have been suggested in the statistical literature to solve this problem (e.g. exact logistic regression, King and Zeng's bias correction method) but the most commonly accepted is probably the one proposed by David Firth (1993) and known as "*penalized maximum likelihood estimation*" (Allison 2012; Leitgöb 2013; Williams 2017). This method has been proven to be superior to traditional maximum-likelihood estimation of logistic regressions by producing unbiased estimates even when dealing with rare events. Therefore, even though in my case the less frequent categories of the three outcomes still contain hundreds of cases – what reduces the risks of getting biased estimates – I re-estimated each logistic regression models which will be presented in the next chapters using Firth's penalized likelihood method. Fortunately, those further robustness checks revealed no substantial differences with the estimates of the conventional logistic regressions (results are to be found in appendix).

Finally, all the models which will be presented in the next chapters have been reestimated with an additional control for citizens' political ideology, measured by a traditional question about the respondent' self-placement on a 10-points left-right scale. Despite the lively controversy which surrounds the use of such a proxy (see e.g. Bauer et al. 2017), I assume that it allows to assess a broad ideological divide within the political realm. Besides, the main purpose of those additional checks is to balance the fact that I did not compute separate analyses for left-wing and right-wing party affiliates – what would hardly have been possible given their small absolute numbers in the sample (N=285) – and that, as mentioned

in the previous chapter, the measure of SMO participation is likely to mainly cover the post-industrial social movement sector, which has historically developed from the left of the political spectrum. The reader's attention will be drawn to these further analyses in the case of substantial changes in the effects of traits and values on group participation when taking into account citizens' left-right ideological stances.

### 4.4.2. Statistical interactions

In addition to the binary logistic regressions and the different robustness checks mentioned above, another statistical tool used to produce the next empirical results deserves some comment. Indeed, statistical interactions will be used to test the trait-resource substitution hypotheses (see previous chapter). The aim is to investigate the moderating role of personality traits by asking how the effects of important personal resources change depending on certain valuable dispositions for group participation. In a similar vein, after having discussed separately the effects of personality traits and personal values, statistical interactions involving those two sets of core dispositions will be analyzed to investigate their potential joint effects on group participation.

Given that the coefficients of interaction terms in logistic regressions are rather abstract pieces of information – and often quite difficult to interpret – I systematically computed adjusted predictions at representative values using the 10$^{th}$ and 90$^{th}$ centiles of the variable of interest[69]. When plotted in a two dimensional space, the predictive margins give a clearer and more informative picture of how the effect of one variable varies along with other individual characteristics. Moreover, to look only at the regression coefficient can lead to underestimate – or, but more rarely, overestimate – a particular conditional relationship as the marginal effect of an independent variable may be statistically different from zero at least for some specific values of another moderating variable, even though the coefficient of the overall interaction term is statistically non-significant (Brambor et al. 2006: 74; Kingsley et al. 2017). Thus, computing graphs of adjusted predictions of all (i.e. not only

[69] All the other covariates being fixed at their median (continuous variables) or modal (categorical variables) values.

the significant ones) interaction effects estimated in regression models allows one to look at the entire range of one predictor's values and then to get a more accurate picture. Furthermore, I subsequently computed and plotted the contrasts of those margins in order to know the statistical significance of the differences in the predicted probabilities. Indeed, looking only at the confidence intervals of predicted probabilities themselves can lead to erroneous conclusions because it does not take into account the covariance between the differences. The fact that the individual parameters might be poorly identified (i.e. getting wide confidence intervals) does not necessarily imply that the same goes for their difference, and because the odds of getting extreme values on *both* of the coefficients are much lower than those of getting only one of them, one cannot conclude that there is no significant difference between two point estimates on the sole basis of their overlapping confidence intervals (Belia et al. 2005: 390). In sum, for each tested interaction, I have got three complementary pieces of information to ensure the robustness of the observed relationship: (1) the regression coefficient and its p-value, (2) the predictive margins at representative values and their respective confidence intervals, and (3) the contrasts between them and the respective confidence intervals of these "differences-in-differences". In the next chapters, all these three statistical elements will be taken into account when discussing interaction effects.

## 4.5. Concluding remarks

Despite the aforementioned methodological precautions, my research design, by its nature, has two important limitations with which I will conclude this chapter. First, despite the use of panel data, the design of my research is fundamentally a correlational one. It follows that, unlike experimental or quasi-experimental studies, no strong causal inferences can be made on the sole basis of the analyses presented in this paper. That being said, two aspects, one methodological and one theoretical, allow me to suggest – but, again, not ascertain – the direction of the causality of the observed relationships. The first one relates to the chronological order in which the data was collected and the second one relates to the very nature of personality traits and personal values. Indeed, as shown in section 3.2.1 of this chapter, the measures of the different theoretical concepts were made at different points in time over a period of about one and a half years and the questions about group participation

were asked at the end of this period. Those questions are retrospective by nature, asking respondents about their participation during the previous year, but most of the other variables included in my models were measured before or at the very beginning of the period covered by the group participation questions. Regarding traits and values specifically, respondents were interviewed about 9 months before being asked about their past-year associational involvement. Because those core dispositions are assumed to be relatively stable over time (see previous chapter) it is rather unlikely that substantial changes occurred during such a short period of time and, therefore, one can reasonably expect that the individual data regarding personality traits and personal values collected at a specific point in time reflect as well the individual's dispositions of the previous and subsequent months. Thus, without making strong causal claims, there are reasons to believe that traits and values are more likely to precede associational involvement rather than the other way around. But of course, individuals who indicate that they have participated in the activities of an association during the last 12 months may well have been involved for many years and, on the other hand, both personality traits and personal values, while being relatively stable, are not irrevocably fixed attributes. Therefore, the causality issue remains a critical one of this research.

Second and finally, it should be reiterated that the data analyzed here was collected in the German context and over a specific period (2015-2016). On this point, it is worth noting that the year 2015 in Germany was somewhat unusual in many regards. Indeed, there was a historic record regarding the number of workers going on strike[70]. Even though participation in business organizations or trade unions is not part of my measure of associational involvement, massive strikes often contribute to polarize public opinion, between supporters and opponents of the government's economic policies, as well as between supporters and opponents of this specific kind of action itself. This is probably especially true in Germany, which has long been regarded as a *"low-strike country"* (Dribbusch 2007). Furthermore, and maybe more importantly, at the end of 2015, the number of refugees registered in Germany throughout the year reached the symbolic threshold of one

[70] https://www.theguardian.com/commentisfree/2015/may/22/strikes-sweeping-germany-here-to-stay (retrieved November 15, 2018)

million[71]. Again, this issue created strong dissension among the population as well as among politicians and parties – notably, the Chancellor Angela Merkel was strongly criticized, even within her own party and electorate, for having opened German borders to immigrants and refugees[72]. At the end of the year, the mass sexual assaults during the New Year's Eve celebration in Cologne and other cities, which were first erroneously attributed to refugees, further contributed to crystallizing opposition between pro- and anti-migrants in Germany[73]. What impact could these contextual elements have had on the analyses presented in the present research and the sample they rely on? First, as mentioned earlier in this chapter, the great deal of mobilization during 2015 is likely to be reflected in the data by a higher-than-usual number of people indicating that they participated in the activities of a political group during the last twelve months. In particular, it might be the case that people who are not particularly predisposed to getting involved in civic groups and who therefore are usually passive citizens nonetheless participated in such groups given the somewhat extraordinary mobilization context. In other words, the latter could have weaken the relative importance of personal dispositions in explaining civic participation, what would partly blur the relationships between personality traits and associational involvement which will be investigated in the next chapter. Regarding personal value priorities, a context of great divisions on major societal issues like those described above is likely to arouse antagonism among people who are, in some ways, encouraged to "choose sides". However, it is not clear how this can have an impact on the hypothesized relationship between value priorities and the choice of a specific form of civic participation, beyond ideological divides. Indeed, regarding the migrant issue notably, political mobilizations were fueled by both pro- and anti-immigrants discourses. Moreover, these discourses were echoed simultaneously by civil society organizations (e.g. Pro Asyl vs. PEGIDA) and political parties (e.g. Die Grünen vs. Alternative für Deutschland). Thus, if for instance a relationship between certain basic values and party (vs. SMO) activism is empirically established, there is no a priori reason to think that this relationship is necessary fallacious,

[71] https://www.theguardian.com/world/2015/dec/08/germany-on-course-to-accept-one-million-refugees-in-2015 (retrieved November 15, 2018)
[72] https://www.theguardian.com/world/2015/oct/30/merkel-pressure-refugees-germany-talks-government-divided-crisis (retrieved November 15, 2018)
[73] https://www.bbc.com/news/world-europe-35274105 (retrieved November 15, 2018)

hiding solely ideological disputes over the so-called "migrant crisis". Yet, in any case, the inferences that may be drawn in the present research are limited – both in time and space – to this specific context and it will be up to future research to extend the scope of the present study and to confirm or invalidate its conclusions in other contexts.

Keeping these two major limitations in mind, I now turn to the presentation of the first set of empirical results regarding the effects of personality traits on group participation.

# 5. Personality traits and the *"if"* question of group participation

## 5.1. Introduction

Do some citizens encounter major difficulties in participating in community life "*simply because of who they are*" (Weinschenk 2013: 11)? Are some individuals more likely to get involved in a group because of some enduring characteristics rooted in their personality? And if such a form of personal predisposition does exist, may it even, in extreme cases, compensate for a lack of resources? Those questions, among others, will be addressed in this first empirical chapter dedicated to the effects of personality traits on group participation in general, and on political and party participation in particular. The aim of this chapter is then to highlight the role of core personality dispositions (i.e. the "Big Five" traits) regarding collective participation. By means of several statistical analyses, the relative contribution of each of the Big Five to different kinds of associational involvement will be closely examined. I will thus demonstrate that personality traits indeed do matter – even when other important individual-level determinants are taken into account. In particular, it will be shown that personality traits, as theoretically expected, are mainly related to the *"if"* question of group participation (i.e. *will an individual participate in a group?*), and much less important regarding the different forms this associational involvement can take (i.e. *in what kind(s) of groups will he or she participate?*). This latter aspect will be addressed in the next chapter, when discussing the effects of core personal values. But before moving on, let me briefly sum up my theoretical expectations about traits and group participation.

Firstly, in the theoretical chapter I argued that traits, as enduring characteristics of an individual's personality, contribute to shaping *who he/she is*. As such, they may directly influence what people *can do easily or not*, i.e. their *capability* for doing something. In particular,

they may act as facilitating or, on the contrary, obstructing factors regarding specific behaviors, such as participation in community-based activities. For instance, an excessively shy person would hardly be able to deliver a public speech in front of dozens of people, or approach strangers on the street, or even just enjoy the company of others. It may, therefore, strongly discourage him/her from engaging in situations involving a high degree of public exposure.

The ease with which someone can participate in an association is fundamental and thus a question that needs to be addressed if we are to study the (individual) rationale of group participation. Indeed, personal motivation to take part in group activities probably hardly matters if it appears to be exceedingly difficult for one to do it. In that respect, just as well-known resources (e.g. biographical availability) some personality traits may greatly facilitate associational involvement, whatever the group under scrutiny. Of course, I do not exclude that, depending on the association and the nature of its activities (e.g. political or not), some traits – or facets of a trait – could be more or less important. Nonetheless, I argued that all kinds of associational involvement share some basic common characteristics that lie at the very heart of "group participation" broadly defined (i.e. a personal involvement in a collective structure formally organized and civically oriented) and that make some individual resources and psychological dispositions almost equally desirable for participation in any type of organization. All things being equal, if one is *capable* of spending one hour a week discussing with one's fellow members of a charitable organization, it is hardly likely that one would be totally *unable* to do the same in an environmental organization or a recreational club. Therefore, I hypothesized that personality traits should more significantly affect the overall likelihood of group participation in general than the choice of a specific kind of organization (a political or a social one, a party or a SMO),the latter depending probably more importantly on personal preferences. In a nutshell, I expect personality traits to be mostly related to what I have called the *"if"* question of group participation.

More specifically, I expect people scoring high on extraversion, agreeableness, and openness to experience to be more likely to be active in at least one association than their

more introverted, antisocial, and close-minded fellow citizens, whereas a higher level of neuroticism should be associated with a lower probability of participating in any association. Due to the inconsistent results in the existing literature on conscientiousness and participation, and because of the often conditional effects of this trait, I do not expect any direct relationship between conscientiousness and group participation.

Secondly, based on the resource-substitution theory, I argued that high levels of openness to experience and extraversion may help compensate for a lack of cultural, and social and time-related resources, respectively. Thus, I expect personality traits to *moderate* the relationship between those resources and group participation probability. According to the substitution hypothesis, the effects of traits and resources should be inversely related: the latter should be weaker predictors of group participation at higher levels of openness and extraversion. In line with my theoretical framework, I expect this trait-resource substitution effect to be relevant to the estimation of the overall group participation probability (rather than when specific forms of engagement are contrasted with each other) because of the higher importance of resources in predicting the former (see previous chapters).

This chapter is structured as follow: I will start off by presenting the main empirical results. It will allow me to first test my meta-hypothesis about the greater influence of the Big Five on group participation as a whole rather than on specific forms of it (i.e. political and party participation). On this basis, I will then discuss in detail the effects of each of the Big Five on my three different outcomes. The first part of the discussion will be dedicated to the overall group participation probability: direct effects of personality traits will be firstly examined and, subsequently, the resource-substitution hypothesis will be empirically assessed. In the second part, I will comment on the effects of the Big Five on the two specific forms of group participation theoretically and empirically distinguished: *political* (vs. social) participation, and *party* (vs. SMO) activism. It will be shown that, as expected, these relationships are rather rare and less statistically robust. Finally, I will conclude by summing up the overall contribution of personality traits on group participation.

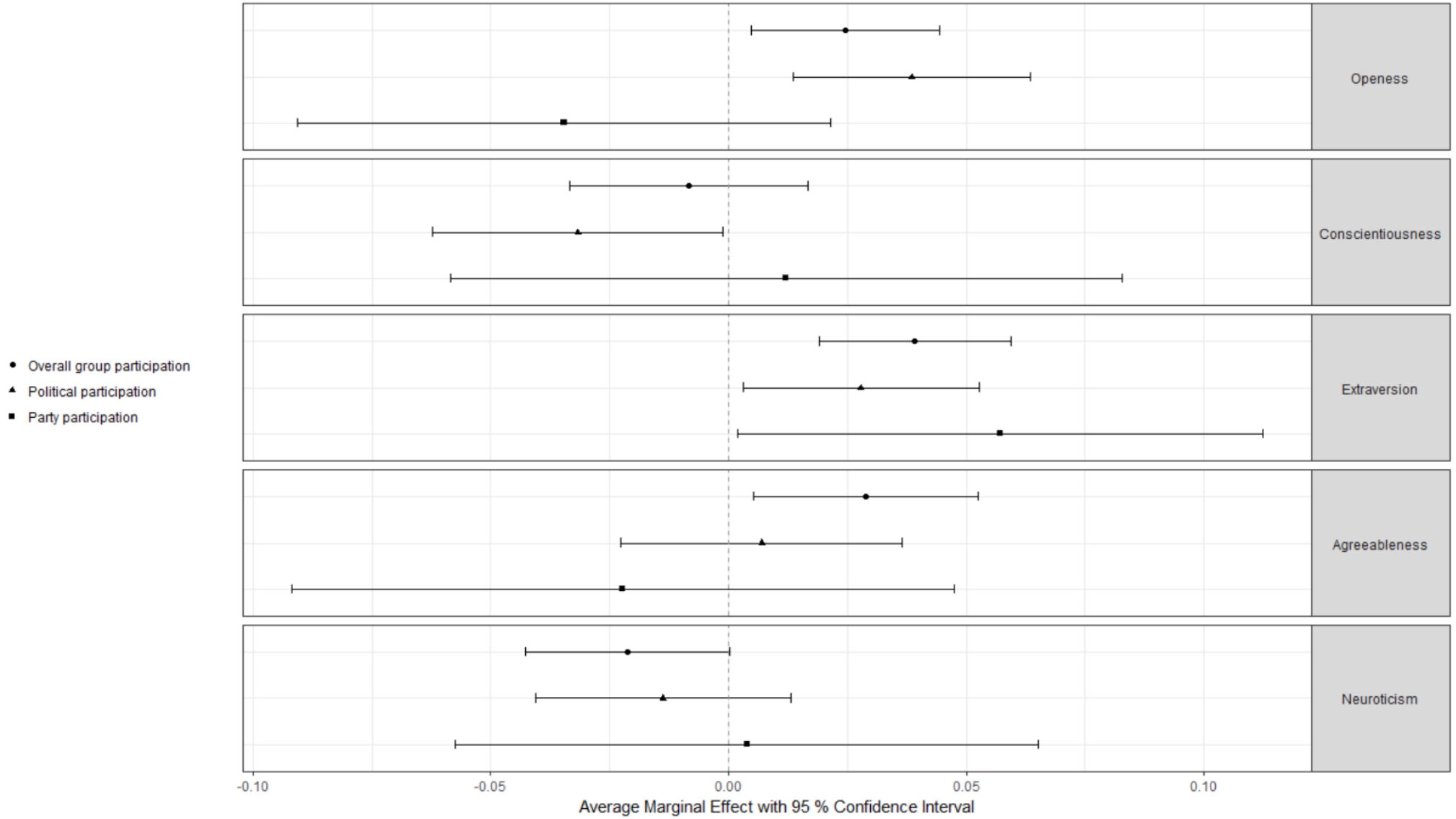
## 5.2. Empirical results

I ran several logistic regressions using the three binary dependent variables described in the previous chapter. Thus, three models successively contrast people engaged in *any association* with passive citizens (M1), people engaged specifically in a *political* association with those active solely in social, non-political ones (M2), and finally, among political activists, *party* with (exclusive) SMOs participants (M3).

Results are displayed in Figure 6 below. Each of the three models includes the Big Five as well as several control variables (see the previous chapter for a discussion of the effects of those variables)[74], allowing one to determine the relative weight of personality traits in the explanation of group participation. However, for the sake of clarity and to save space, only the main results are presented here (the estimates of the full models are reported in Table B1 in appendix). As explained in the previous chapter, Firth's penalized likelihood regressions and multinomial logistic regressions have been conducted as robustness checks: the former to check for the limited statistical power of binary logistic regressions when predicting such unbalanced outcomes, the latter to check for the impact of merging different associational types in a single category (e.g. "political group participation"). An additional model including a measure for respondents' left-right self-placement has also been estimated. The results of those additional statistical analyses are also reported in appendix (see Table B2 to Table B4).

[74] Consistent with the common practices in this research field, the "basic model" simultaneously estimates the effects of the five traits together – but without any additional control variables.

**Figure 6 – The effects of the Big Five personality traits on group participation: main results**




Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

The effects are estimated along with the following control variables: gender, age, education, income, place of residence, employment status, parenthood, and religiosity.

At first glance, results in Figure 6 tend to corroborate most of my hypotheses. The four traits expected to be significantly associated with group participation show indeed statistically significant effects on group participation probability and in the expected direction. Moreover, most of them affect group participation in general, whatever the association under scrutiny, whereas only extraversion appears to affect the party choice among politically committed participants (M3). This is in line with my baseline assumption (H1) about the primary influence of personality traits on the overall likelihood of group participation (i.e. the *"if"* question) rather than on the choice of a specific kind(s) of group (i.e. the *"what"* question). I will now discuss in detail each of these effects, starting by the influence of traits on group participation as a whole.

### 5.2.1. Personality traits and overall group participation probability

#### 5.2.1.1. More fun, less stress: direct effects of the Big Five on group participation

As expected, extraversion and, to a lesser extent, openness to experience and agreeableness are positively related to group participation, while neuroticism tends to decrease one's probability of being involved in an association. In line with previous research, the pattern of results for *Extraversion* is the most consistent. As hypothesized, this trait has a relatively strong, positive effect on the probability of group participation. *Ceteris paribus*, a one-unit change on the extraversion scale is associated with an average 4 percentage point increase in the expected difference in the probability of being involved in an association. This is quite a strong effect for such a distal predictor. Thus, extroverts are more likely to be active in community-based associations than their more withdrawn counterparts, which confirms findings of previous research (e.g. Bekkers 2005; Carlo et al. 2005; Weinschenk 2013; Dinesen et al. 2014). It makes sense as people who score high on extraversion are often characterized by two major qualities: sociability and activity. As gregarious and dynamic people, they enjoy social interactions and usually experience a vibrant social life. It follows that they typically join civil associations *"because they 'like to do and organize things with other people', it doesn't matter for what kind of collective action"* (Bekkers 2004: 131). More importantly, thanks to their good social and communicative skills, they are probably much better equipped to deal with the basic requirements of associational life than introverts are.

Moreover, some research has demonstrated that, unsurprisingly, those high on extraversion tend to be embedded in larger social networks than shyer individuals (e.g. Mondak 2010; Kim et al. 2013), making the recruitment process probably even easier. The results confirm those ideas and my theoretical expectations, demonstrating that extraversion is indeed "*an important dispositional factor furthering active participation in organisations in general*" (Dinesen et al. 2014: 147).

Although to a lesser extent, *Openness to experience* is also positively associated with group participation (a one-unit increase in the openness scale being associated, on average, with a 2,5 percentage point increase in the expected probability of associational involvement). Again, many authors have stressed the importance of this trait for participation in civic groups (e.g. Bekkers and De Graaf 2002; Bekkers 2005; Carlo et al. 2005; Mondak 2010; Mondak et al. 2010; Weinschenk 2013; Dinesen et al. 2014; Brandstätter and Opp 2014) and results in Figure 6 are consistent with these previous studies, as well as my theoretical expectations – even though the strength of this effect is somewhat less impressive than those of extraversion. It confirms the idea that curiosity about, and tolerance towards, others' ideas, opinions, and views are valuable qualities for the necessary cooperation implied by any form of group participation.

In line with my expectations too, results for *Agreeableness* are pretty similar to those of openness. As a reminder, I argued in the theoretical chapter that a high score on this trait would lead to a greater probability of being collectively engaged. Indeed, highly agreeable people are described as sympathetic, cooperative and trusting (John et al. 2008: 120). They tend to be particularly helpful and empathic, to such an extent that this trait is traditionally associated with the so-called "altruistic" or "pro-social" personality (Graziano and Eisenberg 1994; Penner and Finkelstein 1998). As a consequence, associational involvement should be highly compatible with the communal and social orientation of highly agreeable people. Besides, many empirical studies have previously shown that agreeableness – or at least some of its facets, like empathy – is positively related to organizational volunteering (e.g. Elshaug and Metzer 2001; Carlo et al. 2005; Okun et al. 2007; Dinesen et al. 2014). Again, the results presented here support those theoretical arguments.

The results for *Neuroticism* are also consistent with my expectations and show the opposite pattern of the three described above: a higher level of neuroticism slightly decreases the likelihood of any kind of group participation ($p < .10$). Other things being equal, the average marginal effect on the probability of being engaged in an organization associated with a one-unit increase in neuroticism is a 2 percentage point decrease. Again, this is in line with previous research (e.g. Howarth 1976; Omoto et al. 2010; Handy and Cnaan 2007; King et al. 2015). Highly neurotic persons tend to be anxious and uneasy; they often experience psychological distress or negative emotions (e.g. stress, nervousness, sadness, angry) and have a tendency to feel vulnerable. Moreover, they are likely to see other people as potential threats, and hence to distrust them (Dinesen et al. 2014). As confirmed by the empirical results, all of this may constitute important psychological barriers to any kind of group participation, and thus people who score high on neuroticism are less likely to participate in an association than those characterized by higher levels of emotional stability.

Finally, as explained in the theoretical chapter, it is quite difficult to predict the effect of *Conscientiousness* on various social and political outcomes, because it often crucially depends on the subjective evaluation of what is important, and therefore worth the effort, and what is not (Mondak et al. 2010: 97). As indicated by the null finding for this trait in Figure 6, group participation is no exception. Consistent with my theoretical intuition, this trait does not seem to have any direct influence, in one way or another, on the overall group participation probability (as the estimate, close to zero, fails to reach conventional levels of statistical significance).

In sum, these first results confirm that some personality traits indeed do matter for group participation as a whole. At least four of the Big Five show a significant and stable pattern of direct relationships with it, even when considering a number of other important individual determinants. Moreover, my hypotheses about the direction of these direct effects are broadly confirmed. The most important disposition is unquestionably extraversion, which shows the hypothesized positive and highly significant ($p < .001$) relationship with group participation probability. Although the strength of the scientific evidence on the impact of openness to experience, agreeableness, and neuroticism is somewhat lower, the influence of these three traits is also in line with my theoretical

expectations: a higher score on the former tends to be associated with a greater personal likelihood of participating in the activities of a group while the opposite pattern is observed for the latter. Likewise, results confirm the anticipated lack of direct influence of conscientiousness on group participation probability. In a nutshell, four traits are proven to be favorable psychological dispositions regarding group participation: extraversion, openness to experience, agreeableness, and emotional stability (the opposite of neuroticism). Can these core dispositions help compensate for a lack of individual resources? Can they help reduce the gap between *a priori* disadvantaged citizens regarding associational involvement and those who benefit from a more favorable social background? I will attempt to answer these questions in the next section.

#### 5.2.1.2. An empirical assessment of the resource substitution hypothesis

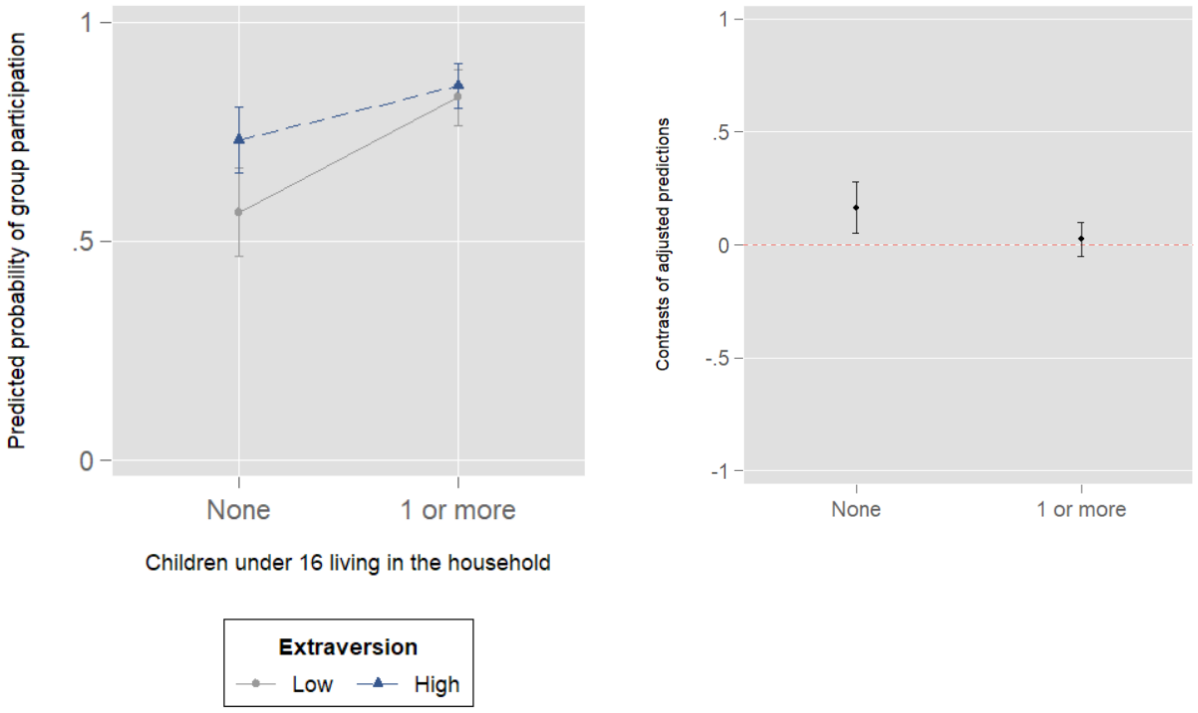
As a reminder, I hypothesized that high levels of openness to experience and extraversion would help compensate for a lack of cultural, and social and time-related resources respectively. If these trait-resource substitution hypotheses are confirmed, those resources should be weaker predictors of group participation at higher levels of extraversion and openness.

Regarding extraversion as a surrogate for social capital, the interaction effects between this trait and parenthood[75] and religiosity are rather in line with my expectations. First, regarding parenthood – which was found to be the most important predictor of group participation as a whole (see previous chapter) – there is empirical evidence that extraversion does moderate this relationship (see Figure 7 below). More precisely, in line with the trait-resource substitution hypothesis, the positive influence of having children still living at home in promoting citizens' involvement in associations is stronger for introverts

[75] As a reminder, it was found in the previous chapter that the presence of children under 16 living in the household greatly *increases* one's likelihood of participating in the activities of an association. I explained this by the fact that inclusion in social networks is probably facilitated by the fact that children, and especially young ones, tend themselves to take part in many social and cultural activities. Therefore, I argued that parenthood may be associated with a strong community anchorage and that it surely reflects a citizen's level of social capital rather than – as originally thought – biographical availability.

compared to their more outgoing counterparts. In other words, at higher levels of extraversion, parenthood plays a much less decisive role in predicting group participation.

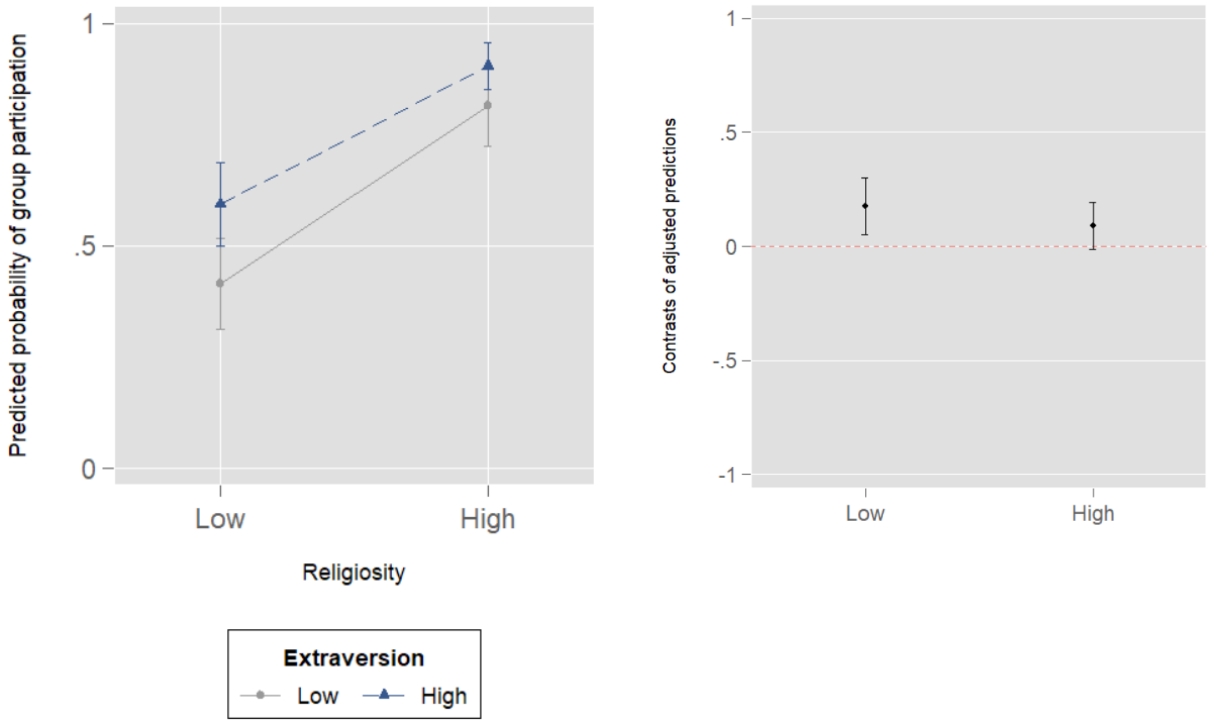
**Figure 7 – The moderating effect of extraversion on the relationship between parenthood and group participation probability (adjusted predictions and their contrasts with 95% CIs)**




This is a good example of a "catch-up" effect; that is, a substitution of a psychological favorable disposition for an important resource. It certainly reflects the fact that extroverts do not need any specific "reason" to be socially active citizens; they simply enjoy social interactions and are at ease with it. As such, they may *de facto* benefit from a facilitated network integration, whether they have children or not. This idea is somewhat supported, though to a much lesser extent, by the results of the interaction of extraversion with religiosity (the second most important predictor of group participation as a whole and the original proxy used to assess one's level of social capital). Indeed, even though the average interaction term is not statistically significant at the 95% level – meaning that this result has to be treated with caution – a somewhat similar trend emerges for the interaction between extraversion and religiosity. As shown in Figure 8 below, extraversion seems to (very) slighlty negatively moderate the impact of religiosity on group participation: religious

citizens have, on average, a higher probability of being involved in an association, but extraversion tends to bridge the gap between religious and non-religious people.

**Figure 8 – The moderating effect of extraversion on the relationship between religiosity and group participation probability (adjusted predictions and their contrasts with 95% CIs)**



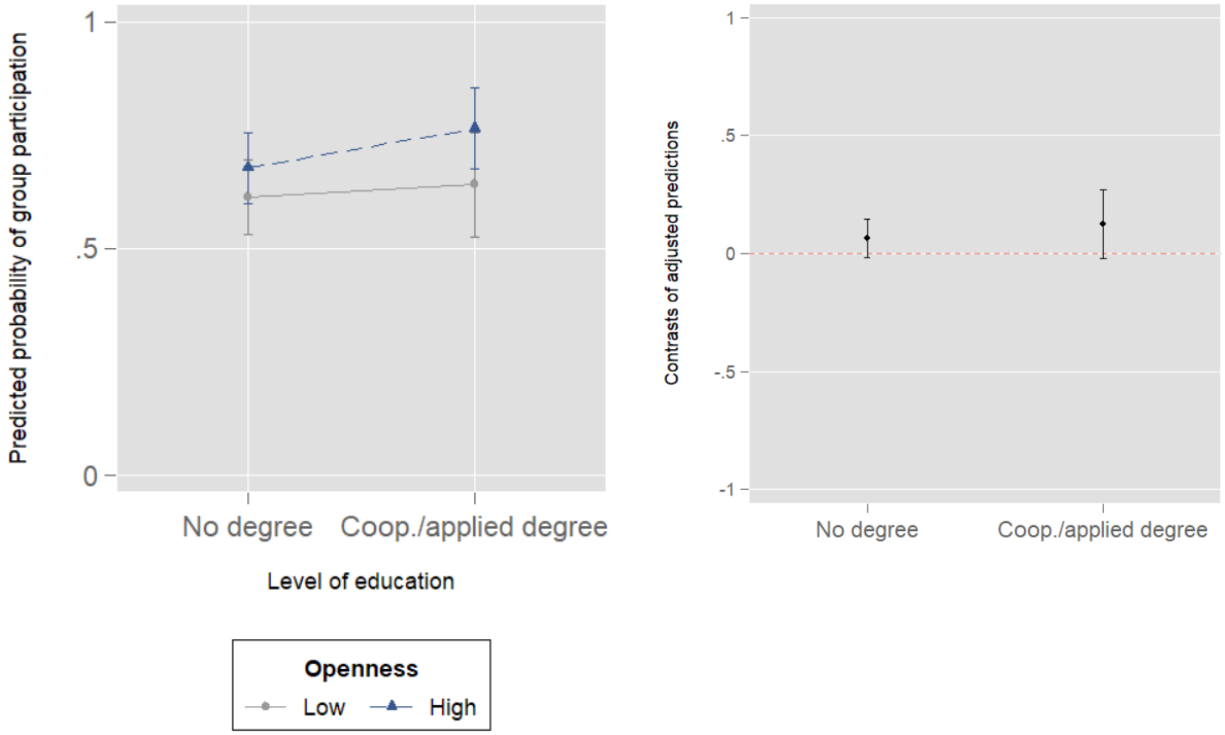

Thus, in line with the trait-resource substitution hypothesis, a high level of extraversion appears to help compensate for a lack of social capital provided by a strong community anchorage. Regarding time availability, however, the expected substitution effect of extraversion shows less empirical evidence[76]. First, from a biographical point of view, the effect of extraversion is, as expected, stronger for people aged between 31 and 50 years old – who are overall the least likely to be involved in civic groups – than for the 51-64, but not different from those observed among the youngest (18-30) and oldest (over 65) respondents. Moreover, regarding employment status, people who are employed on a full-time basis do not seem to benefit from high levels of extraversion to a greater extent than their part-time or unemployed counterparts. As discussed in the previous chapter, people who are employed part-time – or, but to a lesser extent, unemployed – have, on average, a

[76] In order to save space, only the figures actually depicting a trait-resource substitution effect will be shown here (the others are available on demand).

significantly higher probability to be involved in an association than their full-time employed colleagues. Thus, according to the trait-resource substitution theory, part-time employment (vs. full-time employment) should be a weaker predictor of associational involvement at higher levels of extraversion, which is not the case here as its effect is pretty similar all along the extraversion continuum. In other words, extraversion does not moderate the positive effect of having more free-time to spend in extra-professional activities on the overall group participation probability. Hence, all in all, empirical evidence for an energy-time substitution is lacking.

Finally and similarly, the substitution effect hypothesized between Openness to experience and cultural resources is not empirically confirmed. Indeed, while the positive effect of having a university degree (as opposed to no degree at all) remains almost identical for every possible values of the openness scale, a degree from a University of Cooperative Education (UCE) or Applied Sciences (UAS) is almost a stronger predictor of group participation at higher levels of openness (see Figure 9 below). Thus, this personal disposition fostering group participation not only fails to compensate for little cultural capital, but it tends to widen the gap further between citizens endowed with this resource and those who are not, which goes clearly against the idea of a resource substitution.

**Figure 9 – The moderating effect of openness to experience on the relationship between education level and group participation probability (adjusted predictions and their contrasts with 95% CIs)**




In conclusion, the hypothesized trait-resource substitution is supported only in certain cases, and the strength of the empirical evidence for such effects is limited. First, most of them are rather weak and barely significant, implying that these findings should be interpreted with great caution. Second and more importantly, extraversion is the only disposition which can actually help overcome a lack of a certain resource, namely social capital provided by a strong community anchorage. More precisely, as suggested by the results presented above, at high levels of extraversion, having a young child or being religious hardly matters; the "*preference for companionship and social stimulation*" (McCrae and Costa 2008: 164) of extroverts makes them especially likely to experience a vibrant social life and to join others in civic groups, whether or not they were previously embedded in *ad hoc* religious or parental networks. In this specific case, therefore, a core disposition (extraversion) can indeed help bridge the gap between citizens *a priori* less likely to be active in a group because of a disadvantageous social background (a low level of social embeddedness) and those who are better equipped. Nonetheless, this specific trait-resource substitution is the only one which is empirically supported by my data – and again, one should be cautious as these relationships are not extremely robust from a statistical point

of view. Indeed, contrary to my expectations, a high level of extraversion does not seem to help regarding a lack of time availability for associational involvement. The absence of such a moderation effect could be, at least, partly due to a methodological issue. Indeed, my expectation was theoretically based on the "energy" (or "activity") facet of extraversion – the tendency of extroverted people to engage in many activities and their special need to keep busy. Yet the two items used in the BFI-10 to measure extraversion (i.e. *"I am outgoing, sociable"* and *"I am reserved"* (reversed)) do not really cover the *"Energy Level"* domain, but rather those of *"Sociability"* (Soto and John 2017: 122). As reminded by McCrae and colleagues (1986: 444), "*the factors represent groups of traits that covary, but are not necessarily interchangeable*", thus the selection of these specific items, representing specific facets of extraversion and leaving out others (in this case, energy), may explain why I did not find any substitution effect between extraversion and time-related resources. I will discuss further this methodological issue in the conclusion. Finally, evidence was also lacking regarding the compensating role of openness to experience when it comes to cultural capital. As explained above, being open-minded, as a personal disposition, may, in fact, even reinforce the discriminatory power of this specific resource. This unexpected result indicates that not only is the trait-resource substitution limited, but personality factors can even sometimes widen the gap between the more and less "socially advantaged" citizens, by reinforcing, above all, the associational probabilities of the former. In sum, only one of my hypotheses regarding potential trait-resource substitution effects on overall group participation was confirmed and future research is needed if one wants to fully understand the complex nature of these interaction patterns.

All in all, the first part of this chapter has demonstrated that personality traits do matter for group participation as a whole. But what about different kinds of groups? Do personality traits similarly affect the choice of a specific form of collective action (i.e. political or not, within a party or a SMO)? Or are they, as hypothesized, only loosely related to such a choice? To answer this question, I now turn to the examination of the effects of the Big Five on *political* (vs. social) and *party* (vs. SMO) participation specifically.

### 5.2.2. Personality traits and specific forms of group participation: extroverted party supporters, open-minded protesters?

As mentioned earlier, overall, the results presented on Figure 6 tend to confirm my main hypothesis about a less influential role of personality traits on the "*what*" question of group participation (i.e. the choice of a specific form of engagement over another). Indeed, only one trait out of five shows a significant association with the choice of *party* (vs. SMO) activism. Nonetheless, this unexpected effect, as well as those observed on *political* (vs. social) participation deserve some comments.

As shown in Figure 6, and quite unexpectedly, *extraversion* and *openness to experience* do significantly affect political participation specifically. As for group participation as a whole (see above), results suggest positive direct effects on political involvement, indicating that a higher score on these traits is associated not only with a higher probability of group participation in general, but also with a greater likelihood of participating in a political association in particular. Or to put it differently, and more in line with my conceptualization of traits as valuable dispositions for group participation, a lack of openness or extraversion appears to decrease one's probability of being politically – instead of solely socially – active. While I did not theoretically expect any effect of personality traits on the choice of a particular form of associational involvement, those results may nonetheless make sense in the light of the theoretical conceptualization of those two core dispositions. Indeed, as stated by Caprara and Vecchione:

> "*It is likely that both openness to experience and energy/extraversion account for individual differences in behavior, communication, and relational styles that are crucial for being successful in the political arena. Important ingredients of political activity such as keeping up to date with main political events, being receptive to a large variety of ideas and points of views, and interacting with a large diversity of people, may benefit from a genuine openness toward others and the world*." (Caprara and Vecchione 2013: 41)

Yet, beyond this common trend, a closer look at the results of the more fine-grained multinomial analyses (see Table B4 in appendix) reveals interesting dissimilar effects which

shed further light on the relationships between openness, extraversion, and participation in political groups. Indeed, within the realm of political engagement, extraversion is primarily linked to party activism, while openness appears to be a better predictor of SMO activism specifically – even though this latter effect is not strong enough to be of practical importance when party and SMO activists are directly contrasted with each other (cf. Figure 6). It follows that highly extroverted people, on the one hand, and highly open-minded people on the other, may well be equally likely to be involved in a political group but for slightly different reasons. I propose that two core features of political collective action may be differently relevant to each trait's effect: conflict and public exposure.

The specific effect of openness to experience is probably mostly related to the former dimension (i.e. conflict). It is a matter of fact that political activism is a special source of exposure to other people's views but this is probably especially true regarding SMO activism, as the internal structures of SMOs are generally less rigid than those of political parties. Moreover, unlike most parties, SMOs are issue-specific organizations, which might increase the likelihood of bringing together people from across the political spectrum. Finally and more importantly, as explained in chapter 3, contentious participation is associated with an "outsider" and challenging position; many SMOs in the post-industrial sector are relatively young organizations which put forward new and sometimes thought-provoking ideas. In such an environment, a high level of openness might be of great help. Indeed, highly open-minded people who appreciate encountering "*novel and alternative ideas, people and situations*" (Dinesen et al. 2014: 136) and are described as curious and nonconforming would certainly be in their element in such a context. On the contrary, those with lower openness may be rather annoyed by floating organizational settings. They may also feel quite uncomfortable with the deliberately provocative ideas and/or actions of some social movements (for instance, some animal-rights advocates who conduct undercover investigations). This may explain why openness to experience is positively related to participation in political groups in general, but somewhat more strongly to SMO activism in particular.

Regarding the effect of extraversion, public exposure – the second typical aspect of participation in the activities of a political group – may be the key to understanding this

trait's specific influence on political participation and, above all, party activism (this latter form of participation is particularly encouraged by a high level of extraversion as the average marginal effect on the probability of being involved in a party associated with a one-unit increase on this dimension is almost a 6 percentage point increase, *ceteris paribus*). Indeed, people who take part in political activities are likely to be in the public eye, but it is probably especially the case of party affiliates – even more in a federal system like those of Germany where local sections have a high degree of autonomy and hence participate actively in the local decision-making processes (Gabriel 2012: 5). Leafleting, canvassing, speaking at local meetings, participating in interactive round tables or forums, or even attending general meetings and discussing the party's manifesto… All of these involve a certain degree of self-disclosure. A high level of extraversion is likely to be a major asset in performing such actions, given that extroverts are often characterized by assertiveness and attention-seeking; two major attributes for taking part in electoral campaigns and other party-related events. On the contrary, it may well prevent shyer citizens from engaging in such activities as it would make them feel deeply uncomfortable. Additionally, one can also assume that the more extroverted people, because they tend to be very energetic, are better equipped than their more introvert fellow citizens for party work because of parties' long-term action (Johann et al. 2015). By contrast, dynamism should be somewhat less relevant to participation in the activities of SMOs as large mobilization of activists – for instance as part of a public event – is generally more sporadic (Rucht 1998: 53). As suggested by previous research (e.g. Bekkers 2005; Okun et al. 2007), this latter facet of extraversion ("energy") may also simply make it easier for extroverts to participate simultaneously in many different associations – something that would be partly overshadowed by my hierarchical measure of associational involvement. Yet, as explained above (see section 5.2.1.2), an effect due to this facet of extraversion is rather unlikely, because of the choice of the items used to assess respondents' levels of extraversion in the GESIS panel data.

Finally, the significant negative effect of conscientiousness on political participation specifically is rather puzzling. Why would highly conscientious people be discouraged from engaging in politics specifically? As explained in the theoretical chapter, empirical evidence regarding the relationship between this trait and civic engagement in the literature is mixed. Nonetheless, a number of studies did find similar negative effects when it comes to non-

voting political participation (e.g. Bekkers 2005; Mondak et al. 2010; Gallego and Oberski 2012; Steinbrecher and Schoen 2012; Weinschenk 2013; Weinschenk and Panagopoulos 2014). A common explanation for this effect relates to the fact that, as dependable and self-disciplined, conscientious people usually have a deep sense of duty and their behavior tends to be "*strongly shaped by a sense of the task's importance*" (Mondak et al. 2010: 97). It implies that highly conscientious people are especially likely to engage in political behavior which is perceived as being part of citizens' duties – otherwise, they are just as likely to avoid it and save time for other activities considered as more important. Unlike voting, personal involvement in political groups is rarely seen as a civic duty, which could explain why a high degree of conscientiousness is negatively related to it. Following Mondak and his colleagues, I test this interpretation with an additional item measuring the perceived importance of being active in organizations as being "a good citizen"[77]. When introduced in the regression model, the interaction between this item and conscientiousness gives, as expected, a positive significant estimate ($p < .05$) and the negative effect of conscientiousness – i.e. its impact for respondents thinking that group participation is not important from a citizenship point of view – sharpens. As suggested by a closer examination of those results (see Figure B1 in appendix), the increase in the predicted probability of political participation associated with an increase in the perceived importance of this specific kind of participation to be judged as "a good citizen" is more impressive among the more conscientious – rising from about 0.06 to 0.33, all other characteristics being kept constant, compared with an increase from about 0.17 to 0.31 for respondents with low levels of conscientiousness. Interestingly, highly conscientious people who see organizational involvement as a civic duty are not significantly more likely to participate in political groups than the less conscientious, but they appear to be especially reluctant to do so when they do not believe that it is a strong citizenship norm. Hence, as nicely put by Mondak and colleagues (2010: 97): *"when contemplating the creed "do it right, or don't do it all" as applied to civic engagement, the highly conscientious seemingly embrace the second half of the statement more strongly than the first"*. Another argument which have been put forth in the literature (e.g. Steinbrecher and Schoen 2012; Johann et al. 2015) is that, given their tendency to conform to social norms and habits and to hold

[77] The variable is part of a larger set of items asking respondents about their perception of norms of citizenship. The exact labeling of the question is the following: *"How important are the following things to be a good citizen?: To be active in organizations"*. The scale ranges from 1 (not at all important) to 7 (very important).

conservative values (notably in terms of impulse control and self-restriction), highly conscientious people may be less likely to consider forms of participation which are not perceived as fully socially accepted or legitimate. Yet, while this explanation is somewhat supported by the fact that, echoing previous research (e.g. Mondak et al. 2010, 2011; Gallego and Oberski 2012), the negative effect of conscientiousness on political participation seems to hold especially for unconventional political participation (i.e. participation in SMOs rather than in parties; see Table B4 in appendix), this effect remains almost unchanged when attachment to conservation values is taken into account (see Table D1 in appendix), suggesting that mediation effects are hardly at stake. I will return to this point later when discussing the relationship between traits and values and their joint effects on group participation in the conclusion. Finally, as already suggested for extraversion, the negative relationship between conscientiousness and *political* (vs. social) group participation specifically might also partly be an artifact, due to the hierarchical logic applied to the measurement of the dependent variable. In this sense, the observed effect of conscientiousness would apply more to multi-engagement (i.e. being involved in *both* social and political groups) than political participation *per se*. Because of their proclivity to do things thoroughly, highly conscientious people may indeed be willing to focus on one kind of participation instead of multiplying different, time-consuming activities[78].

## 5.3. Discussion of the results and conclusion

In this empirical chapter, I investigated the role of personality traits in predicting group participation. The first part of the chapter was dedicated to the effects of the Big Five on group participation as a whole. It thus addressed the question of whether personality traits affect the individual likelihood of being involved in any association (i.e. the *"if"* question of group participation). In line with my hypotheses, it has been demonstrated that four of the Big Five (i.e. extraversion, openness to experience, agreeableness, and neuroticism) show direct significant effects on the overall group participation probability, even when estimated along with other important individual determinants of group participation. I then tested my

[78] Using data from the Family Survey of the Dutch Population 2000 and investigating participation in voluntary associations, Bekkers found a similar negative relationship between conscientiousness and the probability of holding multi-memberships (both non-political and (quasi-)political) (see Bekkers 2005: 445).

resource-substitution hypothesis according to which the positive influence of extraversion and openness to experience may help compensate for a lack of certain resources (i.e. cultural, social, or time-related, respectively). The empirical analyses have shown that only one of the three hypotheses is confirmed (i.e. a substitution of extraversion for social embeddedness). Hence, the hypothesized substitution of personal resources with favorable psychological dispositions may indeed occur, but only in very specific cases and to a rather limited extent – an opposing reinforcement effect having even been found. In the second part of the chapter, I examined the effects of personality traits on the choice of a specific kind of associational involvement (i.e. the "*what*" question of group participation). Two out of the five personality traits appear to be positively related to political participation, but in quite different ways: openness to experience tends to be associated with SMO activism particularly, whereas higher levels of extraversion especially increases one's likelihood of participating in the activities of a party. In addition and quite surprisingly, conscientiousness is significantly, negatively related to participation in political (vs. social) groups. In the discussion above, I suggested several possible explanations for this rather unexpected result but further research is needed to fully understand how this personality dimension is linked to participation in different civic groups. Finally, both neuroticism and agreeableness appear to be unrelated to the choice of a specific kind of group participation. All in all, the results presented in this chapter confirm that personality traits do matter for the *"if"* question of group participation. It is in line with my baseline assumption and the conceptualization of personality traits as valuable psychological dispositions which could facilitate participation. Traits mainly – though not exclusively – influence citizens' overall likelihood of being involved in a group, whatever the kind of association. Even though the coefficients of logistic regressions using different samples and outcomes cannot be directly compared, the distinct lack of strong and consistent patterns of relationship between most of the Big Five and the most specific forms of associational involvement (i.e. party and SMO activism) stands in contrast to the significant direct effects of traits on group participation as a whole. This chapter has hence demonstrated the importance of considering personality traits when studying participation, because they help enable citizens to participate in civic groups. But as being *able* to do something does not necessary mean that one will actually do it, the next chapter will investigate the role of personal values on citizens' *willingness* to be involved in associations.

# 6. Personal values and the *"what"* question of group participation

## 6.1. Introduction

In the previous chapter, it has been demonstrated that some personality traits could foster associational involvement by making it easier for citizens to deal with the basic requirements of this kind of participation. But would they actually be willing to do so? Possessing valuable skills and personal resources facilitating participation in groups is, of course, an important step in the pathway to associational involvement, but still, it is only one side of the equation; having the motivation to actually do it is another. Thus, the central question addressed in this third empirical chapter is no longer whether some citizens *could more easily* participate in such groups than others, but whether and why they would be especially *willing* to do so. In other words, this chapter will address the question of citizens' underlying motivations to get involved in associations and it will do so by focusing on the role of another set of core individual attributes: personal values. Hence, the aim of this chapter is to highlight the role of people's deeply rooted, enduring, and abstract goals regarding group participation. Are people who attach more importance to certain basic values more likely to become involved in an association? Are all group participants driven by common inner motivations, whatever the organization under scrutiny, or do different value priorities lead to different types of collective engagement? More generally, how are various forms of group participation related to the basic value system described by Schwartz (1992)? The statistical analyses that will be presented and discussed below will shed light on the particular contribution of personal values to group participation and, in line with my theoretical expectations, it will be demonstrated that they are indeed closely related to *specific* forms of engagement (i.e. the "*what*" question) but poor predictors of the overall likelihood of group participation (i.e. the "*if*" question). Before that, let me briefly recap the theoretical arguments that underlie my hypotheses.

As a reminder, I explained in the theoretical chapter that basic personal values are motivational factors which drive people to behave in a particular way because they "*serve as guiding principles in the people's lives"* (Schwartz 2007a: 165). As such, they may deeply influence what people *want or do not want to do*, i.e. their *willingness* to do something. Indeed, people rely on them to decide if a specific behavior, like participation in an association, is *"good or bad, justified or illegitimate, worth doing or avoiding"* (Schwartz 2007a: 163). They may therefore provide reasons to be involved in an association and motivate people who see group participation as an opportunity to attain or promote their cherished values.

Yet, group participation broadly defined encompasses a wide range of diverse associational structures, from local football clubs to national political parties, and as explained in the theoretical chapter, different types of associations may have very different purposes. The kind of goals pursued by an association is even the criteria used to distinguish political association from social ones. As a reminder, the former seek collective goods and aim at influencing the political decision-making process, whereas the latter often seek private goods and, in any case, "*do not 'primarily' aim at influencing the political arena*" (Morales 2009: 25). Because basic personal values refer to "*desirable, trans-situational goals, varying in importance"* (Schwartz 2007a: 165), different value priorities are likely to lead to involvement in different kinds of associations – varying with the degree of compatibility between one's own values and the goals the association in question strives for. Therefore, unlike some basic resources and personality characteristics which are likely to be important for any group participation and more or less equally valuable whatever the association under scrutiny (see previous chapter), personal motives – and hence basic values underlying them – are likely to greatly vary from one kind of associational involvement to another. Or, as Schwartz pointed out: "*values may motivate joining some types of organisations in a positive direction and others in a negative direction*" (Schwartz 2007a: 185). Continuing with an example provided in the previous chapter, all things being equal, if one is *willing* to spend one hour a week discussing with his fellow members of a charitable organization, it does not necessarily follow that one would be as willing to do the same in an environmental organization or a recreational club. Relying on this intuition, I hypothesized that personal values, as motivational factors, should affect more significantly the choice of a specific kind of group (a political or a social one, a party or a SMO) than the overall likelihood of group participation broadly defined. In other

words, I hypothesized that basic personal values are mostly related to what I have called the "*what*" question of group participation.

More specifically, I expect a high priority given to *self-enhancement* values (achievement, power) to be negatively related to political activism because it is a costly personal investment for only limited, uncertain, and collective benefits. This should be especially the case regarding SMO activism because of the particularly strong collective component and the lower personalization of politics in social movements. People primarily motivated by self-enhancement values would therefore certainly prefer to join parties which can offer them more opportunities to be in the spotlight or to enjoy special benefits than SMOs do. For the exact same reasons, people who give priority to *self-transcendence* values (universalism, benevolence) should exhibit the opposite behavioral pattern because they may view political activism, and especially SMO activism, as a preferred way of promoting their cherished selfless, altruistic values. Regarding the second dimension of the value system, I expect citizens who give priority to *conservation* values (security, conformity, tradition) to turn away from political activism because of its natural orientation towards societal change. In this respect, contentious participation in challenging groups like new social movements should especially fail to gain the approval of people who are motivated by conservation values. Conversely, political participation and *a fortiori* unconventional forms of it should be favored by those who place a greater emphasis on *openness to change* values (stimulation, self-direction of thought and action). Indeed, they may see politics in general, and contentious politics in particular, as a valuable and exciting way of expressing themselves and exploring promising new avenues, outside the narrow framework of the traditional legal system.

This second empirical chapter follows the basic structure of the previous one quite closely. After having presented the main empirical results, the detailed discussion of the results will be divided into two parts. Firstly, the influence of personal values on overall group participation will be discussed. In line with my theoretical expectations, it will be shown that there is little empirical evidence that personal values directly affect the overall group participation probability. Secondly, I will comment on the strong, direct effects of basic personal values on *political* (vs. social) and *party* (vs. SMO) activism specifically. Finally, some

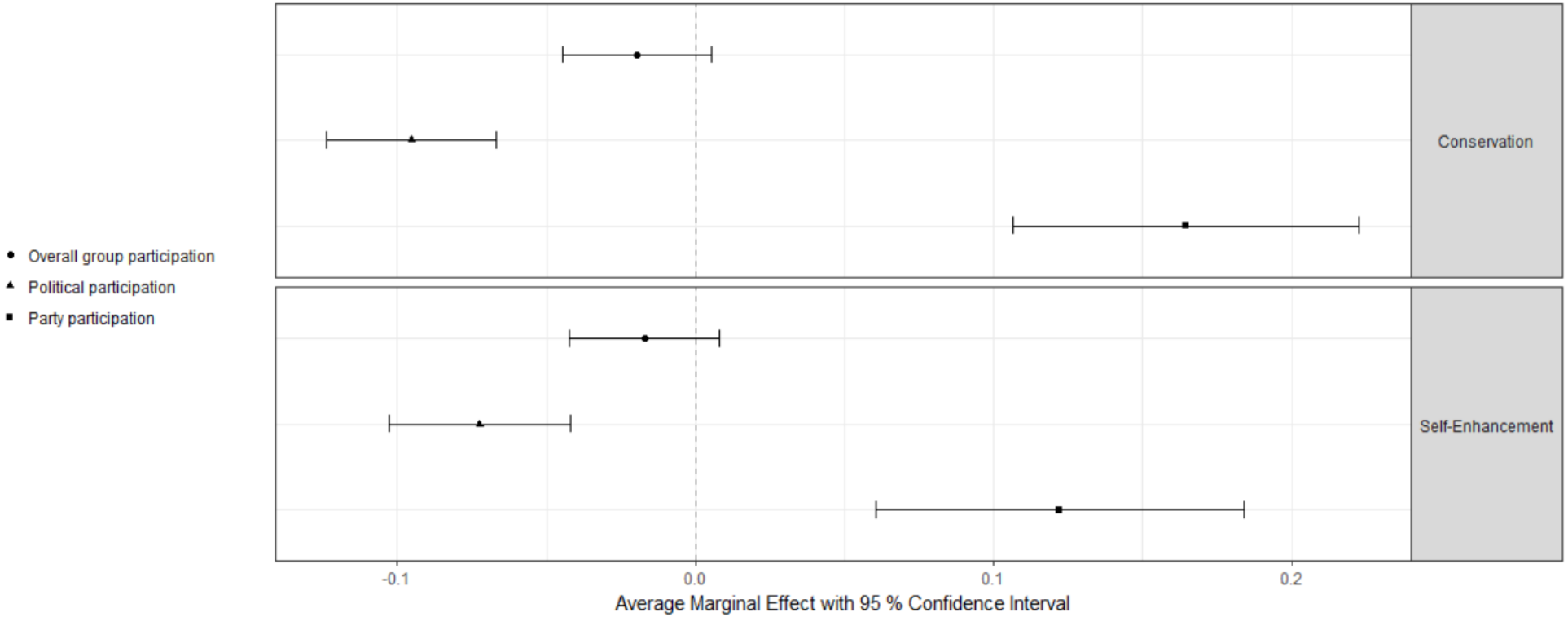
concluding remarks will be made about the relationship between personal values and various forms of group participation.

## 6.2. Empirical results

The same statistical procedures as those discussed in the previous chapter have been applied, using the same three binary dependent variables: *any group participation* vs. none (M1), participation in *political* vs. social groups (M2), and *party* vs. SMO activism (M3). Again, only the main results will be presented and discussed here. Full models, as well as Firth's penalized likelihood and multinomial logistic regressions conducted as statistical robustness checks, are shown in appendix.

Furthermore, an additional check has been carried out specifically for this chapter. As basic values are conceptualized along a motivational continuum, including all values as predictors in the same regression may – and actually does – lead to inaccurate estimates due to multicollinearity. Moreover, the circular structure of the value system implies that the relationship between personal values and any outcome should fit a sinusoid curve. As I am interested in the effects of four higher-order value types organized along two bipolar dimensions of conflicting values (*Self-enhancement vs. Self-transcendence*; and *Openness to change vs. Conservation*), including the two poles of each of those dimensions is not necessary as the way one relates to the outcome can logically be deduced from the way the other one does. Yet, sometimes the uncovered pattern of relationship may not match perfectly the expected prototypical sinusoid curve, and then an additional check is still desirable. Therefore, I estimated separately the effects of *conservation* and *self-enhancement* values on one hand, and *openness to change* and *self-transcendence* on the other hand – the latter serving only a secondary purpose of checking the former results, it is therefore reported in appendix (see Table C5).

**Figure 10 – The effects of the personal values on group participation: main results**




Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

The effects are estimated along with the following control variables: gender, age, education, income, place of residence, employment status, parenthood, and religiosity.

Results in Figure 10 broadly support my theoretical expectations. Indeed, basic personal values seem to be strong predictors of participation in political groups and parties specifically, in the expected direction and even when other important individual-level determinants of group participation are taken into account. Conversely, individual differences in terms of value priorities have virtually no statistically significant effect on the overall probability of being involved in an association (these null effects hold even when no additional control variables are included in the model).As stated above, this probably reflects the wide range of possible individual motivations behind associational involvement. While certain values may be positively related to one specific form of group participation, they may be, at the same time, negatively related to another, resulting in no overall impact on group participation as a whole. Thus, unlike traits (see previous chapter), basic value priorities seem to be poor predictors of group participation as far as the *"if"* question is concerned, but appear to be of crucial importance when it comes to the *"what"* question. I will now discuss in detail these results.

### 6.2.1. Higher-order personal values and overall group participation probability

As stated above, the results shown in Figure 10 confirm the idea that personal values do not impact significantly citizens' overall probability of group participation. Interestingly, a further investigation reveals that the effect of value priorities on the overall likelihood of group participation strongly depends on one's age. Let me say a few words about these conditional effects before moving on to the direct impact of values on specific groups in the next section.

First, regarding self-enhancement values (see Figure C1 in appendix), a higher relative priority given to these values tends to decrease the probability of group participation among citizens over the age of 30[79], whereas it strongly increases it among those under 30. Contrary to their older counterparts, youths seem thus to perceive group participation

[79] For the sake of clarity, Figure C1 and Figure C2 display only predictive margins of individuals aged between 18-30 and 31-50 years old, leaving out older citizens. The pattern of results for the latter is pretty similar to the one of those aged between 31 and 50 years old.

as consistent with the pursuit of their own self-interest. More precisely, given that self-enhancement motivational type of value encompasses both power and achievement values, it appears that young people – but not older ones – tend to consider group participation as an opportunity to demonstrate their own competence and/or to improve their social status. How to explain such opposite dynamics? One possible explanation lies in a particular "life-cycle effect" (e.g. Verba and Nie 1972). Young people are in a period of life which is crucial for their personal and, maybe most importantly, professional self-realization. This transition period is often characterized by a relative degree of uncertainty. Hence, beyond the so-called "strong-ties" of one's immediate circle (e.g. relatives, friends), being integrated to larger social or political groups may be a huge advantage for young people planning their professional future. Indeed, according to social network theory and in particular to Granovetter's highly influential work (1973), the "weak ties" one establishes with one's acquaintances may play a key role in landing a new job. This is probably all the more true in a difficult economic context where jobs are scarce, as during the years immediately following the 2008 economic crisis. Even though Germany was somewhat less affected by the crisis than other European countries, recent years have been nonetheless marked by a drive towards greater labor market flexibility – notably after the so-called "Hartz reforms" implemented by Schröder in the mid-2000s. This, among other factors, has led to a rise of "atypical" employment forms (e.g. mini- and midi-jobs, fixed-term employment) and an increasing social precariousness (Keller and Seifert 2013). Young people, as labor market entrants with little or no work experience, are especially concerned by risks of precariousness and job insecurity (Klammer and Ahles 2010; Keller and Seifert 2013: 463; Groh-Samberg and Voges 2014). In such a context, having an extensive network on which one can rely is undoubtedly a major advantage and the most ambitious young people who are primarily concerned with their own personal success may well perceive group participation as a way to launch their professional career and eventually to climb to the top of the social ladder[80]. Thus, people under 30 years old emphasizing self-enhancement values may see associational involvement as an opportunity to "prove themselves", i.e. to improve and demonstrate

[80] See e.g. Okun and Schultz (2003) on the negative relationship between age and career-related motives for volunteering.

their skills, and to initiate useful social contacts for their future[81]. By contrast, their older counterparts who are similarly primarily motivated by achievement and power values have probably already established such a personal and professional network and may therefore see associational involvement as merely a waste of time. Finally, an alternative explanation would be one of a "generational effect" (e.g. Jennings 1987). According to this hypothesis, younger cohorts might have a more instrumental view of associational involvement than previous generations (perhaps partly due to the tightening of the labor market mentioned above). Unfortunately, as in many other cases, it is "*difficult to establish if the effect attributed to age is strictly related to the life-cycle or if it is masking generational effects*" (Morales 2009: 77), and I cannot test here any of these alternative hypotheses.

The effect of conservation values is also shaped by age, though less dramatically. Interestingly, it shows almost the opposite pattern (see Figure C2 in appendix): while a higher priority given to these values does not seem to affect the probability of group participation among citizens over the age of 30, it decreases it for younger people. Again, it is impossible to determine if this is a life-cycle or a generational effect, but it might have practical implications for group participation as we know it. Indeed, Sortheix and colleagues (2017) recently demonstrated that apparently long-lasting changes occurred at the aggregate level in young Europeans' values following the 2008 global financial crisis. In particular, the authors conclude that among cohorts of youth and young adults (16-35 years old) living in 16 different European countries (including Germany) *"values that express self-protection/anxiety-control motivations (security, tradition, and, to a lesser extent, conformity) increased in importance after the onset of the GFC"* (Sortheix et al. 2017: 6)[82]. If these period effects will be proved to be persistent, implying that younger cohorts in Europe tend to increasingly endorse conservation values, and if, at the same time, a high priority given

[81] Party scholars generally refer to this kind of motivations as "selective outcome incentives", encompassing motives concerned with achieving private goals through political activism (Seyd and Whiteley 1992; see also Whiteley and Seyd 1996, 2002: 52).

[82] Reeskens and Vandecasteele (2017) also investigated the consequences of economic downturns in Europe on young people values. Although the authors conclude that, on overall, human values tend to be unaffected by economic hardship, they nonetheless found that the importance attached to hedonism values (theoretically opposed to conservation values) specifically tends to decrease among youth facing high rates of unemployment.

to those values keeps pushing young people away from associational life, youth civic participation may become a matter of concern in the next decades.

Finally, another possible interpretation of these results relies on socialization effects which are likely to take place *within* groups. Indeed, previous research has shown that motivations to participate may change over time, implying that the reasons why one joins an association in the first place may slightly differ from those which motivate him/her to sustain his/her engagement afterwards (van Haute 2009: 114). Using quantitative as well as qualitative data from in-depth interviews conducted with members of several organizations in Switzerland, Passy and Monsch (forthcoming; see also Monsch and Passy 2018) for instance show how some activists, throughout the participation process, synchronize their worldviews with those of the community they joined. Regarding the interaction effects observed here between age and value priorities, and considering that the length of engagement of people under 30 is likely to be shorter than those of their older counterparts, results might therefore indicate that the importance of self-enhancement and conservation values in explaining participation in civic groups decreases over time, throughout the participation process itself. For instance, newcomers may be initially motivated by the pursuit of self-enhancement values but then, those values would become less relevant in explaining why they eventually decide to remain involved in the group.

Unfortunately, I cannot test any of these interpretations with the data used here. Thus, further research is needed to understand how personal motivations (and beyond them, value priorities) underlying associational involvement vary over time – both from an individual perspective (cf. life-cycle effects) and from a collective one (cf. generational effects) – as well as throughout the participation process. What is made clear, though, is that the effect of value priorities on group participation probability strongly depends on age. In addition to the great variations existing between associations' goals and purposes, this could be another explanation for the lack of overall, uniform impact of personal values on the *"if"* question of group participation.

### 6.2.2. Higher-order personal values and specific forms of group participation

As expected, results for models 2 and 3 in Figure 10 show that different value priorities lead to participation in different kinds of groups (i.e. the *"what"* question of group participation). Indeed, value priorities significantly ($p < .001$) impact the choice of a specifically *political* (*vs.* 'social', non-political) engagement as well as the choice of *party* activism over a purely contentious participation. These effects are quite strong and hold even when estimated along other traditional covariates. I will now comment on them in detail.

#### 6.2.2.1. 'Know your place': conservation (*vs. openness to change*) values and political group participation

In line with my theoretical expectations, giving high priority to conservation values significantly *decreases* one's probability of being involved in a political association. All other things being equal, a one-unit increase on the conservation scale leads, on average, to a 9,5 percentage point decrease in the expected difference in political participation probability. Previous works investigating political activism have already noted such a negative link (e.g. Schwartz 2007a, 2010). As a reminder, conservation value type encompasses security, conformity, and tradition values, all of them promoting risk avoidance and resistance to change (Schwartz 2007a: 167). Hence, people who favor those values are likely to avoid political activism because it often aims at challenging the status quo and bringing about social and political change, which could reasonably "*lead to unexpected and uncontrolled outcomes that might threaten one's security*" (Vecchione et al. 2015: 89). This could be especially true in the context in which data was collected, i.e. a context of great political dissensions and troubles (see section 4.5 in Chapter 4). By contrast, participating in one's community through local associations such as clubs or charitable organizations, for instance, might be fully compatible with the promotion of societal harmony and stability so dear to people who prioritize conservation over openness to change values (see also Augemberg 2008). This probably explains why a higher priority given to conservation values is associated with a significantly lower relative probability of

being active in a political association rather than in a social one, even when other individual-level characteristics are taken into account.

More specifically, as shown in Figure 10 (see also Table C4 in appendix), this negative effect of conservation values on political activism holds especially for SMOs. Among politically active citizens, a one-unit change on the conservation value dimension is associated with a 16,5 percentage point average increase in the expected difference in probability of participating in a party rather than (solely) in a SMO, regardless of other individual characteristics. In line with previous research (e.g. Vecchione et al. 2015; Chrona and Capelos 2017), this result confirms my hypothesis assuming that citizens who attach great importance to conservation values are likely to especially harshly judge unconventional forms of participation like SMO activism. Indeed, as stated in the theoretical chapter, respect for established norms and authority is very important to people who especially cherish conservation values. They endorse individual self-restriction and the strict adherence to community rules, which are thought to guarantee public order and security – two major concerns for people who foster conservation values. Thus, because of the "outsider" nature of many post-industrial SMOs that challenge lawful authorities and the established order, sometimes even through illegal means, citizens who prioritize conservation values could be especially likely to disapprove of this form of group participation and to favor the more formal and traditional activities of political parties. These results give further evidence that people who are essentially driven by conservation values are not only more conservative on specific political issues (e.g. Constanze et al. 2016), but are also much less likely to participate in new, non-traditional political organizations.

Finally, it is worth noting that the effect of openness to change values – whose underlying motivations are the most antagonistic towards conservation values – on party rather than SMO activism specifically is, surprisingly, not significantly different from zero ($p = 0.29$;

see Table C5 in appendix)[83]. Even though the effect is in the expected (negative) direction, this somewhat calls into question the validity of the integrated structure of values and, more precisely, the very existence of a single dimension opposing conservation and openness to change values. I will return to this point later in the conclusion. Yet, be that as it may, my analyses put forth a nuanced perspective suggesting that opting for non-traditional forms of political participation has actually less to do with a strong emphasis on openness to change values than it does with a disregard of conservation goals. Or, in other words, the relationship between participation in SMOs (vs. parties) and the *Openness to change – Conservation* value dimension is less a positive one with the former higher-order value-type than a strong, negative one with the latter.

#### 6.2.2.2. 'Me against the world': self-enhancement (*vs. self-transcendence*) primacy and political group participation

Results for the second dimension organizing the value system are unambiguous and in the expected direction. As hypothesized, self-enhancement values are significantly and quite strongly, negatively related to personal involvement in political associations. Other things being equal, the average change in the probability of participating in a political rather than social group associated with a one-unit increase in the self-enhancement value scale is a decrease of more than 7 percentage point. In line with the "free-rider" effect outlined in Mancur Olson's famous work on the logic of collective action (1965) and contrary to a widespread belief among ordinary citizens, those who emphasize self-enhancement values, that is people who are primarily motivated by the pursuit of their own personal interest and success, are unlikely to engage in political groups. I expected such a negative effect because political activism "*typically seeks to advance causes beneficial to the collectivity, even at a cost to the actor*" (Vecchione et al. 2015: 89). Moreover, this costly personal investment offers most of the time only limited and uncertain benefits. People who give high priority to their own personal accomplishment are thus likely to view participation in large political groups as a waste of time. This may also explain why, again,

[83] Actually, further analyses (not shown here) indicate that a high priority given to openness to change values is indeed positively associated with SMO activism but this effect is barely significant ($p = .10$) and does not hold when other individual characteristics are taken into account.

the negative effect of self-enhancement values on political group participation is especially strong for SMO activism (see Figure 10 and Table C4 appendix). Indeed, many post-industrial movement organizations are dedicated to the creation and/or preservation of "pure" or quasi-pure public goods (e.g. peace, clean air), or to the defense of minority rights (e.g. migrants, women). Furthermore, the claim for relatively horizontal, leaderless structures of many of these new SMOs (Della Porta 2009) offer participants even fewer opportunities to demonstrate their achievements, or to exert social dominance or control over resource allocation. As confirmed by the empirical results, citizens politically committed who still actively pursue power and achievement recognition tend thus to prefer more hierarchical structures like parties which, at least in the decentralized political system of Germany, might possibly give them an opportunity to occupy a dominant position in the society.

Consistent with the circular structure of the value system this time, self-transcendence values – the most antagonistic value type – affect political and party engagement probability in the exact opposite way (see Table C5 in appendix): a high value placed on them considerably and significantly ($p < .001$) increases the individual likelihood of participating in the activities of political associations, and especially in those of SMOs. This latter effect is huge, as the average change in the party probability associated with a one-unit increase in the self-transcendence values is a 30 percentage point decrease, other things being equal. It probably indicates that people who prioritize self-transcendence values, i.e. the preservation and enhancement of others' welfare and interests, even at the expense of their own, are less affected by the rational "cost-benefit" calculations mentioned above (Vecchione et al. 2015: 89). On the contrary, they seem to perceive political and especially SMO activism as a way of striving for their personal goals by taking action for the sake of others. It should be noted that the strength of this effect may be partly due to methodological issues. Indeed, one of the five items used to measure self-transcendence values directly addresses environmental concern (i.e. "*it is important for him/her to take care of nature*") while the measure of SMO activism encompasses, among others, participation in environmental organizations. The close proximity of these two concepts – environmental concern and participation in an environmental organization –

on both sides of the equation may, of course, artificially inflate the relationship. Yet, the effects for both self-enhancement and self-transcendence values are consistent and strong enough to ensure the robustness of the observed pattern of relationship[84]. Moreover, they are in line with the findings of previous research on the effects of value priorities on political participation (e.g. Karp 1996; Výrost et al. 2007; Schwartz 2007a, 2010; Pacheco and Owen 2015; Vecchione et al. 2015).

Finally, it is interesting to note that, consistent with a few other studies (e.g. Vecchione et al. 2015; Chrona and Capelos 2017), unconventional activism (here, participation in SMOs' activities) shows stronger relationships with values than conventional participation (here, party activism). As stated by Vecchione and colleagues, "*because conventional political activities are more normative, they are probably more influenced by social expectations than unconventional activities are, and less influenced by personal decisions based on individual differences*" (Vecchione et al. 2015: 102). This would be consistent with the fact presented above that conservation value type, which encompasses values emphasizing the "*subordination of the self in favor of socially imposed expectations*" (Schwartz 1992: 40), is negatively related to the choice of SMO over party activism. Further, my results suggest that the motivational bases of political activism in general (i.e. a high priority given to self-transcendence values and a relative disregard of conservation ones) are particularly close to those of SMO – rather than party – activism in particular. This may well reflects Norris' idea of a *"Democratic Phoenix"* (2002), i.e. a growing popularity over the last decades of movements, and especially of the so-called "new" social movements, along with a decline of more traditional forms of activism like party membership[85]. It is not clear, though, how basic values may have been related to the long-term dynamics of party membership. On the one hand, following Inglehart's "*silent revolution*" thesis, many studies suggest that a broad shift in values occurred across generations in Western Europe since the second half of the 20th century (Inglehart 1977, 1990, 2008; Inglehart and Welzel 2005; see also Gundelach 1992), implying notably that "*individual allegiance is [now] directed*

[84] Many empirical studies have found self-transcendence values to be significantly associated with pro-environmental behavior (for a review, see Steg and de Groot 2012). Besides, removing the incriminated item for self-transcendence values leads to fairly similar results (not shown here).
[85] On the rise of "new" social movements, see also Tarrow (1994) and Meyer and Tarrow (1998).

*more towards inner convictions than towards outer authorities and rules*" (Pettersson and Esmer 2008: 146). Given the foregoing, this growing relative importance of self-expression values in opposition to compliance with established norms, rules, and authorities might partly explain why citizens gradually switched from parties to "new" social movements. Yet, on the other hand, parties have changed, too, over the course of the last century (Kirchheimer 1966; Panebianco 1988; Katz et Mair 1994, 1995; Mair 1997), and even the relationship itself between basic value priorities and political activism may well have changed over time. Thus, more fine-grained, longitudinal data would be necessary to better understand how changes in value priorities may affect the macro dynamics of party and SMO activism, in the short as well as the long term[86]. What is clear, however, is that personal values are strongly related to the choice of a specifically political group participation, and especially to the even more specific choice of SMO (vs. party) activism.

## 6.3. Discussion of the results and conclusion

This chapter aimed at exploring the role of basic personal values regarding group participation. The first part of the chapter was dedicated to the effects of higher-order value types on the overall group participation probability, irrespective of the kind of association (i.e. the *"if"* question of group participation). In line with my theoretical expectations, it has been demonstrated that individual differences in terms of value priorities have virtually no direct effect on group participation studied as a whole, even when the influence of the higher-order value types is estimated without any additional control variables. This is a further confirmation of the wide range of individual motivations that could underlie associational involvement. It has also been demonstrated that the effects of self-enhancement and conservation values on group participation as a whole actually strongly depends on age – opposite effects are found among young citizens (i.e. under 30 years old) and their older counterparts. Thus, with the exception

[86] So far, and to the best of my knowledge, researchers have mostly focused on the link between cultural value changes and the increasing or decreasing support for specific parties and/or the specific issues they address – notably the green parties and the populist authoritarian parties (e.g. Müller-Rommel 1989; Ignazi 1992, 2003; Inglehart and Norris 2016). More systematic empirical investigations are needed, though, to get the overall picture of value changes, the rise and fall of parties and movements, and the relationship between the two.

of these few, purely conditional relationships, personal values have been proven to be poor predictors of group participation as a whole. By contrast, remarkably strong significant relationships between higher-order values and participation in the activities of specific groups (i.e. the *"what"* question of group participation) have been highlighted in the second part of the chapter. It has been shown that different value priorities clearly lead to different kinds of associational involvement, or in other words, that the specific choice of one kind of group over another is strongly shaped by the relative importance assigned to basic values. More precisely, a high priority given to both self-enhancement (*vs. self-transcendence*) and conservation (*vs. openness to change*) values tend to inhibit political activism and especially participation in SMOs' activities. Again, even though the coefficients of logistic regressions using different samples and outcomes cannot be directly compared, these highly significant and strong relationships stand in sharp contrast to the lack of such consistent effects on group participation analyzed without any associational distinction. Interestingly enough, it has also been shown that personal values are more strongly related to SMO than party activism and that what appears to be the motivational bases of political activism in general are closer to those of the former. As discussed above, it may reflects the fact that parties are no longer the central groups around which the political life is organized.

In a nutshell, personal values, unlike traits, seem to be of little help in predicting the overall probability of group participation but are strongly related to the choice of a specific kind of group over another (political vs. social ones, parties vs. SMOs). Those results support the idea according to which personal values, as motivational factors, serve as guiding principles on which people rely to navigate the social and political arena. Depending on the relative priority they give to different and potentially conflicting values on the one hand, and the goals pursued by a certain association on the other, citizens appear to be more or less willing to participate in its activities. In consequence, and to answer a question raised at the beginning of this chapter, far from all being driven by the same inner motivations, associational participants seem to form a very heterogeneous group in terms of worldviews, as their "value profile" appears to vary considerably from one association to another. Furthermore, it is worth noting that these relationships go

beyond the traditional left-right cleavage. Indeed, the fact that, for instance, activists who attach the greatest importance to conservation values tend to be especially likely to participate in parties cannot be solely explained by the more conservative, right-wing political attitudes which those people usually hold in the political realm (e.g. Caprara et al. 2012: 268; Schoen and Schumann 2005, 2007). Indeed, other things being equal, *including one's self-placement on a left-right scale*, a one-unit increase on the conservation basic value scale is still associated with an average increase of 14 percentage point in the expected probability of being involved in a party ($p < .001$; see Table C2 in appendix). It suggests that there is something in the very nature of parties which attracts politically committed people who give high relative importance to those values, be it on the right or left end of the political spectrum (for example, given their long-established role in organizing and representing citizens' interests in the political arena, parties may be seen as guarantors of the political and institutional stability in democracies). Hence, in line with my theoretical expectations, these results confirm that core values not only shape people's political preferences (e.g. *vis-à-vis* specific public policies) as emphasized by previous research, but also, and more fundamentally, their "*relation to politics*" (Monsch 2014: 60).

# 7. Conclusion

## 7.1. Putting things together: an exploration of the joint effects of traits and values on group participation

As explained at the beginning of this thesis (see 2.2.3 in Chapter 2), two major approaches can be distinguished in the literature regarding the theoretical conceptualization of the relationship between traits and values and the way they may jointly predict outcomes. According to the first one, traits and values differ almost exclusively in the level at which they exist in the hierarchy of the personality structure, traits being conceived as antecedents to values, and the latter are therefore expected to mediate the effects of the former. By contrast, the complementary view of the two suggests that neither traits nor values would mediate each other's effects, but rather that, as fully separate constructs, they independently and simultaneously predict people's behavior (Parks-Leduc et al. 2015: 23). Beyond their unique contributions, from this perspective, traits and values may also interact in meaningful ways to predict behavior (Hudson and Roberts 2014: 70). In this latter case, compensatory, reinforcing, or fully interactive effects might be expected – meaning that the expression of one characteristic (trait or value) might respectively temper, strengthen, or shape the directional effect of the other.

As it is clear from the previous chapters, I theoretically argued in favor of a complementary approach to traits and values. Accordingly, core dispositions and goals, respectively, are expected to be independent factors which have unique impacts on group participation (the former by helping people to deal with the basic requirements of civic participation in group-based activities, the latter by providing them with the motivation to do it). If this assumption is correct, the effects of one set of factors should not be fundamentally altered when controlling for the other. Alternatively, one can also imagine that traits and values might combine to predict associational involvement. As it has been

highlighted by a brief literature review in the field of civic participation (see section 2.3 in Chapter 2), empirical studies investigating the joint effects of the Big Five and Schwartz' basic values on individual participation in civic groups are virtually non-existent. Hence, in the absence of previous research and following a mostly exploratory and inductive approach, I will not formalize here specific hypotheses regarding the way each trait and value-type could interact in predicting group participation. Yet, general expectations can be formed regarding possible overall patterns of interactions between traits and values. Because personality traits are thought to *"set the potentials that predispose people to engage in political action"* whereas *"values provide the reasons that sustain the motivation to become politically engaged"* (Caprara and Vecchione 2017: 276), two major alternative scenarios could be envisaged regarding the way values might shape the effects of traits on participation. On the one hand, values might temper the effects of traits, according to the idea that, if participating in a group is perceived as a preferred way to pursue or promote one's core values, the importance of one's personal dispositions towards such a personal involvement is reduced. On the other hand, one can expect the discriminatory power of personal dispositions to be actually stronger among highly motivated people than for people who, in any case, will be reluctant to participate in a group because it is not consistent with their core life goals. These two different interactive patterns refer to *compensatory* and *cumulative* effects, respectively. In the first case, a particularly strong motivation is thought to be able to trump the negative impact of unfavorable core dispositions. By contrast, in the case of cumulative effects, being both highly motivated and favorably predisposed to participate in a group should bring a significant additional gain, and hence those who lack either motivation or psychological skills (or both) will have a significantly lower probability to participate, regardless of the other. To give concrete examples, given the results presented in the two previous chapters, the compensatory hypothesis suggests that people whose core value priorities are congruent with the goals pursued by political associations will be especially likely to be involved in such a group, *whatever their level of e.g. extraversion*. By contrast, the cumulative hypothesis suggests that this probability will still be significantly higher among extroverted people than among introverts, because people who perceive such a commitment as incompatible with the pursuit of their most cherished values *or* who are not at ease with participation

in the activities of such groups should all be significantly less likely to participate in it. Such interaction effects would be in line with the complementary view of traits and values which has been put forward in the previous chapters.

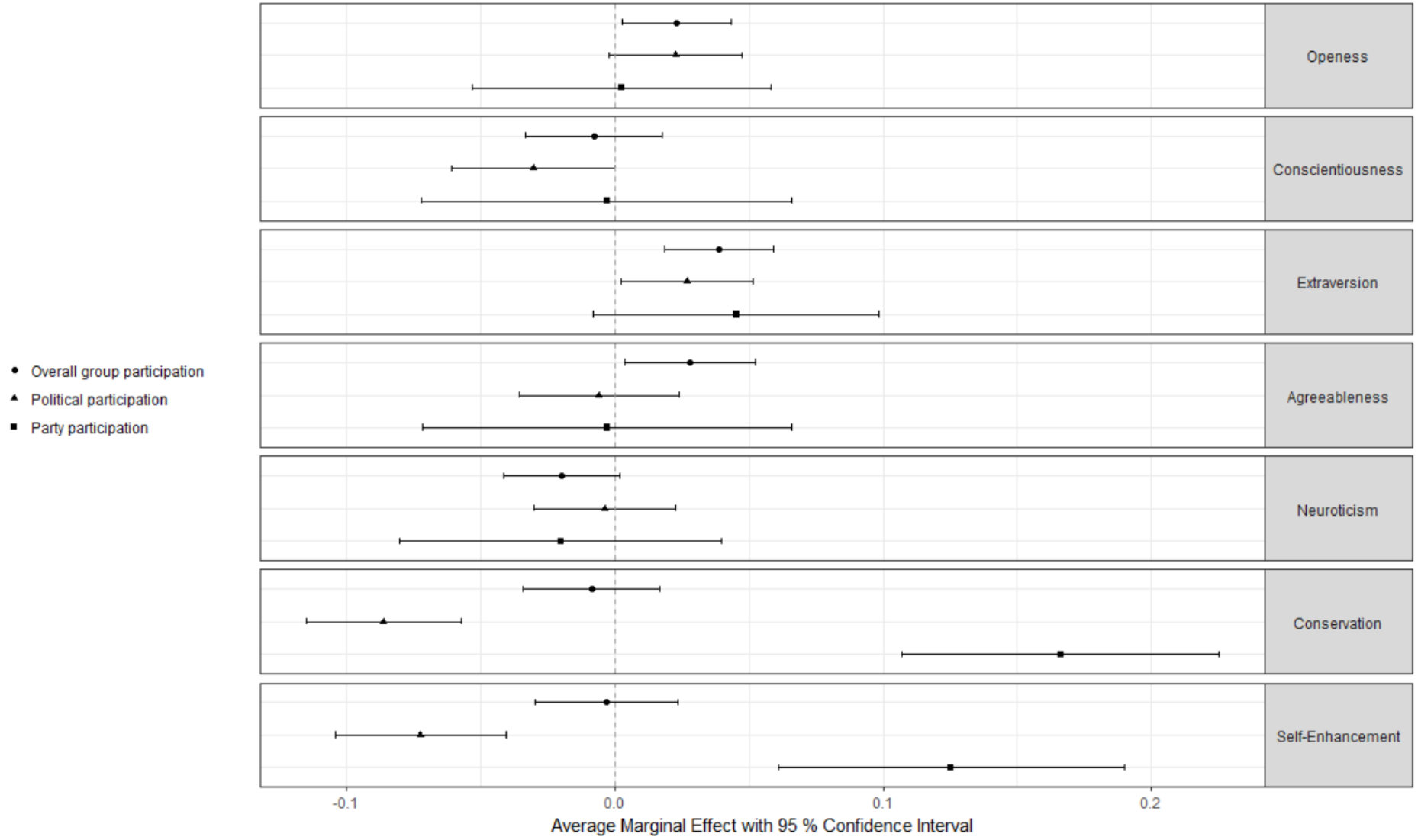
Besides, some empirical support for such a complementary approach has already been provided by the results presented above. First, as discussed in chapter 4, the zero-order correlations between traits and values are, on average, very low (ranging from -.24 to .29, with an absolute mean correlation of .11). Extraversion, for instance, which has been found to be a strong predictor of group participation in general, but also of political and party involvement in particular, is only poorly related to the openness to change–conservation value dimension and not related at all to self-enhancement and self-transcendence values. Second and most importantly, as shown in chapters 5 and 6 and in line with my theoretical expectations, traits and values appear to be related to different aspects of group participation. Personality traits tend to primarily predict *whether* one would participate in a group (i.e. the *"if"* question of group participation), whereas personal values mainly affect in *what kind(s)* of groups one would participate (i.e. the *"what"* question of group participation).

Yet, until now, the effects of traits and values have been investigated separately. Before concluding, it seems therefore important to examine how these effects might change when estimated simultaneously in a single regression model. In addition, investigating moderation effects will shed further light on the relationship between traits and values, as well as on their joint effects on group participation. I now turn to an empirical evaluation of those relationships.

### 7.1.1. The additive direct effects of traits and values

As mentioned above, a "total" model estimating both the effects of traits and values has been conducted. The main results are presented in Figure 11 below and, as for the previous analyses, the full model as well as robustness checks are reported in appendix (see Table D1 to Table D5 in appendix).

**Figure 11 – The effects of the Big Five and personal values on group participation: main results**




Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

The effects are estimated along with the following control variables: gender, age, education, income, place of residence, employment status, parenthood, and religiosity.

Overall, the results shown in Figure 11 look remarkably similar to those presented in the two previous chapters, suggesting that controlling for values barely affect the effects of traits – and *vice versa*. First, results for group participation as a whole are virtually identical to those presented in chapters 5 and 6, regarding both the magnitude and the direction of the observed relationships: extraversion, agreeableness, and openness to experience are still positively and significantly related to the likelihood of being involved in a group, while neuroticism is slightly negatively associated with it – and there is still no evidence for an effect of values. Given that one's overall probability of being involved in any association had previously been shown to be unrelated to one's value priorities (see Chapter 6), those results are hardly surprising (see Baron and Kenny 1986). Nonetheless, it confirms the robustness of the unique effects of traits on the *"if"* question of group participation discussed in chapter 5.

The choices of a political and party engagement specifically are more critical, given that both some personality factors (i.e. openness to experience, conscientiousness, and extraversion) and higher-order value-types have been previously found to impact those specific forms of associational involvement. Yet, as regards extraversion and conscientiousness, the effects of those two traits on political participation remain almost unchanged when measures of citizens' value priorities are introduced into the model. Furthermore, even though the positive impact of extraversion on party (vs. SMO) activism specifically seems lower in this "total" model, this decrease in the effect is not statistically significant[87]. It follows that openness to experience is the only trait whose effect appears to be significantly affected (reduced) by the simultaneous estimation of value effects. As mentioned earlier (see Chapter 4), this could be due to the fact that openness to experience has a strong cognitive component (Pytlik Zilig et al. 2002: 854), which may confound its executive-behavioral function with the evaluative-motivational one of values. Nevertheless, this is the only piece of evidence compatible with the idea of a possible partial mediation of traits' effects by personal values. And more interestingly, openness to experience also shows the most significant and consistent

[87] A comparison of the coefficients of the two regression models indicated that the null hypothesis (i.e. equality of the two parameters) cannot be rejected ($X^2 = 0.78$, $p = 0.38$).

interaction pattern with value priorities in predicting personal involvement in political associations, as will now be discussed[88].

### 7.1.2. Interaction effects between traits and values

As mentioned above, the following investigation of joint effects of traits and values on group participation is mostly exploratory and I did not develop specific hypotheses regarding which traits and values should interact. Instead, I only proposed that, in general, valuable dispositions for group participation and value priorities congruent with one specific form of associational involvement might be either compensatory or reinforcing in predicting this kind of group participation. Thus, all the possible interactions have been tested and included in *ad hoc* logistic regression models (see Table D6 and Table D7 in appendix)[89].

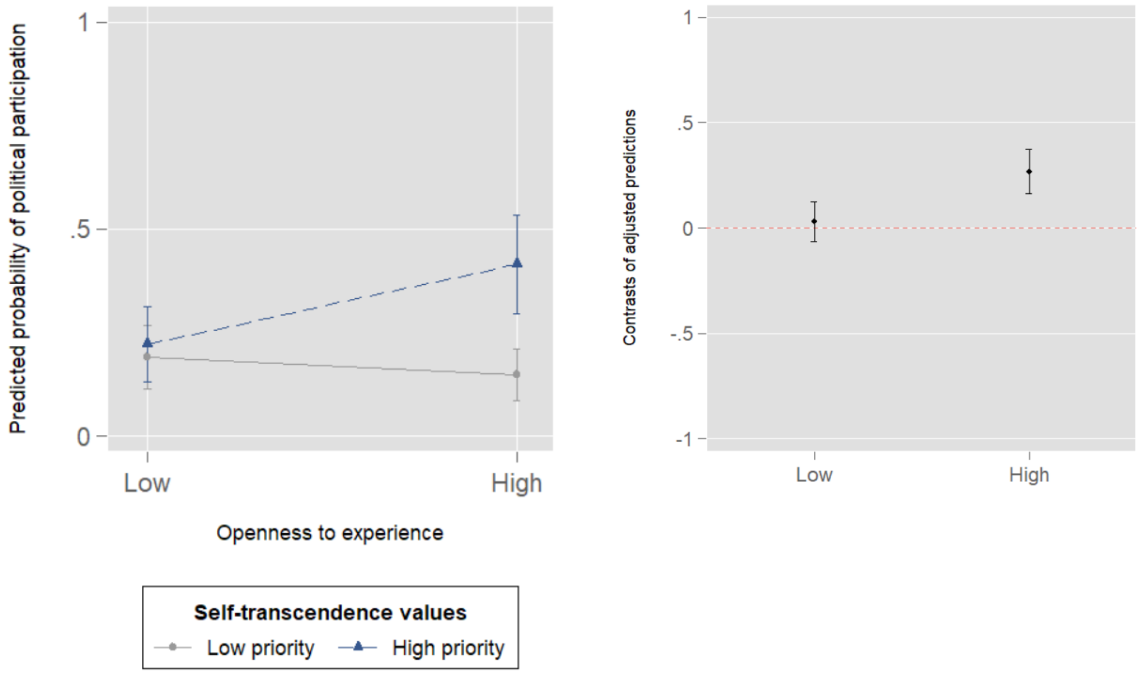
The first observation which can be made on the basis of these additional analyses concerns the very few interaction effects observed between traits and values. Even a careful visual inspection, beyond the sole criterion of the statistical significance of the interaction term (see section 4.4.2 in chapter 4), leads to the conclusion that the effects of traits and values are largely independent. Nonetheless, the few interaction patterns found are informative and deserve some comments. As mentioned above, openness to experience is the personal disposition whose directional effect on participation appears to be the most consistently and significantly ($p < .05$) shaped by one's value priorities, in particular regarding values of self-transcendence vs. self-enhancement. As a reminder, both openness to experience and self-transcendence values had been found to foster

[88] There is a lively debate in the literature about the question of whether the same variable can simultaneously function as a mediator and a moderator, some researchers arguing that it is possible (e.g. Beauchaine et al. 2005; Preacher et al. 2007) and others that it is not (e.g. Jacoby and Sassenberg 2010; see also Kraemer et al. 2008). Here, because my correlational design does not allow for (strong) causality inferences and given the somewhat stronger evidence for moderation effects (see next pages), I will not go further with mediation tests. Future research using extended longitudinal designs would be useful to thoroughly explore this possibility.

[89] For practical reasons, I ran one regression model per higher-order value-type – implying that all the interaction effects involving a same value-type have been simultaneously estimated. Separate estimations (not shown here but available on demand) yielded fairly similar results. In order to avoid multicollinearity issues, all the continuous predictors included in the models have been mean-centered.

participation in political groups (see chapters 5 and 6). Yet, as shown in Figure 12 below, the effect of openness on political participation is actually shaped by the relative importance attached to self-transcendence (vs. self-enhancement) values. Indeed, while among group participants who prioritize those values over the pursuit of self-centered goals (e.g. social recognition of one's own success or achievements) a high level of openness is indeed associated with a significantly greater probability of being involved in a political group, a slightly negative (though not significant) effect is found at the other end of this value dimension.

**Figure 12 – The joint effect of openness to experience and self-transcendence values on political participation (adjusted predictions and their contrasts with 95% CIs)**

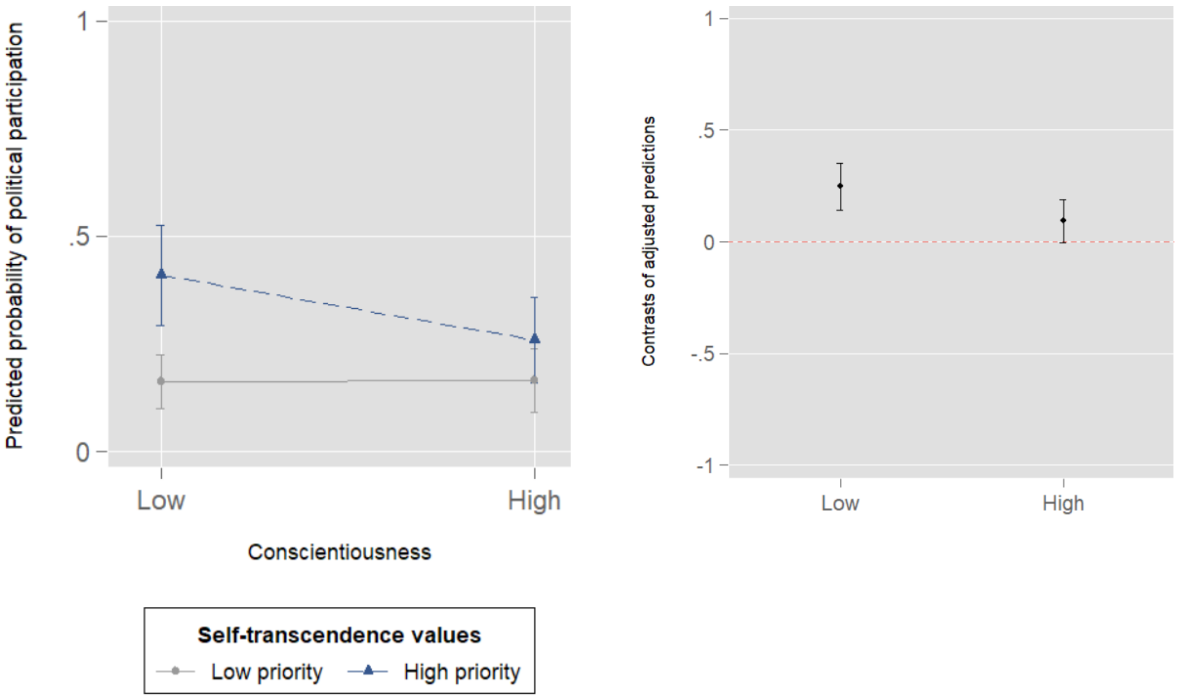



Hence, high levels of openness are conducive to political participation primarily among people whose value priorities are compatible with such an engagement. Otherwise, being particularly open-minded hardly makes any difference and even tends to lower the probability of joining specifically a political group. Interestingly, a similar comment can be made regarding the value effect: indeed, at the lowest levels of openness to experience, whatever the priority given to self-transcendence values, the probability of being involved in a political group is virtually the same and is especially low. By contrast, among highly open-minded people, the congruence between one's value priorities and the goals

pursued by political groups seems to be much more determinant as, other things being equal, people who cherish self-transcendence values are significantly more likely to engage in political collective action than those who do not give priority to such values. This interactive pattern perfectly mirrors those involving self-enhancement values (see Figure D1 in appendix). It implies that, ultimately, this is the *combination* of a high level of openness to experience and a higher relative importance attached to self-transcendence rather than self-enhancement values which leads to the higher probability of political activism. Furthermore, a fairly similar trend emerges from the interaction of the same openness disposition and the second value dimension, opposing conservation and openness to change values. Again, people who are both very open-minded *and* primarily motivated by openness to change – rather than conservation – values are the most likely to participate in political associations (see Figure D2 in appendix). However, this effect is somewhat less pronounced and the interaction term fails to reach conventional levels of statistical significance.

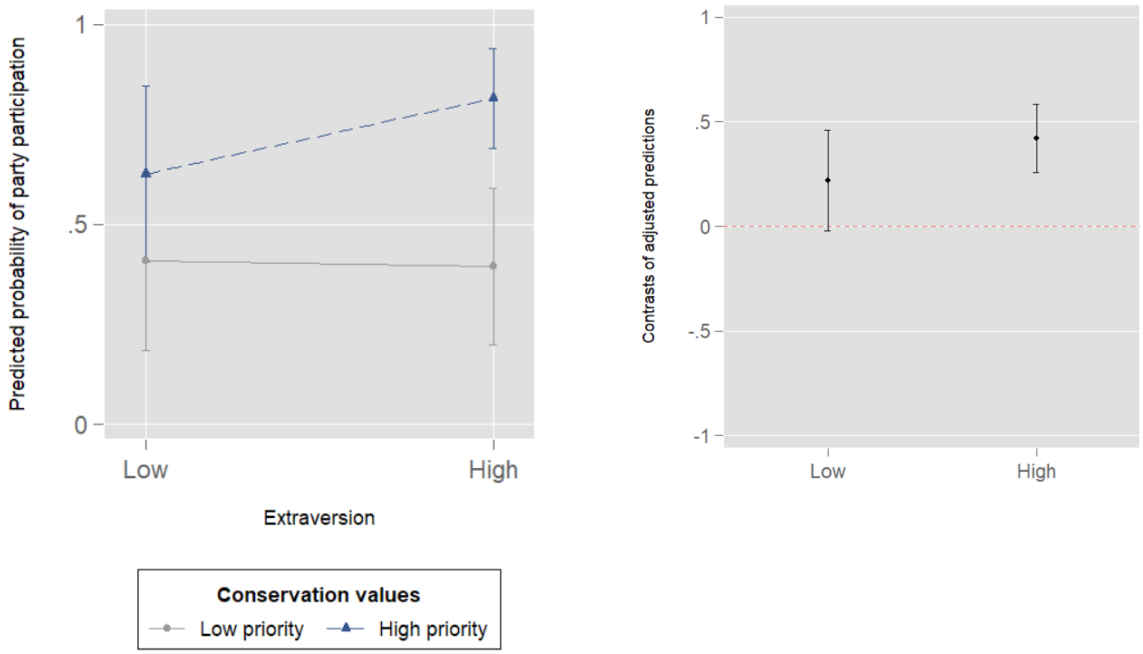
Still regarding participation in political (vs. social) groups, the effect of another personal disposition appears to meaningfully interact with the relative importance one attaches to self-transcendence values. Indeed, as shown in Figure 13 below (see also Figure D3 in appendix), a high level of conscientiousness on political participation decreases the likelihood of such an engagement essentially among people who express a deep concern for others' – rather than their own – welfare and interests, while it has no impact among their more self-focused counterparts. Given that lower levels of conscientiousness have been shown to facilitate involvement in political associations (see Chapter 5), Figure 13 suggests again a reinforcement effect between core dispositions and goals. Again, when the pursuit of one's most cherished values appears in complete contradiction to the political goals of parties and SMOs, whether or not such an engagement is facilitated by a favorable personal disposition does not really matter. Conversely, when one's level of conscientiousness is so high as to constitute a strong dispositional barrier to political engagement, people who give priority to self-transcendence values are no longer significantly more likely to participate in a political group.

**Figure 13 – The joint effect of conscientiousness and self-transcendence values on political participation (adjusted predictions and their contrasts with 95% CIs)**




Finally, the positive effect of extraversion on political participation appears to be uniform across the subsample of group participants and thus not to depend on citizens' value priorities. Yet, as a reminder, extraversion does not only foster political participation in general, but also, and above all, party activism specifically. When it comes to the latter, once again, a similar interactive pattern emerges with conservation values – which have been found to be among the strongest predictors of party activism. In particular, higher levels of extraversion are associated with a higher probability of being involved in a party as far as citizens give relatively high priority to those values – and conversely, the role of the latter in promoting conventional activism is especially strong at high levels of extraversion (see Figure 14 below). Nonetheless, this result must be treated with caution as the overall interaction is not significant at the .05 level ($p$ = .115) and the interaction of extraversion with openness to change values does not mirror those described above. This inconsistency along the value dimension meant to oppose conservation and openness to change values is reminiscent of the fact that the latter appear to be, unexpectedly, not significantly associated with party activism, whereas conservation values show a strong positive effect (see Chapter 6). I will return later to this point.

**Figure 14 – The joint effect of extraversion and conservation values on party participation (adjusted predictions and their contrasts with 95% CIs)**




In sum, the results of this last empirical section merely confirm the robustness of those presented in the two previous chapters and provide new evidence for the complementary role and cumulative effects of personality traits and personal values in predicting participation in civic groups. In a nutshell, both appear to be important personal characteristics when it comes to associational involvement and neither seems to be reducible to the other. I will now sum up the main findings of the present research and discuss their implications regarding our understanding of personality traits, personal values, and citizens' involvement in civic groups.

## 7.2. Main findings, implications and contributions

This research was aimed at highlighting the importance of two sets of core individual characteristics, personality traits and personal values, for personal involvement in civic groups. These endogenous psychological factors have been shown to powerfully shape various facets of citizens' political behavior in numerous studies but, as shown by a brief literature review (see Chapter 2), few have focused so far on individuals' participation in civic groups. By distinguishing between what I have called the *"if"* and the *"what"* questions of group participation and based on conceptual distinctions between traits and

values (i.e. enduring *dispositions* and *goals*, respectively), I argued that traits can provide (or fail to provide) citizens with certain basic psychological skills valuable for civic participation in group-based activities – and should therefore be mainly related to the *"if"* question. As such, I proposed that a favorable personality disposition may even help compensate for a background disadvantage due to a lack of social, cultural, or time-related resources. By contrast, I conceptually linked basic values to the personal motivation for such a personal involvement. Because different groups pursue different kinds of goals and choose different ways to attain those goals, individual value priorities might serve as a compass in the associational realm, directing citizens towards groups whose goals and practices are the most congruent with their own cherished values – hence addressing the "*what*" question of group participation. The empirical analyses presented above provided some empirical support for these baseline assumptions. The main findings are summed up below.

### 7.2.1. Summary of the main findings

Regarding *personality traits*, results presented in chapter 5 have confirmed that, as far as the *"if"* question is concerned, traits indeed do matter for group participation. To answer a question raised at the beginning of that chapter, indeed, to a certain extent, some citizens may be more likely to stay away from civic life "*simply because of who they are*" (Weinschenk 2013: 11) – for instance, because they tend to feel uncomfortable in unusual situations where they have to interact and cooperate with strangers, potentially holding opinions that differ from their own. In this sense, a parallel could be drawn with the well-known self-censorship process in electoral behavior, according to which people who lack some important cognitive resources decide themselves to stay out of the electoral game (Hayes et al. 2006). On the contrary, other citizens show favorable psychological dispositions towards participation in civic groups which make them more likely to become personally involved in those groups, even though they may simultaneously lack important resources. Yet, not all of the Big Five traits have been found to be equally powerful in this regard.

Consistent with previous research, results confirmed that *extraversion* is by far the most important "*foundational personality disposition*" (Gerber et al. 2010: 111) regarding associational involvement. Other things being equal, the more extroverted a citizen is, the greater the probability that he or she will participate in a civic group. Moreover, corroborating the trait-resource substitution hypothesis, it has been demonstrated that extraversion could even contribute to partially overcoming obstacles to group participation. More precisely, it has been shown that a high level of extraversion can act as a surrogate for social capital created through religious channels or social integration opportunities opened up by parenthood – the two most important classical predictors of group participation (see Chapter 4). Furthermore, and quite unexpectedly, extraversion seems to be not only a good predictor of group participation as a whole, but also of political and party engagement specifically. As explained in chapter 5, this could also "simply" indicate that extraversion foster multi-engagement, which would make sense from a theoretical point of view and be consistent with findings of previous works (e.g. Bekkers 2005; Okun et al. 2007). What is clear, at any rate, is that extraversion is a strong predictor of citizens' participation in civic groups and the most important personal dispositions in this regard..

To a lesser extent, *openness to experience* has also been shown to foster associational involvement. Yet, unlike extraversion, this trait does not help compensate for a lack of resources, quite the contrary. When interacting with education level, a proxy for cultural capital, a higher level of openness tends actually to be associated with a *stronger* discriminatory power of this important resource. That goes clearly against the idea of a trait-resource substitution, and therefore it partly invalidates this hypothesis. Another unexpected result comes from the positive effect of openness to experience on political – and, but to a lesser extent, SMO – activism specifically. Indeed, beyond the overall effect of openness on group participation as a whole, this trait seems to be especially related to these specific types of associational involvement – however, the lack of statistical significance of its effect on SMO activism when estimated along other covariates calls for caution. Furthermore, openness to experience has been found to be the personality factor which shows the stronger and most consistent association patterns

with personal values. Even though these empirical associations are not strong enough to call the conceptual independence of traits and values into question (see previous section), it tends to confirm the somewhat "special status" of openness among the Big Five, which had already been highlighted by previous research (see Dollinger et al. 1996; Parks-Leduc et al. 2015). As such, this is a quite challenging case as regards the conceptual distinction between the executive-behavioral function of traits and the evaluative-motivational one of values. In future research, special efforts should be made to disentangle those two functions – including at the measurement level – in order to better understand how openness to experience, as a personal disposition, may impact citizens' behavior.

While findings of previous research regarding the effects of *Neuroticism* on civic participation were somewhat ambiguous, results presented in chapter 5 confirmed my theoretical intuition about a negative effect of this trait on the overall group participation probability. The more easily stressed and anxious an individual is, the lower is his or her probability of being engaged in any association. Given that neither direct nor indirect effects were found on the choice of specific forms of associational involvement (in political vs. social groups, in a party or a SMO), it further confirms that emotional stability (the reverse of neuroticism) is a valuable disposition for group participation in general, whatever the kind of groups considered.

Somewhat similarly, my theoretical expectations regarding the relationship between *Agreeableness* and group participation as a whole were empirically confirmed. Indeed, it has been shown that this trait has, as expected, a relatively strong, positive and significant direct effect on the probability of being involved in an association. By contrast, it does not appear to exert a significant influence on the choice of a specific kind of groups. In particular, although the effect of agreeableness regarding the *"if"* question of group participation seems to be especially strong for non-political associations, contrary to certain previous studies (e.g. Mondak et al. 2010; Gerber et al. 2011a,b; Ha et al. 2013) there was no evidence in my analyses for a negative relationship regarding political participation specifically. Rather, a particularly trusting, compliant, and empathic general

inclination appears to be a great asset when it comes to collaborate with other people within civic groups, whatever the group in question.

Finally, as anticipated, one's level of *Conscientiousness* was not found to be significantly related to the overall likelihood of group participation. However, and quite surprisingly, being highly conscientious appears to be an *un*favorable disposition towards political participation specifically – or possibly, as previously suggested (see Chapter 5), towards multi-engagement. This result is fairly similar to those of Bekkers (2005) in his study on participation in voluntary associations in Netherlands. Indeed, the author found that higher levels of conscientiousness are associated with an especially low probability of getting involved in (quasi-)political groups, as well as simultaneously in both non-political and political groups (Bekkers 2005: 445). Moreover, Bekkers' results similarly indicated that *"the relation of conscientiousness with civic engagement does not decrease when conservative attitudes are taken into account"* (Bekkers 2005: 448). The author confesses that he has little explanation for this negative relationship, and so do I. Future research is needed to understand why – or under which conditions – the more dutiful, organized, and self-disciplined people are so unlikely to take part in group-based political activities.

In conclusion, my hypotheses regarding the direct effects of the Big Five were generally supported by the results presented in this thesis. Four traits play an important role in predicting citizens' affiliation with any kind of civic group: extraversion is the most important of them, followed by agreeableness, openness to experience, and neuroticism (the latter being negatively related to participation). As expected, the more extroverted, agreeable, open-minded, or emotionally stable an individual is, the more likely he or she is to be part of a civic group. A high level of extraversion can even reduce the critical importance of other long-established predictors of associational involvement. While the statistical strength and magnitude of the observed effects are relatively low, they are still quite remarkable for such distal predictors. Indeed, as core dispositions, traits are deeply rooted in an individual's personality and refer to very general, daily behavioral tendencies. Moreover, most of these effects remain of practical importance when other "sociological" inter-individual differences are taken into account. Those effects are all the

more impressive that, as discussed in chapter 4, the analyses of this research rely on brief, "*rudimentary measures of Big Five traits that […] appear to be entirely unrelated to politics*" (Gerber et al. 2012a: 672). Given the very low number of items on the basis of which the scales were computed, and then their low reliability, it is almost surprising that such effects were found.

With regard to *personal values*, the analyses presented in chapter 6 have largely confirmed my theoretical expectations regarding their impact on group participation. In sharp contrast to personality traits, values showed no significant direct association with group participation taken as a whole – even when estimated without additional control variables. In other words, knowing one's value priorities is of little help in predicting whether one will be civically active or not. In particular, it has been shown that the effects of values on the overall group participation probability crucially depends on one's age, the pursuit of both conservation and self-enhancement motivational goals producing opposite effects among young people (18-30 y.o.) and their older counterparts. As discussed earlier, more research – notably using longitudinal designs – is needed to determine if those results are due to life-cycle or generational effects. On the contrary, strong and consistent differences emerged when participants of different groups were contrasted with each other, indicating that different value priorities lead actually to personal involvement in different types of groups – hence confirming the primary role of values on the *"what"* question of group participation.

More precisely, giving a higher priority to *conservation* values strongly decreases one's probability of being engaged in a political (rather than social) group, and especially in a SMO exclusively. Consistent with my theoretical expectations and the findings of recent empirical studies (e.g. Schwartz 2010; Vecchione et al. 2015; Chrona and Capelos 2017), pursuing goals mainly related to the preservation of the status quo and valuing "*the certainty it provides in relationships with close others, institutions, and traditions*" (Schwartz 1992: 43) seems largely incompatible with unconventional forms of political activism – but, and this is a new result, not with participation in social, non-political groups. In the realm of political group participation, party activism hence appears to be a much preferred way

for people primarily motivated by conservation goals. Interestingly, however, emphasizing instead one's own autonomy of thought and action and being proactive in the search for new challenging experiences does not seem to be significantly associated with party activism specifically. Hence, while the promotion of conservation goals might serve as a useful compass in the associational realm, a particularly high priority given to openness to change values does not appear to be a relevant criterion for judging the relative worthiness or legitimacy of different forms of political activism. As will be discussed below, this surprising result somewhat contradicts the idea according to which there would be a single value dimension opposing conservation and openness to change values.

Regarding the second dimension of the value system opposing *self-transcendence to self-enhancement* values, the findings presented in this thesis confirmed the strong positive effect of the former on citizens' likelihood of participating in political groups and especially SMOs. This result is in line with previous research (e.g. Karp 1996; Spini and Doise 1998; Cohrs et al. 2007; Schwartz 2007b, 2010; Firat 2014) and confirms that people who consider the preservation and enhancement of others' welfare as a central guiding principle in their lives tend to regard political activism as a great opportunity to act on their cherished values. Yet, among politically active citizens, the greater the importance attached to those values, the lower the probability of being involved in a political party. Participating in such a traditional organization seems thus incompatible with the strong altruistic motivations of certain political activists – which may reflect the well-documented growing disaffection towards parties and their elected officials (e.g. Poguntke and Scarrow 1996; Dalton and Wattenberg 2000; Dalton 2004; Dalton and Weldon 2005). Furthermore, while many previous studies have found that being primarily motivated by self-enhancement goals has no significant impact on any form of civic participation (e.g. Karp 1996; Spini and Doise 1998; Cohrs et al. 2007; Chrona and Capelos 2017), my findings revealed that, as expected by the circular value structure, a strong emphasis on such goals actually strongly discourages political and *a fortiori* SMO activism. Interestingly, however, it does not decrease the likelihood of participation in social groups, which thus does not appear incompatible with the pursuit of one's own

personal interests. The same goes for party engagement as a specific kind of political activism which seems somewhat congruent with the primary self-focused concerns of some politically committed citizens. In sum, the trade-off between the competing self-enhancement and self-transcendence values is a strong predictor of one's decision to participate in one type of group rather than another.

While previous research has mostly focused on the impact of personal values on attitudes, political values, or electoral choices, this thesis demonstrated that they are also powerful motivators for civic engagement. More precisely, individual basic value priorities help citizens to navigate the rich and complex associational realm by serving as selection and evaluation criteria. Depending on their goals and practices, different organization-types are thus likely to attract different citizens; their personal motivation being strongly dependent on the perceived level of congruence between their own most cherished values and those of the association. Given the abstractness of basic values, the statistical strength and magnitude of the effects found for specific forms of group participation, even when estimated along with other covariates, is quite remarkable. It is also worth noting that these effects remain highly significant and quite strong when taking into account citizens' ideological self-placement, suggesting that basic values underlying specific forms of associational involvement are deep, powerful motivators which cannot be reduced to the expression of an ideological contrast between left-wing and right-wing citizens and/or organizations. Moreover, as already suggested in chapter 4 (see 4.5), it is most unlikely that the highly polarized political context in Germany at the time data was collected is sufficient to explain such relationships between basic values and (different forms of) political activism. For instance, anti-immigrants activists, who may be expected to place a stronger emphasis on conservation values than their opponents, were *a priori* as likely as them to opt for an exclusively unconventional form of participation as the PEGIDA movement organizations were numerous and highly active during this period. And similarly, pro-immigrants activists, who are likely to give special importance to self-transcendence values, may well have decided to join parties as many of them (mainly left-wing ones, but not exclusively) have openly taken a position in favor of opening up German borders to refugees. Hence, the relationships found between basic value

priorities and specific forms of activism are likely to reflect more than a "simple" ideological conflict exacerbated by the large influx of migrants to Germany during the year of data collection. Nonetheless, it is possible that the role of personal values in guiding individuals' behavior in the political realm is especially important in times of political crisis – implying that one would find smaller effects in a less "extraordinary" context. For example, while facing such a context of great uncertainty, people who give special importance to conservation values might be particularly tempted to participate in politics through conventional channels, in order to preserve or reinforce the existing institutions, whereas other people might view the very same situation as a "window of opportunity" to precisely challenge the established order. Of course, this speculative hypothesis needs further testing. Yet, be that as it may, it would not contradict the results discussed above and, all in all, these results highlight again the importance of taking into account fundamental, enduring psychological characteristics when scrutinizing citizens' social and political behavior. Moreover, as discussed in Chapter 5, it has the potential for improving our understanding of the logics of collective action, such as the fact that political parties are losing appeal whilst SMOs are becoming more and more popular.

Finally, the results of the additional analyses presented at the beginning of this chapter regarding the joint effects of personality traits and personal values on group participation provided further empirical evidence for a complementary view of traits and values, according to which these are distinct constructs – core *dispositions* and *goals*, respectively – which serve distinct purposes and have unique impacts on behavior. This theoretical conceptualization is indeed supported by at least three empirical observations. First, when a "total" model is estimated, i.e. when the effects of traits and values are simultaneously estimated in a single regression model, the results are fairly similar to those discussed above. In particular, all but one trait effects remain statistically unchanged when citizens' value priorities are taken into account. Given the relative weakness of the initial coefficients in comparison with the strong and much larger impact of values regarding notably the *"what"* question, there is rather convincing evidence of the robustness of the independent trait effects on group participation. Second, the absence of any significant indirect effect of personal values – when interacting with personal

dispositions – on the overall associational involvement probability further confirms that value priorities, unlike traits, are indeed poor predictors of the most general *"if"* question. Third, the few significant interaction effects of traits and values involve personality dimensions which had been previously shown to have a direct effect on the *"what"* question of group participation and all confirm the cumulative (rather than compensatory) hypothesis, according to which the effects of traits and values are mutually reinforcing. Indeed, as shown in section 7.1.2 above, the more congruence between one's value priorities and the goals pursued by a group, the stronger the effect of one's basic psychological skills on the probability of taking part in the activities of this group – and, conversely, the lower the dispositional barriers, the higher the importance of the motivational and directional role played by personal values. Ultimately, in the most extreme cases, when personal involvement in a specific kind of group is clearly contrary to one's most cherished basic values *or* when participation through this form of collective action is seriously hampered by some unfavorable personal dispositions, the probability of being involved in such groups is almost the same whatever the "score" on the other dimension: very low. On the contrary, the combination of goals congruent with those of an association *and* valuable core dispositions for participation in its activities leads to the higher probability of joining it. For instance, citizens who strongly believe that one must not focus on one's own self-interests and who are, at the same time, particularly favorably disposed towards new life experiences are especially likely to engage in political collective action. Among them, those political activists who are both highly extroverted and who give high relative importance to conservation values (i.e. values promoting individual self-restriction and obedience to established authorities and rules in order to preserve societal harmony and stability) seem to be the most likely to get involved in parties[90]. In other words, beyond the direct, independent effects which had been established in previous chapters and which I just summed up in the above discussion, it has been shown that values and certain traits – most notably those which have been found to be significant predictors not only of group participation in general but also of specific forms of engagement in particular – may further interact in a strengthening manner.

[90] Besides, those two joint effects are confirmed by further analyses (not shown here but available on demand) predicting political and party activism, respectively, among the whole sample.

### 7.2.2. Contributions to the existing literature and practical implications

Findings from the present research add to our understanding of personality traits, personal values, and associational involvement in several ways, and have theoretical as well as practical implications. In particular, it has been demonstrated that breaking down associational involvement into its two crucial components (i.e. whether one would participate, and if so, in what kind(s) of groups) and observing the respective effects of personality traits and personal values on those distinct facets of group participation offers an opportunity to improve our knowledge in the fields of both participation research and personality and social psychology.

To begin with, this thesis offers valuable insights into personality research. Indeed, looking at the effects of both individuals' traits and values on a same given outcome allows one to disentangle them and to observe the respective contributions of each of these two distal predictors. In particular, as mentioned above, the analyses and results presented in this thesis are compatible with the idea according to which personality traits and personal values are distinct psychological constructs which are likely to influence people's behavior in different ways: the former by setting the potential for action, the latter by providing the motivation to turn this potential into action. As such, core dispositions and goals appear to complement each other and to show separate and cumulative effects. It concurs with the intuition of Winter and his colleagues that *"traits and motives are not the same and cannot simply be mapped onto each other"* (Winter et al. 1998: 236). Or, in other words, it gives further support to the idea that the two concepts are *not* interchangeable and should not be theoretically nor empirically confounded. Although Gordon Allport himself, in his pioneering work on personality (1937), already insisted that "*personality traits should be non-evaluative*" and hence "*was explicit in his efforts to remove evaluative terms that related to an individual's "character", or values"* (Parks-Leduc et al. 2015: 23), traits and values continue to be often conflated in practice (see for instance the previous discussion about the measure of openness to experience in the BFI-10). In this sense, some researchers continue to adopt more or less explicitly a subsuming view, notably in emphasizing (solely) the motivational components of traits, which regrettably contributes to blurring the lines between personality traits and personal values, and eventually adds

to the "*jingle and jangle fallacies*" (Block 1995: 210). Of course, some core dispositions may have motivational implications because they are *"likely to influence both the ease with which personal projects can be accomplished and the alternate routes through which they are carried out"* (Little et al. 1992; cited in Parks and Guay 2009: 681), yet the content of the goals one chooses to pursue is most likely ultimately set by one's personal values, because of the stronger cognitive nature of the latter (e.g. Parks-Leduc et al. 2015 : 6 ; Roccas et al. 2002). The present research shows the benefits of considering both of them when trying to explain citizens' social or political behavior, while keeping in mind the conceptual differences between these two sets of psychological factors.

Regarding the literature on civic engagement, the findings of this thesis emphasize the importance of taking into account the role of enduring psychological structures in enabling and motivating citizens to participate in civic life. As explained in Chapter 3, at the individual level, two major theoretical models have been developed in the literature on civic participation to explain associational involvement. On the one hand, the so-called "resource model" emphasizes the role of the *"stockpile of resources"* (Verba et al. 1995: 8) one can rely on when considering civic participation (e.g. economic, cultural, or social capital) . Those resources are thought to help enable citizens to become involved in civic groups by reducing the cost of such an engagement. On the other hand, a "socio-psychological model" highlighted the crucial role of several political attitudes (e.g. political interest, efficacy, or trust) in explaining people's motivation to participate in public life. In this respect, following Olson's (1965) pioneering work, many scholars have further emphasized the role of different kinds of incentives to associational involvement, in the form of expected benefits derived from one's participation within an organization (e.g. express one's values, develop and strengthen social relationships, boost one's career development). Those latter studies build links between "supply-side" and "demand-side" explanations of associational involvement, i.e. between organizational-level and

individual-level explanations[91]. Without casting doubt on their relevance, the results presented in this thesis shed new light on those classic explanations of civic participation.

First, regarding the role of personal resources in making it easier for some people to become involved in associations, the results presented in the previous chapters gave further empirical support to the idea that resources tend to be powerful predictors of associational involvement in general, regardless of the specific form of group participation. This confirms an initial intuition formed on the basis of a literature review of different subfields of participation research (e.g. volunteering, party membership, social movement studies) which developed in relative isolation, despite the fairly obvious overlap in their content. Furthermore and more importantly, it has been shown that some core psychological dispositions may play a somewhat similar role, which remains of practical importance when "sociological" inter-individual differences are taken into account. In certain cases, a valuable personal quality for participation in civic groups (e.g. extraversion) can even help overcome a lack of social resources, and on the contrary, the social component of collective forms of civic engagement may well dissuade highly introverted, anxious, uncompromising, or close-minded citizens, whatever the type of group under consideration. Hence, this research adds to the growing body of evidence that, with modernization and individualization processes, the importance of individuals' socio-economic status in explaining civic participation tends to be in decline in Western democracies, leaving room for other personal factors such as core dispositions and goals (e.g. Caprara and Vecchione 2017: 253-254; see also Caprara 2007).

Regarding the latter, the effects of personal values on the choice of specific forms of participation which have been shown in this thesis are reminiscent of previous studies on the role of different kinds of incentives in explaining civic participation. In particular, the importance of self-transcendence values for political activism seems to confirm the

[91] As explained by Ramiro and Morales, the "supply" and "demand" labels are used differently by scholars, depending on the perspective they adopt: *"For example, Seyd and Whiteley (2004) argue that citizens form the supply (in the form of activists) and organizations the demand (requiring members), while Richardson (1995) and Jordan and Maloney (1997: 77) think that organizations form the supply (offering policy goals and other goods) and citizens the demand"* (Ramiro and Morales 2014: 517).

fact that, as suggested by many authors who criticized Olson's utilitarian perspective, altruistic motivations and collective incentives may actually be great predictors of participation in political groups (e.g. Seyd and Whiteley 1992; Muller and Opp 1986)[92]. Furthermore, the fact that this effect appears to be especially strong for participation in SMOs – in contrast with party activism which seems to attract politically commited citizens who attach somewhat more importance to self-enhancement values – echoes the results of Bäck and colleagues' (2011) study, which found that collective incentives are of greater importance for participation in manifestations (which are at the core of many SMOs' "*repertoire of contention*" (Tilly 1986: 2)), whereas party activity is mostly affected by selective incentives. By contrast, the results regarding the second value dimension, opposing conservation to openness to change values, are more difficult to link with the existant literature on incentives, and therefore shed new light on the various motivations which may underlie different forms of civic participation. More importantly, the findings of this research suggest that people's sensitivity towards specific kinds of incentives (which are proximal determinants of group participation) are likely to be actually deeply rooted in core aspects of their personality. Future research should investigate how incentives may indeed mediate the relationship between core personal values and participation in different kinds of civic groups, but what is clear is that political parties and SMOs appear to attract people characterized by fundamentally different value priorities, and thus do not really compete for the same potential activists.

Hence, the findings of this research highlight the potential of "going back to the roots" when trying to better understand who those citizens are, who collectively shape the future of our communities. In particular, it has been demonstrated that part of the solution to the so-called "paradox of participation" may well be found in deep, enduring psychological structures which have received little attention so far in the field of political participation – especially among party and movement scholars who have paid scant attention to personality traits and personal values. Given the growing individualization

[92] Interestingly, Hansen (1985) has further suggested that those collective incentives might be particularly important in threatening times. Following the comments made earlier regarding the influence of the political context within which data used in this research were collected, this could partly explain the especially strong effects of self-transcendence values on participation in political groups (see Chapter 6).

and personalization of politics, chances are that their role in explaining citizens' political behavior will only increase in the future and therefore, these factors should be given the attention they deserve. Moreover, by asking why some citizens participate actively in public life while others remain merely passive spectators, this research addressed a question of great importance regarding the democratic functioning of many Western European societies. Indeed, participation in associations is thought to promote citizens' empowerment and integration in the social fabric of society, and ultimately to be *"in itself a resource"* (Morales and Geurts 2007: 136). Yet, as highlighted in Chapter 4 (see section 4.3.3), and according to data collected through the GESIS Panel, more than a quarter of German citizens do not participate in *any* association[93], i.e. not even occasionally in a sport club or recreational organization. As stated in the introduction of this thesis, Germany is not an exception in this respect as several European countries exhibit lower rates of associational involvement (see Morales and Geurts 2007: 138). As mentioned above, beyond a lack of personal resources due to a disadvantaged social background, core personal dispositions may well be part of the explanation. Thus, while abundant research exists supporting the idea that some people may be especially at risk of social exclusion because of "where they come from", the results presented in this research show that, in addition and to some extent, some people may also be disadvantaged because of *"who they are"* (Weinschenk 2013: 11). The inadequacy of participatory civic structures in this respect becomes all the more problematic if one considers political participation specifically. Indeed, the findings of the present research echo those of Best who has shown that "*personality selectivity in the process of parliamentary elite recruitment results quite systematically in elite-mass gaps and does not lead to MPs who mirror their followers in terms of personality traits*" (Best 2011: 939). Yet, if some citizens are systematically underrepresented in groups which have a strong influence on political decision-making processes, so are their interests and preferences in the political arena (Schoen 2012: 52). Because both personality traits and personal values have been shown to influence political views in

[93] This proportion remains fairly similar when all the possible types of organizations (including the residual "other" category) are taken into account in the associational involvement measure (23,1%). Similarly, among the whole sample of panelists and during the very first wave of the GESIS Panel, 22,4% of respondents indicated that they did not participate in any of the 9 broad organization-types listed in the questionnaire.

rather consistent ways, the fact that they also influence which citizens are more likely to actively advocate for them and the channels by which they will do so may ultimately "*affect which policies are likely to receive most attention*" (Vecchione et al. 2015: 103). Hence, not only are some citizens at risk of being socially marginalized because of enduring psychological dispositions (e.g. an excessive shyness or a tendency to experience negative emotions such as anxiety, depression, or a sense of vulnerability), but they are also likely to be politically disadvantaged because of a great difficulty in effectively raising their voices.

From the above and with great caution, a few pratical implications can be drawn. First, to counter social and political marginalization by promoting participation in civic groups, offering different possible ways to take part in the activities of an association may be almost as important as offering reduction rates on membership fees. In this regard, the recent development of new forms of participation in some associations, like online participation, is promising as it may offer great involvement opportunities to people who would otherwise be unlikely to get involved in a civic group. Unfortunately, despite their growing popularity in the world of political activism, only a few studies have examined the influence of personality traits on those innovative forms of participation (e.g. Quintelier and Theocharis 2013; Russo and Amnå 2016a) and more research is needed to analyze the long-term consequences of such organizational changes on the diversity of psychological profiles among group participants. Second, the findings discussed above may be of particular interest for civic organizations themselves, regarding their recruitment processes. Depending on their personality traits and personal values, people might indeed differ in their likelihood of joining a group when asked to do so. In particular, one could imagine that people with different value priorities would be more receptive to different forms of recruitment. For instance, a person who attaches a great importance to conservation values might be more likely to join a group if solicited by an "authority" figure, while people who attach higher importance to benevolence values may be more likely to do so if asked by a close friend (Sanderson et McQuilkin 2017: 79). Regarding personality traits, highly agreeable and open-minded people may be less likely to refuse when asked, because of the former's tendency towards compliance and the latter's special readiness for new experiences. One could further imagine that traits and

value priorities might also influence citizens' probability of being themselves "good recruiters". In this respect, extroverts might be especially comfortable with the idea of asking for others' participation because of their assertive nature, and therefore they are likely to be especially good ambassadors for organizations. In terms of value priorities, one may easily imagine that those who primarily pursue self-focused goals (i.e. self-enhancement or openness to change values) would be less easily motivated to voluntarily recruit new group members than those who give higher priority to values reflecting social concerns (i.e. self-transcendence or conservation value-types), unless it matches their own self-interests. Thus, when invited by civic organizations to recruit new members, the former may be more receptive to selective incentives such as financial rewards or private benefits, whereas the latter might be more easily convinced by statements framed in terms of the benefits for the collectivity to increase the influence of the organization. Of course, this is pure speculation and further research should assess the empirical relevance of those hypothesized relationships. But if confirmed, and without indulging in unethical practices such as those revealed in the recent Facebook-Cambridge Analytica scandal[94], such findings may be of particular interest for voluntary organizations wishing to attract new members. Yet, organizations also need to be aware that, depending on the kind(s) of incentives and the modes of participation they offer to citizens, they are likely to attract people with specific psychological profiles in terms of core dispositions and goals. Given that both have been shown to impact people's perceptions and reactions to environmental stimuli, in everyday life as well as in politics, this could have substantial consequences for the organization itself.

Beyond its contributions, this thesis has also a number of limitations which have to be pointed out. In the following discussion, I will focus on the more important ones and show how future research might further advance our understanding of the complex relationships between traits, values, and citizens' involvement in civic life.

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[94] The firm has been accused of having gathered personal data of millions of Facebook users, without their consent, and to have further used it to influence public opinion during political campaigns (most notably, the 2016 American presidential election and the 2015 Brexit vote). Among other data, results from Big Five online tests undertaken by Facebook users have been used for the purpose of personality profiling (see for instance https://www.theguardian.com/technology/2018/mar/17/facebook-cambridge-analytica-kogan-data-algorithm, Retrieved November 13, 2018).

## 7.3. Limitations and avenues for future research

This thesis suffers from several intrinsic limitations which could beneficially be overcome through future research. First of all, the use of very brief instruments to measure psychological constructs as abstract and multi-facets as personality traits or personal values is obviously a severe limitation. Even though the rationale behind the development of these ultra-short measurement instruments is perfectly understandable, their use has important practical implications. Indeed, the psychometric properties of the resulting variables are inevitably lower than what would be expected with the use of lengthier instruments. In particular, as discussed in chapter 4, both the validity and the reliability of the scales measuring traits and values might be affected by the need for brevity – leading to blurred factorial structures and/or low internal consistencies. Crucially, because both the Big Five and the Schwarz' value-types are thought to be broad, higher-order dimensions, each of which encompasses many different sub-dimensions, the use of only a few items to index them imposes considerable constraints on the range of the conceptual content coverage. Hence, the very selection of those items is crucial, as it has been demonstrated that different "*short-form batteries [which] vary in the weight they implicitly assign to the facets of each trait*" are likely to produce different results (see Gerber et al. 2011b: 280). This sensitivity to the items selected can be explained by the fact that, even though trait facets or specific values are conceptualized as sub-dimensions of broader common factors, not all of them are expected to be equally relevant to explain a given behavior or attitude. I already discussed how, for example, the absence of an item tapping the energy facet of extraversion in the BFI-10 might partly explain why no evidence was found for an energy-time substitution in the analyses presented in Chapter 5 (see section 5.2.1.2). In addition, the impossibility of distinguishing more fine-grained facets of a certain personality factor or value-type limits our theoretical understanding of the studied relationships. As an illustration, the bivariate correlations between the items tapping the Big Five traits and the four higher-order value-types, on the one hand, and group participation, on the other, reveal interesting subtle differences at the item-level (see Table D8 in appendix). For instance, it appears that within the self-transcendence value-type, which have been shown to be influential in predicting political and especially SMO

activism (see Chapter 6), benevolence values seem to be much less important than universalism values, indicating that people who engage in those activities tend to be primarily motivated by the defense of the welfare of *all* people, relying on abstract principles such as social justice or environmental protection, rather than by the "*preservation and enhancement of the welfare of those with whom [they are] in frequent personal contact*" (Schwartz 2007a: 166). Similarly, the two items measuring agreeableness show different associations with the binary variable measuring group participation in general: the trust facet of this trait is quite strongly, positively associated with group participation but the tendency to sharply criticize others is not. Furthermore, regarding personal values specifically, the fact that, as stressed several times throughout the discussion of the results, the effects of openness to change values do not always mirror those of conservation ones might also be due to the selection of items used to measure them. Indeed, as shown in Table A7 in appendix, while self-transcendence and self-enhancement values show, as expected, quite a strong negative zero-order correlation in the sample ($r$ = -.631, $p$ < .001), the opposition between conservation and openness to change values is somewhat less pronounced ($r$ = -.418, $p$ < .001). Moreover, the latter appear to contrast even more sharply with the motivational goals expressed by self-enhancement values ($r$ = -.446, $p$ < .001), while being apparently unrelated to the opposed self-transcendence values ($r$ = .023, $p$ = .214). This pattern of bivariate correlations does not fit with the theoretically expected structure of the value system as proposed by Schwartz (1992; Schwartz et al. 2012). As suggested above, part of the explanation might lie in the very choice of the items used to empirically assess people's goals in relation to openness to change values. For instance, the absence of an item tapping hedonism motivations – which tend to be congruent with self-enhancement values but strongly opposed to conservation ones – is notable[95]. Yet, beyond measurement issues, it could also more fundamentally call into question the very existence of such a single value dimension in the integrated value structure. Future research must carefully address this point, but in any event, it is a matter of fact that the results presented in this thesis are

[95] It is worth noting, though, that the inclusion of such an item would have represented an additional difficulty because, as explained in Chapter 2, hedonism values are thought to "fall in-between" the self-enhancement and openness to change poles, sharing elements of both higher-order value-types. However, empirically, they tend to be systematically closer to the latter (Schwartz 2007a: 172).

clearly constraint by the use of very short measurement instruments. Our understanding of the enduring psychological factors underlying civic participation would without doubt benefit from a more in-depth investigation at the facet-level.

Second, this thesis, by its observational, cross-sectional nature, may falsely give a static view of civic engagement and its relationship with citizens' personality. Of course, this does not reflect the reality. On the one hand, participation in collective action is "*a dynamic process occurring in a rather long-lasting period of time*" (Monsch 2014: 197). Notably, people first choose to join a group, and then decide to remain engaged or to leave it. At each step, many different factors are likely to come into play and, for instance, the reasons why an individual initially decided to participate in the activities of an association may greatly differ from those which motivate him or her to stay within the association (see van Haute 2009: 114). On the other hand, although personality traits and personal values are posited to be deeply-rooted, enduring attributes, the possibility of development and slight changes over time cannot be ruled out – especially among young people whose personality is still developing (McCrae and Costa 2003: 10). Indeed, as explained by Caprara and Vecchione:

> "*[People are] beings endowed with a vast array of unexpressed capacities that are realized within appropriate environments. Potentials draw attention to the fact that personal qualities develop and express themselves through dynamic interactions between people and their sociocultural environment, assigning them a proactive role in selecting and changing the situations they encounter, and ultimately setting the course of their life.*" (Caprara and Vecchione 2013: 48)

Throughout the associational participation process, such "*dynamic interactions*" are most probably at stake. Relying on the theory of "role identity" developed by Lee and colleagues (1999), Einolf and Chambé nicely illustrated this idea by suggesting that "*[a] person who volunteers repeatedly may come to think, 'I am the kind of person who volunteers', and eventually, 'Volunteering is an important part of who I am*'" (Einolf and Chambé 2011: 301). Volunteering is thus likely to reinforce the same personal dispositions which led an individual to volunteer in the first place, but it may also help realize one's unfulfilled

potential. As discussed earlier, the use of a correlational research design as well as the absence of an indicator for the length of engagement in the GESIS questionnaire do not allow for taking into account such socialization effects and ultimately untangling possible reciprocal relationships. Only a sophisticated longitudinal design can help in revealing the complex and dynamic relationships between citizens' personality and civic participation. As suggested by Cole and Maxwell (2003), it would also allow rigorous tests for possible mediation effects which are otherwise hardly trackable. Investigating such mediation effects may help improve our understanding of the mechanisms through which core personal characteristics eventually impact people's civic participation.

Third, the findings of this thesis are restricted to one country, Germany, and it will be up to future research to look at their generalizability in other countries. In addition to the specific political context of the period during which data was collected and which I already discussed in previous chapters, more general cultural and institutional settings can affect the relationships between core personal characteristics and civic participation. As stressed by van Stekelenburg and Klandermans (2017: 110), "*although the emphasis in social psychology is on the individual level, the dynamics of collective action participation do take place in a social and political context*". It is all the more important that psychological factors such as personality traits and personal values do not operate in a vacuum; they are thought to shape people's behavior by influencing how they perceive and respond to environmental stimuli (Schoen and Steinbrecher 2013: 534). In line with this premise, previous research suggests that "*the associations between personality traits and political variables can vary across cultural contexts, political systems, and other situational factors*" (Cichocka and Dhont 2018: 328). Certainly, as pointed out by Opp and Brandstätter (2010: 340), taking part in a demonstration in a modern democracy or under a dictatorship might not require the same personal dispositions – and besides, neither do other forms of civic participation. Similarly, Roccas and Sagiv (2010: 30) noted that "*the strength of the relationships between values and behavior differs across cultural groups*" and the relationships between personal values and political activism specifically have been found to vary across cultural and political contexts (e.g. Hafner-Fink 2012; Roets et al. 2014). In social contexts where people are encouraged to behave as self-reflective agents and to fully express their own personalities,

personal values are likely to play a key role in orienting their behavior but in highly normative contexts, people will most probably rely less on their personal values and more on social expectations. Indeed, "*the stronger the situational pressure to act in a particular way, the weaker the influence of internal factors […] People may conform with norms even when the normative behavior opposes their own values*" (Bardi and Schwartz 2003: 1217; see also Shoda 1999). Even in the absence of such an inhibitive effect, the very content of norms is likely to differ across cultural contexts and, as people who give a high priority to conservation goals are especially likely to strongly emphasize compliance with social expectations, the influence of these value-types on social and political behavior may be highly context-dependent. In the absence of a check for those macro-level external influences in the present research, one must therefore caution against premature generalizations until further replications in other, different contexts.

In a similar vein, meso-level influences might be equally important and in this respect, two important elements regarding the types of groups considered in this research must be noted. First, as already mentioned in chapter 3, chances are that the SMOs investigated in this thesis are mostly left-wing organizations from the post-industrial sector – even though the question asked to panelists regarding this kind of associational involvement remains theoretically open to any kind of movements, the mention of "*peace or environmental organization[s]*" as examples may have biased responses towards "new social movements" and left-wing activism. Despite an effort to systematically control for citizens' left-right self-placement, more research is needed to ascertain the extent to which the findings of this research equally apply to the whole spectrum of social movements, including right-wing movements. Second, as explained in the same chapter, for practical reasons, trade unions have been left out of this research. While political parties and SMOs are the two types of organizations which are the most often pitted against one another in the contemporary literature on political activism, unionism may represent a particularly interesting case of a somewhat "hybrid" form of group participation. Indeed, it shares characteristics with both party and SMO activism: on the one hand, its contentious orientation closely resembles those of SMOs which act as lobbying groups trying to put pressure on governments to influence the political decision-

making process, but on the other hand, trade unions are often referred to as "social partners", a term which reflects their closer cooperation with the State at the bargaining table (on this dual role of trade unions, see for instance Hyman 2001, and Taylor and Mathers 2002). Moreover, many researchers classify them along with political parties as "*old, traditional political associations*", in opposition to the "*new social movements*" such as those discussed above (e.g. Wessels 1997; Schofer and Fourcade-Gourinchas 2001). Trade unionism might hence be a particularly interesting case regarding the influence of citizens' value priorities in the realm of civic participation and extending the analyses presented in this thesis to unions has the potential to shed new light on those relationships.

Finally, while this thesis' focus was on explaining *whether* citizens participate in civic groups, and if so, *in what kind(s)* of groups, a promising avenue for future research lies in a careful inquiry of how the effects of personality traits and personal values highlighted above can further vary according to different characteristics of one's individual participation. Notably, as explained by Bekkers and de Wit, group participation can vary in intensity and different levels of associational involvement can be distinguished:

> *"Common distinctions in the literature are between a) passive membership, signifying that citizens pay membership dues but do not participate in any activities of the organization; b) donorship, giving money supporting the activities of the organizations beyond the membership dues; c) active participation, signifying that citizens are involved in activities organized by others; d) volunteering, by providing unpaid labour to the organization."* (Bekkers and de Wit 2014: 5)

In this thesis, by using measures of associational involvement in terms of participation in the activities of an organization, I therefore focused on a rather active form of involvement. While I explain the rationale behind this decision, it is a crucial point as my hypotheses about, and interpretation of, the relationships between personality traits and group participation are directly based on this participatory component. It is likely that scrutinizing more distant forms of involvement, which do not imply any concrete form of social interactions or cooperation, such as donating money, would yield slightly different results (see e.g. Bekkers 2005). In this case, some personality characteristics, like

extraversion or emotional stability for instance, are probably much less important. Besides, previous research has demonstrated that "*personality traits are the strongest set for discriminating active and inactive members*" (Smith 1966: 261). In this respect, it is worth noting that differences in organizational settings may have an impact on the opportunities offered to citizens to participate in the group activity, and therefore on the relationships between core personal characteristics and associational involvement. In particular, variations in terms of size or degree of professionalization of groups are likely to induce variations in the impact of personality traits. Indeed, as rightly noted by Smith many years ago "*we might expect that personality traits will be more important for predicting joining versus not joining where an [Formal Voluntary Organization] involves a great deal of pre-entrance activity and interaction with FVO members than where an FVO involves only a minimum of such contact"* (Smith 1966: 262). Thus, the explanatory power of traits is likely to be lower in the case of large, highly professionalized organizations than in smaller grassroots ones, because people's active participation is particularly encouraged (if not expected) in the latter. Regarding parties specifically, we know that the very meaning of party activism varies, notably according to the specific party-type one is looking at (e.g. Lisi and Cancela 2017; Passarelli and Tuorto 2018; see also Scarrow 2014). In particular, beyond the obvious ideological divide, left-wing and right-wing parties have been historically built on different organizational underpinnings. Left-wing parties were traditionally organized as "mass parties", within which grassroots activists played a crucial role for the party's life and activities, whereas right-wing parties used to be closer to the archetype of the so-called "*partis de cadres*", relying on smaller groups of a political elite (Duverger 1951). One may also think of the recently institutionalized green parties, which seem to be willing to preserve the cultural heritage of the ecological movement from which they have emerged, and then emphasize grassroots participation and bottom-up policy processes. Such "cultural" differences, which translate into different organizational features, are likely to impact the room left for the participation of citizens and thus, ultimately, the discriminatory power of individual core dispositions. Furthermore, the variety of activities in which one can engage – or tasks which one can perform – within a group is also likely to be of importance regarding the relationship between citizens' personal dispositions and associational involvement. For instance, a high level of extraversion is

probably a more valuable quality for public speaking than it is for bookkeeping, whereas the reverse is expected to apply to conscientiousness. Consequently, the importance of each personality trait in fostering (or impeding) group participation is likely to vary according to the nature of intra-group participation. While the data used in this research did not allow me to distinguish between those different modes of participation within groups, future research should carefully scrutinize such specific relationships, beyond the general pattern highlighted in this thesis.

To conclude, after having addressed the *"if"* and the *"what"* dimensions of group participation in light of citizens' core dispositions and goals, the next question which deserves special attention is *"how much?"*. This question actually encompasses two distinct but equally interesting sub-questions: first, *how frequently* one participates in a group, and second, in *how many different groups* one simultaneously participates. Given the results discussed in this thesis, both personality traits and personal values might be of importance in those regards. Indeed, the strength of one's engagement in public life is likely to be a function of both one's motivation and the efforts required given one's personal dispositions. For practical reasons, it was not possible to stringently address those aspects of group participation in this thesis, notably because of the restricted number of participants in political associations. As stressed several times in previous chapters, disentangling multi-engagement from participation in political groups is a challenging task, as the two overlap to a considerable extent (as an illustration, in the sample used here, only 57 (about 3%) of people participating in political groups were not, at the same time, involved in a social one). But it also appears that those people who are simultaneously engaged in *both* political and social associations are, overall, those who participate the most frequently. Indeed, only 8% of them participated only rarely in those associations, against about 20% among people who declared having participated in only one type of groups. At the individual level, the frequency and the scope of the associational activity seem thus to be closely intertwined. At the same time, this pattern hides important disparities at the group level. Indeed, the data used here suggest that within social, non-political groups, people tend to participate on a much more regular basis than they do in parties or SMOs: within the former, only 19% of participants

declared having taken part in the activities of the group only rarely and almost 50% said they did it often, whereas among political groups, the exact opposite pattern is observed (51% and 14%, respectively)[96]. It implies that, while people involved in political groups are those who participate the most frequently overall, they actually tend do so especially in the activities of the social groups in which they are simulatneously involved. Finally, one may also wonder to what extent the intensity of participation (either "vertical" or "horizontal", i.e. within groups or across groups) is related to the type and diversity of activities or tasks undertaken[97]. Yet, given the scarcity of empirical studies considering this latter aspect as well as the absence of indicators designed to assess it in the GESIS Panel, this question still remains open.

To extend the results presented here and thoroughly explore the mechanisms through which personality traits and personal values eventually affect citizens' civic participation, future research should thus address those complex inter- and intra-group dynamics and try to disentangle the effects of traits and values on the intertwined but different aspects of personal involvement in civic groups (e.g. its specific nature, frequency, and scope). This would notably require a large sample of group participants and especially a high number of political activists, something that is difficult to achieve with data collected through large-scale multi-topic surveys like those on which the present research relies. More fine-grained measures of traits and values would also be needed in order to pinpoint relationships between specific facets of citizens' psychological profile in terms of core dispositions and goals on the one hand, and the numerous, diverse aspects of group participation on the other. In this respect, a mixed-method design in which this data would be cross-checked and supplemented with group participants' narratives for instance, might also be of special interest. Using the findings of the present research as a starting point, such further investigations may represent particularly promising avenues as it has the potential to yield highly valuable insights into the complex psychological mechanisms underlying civic participation.

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[96] As suggested earlier, those rates are likely to further vary between groups of a same type (e.g. across political parties; see Gauja and van Haute 2015: 197).

[97] In the literature, the two dimensions tend to be associated, at least implicitely, with the umbrella term of "active" participation.

# 8. References


Ackermann, K. (2017). Individual differences and political contexts – The role of personality traits and direct democracy in explaining political protest. Swiss Political Science Review, 23(1): 21-49.

Ackermann, K. and Ackermann, M. (2015). The Big Five in context: Personality, diversity and attitudes toward equal opportunities for immigrants in Switzerland. *Swiss Political Science Review*, 21(3): 396-418.

Ackermann, K. and Freitag, M. (2015). Persönlichkeit und Parteibindung unter den Bedingungen direkter Demokratie. *Politische Vierteljahresschrift,* Sonderheft 50 "Politische Psychologie", 91-114.

Adler, R. P. and Goggin, J. (2005). What do we mean by 'civic engagement'?. *Journal of Transformative Education*, 3(3): 236-253.

Adorno, T. W., Frenkel-Brunswik, E., Levinson, D. J. and Sanford, R. N. (1950). *The authoritarian personality*. New York: Harper and Row.

Aichholzer, J. (2014). Random intercept EFA of personality scales. *Journal of Research in Personality*, 53: 1-4.

Aichholzer, J. (2015). Controlling acquiescence bias in measurement invariance tests. *Psihologija*, 48(4): 409-429.

Alford, J. R. and Hibbing, J. R. (2007). Personal, interpersonal, and political temperaments. *Annals of the American Academy of Political and Social Science*, 614(1): 196-212.

Allison, P. (2012). Logistic regression for rare events. Blog post on Statistical Horizons website. Retrieved from: www.statisticalhorizons.com/logistic-regression-for-rare-events

Allport, G. W. (1937). *Personality: A psychological interpretation*. New York, NY: Henry Holt.

Allport, G. W. (1961). *Pattern and growth in personality*. New York, NY: Holt, Rinehart &. Winston.

Allport, G. W. and Odbert, H. S. (1936). Trait-names: A psycho-lexical study. *Psychological Monographs*, 47(1): i-171.

Almond, G. A. and Verba, S. (1963). *The civic culture. Political attitudes and democracy in five nations*. Princeton: Princeton University Press.

# REFERENCES


Amengay, A., Durovic, A. and Mayer, N. (2017). L'impact du genre sur le vote Marine Le Pen. *Revue française de science politique*, 67(6): 1067-1087.

Anderson, M. R. (2009). Beyond membership: A sense of community and political behavior. *Political Behavior*, 31(4): 603.

Anderson, N. H. (1963). Comparison of different populations: Resistance to extinction and transfer. *Psychological Review*, 70(2): 162-179.

Armingeon, K. (2007). Political participation and associational involvement. In J. W. van Deth, J. R. Montero and A. Westholm (Eds.), *Citizenship and Involvement in European Democracies: A Comparative Analysis* (pp. 358-383). London: Routledge.

Asparouhov, T. and Muthén, B. (2009). Exploratory structural equation modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, 16(3): 397-438.

Atkins, R., Hart, D. and Donnelly, T. M. (2005). The Association of Childhood Personality Type With Volunteering During Adolescence. *Merrill-Palmer Quarterly*, 51(2): 145-162.

Augemberg, K. (2008). Values and politics: value priorities as predictors of psychological and instrumental political engagement. *ETD Collection for Fordham University*. AAI3301430. Retrieved from: https://fordham.bepress.com.

Ayoub, M., Gosling, S. D., Potter, J., Shanahan, M. and Roberts, B. W. (2018). The relations between parental socioeconomic status, personality, and life outcomes. *Social Psychological and Personality Science*, 9(3): 338-352.

Babyak, M. A. (2004). What you see may not be what you get: A brief, nontechnical introduction to overfitting in regression-type models. *Psychosomatic Medicine*, 66(3): 411-421.

Bäck, H., Teorell, J. and Westholm, A. (2011). Explaining modes of participation: A dynamic test of alternative rational choice models. *Scandinavian Political Studies*, 34(1): 74-97.

Badescu, G. and Neller, K. (2007). Explaining associational involvement. In J. W. van Deth, J. R. Montero and A. Westholm (Eds.), *Citizenship and involvement in european democracies: A comparative analysis* (pp. 158-187). London: Routledge.

Bakker, B. N., Hopmann, D. N. and Persson, M. (2015). Personality traits and party identification over time. *European Journal of Political Research*, 54(2): 197-215.

Barbaranelli, C., Caprara, G.-V., Vecchione, M. and Fraley, C. R. (2007). Voters' personality traits in presidential elections. *Personality and Individual Differences*, 42(7): 1199-1208.

Barber, B. R. (1984). *Strong Democracy: Participatory Politics for a New Age*. Berkeley: Univeristy of California Press.

# REFERENCES


Bardi, A. and Schwartz, S. H. (2003). Values and behavior: Strength and structure of relations. *Personality and Social Psychology Bulletin*, 29(10): 1207-1220.

Barnea, M., and Schwartz, S. H. (1998). Values and voting. *Political Psychology*, 19(1): 17-40.

Barnes, S. H. and Kaase, M. (1979). *Political action: mass participation in five Western democracies*. Beverly Hills, CA: SAGE Publications.

Baron, R. M. and Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6): 1173-1182.

Barrett, Martyn and Brunton-Smith, I. (2014). Political and civic engagement and participation: Towards an integrative perspective. *Journal of Civil Society*, 10(1): 5-28.

Bauer, P. C., Barberá, P., Ackermann, K. and Venetz, A. (2017). Is the left-right scale a valid measure of ideology? Individual-level variation in associations with "left" and "right" and left-right self-placement. *Political Behavior*, 39(3): 553-583.

Bauknecht, J. (2012). Conventional political participation. In O. W. Gabriel, S. I. Keil and E. Kerrouche (Eds.), *Political participation in France and Germany* (pp. 71-112). Colchester: ECPR Press.

Beauchaine, T. P., Webster-Stratton, C. and Reid, M. J. (2005). Mediators, Moderators, and Predictors of 1-Year Outcomes Among Children Treated for Early-Onset Conduct Problems. *Journal of Consulting and Clinical Psychology*, 73(3): 371-388.

Behr, A., Bellgardt, E. and Rendtel, U. (2005). Extent and determinants of panel attrition in the European community household panel. *European Sociological Review*, 21(5): 489-512.

Bekkers, R. (2004). Giving and volunteering in the Netherlands: Sociological and psychological perspectives. PhD Thesis, University of Utrecht, The Netherlands.

Bekkers, R. (2005). Participation in voluntary associations: Relations with resources, personality, and political values. *Political Psychology*, 26(3): 439-454.

Bekkers, R. (2007). Intergenerational Transmission of Volunteering. *Acta Sociologica*, 50(2): 99-114.

Bekkers, R. and De Graaf, N. D. D. (2002). Verschuivende achtergronden van verenigingsparticipatie. *Mens & Maatschappij*, 77(4): 338-360.

Bekkers, R. and de Wit, Arjen (2014). Participation in volunteering: What helps and hinders. A deliverable of the project: "Impact of the third sector as Social Innovation" (ITSSOIN), European Commission – 7th Framework Programme. Brussels: European Commission, DG Research.

# REFERENCES


Belia, S., Fidler, F., Williams, J. and Cumming, G. (2005). Researchers misunderstand confidence intervals and standard error bars. *Psychological Methods*, 10(4): 389-396.

Bem, D. J. (1970). *Beliefs, attitudes, and human affairs*. Oxford: Brooks/Cole.

Bennett, W. L. (2012). The personalization of politics: Political identity, social media, and changing patterns of participation. *The Annals of the American Academy of Political and Social Science*, 644(1): 20-39.

Bergman, M. M. (1998). A theoretical note on the differences between attitudes, opinions, and values. *Swiss Political Science Review*, 4(2): 81-93.

Best, H. (2011). Does personality matter in politics? Personality factors as determinants of parliamentary recruitment and policy preferences. *Comparative Sociology*, 10(6): 928-948.

Beyerlein, K. and Bergstrand, K. (2013). Biographical availability. In D. A. Snow, D. Della Porta, B. Klandermans and D. McAdam (Eds.), *The Wiley-Blackwell encyclopedia of social and political movements*. doi: 10.1002/9780470674871.wbespm012.

Billiet, J. B. and McClendon, M. J. (2000). Modeling acquiescence in measurement models for two balanced sets of items. *Structural Equation Modeling: A Multidisciplinary Journal* 7(4): 608-628.

Bilsky, W., Janik, M. and Schwartz, S. H. (1994). Values and personality. *European Journal of Personality*, 8(3): 163-181.

Bilsky, W., Janik, M. and Schwartz, S. H. (2011). The structural organization of human values- evidence from three rounds of the European Social Survey (ESS). *Journal of Cross- Cultural Psychology*, 42(5): 759-776.

Blackburn, R., Renwick, S. J. D., Donnelly, J. P. and Logan, C. (2004). Big Five or Big Two? Superordinate factors in the NEO Five Factor Inventory and the Antisocial Personality Questionnaire. *Personality and Individual Differences*, 37(5): 957-970.

Blais, A. and Labbé St-Vincent, S. (2011). Personality traits, political attitudes and the propensity to vote. *European Journal of Political Research*, 50(3): 395-417.

Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin*, 117(2): 187-215.

Boix, C. and Posner, D. N. (1996). Making social capital work: A review of Robert Putnam's *Making democracy work*: Civic traditions in modern Italy (Working Paper No 96-4). Center for International Affairs, Harvard University.

Borgatta, E. F. (1964). The structure of personality characteristics. *Behavioral Science*, 9(1): 8-17.

# REFERENCES


Borkenau, P. (1990). Traits as ideal-based and goal-derived social categories. *Journal of Personality and Social Psychology*, 58(3): 381-396.

Bosnjak, M., Dannwolf, T., Enderle, T., Schauer, I., Struminskaya, B., Tanner, A. and Weyandt, K. W. (2017). Establishing an open probability-based mixed-mode panel of the general population in Germany: The GESIS Panel. *Social Science Computer Review*, 36(1): 103-115.

Bouchard, T. J. and Loehlin, J. C. (2001). *Genes, evolution, and personality*. *Behavior Genetics*, 31(3): 243-73.

Boyce, C. J., Wood, A. M. and Powdthavee, N. (2013). Is personality fixed? Personality changes as much as "variable" economic factors and more strongly predicts changes to life satisfaction. *Social Indicators Research*, 111(1): 287-305.

Boyle, G. J. (2008). Critique of the five-factor model of personality. In G. J. Boyle, G. Matthews and D. H. Saklofske (Eds.), *The SAGE handbook of personality theory and assessment*, *Vol. 1. Personality theories and models* (pp. 295-312). Thousand Oaks, CA: SAGE Publications.

Brady, H. E., Verba, S. and Schlozman, K. L. (1995). Beyond SES: A Resource model of political participation. *American Political Science Review*, 89(2): 271-294.

Brambor, T., Clark, W. R. and Golder, M. (2006). Understanding interaction models: Improving empirical analyses. *Political Analysis*, 14(1): 63-82.

Brandstätter, H. and Opp, K.-D. (2014). Personality traits ("Big Five") and the propensity to political protest: Alternative models. *Political Psychology*, 35(4): 515-537.

Brehm, J. and Rahn, W. (1997). Individual-level evidence for the causes and consequences of social capital. *American Journal of Political Science*, 41(3): 999-1023.

Browne, M. W. (2001). An overview of analytic rotation in exploratory factor analysis. *Multivariate Behavioral Research*, 36(1): 111-150.

Burke, D. M. and Hall, M. (1986). Personality Characteristics of Volunteers in a Companion for Children Program. *Psychological Reports*, 59(2): 819-825.

Busing, F. M. T. A., Commandeur, J. J. F. and Heiser, W. J. (1997). PROXSCAL: A multidimensional scaling program for individual differences scaling with constraints. In W. Bandilla and F. Faulbaum (Eds.), *Softstat 97: Advances in statistical software* (pp. 237-258). Stuttgart, Germany: Lucius.

Buss, A. H. (1989). Personality as traits. *American Psychologist*, 44(11): 1378-1388.

Buss, D. M. and Cantor, N. (1989). Introduction. In D. M. Buss and N. Cantor (Eds.), *Personality psychology: Recent trends and emerging directions* (pp. 1-12). New York, NY: Springer-Verlag.

# REFERENCES


Campbell, D. E. (2013). Social networks and political participation. *Annual Review of Political Science*, 16: 33-48.

Caprara, G. (2007). The Personalization of Modern Politics. *European Review*, 15(2): 151-164.

Caprara, G. and Vecchione, M. (2013). Personality approaches to political behavior. In L. Huddy, D. O. Sears and J. S. Levy (Eds.), *The Oxford Handbook of Political Psychology (2nd edition)* (pp. 23-58). Oxford: Oxford University Press.

Caprara, G. and Vecchione, M. (2017). *Personalizing politics and realizing democracy*. New York, NY: Oxford University Press.

Caprara, G. and Zimbardo, P. G. (2004). Personalizing politics. A congruency model of political preference. *American Psychologist*, 59(7): 581-594.

Caprara, G. V. and Cervone, D. (2000). *Personality: Determinants, dynamics, and potentials*. New York, NY: Cambridge University Press.

Caprara, G., Schwartz, S. H., Capanna, C., Vecchione, M. and Barbaranelli, C. (2006). Personality and politics: Values, traits, and political choice. *Political Psychology*, 27(1): 1-28.

Caprara, G.-V., Barbaranelli, C. and Zimbardo, P.G. (1999). Personality profiles and political parties. *Political Psychological*, 20(1): 175-97.

Caprara, G.-V., Schwartz, S. H., Vecchione, M. and Barbaranelli, C. (2008). The personalization of politics: Lessons from the Italian case. *European Psychologist*, 13(3): 157-172.

Caprara, G.-V., Vecchione, M. and Schwartz, S. H. (2009). Mediational role of values in linking personality traits to political orientation. *Asian Journal of Social Psychology*, 12(2): 82-94.

Caprara, G.-V., Vecchione, M. and Schwartz, S. H. (2012). Why People Do Not Vote. The Role of Personal Values. *European Psychologist*, 17(4): 266-278.

Caprara, G.-V., Vecchione, M., Schwartz, S. H., Schoen, H., Bain, P. G., Silvester, J., Cieciuch, J., Pavlopoulos, V., Bianchi, G., Kirmanoglu, H., Baslevent, C., Mamali, C., Manzi, J., Katayama, M., Posnova, T., Tabernero, C., Torres, C., Verkasalo, M., Lönnqvist, J.-E., Vondráková, E. and Caprara, M. G. (2017). Basic values, ideological self-placement, and voting: A cross-cultural study. *Cross-Cultural Research*, 51(4): 388-411.

Carlo, G., Allen, J. B. and Buhman, D. C. (1999). Facilitating and disinhibiting prosocial behaviors: The nonlinear interaction of trait perspective taking and trait personal distress on volunteering. *Basic and Applied Social Psychology*, 21(3): 189-197.

# REFERENCES


Carlo, G., Okun, M. A., Knight, G. P. and de Guzman, M. R. T. (2005). The interplay of traits and motives on volunteering: Agreeableness, extraversion and prosocial value motivation. *Personality and Individual Differences*, 38(6): 1293-1305.

Carney, D. R., Jost, J. T., Gosling, S. D. and Potter, J. (2008). The secret lives of liberals and conservatives: Personality profiles, interaction styles, and the things they leave behind. *Political Psychology*, 29(6): 807-840.

Carter, M. J. (2013). Advancing identity theory: Examining the relationship between activated identities and behavior in different social contexts. *Social Psychology Quarterly*, 76(3): 203-223.

Carver, C. S. and Scheier, M. F. (1981). *Attention and self-regulation: A control-theory approach to human behavior*. New York: Springer-Verlag.

Caspi, A., Roberts, B. W., and Shiner, R. L. (2005). Personality development: Stability and change. *Annual Review of Psychology*, 56: 453-484.

Cattell, R. B. (1946). *The description and measurement of personality*. New York, NY: World Book Company.

Cattell, R. B. (1973). Personality Pinned Down. *Psychology Today*, 7: 41-42.

Cawvey, M., Hayes, M., Canache, D. and Mondak, J. J. (2017). Personality and Political Behavior. *Politics: Oxford Research Encyclopedias*. doi: https://dx.doi.org/10.1093/acrefore/9780190228637.013.221

Cheng, A., Zamarro, G. and Orriens, B. (2018). Personality as a Predictor of Unit Nonresponse in an Internet Panel. *Sociological Methods & Research*, Published Online First 2012. doi: 10.1177/0049124117747305.

Chrona, S. and Capelos, T. (2017). The political psychology of participation in Turkey: Civic engagement, basic values, political sophistication and the young. *Southeast European and Black Sea Studi*es, 17(1): 77-95.

Church, A. T. and Lonner, W. J. (1998). The cross-cultural perspective in the study of personality: Rationale and current research. *Journal of Cross-Cultural Psychology*, 29(1): 32-62.

Cichocka, A. and Dhont, K. (2018). The personality bases of political ideology and behavior. In V. Zeigler-Hill and T. K. Shackelford (Eds.), *The Sage handbook of personality and individual differences* (pp. 323-352). 55 City Road, London: SAGE Publications.

Cieciuch, J. and Schwartz, S. H. (2012). The number of distinct basic values and their structure assessed by PVQ- 40. *Journal of Personality Assessment*, 94(3): 321-328.

Cieciuch, J., Davidov, E., Vecchione, M., Beierlein, C. and Schwartz, S. H. (2014b). The cross-national invariance properties of a new scale to measure 19 basic human values: A test across eight countries. *Journal of Cross-Cultural Psychology*, 45(5): 764-776.

Cieciuch, J., Davidov, E., Vecchione, M., Schwartz, S. H. (2014a). A Hierarchical Structure of Basic Human Values in a Third-Order Confirmatory Factor Analysis. *Swiss Journal of Psychology*, 73(3): 177-182.

Cieciuch, J., Schwartz, S.H., Davidov, E. (2015). Values, social psychology of. In J. D. Wright (Ed.), *International encyclopedia of the social & behavioral sciences (2nd edition, vol. 25)* (pp. 41-46). Oxford: Elsevier.

Clark, P. B. and Wilson, J. Q. (1961). Incentive systems: A theory of organizations. *Administrative Science Quarterly*, 6(2): 129-166.

Clary, E. G. and Snyder, M. (1999). The Motivations to Volunteer: Theoretical and Practical Considerations. *Current Directions in Psychological Science*, 8(5): 156-159.

Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J. and Miene, P. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology*, 74(6): 1516-1530.

Cohrs, J. C., Maes, J., Moschner, B. and Kielmann, S. (2007). Determinants of human rights attitudes and behavior: A comparison and integration of psychological perspectives. *Political Psychology*, 28(4): 441-470.

Cole, D. A. and Maxwell, S. E. (2003). Testing mediational models with longitudinal data: Questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology,* 112(4): 558-577.

Constanze, B., Kuntz, A. and Davidov, E. (2016). Universalism, conservation and attitudes toward minority groups. *Social Science Research,* 58: 68-79.

Converse, P. E. (1972). Change in the American electorate. In A. Campbell and P. E. Converse (Eds.), *The human meaning of social change* (pp. 263-337). New York: Russell Sage Foundation.

Cooper, C. A., Golden, L. and Socha, A. (2013). The big five personality factors and mass politics. *Journal of Applied Social Psychology*, 43(1): 68-82.

Costa, P. T. and McCrae, R. R. (1985). *The NEO Personality Inventory manual.* Odessa, FL: Psychological Assessment Resources.

Costa, P. T. and McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual.* Odessa, F: Psychological Assessment Resources.

# REFERENCES


Costa, P. T. and McCrae, R. R. (1994). Stability and change in personality from adolescence through adulthood. In C. F. Halverson, G. A. Kohnstamm and R. P. Martin (Eds.), *The developing structure of temperament and personality from infancy to adulthood* (pp. 139-150). Hillsdale, NJ: Erlbaum.

Credé, M., Harms, P., Niehorster, S. and Gaye-Valentine, A. (2012). An Evaluation of the Consequences of Using Short Measures of the Big Five Personality Traits. *Journal of Personality and Social Psychology*, 102(4): 874-888.

Cronbach, L. J. and Shavelson, R. J. (2004). My current thoughts on coefficient Alpha and successor procedures. *Educational and Psychological Measurement*, 64(3): 391-418.

Cronbach, L. J., Rajaratnam, N. and Gleser, G. C. (1963). Theory of generalizability: A liberalization of reliability theory. *British Journal of Statistical Psychology*, 16(2): 137-163.

Cross, W. P., Katz, R. S. and Pruysers, S. (2018). *The Personalization of Democratic Politics and the Challenge for Political Parties*. Lanham, MD: Rowman and Littlefield/ECPR Press.

Curtin, N., Stewart, A. J. and Duncan, L. E. (2010). What makes the political personal? Openness, personal political salience, and activism. *Journal of Personality*, 78(3): 943-968.

Dalton, R .J. and Weldon, S. A. (2005). Public images of political parties: A necessary evil?. *West European Politics*, 28(5): 931-951.

Dalton, R. J. (2004). *Democratic challenges, democratic choices: The erosion of political support in advanced industrial democracies*. Oxford: Oxford University Press.

Dalton, R. J. and Wattenberg, M. P. (2000). *Parties without partisans. Political change in advanced industrial democracies*. Oxford: Oxford University Press.

Damian, R. I., Su, R., Shanahan, M., Trautwein, U. and Roberts, B. W. (2015). Can personality traits and intelligence compensate for background disadvantage? Predicting status attainment in adulthood. *Journal of Personality and Social Psychology*, 109(3): 473-489.

Davidov, E., Schmidt, P. and Schwartz, S. H. (2008). Bringing values back in: The adequacy of the European Social Survey to measure values in 20 countries. *Public Opinion Quarterly*, 72(3): 420-445.

Dawkins, R. (2017). Political participation, personality, and the conditional effect of campaign mobilization. *Electoral Studies*, 45: 100-109.

Della Porta, D. (2009). Democracy in movement: Some conclusions. In D. Della Porta (Ed.), *Democracy in social movements* (pp. 262-274). London: Palgrave Macmillan.

# REFERENCES


Delwit, P. (2011). Still in decline? Party membership in Europe. In E. van Haute (Ed.), *Party membership in Europe: Exploration into the anthills of party politics*. Bruxelles: Editions de l'Université de Bruxelles.

Denny, K. and Doyle, O. (2008). Political interest, cognitive ability and personality: Determinants of voter turnout in Britain. *British Journal of Political Science*, 38(2): 291-310.

Devos, T., Spini, D. and Schwartz, S. H. (2002). Conflicts among human values and trust in institutions. *British Journal of Social Psychology*, 41(4): 481-494.

DeYoung, C. G. (2006). Higher-Order Factors of the Big Five in a Multi-Informant Sample. Journal of *Personality and Social Psychology*, 91(6): 1138-1151.

DeYoung, C. G., Peterson, J. B. and Higgins, D. M. (2002). Higher-order factors of the Big Five predict conformity: Are there neuroses of health? *Personality and Individual Differences*, 33(4): 533-552.

DeYoung, C. G., Peterson, J. B. and Higgins, D. M. (2005). Sources of Openness/Intellect: Cognitive and neuropsychological correlates of the fifth factor of personality. *Journal of Personality*, 73(4): 825-858.

Digman, J. M. (1990). Personality structure: Emergence of the Five-Factor Model. *Annual Review of Psychology*, 41(1): 417-440.

Digman, J. M. (1997). Higher-order factors of the Big Five. *Journal of Personality and Social Psychology*, 73(6): 1246-1256.

Digman, J. M. and Inouye, J. (1986). Further specification of the five robust factors of personality. *Journal of Personality and Social Psychology*, 50(1): 116-123.

Dinesen, P. T., Nørgaard, A. S. and Klemmensen, R. (2014). The civic personality: Personality and democratic citizenship. *Political Studies*, 62(1): 134-152.

Dollinger, S. J., Leong, F. T. L. and Ulicni, S. K. (1996). On traits and values: With special reference to openness to experience. *Journal of Research in Personality*, 30(1): 23-41.

Dribbusch, H. (2007). Industrial action in a low-strike country: Strikes in Germany 1968-2005. In S. van der Velden, H. Dribbusch, D. Lyddon, and K. Vandaele (Eds.), *Strikes around the world 1968-2005. Case-studies of 15 countries*. Amsterdam: Aksant Academic Publisher.

Duverger, M. (1951). *Political parties: Their organization and activity in the modern state*. Cambridge, MA: Cambridge University Press.

Eagly, A. H. and Chaiken, S. (1993). *The psychology of attitudes*. Forth Worth, TX: Harcourt Brace Jovanovich.

Edwards, B. and McCarthy, J. D. (2004). Resources and social movement mobilization. In D. A. Snow, S. A. Soule, and H. Kriesi (Eds.), *The Blackwell Companion to Social Movements* (pp. 116-152). Oxford, UK: Blackwell Publishers.

Egger, J. I. M., De Mey, H. R. A., Derksen, J. J. L. and van der Staak, C. P. F. (2003). Cross-cultural replication of the Five Factor Model and comparison of the NEO-PI-R and MMPI-2 PSY-5 scales in a Dutch psychiatric sample. *Psychological Assessment*, 15(1): 81-88.

Einolf, C. and Chambé, S. M. (2011). Who volunteers? Constructing a hybrid theory. *International Journal of Nonprofit and Voluntary Sector Marketing*, 16(4): 298-310.

Ekman, J. and Amnå, E. (2012). Political participation and civic engagement: Towards a new typology. Human Affairs, 22(3): 283-300.

Elshaug, C. and J. Metzer (2001). Personality attributes of volunteers and paid workers engaged in similar occupation tasks. *The Journal of Social Psychology*, 141(6): 752-763.

Eysenck, H. J. (1967). *The biological basis of personality*. Springfield, IL: Thomas.

Eysenck, H. J. (1994). The Big Five or giant three: Criteria for a paradigm. In C. F. Halverson, G. A. Kohnstamm and R. P. Martin (Eds.), *The developing structure of temperament and personality from infancy to adulthood* (pp. 37-51). Hillsdale, NJ: Lawrence Erlbaum Associates.

Eysenck, H. J. and Eysenck, S. B. G. (1976). *Psychoticism as a Dimension of Personality*. London: Hodder & Stoughton.

Farro, A. L. and Lustiger-Thaler, H. (2016). Introduction: Subjectivity and Collective Action. In A. L. Farro and H. Lustiger-Thaler (Eds.), *Reimagining social movements. From collectives to individuals* (pp. 1-14). New York, NY: Routledge.

Feather, N. T. (1982). Human values and the prediction of action: An expectancy-valence analysis. In N. T. Feather (Ed.), *Expectations and actions: Expectancy-value models in psychology* (pp.263-289). Hillsdale, NJ: Lawrence Erlbaum Associates.

Feather, N. T. (1985). *Values in Education and Society*. New York, NY: Free Press.

Feather, N. T. (1992). Values, valences, expectations, and actions. *Journal of Social Issues*, 48(2): 109-124.

Feather, N. T. and Newton, J. W. (1982). Values, expectations, and the prediction of social action: An expectancy-valence analysis. *Motivation and Emotion*, 6(3): 217-244.

Feldman, S. (2003). Values, ideology, and the structure of political attitudes. In D. O. Sears, L. Huddy and R. Jervis (Eds.), *Oxford handbook of political psychology* (pp. 477-508). New York, NY: Oxford University Press.

# REFERENCES


Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

Finkel, S. E. (1985). Reciprocal effects of participation and political efficacy: A panel analysis. *American Journal of Political Science*, 29(4): 891-913.

Firat, R. B. (2014). Media usage and civic life: The role of values. *Journal of Social and Political Psychology*, 2(1): 117-142.

Firth, D. (1993). Bias reduction of maximum likelihood estimates. *Biometrica*, 80(1): 27-38.

Fiske, D. W. (1949). Consistency of the factorial structures of personality ratings from different sources. *Journal of Abnormal and Social Psychology*, 44(3): 329-344.

Fowler, J. H. (2006). Altruism and turnout. *Journal of Politics*, 68(3): 674-683.

Fowler, J. H. and Kam, C. D. (2006). Patience as a political virtue: Delayed gratification and turnout. *Political Behavior*, 28(2): 113-128.

Fowler, J. H. and Kam, C. D. (2007). Beyond the self: Social identity, altruism, and political participation. *Journal of P*olitics, 69(3): 813-827.

Freese, M. (2015). Cultural practices, norms, and values. *Journal of Cross-Cultural Psychology*, 46(10): 1327-1330.

Fretz B. R. (1979). College students as paraprofessionals with children and the aged. *American Journal of Community Psychology*, 7(3): 357-360.

Gabriel, O. W. (2012). Political participation in France and Germany – traditions, concepts, measurements, patterns and explanations. In O. W. Gabriel, S. I. Keil and E. Kerrouche (Eds.), *Political participation in France and Germany* (pp. 1-32). Colchester: ECPR Press.

Gallego, A. and Oberski, D. (2012). Personality and political participation: The mediation hypothesis. *Political Behavior*, 34(3): 425-451.

Gallego, A. and Pardos-Prado, S. (2013). The Big Five personality traits and attitudes towards immigrants. *Journal of Ethnic and Migration Studies*, 40(1): 79-99.

Garzia, D. (2013). Changing parties, changing partisans: The personalization of partisan attachments in Western Europe. *Political Psychology*, 34(1): 67-89.

Gauja, A. and van Haute, E. (2015). Conclusion. Members and activists of political parties in comparative perspective. In A. Gauja and E. van Haute (Eds.), *Party members and activists* (pp. 186-201). New-York: Routledge.

Graziano, W.G., Bruce, J., Sheese, B.E. and Tobin, R.M. (2007). Attraction, personality and prejudice: Liking none of the people most of the time. *Journal of Personality and Social Psychology*, 93(4): 565-582.

# REFERENCES


Gaxie, D. (1977). Economie des partis et rétributions du militantisme. *Revue française de science politique*, 27(1): 79-96.

Gaxie, D. (2005). Rétributions du militantisme et paradoxes de l'action collective. *Swiss Political Science Review*, 11(1): 157-188.

Gerber, A. S., Huber, G. A., Doherty, D. and Dowling, C. M. (2010). Personality and political attitudes: Relationships across issue domains and political contexts. *American Political Science Review*, 104(1): 111-133.

Gerber, A. S., Huber, G. A., Doherty, D. and Dowling, C. M. (2011b). The Big Five personality traits in the political arena. *Annual Review of Political Science*, 14: 265-87.

Gerber, A. S., Huber, G. A., Doherty, D. and Dowling, C. M. (2011c). Personality traits and the consumption of political information. *American Politics Research*, 39(1): 32-84.

Gerber, A. S., Huber, G. A., Doherty, D. and Dowling, C. M. (2012a). Personality and the strength and direction of partisan identification. *Political Behavior*, 34(4): 653-688.

Gerber, A. S., Huber, G. A., Doherty, D. and Dowling, C. M. (2012b). Disagreement and the avoidance of political discussion: Aggregate relationships and differences across personality traits. *American Journal of Political Science*, 56(4): 849-874.

Gerber, A. S., Huber, G. A., Doherty, D., Dowling, C. M. and Panagopoulos, C. (2013). Big Five personality traits and responses to persuasive appeals: Results from voter turnout experiments. *Political Behavior*, 35(4): 687-728.

Gerber, A. S., Huber, G. A., Doherty, D., Dowling, C. M., Raso, C. and Ha, S. E. (2011a). Personality traits and participation in political processes. *Journal of Politics*, 73(3): 682-706.

GESIS (2016). GESIS Panel Standard Edition. GESIS Data Archive, Cologne. ZA5665 Data file Version 16.0.0., doi: 10.4232/1.12658.

GESIS Panel (2016). GESIS Panel Study Descriptions – Related to ZA5664 and ZA5665 (Version 16.0.0).

Goldberg, L. R. (1981). Language and individual differences: The search for universals in personality lexicons. In L. Wheeler (Ed.), *Review of personality and social psychology (vol. 2)* (pp. 141-165). Beverly Hills, CA: SAGE Publications.

Goldberg, L. R. (1990). An alternative "description of personality": The Big-Five factor structure. *Journal of Personality and Social Psychology*, 59(6): 1216-1229.

Goldberg, L. R. (1992). The development of markers for the Big Five factor structure. *Psychological Assessment*, 4(1): 26-42.

Goldberg, L. R. (1994). How not to whip a straw dog. *Psychological Inquiry*, 5(2): 128-130.

Goodwin, J., Jasper, J. and Polletta, F. (Eds.) (2001). *Passionate politics: Emotions and social movements*. Chicago: The University of Chicago Press.

Goren, P., Schoen, H., Reifler, J., Scotto, T. and Chittick, W. (2016). A unified theory of value-based reasoning and U.S. public opinion. *Political Behavior,* 38(4): 977-997.

Gosling, S. D., Rentfrow, P. J., and Swann, W. B. (2003). A very brief measure of the Big Five personality domains. *Journal of Research in Personality*, 37(6): 504-528.

Granik, S. (2005). A reconceptualisation of the antecedents of party activism: A Multidisciplinary Approach. *Political Studies*, 53(3): 598-620.

Granik, S. (2008). Membership benefits, membership action: Why incentives for activism are what members want. *Journal of Nonprofit & Public Sector Marketing*, 14(1-2): 65-89.

Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6): 1360-1380.

Graziano, W. and Eisenberg, N. H. (1994). Agreeableness and altruism. In R. Hogan, J. W. Johnson and S. Briggs (Eds.), *Handbook of personality psychology* (pp. 795-824). New York, NY: Academic Press.

Groh-Samberg, O. and Voges, W. (2014). Precursors and consequences of youth poverty in Germany. *Longitudinal and Life Course Studies*, 5(2): 151-172.

Gundelach, P. (1992). Recent value changes in Western Europe. *Futures*, 24(4): 301-319.

Ha, S. E., Kim, S. and Jo, S. H. (2013). Personality traits and political participation: Evidence from South Korea. *Political Psychology*, 34(4): 511-532.

Hafner-Fink, M. (2012). Political participation, democratisation and citizens' values in Europe. *Teorija in Praksa*, 49(3): 544-565.

Handy, F. and Cnaan, R. A. (2007). The role of social anxiety in volunteering. *Nonprofit Management and Leadership*, 18(1): 41-58.

Hansen, J. M. (1985). The Political Economy of Group Membership. *The American Political Science Review*, 79(1): 79-96.

Hansson, I., Ingeborg Berg, A. and Thorvaldsson, V. (2018). Can Personality Predict Longitudinal Study Attrition? Evidence from a Population-Based Sample of Older Adults. *Journal of Research in Personality*, Published Online First 2018. doi: 10.1016/j.jrp.2018.10.002.

Hatemi, P. K. and McDermott, R. (2012). The genetics of politics: Discovery, challenges, and progress. *Trends Genet*, 28(10): 525-533.

# REFERENCES


Hatemi, P. K. and McDermott, R. (2016). Give me attitudes. *Annual Review of Political Science*, 19: 331-350.

Hayes, A. F., Scheufele, D. A. and Huge, M. E. (2006). Nonparticipation as self-censorship: Publicly observable political activity in a polarized opinion climate. *Political Behavior*, 28(3): 259-283.

Herzog, A. R. and Morgan, J. N. (1993). Formal volunteer work among older Americans. In S. A. Bass, F. G. Caro and Y. P. Chen (Eds.), *Achieving a productive aging society* (pp. 119-142). Westport Connecticut: Auburn House.

Hibbing, M. V., Ritchie, M. and Anderson, M. R. (2011). Personality and political discussion. *Political Beha*vior, 33(4): 601-624.

Hitlin, S. (2003). Values as the core of personal identity: Drawing links between two theories of self. *Social Psychology Quarterly*, 66(2): 118-137.

Hitlin, S. and Piliavin, J. A. (2004). Values: Reviving a dormant concept. *Annual Review of Sociology*, 30: 359-393.

Hinkle, D. E., Wiersma, W and Jurs, S. G. (2003). *Applied Statistics for the Behavioral Sciences, 5th e*d. Boston: Houghton Mifflin.

Hofstee, W. K. B. (1994). Will the true trait theorist please stand up?. *Psychological Inquiry*, 5(2): 134-137.

Hooghe, M. and Stolle, D. (2003). Age matters: Life cycle and cohort differences in the socialization effect of voluntary participation. *European Political Science*, 2(3): 49-56.

Howard, M. M. (2003). *The Weakness of Civil Society in Post-Communist Europe*. Cambridge: Cambridge University Press.

Howarth, E. (1976). Personality characteristics of volunteers. *Psychological Reports*, 38(3): 855-858.

Huber, S. and Rattinger, H. (2005). Die Nichtwähler – ein besonderer Menschenschlag? Persönlichkeitseigenschaften in der Nichtwählerforschung. In S. Schumann and H. Schoen (Eds.), *Persönlichkeit. Eine vergessene Größe der empirischen Sozialforschung* (pp. 157-172). Wiesbaden: Verlag für Sozialwissenschaften.

Hudson, N. W. and Roberts, B. W. (2014). Goals to change personality traits: Concurrent links between personality traits, daily behavior, and goals to change oneself. *Journal of Research in Personality*, 53: 68-83.

Hustinx, L., Cnaan, R. A. and Handy, F. (2010). Navigating theories of volunteering: A hybrid map for a complex phenomenon. *Journal for the Theory of Social Behaviour*, 40(4): 410-434.

# REFERENCES


Hyman, R. (2001). *Understanding European trade unionism: Between market, class and society*. London: SAGE Publications.

Ignazi, P. (1992). The silent counter-revolution: Hypotheses on the emergence of extreme right-wing parties in Europe. *European Journal of Political Research*, 22(1): 3-34.

Ignazi, P. (2003). *Extreme right parties in Western Europe*. Oxford: Oxford University Press.

Inglehart, R. F. (1977). *The silent revolution: Changing values and political styles among western publics*. Princeton, NJ: Princeton University Press.

Inglehart, R. F. (1990). *Culture shift in advanced industrial society*. Princeton, NJ: Princeton University Press.

Inglehart, R. F. (2008). Changing Values among Western Publics from 1970 to 2006. *West European Politics*, 31(1-2): 130-146.

Inglehart, R. F. and Welzel, C. (2005). *Modernization, cultural change and democracy*. Cambridge, MA: Cambridge University Press.

Inglehart, Ronald and Pippa, N. (2016). Trump, Brexit, and the rise of populism: Economic have-nots and cultural backlash. HKS Working Paper No. RWP16-026. doi: http://dx.doi.org/10.2139/ssrn.2818659.

Jacoby, J. and Sassenberg, K. (2010). It takes four to tango: Why a variable cannot be a mediator and a moderator at the same time. *Unpublished manuscript*. Retrieved from: www.johannjacoby.de

Jenkins, J. C. and Klandermans, B. (1995). The politics of social protest. In J. C. Jenkins and B. Klandermans (Eds.), *The politics of social protest. Comparative perspectives on states and social movements* (pp. 3-13). Minneapolis: Minnesota Press.

Jennings, M. K. (1987). Residues of a movement: The aging of the American protest generation. *American Political Science Review*, 81(2): 367-382.

Johann, D., Steinbrecher, M. and Thomas, K. (2015). Persönlichkeit, politische Involvierung und politische Partizipation in Deutschland und Österreich. In T. Faas, C. Frank and H. Schoen (Eds.), *Political Psychology* (pp. 65-90). Germany: Nomos Verlagsgesellschaft.

John, O. P. (1990). The "Big Five" factor taxonomy: Dimensions of personality in the natural language and questionnaires. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 66-100). New York, NY: Guilford Press.

John, O. P. and Srivastava, S. (1999). The Big Five Trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin and O. P. John (Eds.), *Handbook of personality: Theory and research* (pp. 102-138). New York, NY: Guilford Press.

# REFERENCES


John, O. P., Donahue, E. M. and Kentle, R. L. (1991). The Big Five Inventory - Versions 4a and 54. Berkeley, CA: University of California, Berkeley, Institute of Personality and Social Research.

John, O. P., Naumann, L. P. and Soto, C. J. (2008). Paradigm shift to the Integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R.W. Robins and L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114-58). New York, NY: Guilford Press.

John, OP. and Soto, CJ. (2007). The importance of being valid: Reliability and the process of construct validation. In R. W. Robins, R. C. Fraley and R. F. Krueger (Eds.), *Handbook of research methods in personality psychology* (pp. 461-494). New York, NY: Guilford Press.

Jost, J. T., Glaser, J., Kruglanski, A. W. and Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129(3):339-75.

Kaase, M. and Marsh, A. (1979). Political action. A theoretical perspective. In S. H. Barnes and M. Kaase (Eds.), *Political action: Mass participation in five Western democracies* (pp. 27-56). Beverly Hills, CA: SAGE Publications.

Kanacri, B. P. L., Rosa, V. and Di Giunta, L. (2012) The Mediational Role of Values in Linking Personality Traits to Civic Engagement in Italian Youth. *Journal of Prevention & Intervention in the Community*, 40(1): 8-21.

Karp, D. G. (1996). Values and their effect on pro-environmental behavior. *Environment and Behavior*, 28(1): 111-133.

Katz, R. S. and Mair, P. (1994). *How parties organize. Change and adaptation in party organizations in Western democracies*. London: SAGE Publications.

Katz, R. S. and Mair, P. (1995). Changing models of party organizations and party democracy: The emergence of the cartel party. *Party Politics*, 1(1): 5-28.

Keller, B. and Seifert, H. (2013). Atypical employment in Germany. Forms, development, patterns. *Transfer: European Review of Labour and Research*, 19(4): 457-474.

Kenrick, D. T. and Funder, D. C. (1988). Profiting from controversy: Lessons from the person-situation debate. *American Psychologist*, 43(1): 23-34.

Kim, Y. , Hsu, S.-H. and de Zúñiga, H. G. (2013). Influence of social media use on discussion network heterogeneity and civic engagement: The moderating role of personality traits. *Journal of Communication*, 63(3): 498-516.

King, G. and Zeng, L. (2001). Logistic regression in rare events data. *Political Analysis,* 9(2): 137-163.

King, H. R., Jackson, J. J., Morrow-Howell, N. and Oltmanns, T. F. (2015). Personality Accounts for the Connection Between Volunteering and Health. *Journals of Gerontology: Psychological Sciences*, 70(5): 691-697.

Kingsley, A. F., Noordewier, T. G. and Vanden Bergh, R. G. (2017). Overstating and understating interaction results in international business research. *Journal of World Business*, 52(2): 286-295.

Kirchheimer, O. (1966). The transformation of Western European party systems. In J. LaPalombara and M. Weiner (Ed.), *Political parties and political development* (pp. 177-200). Princeton, NJ: Princeton University Press.

Kitschelt, H. (1993). Social movements, political parties, and democratic theory. *The Annals of the American Academy of Political and Social Science*, 528(1): 13-29.

Klammer, U. and Ahles, L. (2010). Labour market uncertainties of young people: France and Germany compared. Contribution to the 3rd seminar of the WP3, GUSTO project, Paris (www.Gusto-project.eu).

Klandermans, B. (1984). Mobilization and participation: Social psychological expansions of resource mobilization theory. *American Sociological Review*, 49(5): 583-600.

Kline, P. (2000). *Handbook of psychological testing*. London: Routledge.

Kluger, A. N. and DeNisi, A. (1996). The effects of feedback interventions on performance: Historical review, a meta-analysis and a preliminary feedback intervention theory. *Psychological Bulletin*, 119(2): 254-284.

Knoke, D. (1986). Associations and interest groups. *Annual Review of Sociology*, 12: 1-21.

Knoke, D. (1990). *Organizing for collective action: The political economies of associations*. New York, NY: Aldine de Gruyter.

Knutsen, O. (1995). Value orientations, political conflicts and left-right identification: A comparative study. *European Journal of Political Research*, 28(1): 63-93.

Kohn, M. L. (1969). *Class and conformity: A study in values*. Homewood, IL: Dorsey.

Konty, M. A. and Dunham, C. C. (1997). Differences in value and attitude change over the life course. *Sociological Spectrum*, 17(2): 177-197.

Kraemer, H. C., Kiernan, M., Essex, M. and Kupfer, D. J. (2008). How and why criteria defining moderators and mediators differ between the Baron & Kenny and MacArthur approaches. *Health psychology, American Psychological Association*, 27(2S): S101-S108.

Kruskal, J. B. (1964). Multidimensional scaling by optimizing goodness of fit to a nonmetric hypothesis. *Psychometrika*, 29(1): 1-27.

Laceulle, O. M. and van Aken, M. A. G. (2018). Transactions of personality and the social environment during development. In V. Zeigler-Hill and T. K. Shackelford (Eds.), *The SAGE Handbook of personality and individual differences, Vol. 2: Origins of personality and individual differences* (Chapter 14). London: SAGE Publications.

Lamprianou, I. (2013). Contemporary political participation research: A critical assessment. In K. N. Demetriou (Ed.), *Democracy in transition* (pp. 21-42). Berlin: Springer.

Lang, F. R., Lüdtke, O. and Asendorpf, J.B. (2001). Testgüte und psychometrische Äquivalenz der deutschen Version des Big Five Inventory (BFI) bei jungen, mittelalten und alten Erwachsenen. [Validity and psychometric equivalence of the German version of the Big Five Inventory in young, middle-aged, and old adults]. *Diagnostica*, 47(3): 111–121.

Lasswell, H. D. (1930). *Psychopathology and Politics*. Chicago: University of Chicago Press.

Lee, K. and Ashton, C. (2004). Psychometric properties of the HEXACO personality inventory. *Multivariate Behavioral Research*, 39(2): 329-358.

Lee, L., Piliavin, J. A. and Call, V. R. A. (1999). Giving time, blood, and money: Differences and similarities. *Social Psychology Quarterly*, 62(3): 276-290.

Leighley, J. (1995). Attitudes, opportunities and incentives: A field essay on political participation. *Political Research Quarterly,* 48(1): 181-209.

Leitgöb, H. (2013). The problem of modeling rare events in ml-based logistic regression - Assessing potential remedies via mc simulations. Paper presented at the European Survey Research Association Meeting.

Lelieveldt, H., Astudillo, J. and Stevenson, L. (2007). The spectrum of associational activities: From self-help to lobbying. In W. A. Maloney and S. Roßteutscher (Eds.), *Social capital and associations in European democracies: A comparative analysis* (pp. 81-95). Abingdon: Routledge.

Levinson, D. (1958). The relevance of personality for political participation. *Public Opinion Quarterly*, 22(1): 3-10.

Lewis, G. J. and Bates, T. C. (2011). From left to right: How the personality system allows basic traits to influence politics via characteristic moral adaptations. *British Journal of Psychology*, 102(3): 546-58.

Lewis, V. A., MacGregor, C. A. and Putnam, R. D. (2013). Religion, networks, and neighborliness: The impact of religious social networks on civic engagement. *Social Science Research*, 42(2): 331-346.

Lichterman, P. (2005). *Elusive togetherness: How religious Americans create civic ties*. Princeton, NJ: Princeton University Press.

Lijphart, A. (1999). *Patterns of democracy*. New Haven: Yale University Press.

Lipset, S. M. (1959). Some social requisites of democracy: Economic development and political legitimacy. *American Political Science Review*, 53(1): 69-105.

Lisi, M. and Cancela, J. (2017). Types of party members and their implications: Results from a survey of Portuguese party members. *Party Politics*, Published Online First 2017. doi: 10.1177/1354068817722445.

Little, B. R., Lecci, L., & Watkinson, B. (1992). Personality and personal projects: Linking Big Five and PAC units of analysis. *Journal of Personality*, 60(2): 501-525.

Loevinger, J. (1954). The attenuation paradox in test theory. *Psychological Bulletin*, 51(5): 493-504.

Loosveldt, G. and Carton, A. (2002). Utilitarian individualism and panel nonresponse. *International Journal of Public Opinion Research*, 14(4): 428-438.

Lugtig, P. (2014). Panel attrition: separating stayers, fast attriters, gradual attriters, and lurkers. *Sociological Methods & Research*, 43(4): 699-723.

Lukes, M. and Stephan, U. (2012). Nonprofit leaders and for-profit entrepreneurs: Similar people with different motivation. *Ceskoslovenská psychologie*, 56(1): 41-55.

Mair, P. (1997). *Party system change. Approaches and interpretations*. Oxford: Clarendon Press.

Maloney, W. A., van Deth, J. W. and Roßteutscher, S. (2008). Civic Orientations: Does Associational Type Matter?. *Political Studies*, 56(2): 261-287.

Mannino, C., Snyder, M. and Omoto, A. (2011). Why do people get involved? Motivations for volunteerism and other forms of action. In D. Dunning (Ed.), *Social motivation* (pp. 127-146). New York, NY: Taylor & Francis.

Marien, S. and Quintelier, E. (2011). Trends in party membership in Europe. Investigation into the reasons for declining party membership. In E. van Haute (Ed.), *Party membership in Europe. Exploration into the anthills of party politics* (pp. 43-60). Bruxelles: Editions de l'Université de Bruxelles.

Marini, M. M. (2000). Social values and norms. In E. Borgatta and R. J. V. Montgomery (Eds.), *Encyclopedia of Sociology (2nd edition, vol. 1)* (pp. 2828-2840). New York, NY: Macmillan.

Marinoff, L. (2003). *The Big Questions. How philosophy can change your life*. London: Bloomsbury.

Marsh, H. W., Hau, K.-T. and Wen, Z. (2004). In search of golden rules: Comment on hypothesis-testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu and Bentler's (1999) findings. *Structural Equation Modeling*, 11(3): 320-341.

Marsh, H. W., Morin, A. J. S., Parker, P. D. and Kaur, G. (2014). Exploratory Structural Equation Modeling: An Integration of the Best Features of Exploratory and Confirmatory Factor Analysis. *Annual Review of Clinical Psychology*, 10: 85-110.

Mattila, M., Wass, H., Söderlund, P., Fredriksson, S., Fadjukoff, P. and Kokko, K. (2011). Personality and turnout: Results from the Finnish longitudinal studies. *Scandinavian Political Studies*, 34(4): 287-306.

McAdam, D. (1986). Recruitment to high-risk activism: The case of Freedom Summer. *American Journal of Sociology*, 92(1): 64-90.

McAdams, D. P. (1986). Recruitment to high-risk activism: The case of freedom summer. *American Journal of Sociology*, 92(1): 64-90.

McAdams, D. P. (1994). A psychology of the stranger. *Psychological Inquiry*, 5: 145-148.

McAdams, D. P. (1995). What Do We Know When We Know a Person?. *Journal of Personality*, 63(3): 365-396.

McAdams, D. P. and Pals, J. L. (2006). A new Big Five: Fundamental principles for an integrative science of personality. *American Psychologist*, 61(3): 204-217.

McCabe, K. O. and Fleeson, W. (2012). What is extraversion for? Integrating trait and motivational perspectives and identifying the purpose of extraversion. *Psychological Science*, 23(12): 1498-1505.

McCarthy, J. D. and Zald, M. N. (1977). Resource mobilization and social movements: A partial theory. *American Journal of Sociology*, 82(6): 1212-41.

McClelland, D. C. (1985). *Human motivation*. Glenview, IL: Scott, Foresman.

McCrae, R. R. (1994). New goals for trait psychology. *Psychological Inquiry*, 5(2): 148-153.

McCrae, R. R. (1996). Social consequences of experiential openness. *Psychological Bulletin*, 120(3): 323-37.

McCrae, R. R. and Costa, P. T. (1985). Updating Norman's 'Adequate Taxonomy': Intelligence and personality dimensions in natural language and in questionnaires. *Journal of Personality and Social Psychology*, 49(3): 710-721.

McCrae, R. R. and Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52(1): 81-90.

McCrae, R. R. and Costa, P. T. (1997). Personality trait structure as a human universal. *American Psychologist*, 52(5): 509-516.

McCrae, R. R. and Costa, P. T. (2003). *Personality in Adulthood. A five-factor theory perspective (2nd edition)*. New York, NY: Guilford Press.

McCrae, R. R. and Costa, P. T. (2008). The five-factor theory of personality. In O. P. John, R. W. Robins and L. A. Pervin (Eds.), *Handbook of personality: Theory and Research (3rd edition)* (pp. 159-181). New-York, NY: Guilford Press.

McCrae, R. R., Costa, P. T. and Busch, C. M. (1986). Evaluating comprehensiveness in personality systems: The California Q-Set and the five-factor model. *Journal of Personality*, 54(2): 430-446.

Meyer, D.S. and Tarrow, S. (Eds.) (1998). *The social movement society. Contentious politics for a new century*. Oxford: Rowman & Littlefield.

Milbrath, L. W. (1965). *Political participation: How and why do people get involved in politics?*. Chicago: Rand McNally.

Miles, A. (2015). The (re)genesis of values: Examining the importance of values for action. *American Sociological Review*, 80(4): 680-704.

Mischel, W. (1968). *Personality and assessment*. New York, NY: Wiley.

Mitchell, P. G., Tetlock, P. E., Mellers, B. A. and Ordonez, L. (1993). Judgments of social justice: Compromises between equality and efficiency. *Journal of Personality and Social Psychology*, 65(4): 629-639.

Mondak, J. J. (2010). *Personality and the foundations of political behavior*. New York, NY: Cambridge University Press.

Mondak, J. J. and Halperin, K. D. (2008). A framework for the study of personality and political behavior. *British Journal of Political Science*, 38(2): 335-362.

Mondak, J. J., Hibbing, M.V., Canache, D., Seligson, M. A. and Anderson, M. R. (2010). Personality and civic engagement: An integrative framework for the study of trait effects on political behavior. *American Political Science Review*, 104(1): 85-110.

Monsch, G.-A. (2014). *On strong citizens: A sociological view on cognitions and contentious participation*. PhD Thesis, Université de Lausanne, Switzerland.

Monsch, G.-A. and Passy, F. (2018). Does commitment change worldviews?. In R. Tillmann, M. Voorpostel and P. Farago (Eds.), *Social Dynamics in Swiss Society. Life Course Research and Social Policies, vol 9* (pp. 231-246). Cham, Switzerland: Springer.

Montero, J. R., Westholm, A. and van Deth, J. W. (2007). Conclusion: The realization of democratic citizenship in Europe. In J. W. van Deth, J. R. Montero and A. Westholm (Eds.), *Citizenship and involvement in European democracies: A comparative analysis* (pp. 413-438). London: Routledge.

Morales, L. (2002). Associational membership and social capital in comparative perspective: A note on the problems of measurement. *Politics & Society*, 30(3): 497-523.

Morales, L. (2009). *Joining political organisations. Institutions, mobilisation and participation in Western democracies*. Colchester: ECPR Press.

Morales, L. and P. Geurts (2007). Associational involvement. In J. W. van Deth, J. R. Montero and A. Westholm (Eds.), *Citizenship and involvement in European democracies: A comparative analysis* (pp. 135-157). London: Routledge.

Morselli, D. and Passini, S. (2018). Exclusive and inclusive protest in Europe: Investigating values, support for democracy, and life conditions. *Journal of Community and Applied Social Psychology*, 28(3): 123-141.

Mößner, A. (2005). Typisch Parteiidentifizierer? Parteiidentifikation und Persönlichkeit. In S. Schumann and H. Schoen (Eds.), *Persönlichkeit. Eine vergessene Größe der empirischen Sozialforschung* (pp. 77-91). Wiesbaden: Verlag für Sozialwissenschaften.

Muller, E. N. and Opp, K.-D. (1986). Rational choice and rebellious collective action. *American Political Science Review*, 80(2): 471-88.

Müller-Rommel, F. (Ed.) (1989). *New politics in Western Europe*. Boulder: Westview Press.

Musek, J. (2007). A general factor of personality: Evidence for the Big One in the five-factor model. *Journal of Research in Personality*, 41(6): 1213-1233.

Musick, M. A., Wilson, J. and Bynum, W. B. (2000). Race and formal volunteering: The differential effects of class and religion. *Social Forces*, 78(4): 1539-1570.

Narayan, S. and Krosnick, J. A. (1996). Education moderates some response effects in attitude measurement. *Public Opinion Quarterly*, 60(1): 58-88.

Nemes, S., Jonasson, J. M., Genell, A. and Steineck, G. (2009). Bias in odds ratios by logistic regression modelling and sample size. *BMC Medical Research Methodology*, 27(9): 56-60.

Newton, K. (1997). Social capital and democracy. *American Behavioral Scientist*, 40(5): 575-586.

Newton, K. (1999). Social capital and democracy in modern Europe. In J. W. van Deth, M. Maraffi, K. Newton and P. Whiteley (Eds.) *Social capital and European democracy* (pp. 3-24). London: Routledge.

Newton, K. and J. R. Montero (2007). Patterns of political and social participation in Europe. In R. Jowell, C. Roberts, R. Fitzgerald, and G. Eva (Eds.), *Measuring attitudes cross-nationally - lessons from the European Social Survey* (pp. 205-237). London: SAGE Publications.

Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology*, 66(6): 574-583.

Norris, P. (2002). *Democratic Phoenix*: *Reinventing Political Activism*. Cambridge, MA: Cambridge University Press.

Norris, P. (2007). Political activism: New challenges, new opportunities. In C. Boix and S. C. Stokes (Eds.), *The Oxford handbook of comparative politics* (pp. 628-652). Oxford: Oxford University Press.

Okun, M. A. and Schultz, A. (2003). Age and motives for volunteering: Testing hypotheses derived from socioemotional selectivity theory. *Psychology and Aging, 18*(2): 231-239.

Okun, M. A., Pugliese, J. and Rook, K. S. (2007). Unpacking the relation between extraversion and volunteering in later life: The role of social capital. *Personality and Individual Differences*, 42(8): 1467-1477.

Olivier, P. (2013). Selective incentives. In D. A. Snow, D. Della Porta, B. Klandermans and D. McAdam (Eds.), *The Wiley-Blackwell encyclopedia of social and political movements*. doi: 10.1002/9780470674871.wbespm185.

Olson, K. R. (2005). Engagement and self-control: Superordinate dimensions of the Big Five Traits. *Personality and Individual Differences*, 38(7): 1689-1700.

Olson, M. (1971) [1965]. *The logic of collective action: Public goods and the theory of groups (Revised edition)*. Cambridge, MA: Harvard University Press.

Olver, J. M. and Mooradian, T. A. (2003). Personality traits and personal values: A conceptual and empirical integration. *Personality and Individual Differences*, 35(1): 109-125.

Omoto, A. M. and Snyder, M. (1995). Sustained helping without obligation: Motivation, longevity of service, and perceived attitude change among AIDS volunteers. *Journal of Personality and Social Psychology*, 68(4): 671-686.

Omoto, A. M., Snyder, M. and Hackett, J. D. (2010). Personality and motivational antecedents of activism and civic engagement. *Journal of Personality*, 78(6): 1703-1734.

Opp, K.-D. and Brandstätter, H. (2010). Political protest and personality traits: A neglected link. *Mobilization: An International Journal*, 15(3): 323-346.

Ostendorf, R. and Angleitner, A. (1994). Enthusiasts contra pessimists. *Psychological Inquiry*, 5(2): 159-162.

Ozer, D. J. and Benet-Martínez, V. (2006). Personality and the prediction of consequential outcomes. *Annual Review of Psychology*, 57: 401-421.

Pacheco, G. and Owen, B. (2015). Moving through the political participation hierarchy: A focus on personal values. *Applied Economics*, 47(3): 222-238.

Panebianco, A. (1988). *Political parties: Organization and power*. Cambridge, MA: Cambridge University Press.

Parks, L. (2007). *Personality and values as predictors of motivated behavior*. PhD Thesis, University of Iowa, Iowa City.

Parks, L. and Guay, R. P. (2009). Personality, values, and motivation. *Personality and Individual Differences*, 47(7): 675-684.

Parks-Leduc, L., Feldman, G. and Bardi, A. (2015). Personality traits and personal values: A meta-analysis. *Personality and Social Psychology Review*, 19(1): 3-29.

Passarelli, G. and Tuorto, D. (2018). The meanings of party membership. A comparison of three parties. *Contemporary Italian Politics*, 10(2): 170-192.

Passy, F. (2003). Social networks matter. But how?. In M. Diani and D. McAdam (Eds.), *Social Movements and Networks: Relational Approaches to Collective Action* (pp. 21-48). Oxford: Oxford University Press.

Passy, F. (2013). Social and solidary incentives. In D. A. Snow, D. Della Porta, B. Klandermans and D. McAdam (Eds.), *The Wiley-Blackwell encyclopedia of social and political movements*. doi: 10.1002/9780470674871.

Passy, F. and Giugni, M. (2001). Social networks and individual perceptions: Explaining differential participation in social movements. *Sociological Forum*, 16(1): 123-153.

Paunonen, S. V. and D. N. Jackson (2001). What is beyond the Big Five? Plenty!. *Journal of Personality*, 68(5): 821-835.

Penner, L. A. (2002). Dispositional and organizational influences on sustained volunteerism: An interactionist perspective. *Journal of Social Issues*, 58(3): 447-67.

Penner, L. A. and Finkelstein, M. A. (1998). Dispositional and structural determinants of volunteerism. *Journal of Personality and Social Psychology*, 74(2): 525-37.

Penner, L. A., Fritzsche, B. A., Craiger, J. P. and Freifeld, T. R. (1995). Measuring the prosocial personality. In J. Butcher and C. D. Spielberger (Eds.), *Advances in personality assessment (vol. 10)* (pp. 147-163). Hillsdale, NJ: Erlbaum.

Pettersson, T. and Y. Esmer (Eds.) (2008). *Changing values, persisting cultures. Case studies in value change*. London: Brill Academic Publishers.

Piurko, Y., Schwartz, S. H. and Davidov, E. (2011). Basic personal values and the meaning of left-right political orientations in 20 countries. *Political Psychology*, 32(4): 537-561.

Plagnol, A. C. and Huppert, F. A. (2010). Happy to help? Exploring the factors associated with variations in rates of volunteering across Europe. *Social Indicators Research*, 97(2): 157-176.

Plomin, R., DeFries, J. C., McClearn, G. E. and McGuffin, P. (1990). *Behavioral genetics: A primer*. New York, NY: W. H. Freeman.

Poguntke, T. and Scarrow, S. (1996). The politics of anti-party sentiment. *European Journal of Political Researc*h, 29(3): 319-344.

Ponce, A. F. and Scarrow, S. E. (2016). Which members? Using cross-national surveys to study party membership. *Party Politics*, 22(6): 679-690.

Pötzschke, J., Rattinger, H. and Schoen, H. (2012). Persönlichkeit, Wertorientierungen und Einstellungen zu Außen- und Sicherheitspolitik in den Vereinigten Staaten. *Politische Psychologie*, 2(2): 4-29.

Preacher, K. J., Rucker, D. D. and Hayes, A. F. (2007). Addressing Moderated Mediation Hypotheses: Theory, Methods, and Prescriptions. *Multivariate Behavioral Research*, 42(1): 185-227.

Purdam, K. and Tranmer, M. (2012). Helping values and civic engagement. *European Societies*, 14(3): 393-415.

Pushkar, D., Reis, M. and Morros, M. (2002). Motivation, personality and well-being in older volunteers. *The International Journal of Aging and Human Development*, 55(2): 141-162.

Putnam, R. D. (1995). Tuning in, tuning out: The strange disappearance of social capital in America. *PS: Political Science and Politics*, 28(4): 664-683.

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon and Schuster.

Putnam, R. D. and Campbell, D. E. (2010). *American Grace: How religion divides and unites us*. New York, NY: Simon & Schuster.

Pytlik Zillig, L. M., Hemenover, S. H. and Dienstbier, R. A. (2002). What do we assess when we assess a big 5 trait? A content analysis of the affective, behavioral, and cognitive processes represented in big 5 personality inventories. *Personality and Social Psychology Bulletin*, 28(6): 847-858.

Quintelier, E. and Theocharis, Y. (2013). Online political engagement, Facebook, and personality traits. *Social Science Computer Review*, 31(3): 280-290.

Ramiro, L. and Morales, L. (2014). Examining the "demand" side of the market for political activism: Party and civil society grassroots activists in Spain. *Party Politics*, 20(4): 506-520.

Rammstedt, B. (1997). Die deutsche Version des Big Five Inventory (BFI): Übersetzung und Validierung eines Fragebogens zur Erfassung des Fünf-Faktoren-Modells der Persönlichkeit. [The German version of the Big Five Inventory (BFI): Translation and validation of a questionnaire assessing the Five-Factor Model of personality]. PhD Thesis, University of Bielefeld, Germany.

Rammstedt, B. and John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*, 41(1): 203-212.

Rammstedt, B. and Kemper, C. J. (2011). Measurement equivalence of the Big Five: Shedding further light on potential causes of the educational bias. *Journal of Research in Personality*, 45(1): 121–125.

Rammstedt, B., Goldberg, L. R., and Borg, I. (2010). The measurement equivalence of Big-Five factor markers for persons with different levels of education. *Journal of Research in Personality*, 44(4): 53–61.

Rathbun, B. C., Kertzer, J. D., Reifler, J., Goren, P. and Scotto, T. J. (2016). Taking foreign policy personally: Personal values and foreign policy attitudes. *International Studies Quarterly*, 60(1): 124-137.

Read, S. J., Jones, D. K. and Miller, L. C. (1990). Traits as goal-based categories: The importance of goals in the coherence of dispositional categories. *Journal of Personality and Social Psychology*, 58(6): 1048-1061.

Reeskens, T. and Vandecasteele, L. (2017). Hard times and European youth. The effect of economic insecurity on human values, social attitudes and well-being. *International Journal of Psychology*, 52(1): 19-27.

Richardson, J. (1995). The market for political activism: Interest groups as a challenge to political parties. *West European Politics*, 18(1): 116-139.

Richter, D., Körtner, J. L. and Saßenroth, D. (2014). Personality has minor effects on panel attrition. *Journal of Research in Personality*, 53: 31-35.

Roberts, B. W. and Wood, D. (2006). Personality development in the context of the neo-socioanalytic model of personality. In D. K. Mroczek and T. D. Little (Eds.), *Handbook of personality development* (pp. 11-39). Mahwah, New Jersey: Lawrence Erlbaum Associates.

Roccas, S. and Sagiv, L. (2010). Personal values and behavior: Taking the cultural context into account. *Social and Personality Psychology Compass*, 4(1): 30-41.

Roccas, S., Sagiv, L., Schwartz, S. H. and Knafo, A. (2002). The big five personality factors and personal values. *Personality and Social Psychology Bulletin*, 28(6): 789-801.

Roets, A., Cornelis, I. and van Hiel, A. (2014). Openness as a predictor of political orientation and conventional and unconventional political activism in Western and Eastern Europe. *Journal of Personality Assessment*, 96(1): 53-63.

Rohan, M. J. (2000). A rose by any name? The values construct. *Personality and Social Psychology Review,* 4(3): 255-277.

Rokeach, M. (1973). *The nature of human values*. New York: Free Press.

Rokeach, M. (1979). From the individual to institutional values with special reference to the values of science. In M. Rokeach (Ed.), *Understanding human values* (pp. 47-70). New York, NY: Free Press.

Rose, R. (1962). The political ideas of English party activists. *American Political Science Review,* 56(2): 360-371.

Roßteutscher, S. and van Deth, J. W. (2002). Associations between associations. The structure of the voluntary association sector. Working paper 56. Mannheim: Mannheimer Zentrum für Europäische Sozialforschung.

Rucht, D. (1998). The structure and culture of collective protest in Germany since 1950. In D. S. Meyer and S. G. Tarrow (Eds.), *The social movement society: Contentious politics for a new century* (pp. 28-58). Oxford: Rowman & Littlefield Publishers.

Russo, S. and Amnå, E. (2016a). The personality divide: Do personality traits differentially predict online political engagement?. *Social Science Computer Review*, 34(3): 259-277.

Russo, S. and Amnå, E. (2016b). When political talk translates into political action: The role of personality traits. *Personality and Individual Differences*, 100: 126-130.

Ryser, V.-A. (2015). Psychometric properties of extra-short Big Five personality measures in multi-topic surveys: Documenting personality traits in the SHP and MOSAiCH. FORS Working Paper Series, paper 2015-5. Lausanne: FORS.

Sagiv, L., Sverdlik, N. and Schwarz, N. (2011). To compete or to cooperate? Values' impact on perception and action in social dilemma games. *European Journal of Social Psychology*, 41(1): 64-77.

Sanderson, R. and McQuilkin, J. (2017). Many kinds of kindness: the relationship between values and prosocial behaviour. In S. Roccas and L. Sagiv (Eds.), *Values and Behavior. Taking a Cross Cultural Perspective* (pp. 75-96). Cham, Switzerland: Springer.

Sandy, C. J., Gosling, S. D., Schwartz, S. H. and Koelkebeck, T. (2017). The development and validation of brief and ultrabrief measures of values. *Journal of Personality Assessment*, 99(5): 545-555.

# REFERENCES


Saßenroth D. (2013). *The impact of personality on participation decisions in surveys: A contribution to the discussion on unit nonresponse*. Wiesbaden, Germany: Springer VS.

Satherley, N., Milojev, P., Greaves, L. M., Huang, Y., Osborne, D., Bulbulia, J. and Sibley, C. G. (2015). Demographic and psychological predictors of panel attrition: Evidence from the New Zealand Attitudes and Values Study. *PLoS ONE*, 10(3): e0121950.

Saucier, G., and Goldberg, L. R. (1996). The language of personality: Lexical perspectives on the five-factor model. In J. S. Wiggins (Ed.), *The five-factor model of personality: Theoretical perspectives* (pp. 21-50). New York, NY: Guilford Press.

Saucier, G., and Goldberg, L. R. (2002). Assessing the big five: Applications of 10 psychometric criteria to the development of marker scales. In B. de Raad and M. Perugini (Eds.), *Big five assessment* (pp. 30-54). Ashland, OH: Hogrefe & Huber Publishers.

Scarrow, S. E. (2014). *Beyond Party Members. Changing Approaches to Partisan Mobilization*. Oxford: Oxford University Press.

Schaurer and Struminskaya (2016). *GESIS Panel Wave Report. Wave db.*

Schlozman, K. L., Verba, S. and Brady, H. E. (1995). Participation's not a paradox: The view from American activists. *British Journal of Political Science*, 25(1): 1-36.

Schlozman, K. L., Verba, S. and Brady, H. E. (1999). Civic participation and the equality problem. In T. Skocpol and M. Fiorina (Eds.), *Civic engagement in American democracy* (pp. 427-460). Washington, DC: Brookings.

Schmitt, N. (1996). Uses and abuses of coefficient alpha. *Psychological Assessment,* 8(4): 350-353.

Schoen, H. (2007). Personality Traits and Foreign Policy Attitudes in German Public Opinion. *Journal of Conflict Resolution*, 51(3): 408-430.

Schoen, H. (2012). Persönlichkeit, politische präferenzenund politische partizipation. *Aus Politik und Zeitgeschichte*, 62: 47-55.

Schoen, H. and Schumann, S. (2005). Missing Links? Zur Position von Persönlichkeitsfaktoren in Ansätzen zur Erklärung von Wahlverhalten. In J. W. Falter, O. W. Gabriel and B. Weßels (Eds.), *Wahlen und Wähler. Analysen aus Anlass der Bundestagswahl 2002* (pp. 388-413). Wiesbaden: Verlag für Sozialwissenschaften.

Schoen, H. and Schumann, S. (2007). Personality traits, partisan attitudes, and voting behavior. Evidence from Germany. *Political Psychology*, 28(4): 471-498.

Schoen, H. and Steinbrecher, M. (2013). Beyond total effects: exploring the interplay of personality and attitudes in affecting turnout in the 2009 German federal election. *Political Psychology*, 34(4): 533-552.

Schofer, E. and Fourcade-Gourinchas, M. (2001). The structural contexts of civic engagement: voluntary association membership in comparative perspective. *American Sociological Review*, 66(6): 806-828.

Schussman, A. and Soule, S. A. (2005). Process and protest: Accounting for individual protest participation. *Social forces*, 84(2): 1083-1108.

Schwartz, S. H. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 countries. In M. Zanna (Ed.), *Advances in experimental social psychology (vol. 25)* (pp. 1-65). New York, NY: Academic Press.

Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, 50(4): 19-45.

Schwartz, S. H. (1996). Value priorities and behavior: Applying a theory of integrated value systems. In C. Seligman, J. M. Olson, and M. P. Zanna (Eds.), *The psychology of values* (pp. 1-24). Hillsdale, NJ: Lawrence Erlbaum Associates.

Schwartz, S. H. (2003). A proposal for measuring value orientations across nations. Chapter 7 in the questionnaire development package of the European Social Survey. http://www.europeansocialsurvey.org.

Schwartz, S. H. (2005a). Basic human values: Their content and structure across countries. In A. Tamayo and J. B. Porto (Eds.), *Valores e comportamento nas organizações [Values and behavior in organizations]* (pp. 21-55). Petrópolis, Brazil: Vozes.

Schwartz, S. H. (2005b). Robustness and fruitfulness of a theory of universals in individual human values. In A. Tamayo and J. B. Porto (Eds.), *Valores e comportamento nas organizações [Values and behavior in organizations]* (pp. 56-95). Petrópolis, Brazil: Vozes.

Schwartz, S. H. (2007a). Value orientations: Measurement, antecedents and consequences across nations. In R. Jowell, C. Roberts, R. Fitzgerald, and G. Eva (Eds.), *Measuring attitudes cross-nationally - lessons from the European Social Survey* (pp. 161-193). London: SAGE Publications.

Schwartz, S. H. (2007b). Universalism values and the inclusiveness of our moral universe. *Journal of Cross-Cultural Psychology*, 38(6): 711-728.

Schwartz, S. H. (2010). Basic values: how they motivate and inhibit prosocial behavior. In M. Mikulincer and P. R. Shaver (Eds.), *Prosocial motives, emotions, and behavior: The better angels of our nature* (pp. 221-241). Washington, DC: American Psychological Association.

Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online readings in Psychology and Culture*, 2(1). http://dx.doi.org/10.9707/2307-0919.1116

# REFERENCES


Schwartz, S. H. and Bilsky W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, 53(3): 550-562.

Schwartz, S. H. and Boehnke, K. (2004). Evaluating the structure of human values with confirmatory factor analysis. *Journal of Research in Personality*, 38(3): 230-255.

Schwartz, S. H. and L. Sagiv (1995). Identifying culture specifics in the content and structure of values. *Journal of Cross-Cultural Psychology*, 26(1): 92-116.

Schwartz, S. H., and Cieciuch, J. (2016). Values. In F. T. L. Leong, D. Bartram, F. Cheung, K. F. Geisinger and D. Iliescu (Eds.), *The ITC international handbook of testing and assessment (*pp. 106-119). Oxford: Oxford University Press.

Schwartz, S. H., Caprara, G.-V. and Vecchione, M. (2010). Basic personal values, core political values, and voting: A longitudinal analysis. *Political Psychology,* 31(3): 421-452.

Schwartz, S. H., Caprara, G.-V., Vecchione, M., Bain, P., Bianchi, G., Caprara, M. G., Cieciuch, J., Kirmanoglu, H., Baslevent, C., Lönnqvist, J. E., Mamali, C., Manzi, J., Pavlopoulos, V., Posnova, T., Schoen, H., Silvester, J., Tabernero, C., Torres, C., Verkasalo, M., Vondráková, E., Welzel, C. and Zaleski, Z. (2014). Basic personal values underlie and give coherence to political values: A cross national study in 15 countries. *Political Behavior*, 36(4): 899-930.

Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., Ramos, A., Verkasalo, M., Lönnqvist, J.-E., Demirutku, K., Dirilen-Gumus, O. and Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology*, 103(4): 663-688.

Schwartz, S. H., Melech, G., Lehmann, A., Burgess, S., Harris, M., and Owens, V. (2001). Extending the cross-cultural validity of the theory of basic human values with a different method of measurement. *Journal of Cross-Cultural Psychology*, 32(5): 519-542.

Schwartz, S.H. and Bardi, A. (1997). Influences of adaptation to communist rule on value priorities in Eastern Europe. *Political Psychology*, 18(2): 385-410.

Seyd, P. and Whiteley, P. (1992). *Labour's grass roots: The politics of party membership*. Oxford: Clarendon Press.

Seyd, P. and Whiteley, P. (2004). British party members. An overview. *Party Politics*, 10(4): 355-366.

Shanahan, M., Bauldry, S., Roberts, B. W., Macmillan, R. and Russo, R. (2014). Personality and the reproduction of social class. *Social Forces*, 93(1): 209-240.

Shoda, Y. (1999). A unified framework for the study of behavioral consistency: Bridging person × situation interaction and the consistency paradox. *European Journal of Personality*, 13(5): 361-387.

Sijtsma K. (2009). On the use, the misuse, and the very limited usefulness of Cronbach's alpha. *Psychometrika*, 74(1): 107-120.

Smelser, N. J. (1962). *Theory of Collective Behavior*. Glencoe: Free Press.

Smith, B. M. M. and Nelson, L. D. (1975). Personality correlates of helping behavior. *Psychological Reports*, 37(1): 307-310.

Smith, D. H. (1966). A psychological model of individual participation in formal voluntary organizations: Application to some Chilean data. *American Journal of Sociology*, 72(3): 249-266.

Smith, D. H. (1994). Determinants of voluntary association participation and volunteering: A literature review. *Nonprofit and voluntary sector quarterly*, 23(3): 243-263.

Smith, J. C. (1957). Membership and participation in voluntary associations. *American Sociological Review*, 22(3): 315-326.

Smith, K. B., Oxley, D., Hibbing, M. V., Alford, J. R. and Hibbing, J. R. (2011). Disgust sensitivity and the neurophysiology of left-right political orientations. *PLoS ONE*, 6(10): e25552.

Sniderman, P. M. (1975). *Personality and democratic politics*. Berkeley, CA: University of California Press.

Snow, D., Zurcher, L., and Ekland-Olson, S. (1980). Social networks and social movements: A microstructural approach to differential recruitment. *American Sociological Review*, 45(5): 787-801.

Sortheix, F. M., Parker, P. D., Lechner, C. M. and S. H. Schwartz (2017). Changes in Young Europeans' values during the global financial crisis. Social Psychological and Personality Science, Published Online First 2017. doi: 10.1177/1948550617732610.

Soto, C. J. and John, O. P. (2017). The next Big Five Inventory (BFI-2): Developing and assessing a hierarchical model with 15 facets to enhance bandwidth, fidelity, and predictive power. *Journal of Personality and Social Psychology*, 113(1): 117-143.

Spier, T. (2014). Party membership figures for Germany (1945-2013). MAPP Working Group Data Archive. Retrieved from https://www.projectmapp.eu.

Spier, T. and Klein, M. (2015). Party membership in Germany: Rather formal, therefore uncool?. In A. Gauja and E. van Haute (Eds.), *Party members and activists* (pp. 84-99). London: Routledge.

Spini, D. and Doise, W. (1998). Organizing principles of involvement in human rights and their social anchoring in value priorities. *European Journal of Social Psychology*, 28(4): 603-622.

Spitz, R. T. and MacKinnon, J. R. (1993). Predicting success in volunteer community service. *Psychological Reports,* 73(3): 815-818.

Srivastava, S., John, O. P., Gosling, S. D. and Potter, J. (2003). Development of personality in early and middle adulthood: set like plaster or persistent change?. *Journal of Personality and Social Psychology*, 84(5): 1041-1053.

Steenvoorden, E. (2018). One of a kind, or all of one kind? Groups of political participants and their distinctive outlook on society. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*. Published Online First 2018. doi: 10.1007/s11266-018-0002-2.

Steg, L., and de Groot, J. I. M. (2012). Environmental values. In S. Clayton (Ed.), *Oxford handbook of environmental psychology* (pp. 81-92). New York, NY: Oxford University Press.

Steinbrecher, M. and Schoen, H. (2012). Persönlichkeit und politische Partizipation im Umfeld der Bundestagswahl 2009. *Politische Psychologie*, 2(1): 58-74.

Stern, P. C. and Dietz, T. (1994). The value basis of environmental concern. *Journal of Social Issues*, 50(3): 65-84.

Stern, P. C., Dietz, T., Abel, T., Guagnano, G. A. and Kalof, L. (1999). A value-belief-norm theory of support for social movements: The case of environmentalism. *Human Ecology*, 6(2): 81-97.

Stinchcomne, A. L. (1965). Social structure and organization. In J. G. March (Ed.), *Handbook of Organizations* (pp. 142-193). Chicago: Rand McNally.

Stolle, D. (1998). Bowling together, bowling alone: the development of generalized trust in voluntary associations. *Political Psychology*, 19(3): 497-525.

Stryker, S., Owens, T. J. and White, R. W. (Eds.) (2000). *Self, identity, and social movements.* Minneapolis, MN: University of Minnesota Press.

Sundeen, R. A., Raskoff, S. A. and Garcia, M. C. (2007). Differences in perceived barriers to volunteering to formal organizations: Lack of time versus lack of interest. *Nonprofit Management and Leadership*, 17(3): 279-300.

Tarrow, S. (1994). *Power in movement: collective action, social movements and politics*. New York, NY: Cambridge University Press.

Taylor, G. and Mathers, A. (2002). Social partner or social movement? European integration and trade union renewal in Europe. *Labor Studies Journal*, 27(1): 93-108.

Tilly, C. (1986). *The contentious French*. Cambridge, MA: Harvard University Press.

Traunmüller, R. (2011). Moral communities? Religion as a source of social trust in a multilevel analysis of 97 German regions. *European Sociological Review*, 27(3): 346-363.

Tupes, E. C. and Christal, R. C. (1961). Recurrent personality factors based on trait ratings. Technical Report, USAF. Lackland Air Force Base, TX: U.S. Air Force.

Turner, R. H. and Killian, L. M. (1957). *Collective Behavior*. Oxford: Prentice-Hall.

Tsaousis, I. (2002). The traits personality questionnaire (TPQue). In J. S. Wiggins (Ed.), *The five-factor model of personality: Theoretical perspectives* (pp. 237-260). New York, NY: Guilford Press.

Uslaner, E. M. (2002). *The Moral Foundations of Trust*. Cambridge, MA: Cambridge University Press.

van Biezen, I., Mair, P. and Poguntke, T. (2012). Going, going, … gone? The decline of party membership in contemporary Europe. *European Journal of Political Research*, 51(1): 24-56.

van de Vyver, J. and Abrams, D. (2017). The arts as a catalyst for human prosociality and cooperation. Social Psychological and Personality Science, Published Online First 2017. doi: 10.1177/1948550617720275.

van der Meer, T. W. G. and van Ingen, E. J. (2009). Schools of democracy? Disentangling the relationship between civic participation and political action in 17 European countries. *European Journal of Political Research*, 48(2): 281-308.

van der Meer, T. W. G., te Grotenhuis, M. and Scheepers, P. L. H. (2009). Three types of voluntary associations in comparative perspective: The importance of studying associational involvement through a typology of associations in 21 European countries. *Journal of Civil Society*, 5(3): 227-241.

van Deth, J. W. (1997). Introduction: Social involvement and democratic politics, in J. W. van Deth (Ed.), *Private groups and public life: Social participation, voluntary associations and political involvement in representative democracies*. London: Routledge.

van Gestel, S. and van Broeckhoven, C. (2003). Genetics of personality: Are we making progress?. *Molecular Psychiatry*, 8(10): 840-852.

van Haute, E. (2009). *Adhérer à un parti. Aux sources de la participation politique*. Bruxelles: Editions de l'Université de Bruxelles.

van Haute, E. and Gauja, A. (2015). Introduction. Party membership and activism. In A. Gauja and E. van Haute (Eds.), *Party members and activists* (pp. 1-16). New-York, NY: Routledge.

van Hiel, A. and Mervielde, I. (2004). Openness to experience and boundaries in the mind: Relationships with cultural and economic conservative beliefs. *Journal of Personality*, 72(4): 659-686.

van Hiel, A., Kossowska, M. and Mervielde, I. (2000). The relationship between Openness to Experience and political ideology. *Personality and Individual Differences*, 28(4): 741-751.

van Ingen, E. and van der Meer, T. (2016). Schools or pools of democracy? A longitudinal test of the relation between civic participation and political socialization. *Political Behavior,* 38(1): 83-103.

van Stekelenburg, J. and Klandermans, B. (2017). Individuals in movements: A social psychology of contention. In C. Roggeband and B. Klandermans (Eds.), *Handbook of social movements across disciplines. Handbooks of sociology and social research* (pp. 103-139). Cham, Switzerland: Springer.

Vecchione, M. and Caprara, G.-V. (2009). Personality determinants of political participation: The contribution of traits and self-efficacy beliefs. *Personality and Individual Differences*, 46(4): 487-492.

Vecchione, M., Caprara, G.-V., Schoen, H., Castro, J. L. G. and Schwartz, S.H. (2012). The role of personal values and basic traits in perceptions of the consequences of immigration: A three-nation study. *British Journal of Psychology*, 103(3): 359-377.

Vecchione, M., Schwartz, S.H., Caprara, G.-V., Schoen, H., Cieciuch, J., Silvester, J., Bain, P. , Bianchi, G., Kirmanoglu, H., Baslevent, C., Mamali, C., Manzi, J., Pavlopoulos, V., Posnova, T., Torres, C., Verkasalo, M., Lönnqvist, J.-E., Vondráková, E., Welzel, C. and Alessandri, G. (2015). Personal values and political activism: A cross-national study. *British Journal of Psychology*, 106(1): 84-106.

Verba, S. and Nie, N. H. (1972). *Participation in America: Political democracy and social equality*. New York, NY: Harper and Row.

Verba, S., Nie, N. H. and Kim, J. (1978). *Participation and political equality: A seven-nation comparison*. New-York, NY: Cambridge University Press.

Verba, S., Schlozman, K. L. and Brady, H. (1995). *Voice and Equality: Civic Voluntarism in American Politics*. Cambridge, MA: Harvard University Press.

Verhulst, B., Eaves, L. J., and Hatemi, P. K. (2012). Correlation not causation: The relationship between personality traits and political ideologies. *American journal of political science*, *56*(1): 34-51.

Vernon, P. E., and Allport, G. W. (1931). A test for personal values. *The Journal of Abnormal and Social Psychology,* 26(3): 231-248.

Verplanken, B. and Holland, R. (2002). Motivated decision making: Effects of activation and self-centrality of values on choices and behavior. *Journal of Personality and Social Psychology*, 82(3): 434-447.

Voorpostel, M., Tillmann, R., Lebert, F., Kuhn, U., Lipps, O., Ryser, V.-A., Antal, E., Monsch, G.-A., Dasoki, N. and Wernli, B. (2017). Swiss Household Panel Userguide (1999-2016). Lausanne: FORS. Retrieved from: http://forscenter.ch.

Výrost, J., Kentoš, M. and Fedáková, D. (2007). Value orientations as factors of social trust, political participation, and life satisfaction. *Studia psychologica*, 49(4): 283-294.

Wang, C.-H. (2014). Gender differences in the effects of personality traits on voter turnout. *Electoral Studies*, 34: 167-176.

Wang, C.-H., Weng, D. L.-C. and Cha, H-J. (2017). Personality traits and voter turnout in South Korea: The mediation argument. *Japanese Journal of Political Science*, 18(3): 426-445.

Ward, M. K., Meade, A. W., Allred, C. M., Pappalardo, G. and Stoughton, J. W. (2017). Careless response and attrition as sources of bias in online survey assessments of personality traits and performance. *Computers in Human Behavior*, 76: 417-430.

Warren, M. E. (2001). *Democracy and association.* Princeton: Princeton University Press.

Weinschenk, A. (2013). Cause you've got personality: Political participation and the tendency to join civic groups. *SAGE Open*, 3(4): 1-12.

Weinschenk, A. and Panagopoulos, C. (2014). Personality, negativity, and political participation. *Journal of Social and Political Psychology*, 2(1): 164-182.

Wessels, B. (1997). Organizing capacities of societies and modernity. In J. van Deth (Ed.), *Private groups and public life. Political involvement in representative democracies* (pp. 198-219). New York, NY: Routledge.

Westholm, A., Montero, J. R. and van Deth, J. W. (2007). Citizenship, involvement, and democracy in Europe. In J. W. van Deth, J. R. Montero and A. Westholm (Eds.), *Citizenship and Involvement in European Democracies: A Comparative Analysis* (pp. 1-32). London: Routledge.

Wilhelm, M. and Bekkers, R. (2010). Helping behavior, dispositional empathic concern and the principle of care. *Social Psychology Quarterly*, 73(1): 11-32.

Whiteley, P. and Seyd, P. (1996). Rationality and party activism: Encompassing tests of alternative models of political participation. *European Journal of Political Research*, 29(2): 215-234.

Williams, R. (2017). Analyzing rare events with logistic regression. Blog post on the author's website. https://www3.nd.edu/~rwilliam/stats3/rareevents.pdf.

# REFERENCES


Williams, R. M. (1951). *American society: a sociological interpretation*. New York, NY: Knopf.

Williams, R. M. (1968). The concept of values. In D. S. Sills (Ed.), *International Encyclopedia of the Social Sciences* (pp. 283-287). New York, NY: Macmillan Free Press.

Williams, R. M. (1979). Change and stability in values and value systems: A sociological perspective. In M. Rokeach (Ed.) *Understanding human values: Individual and societal* (pp. 15-46). New York, NY: Free Press.

Wilson, J. (2000). Volunteering. *Annual Review of Sociology*, 26: 215-40.

Wilson, J. (2012). Volunteerism research: A review essay. *Nonprofit and Voluntary Sector Quarterly*, 41(2): 176-212.

Wilson, J. and Musik, M. (1997). Who cares? Toward an integrated theory of volunteer work. *American Sociological Review*, 62(5): 694-713.

Wiltfang, G., and McAdam, D. (1991). The costs and risks of social activism: A study of sanctuary movement activism. *Social Forces*, 69(4): 987-1010.

Winter, D. G. (2003). Assessing leaders' personalities: A historical survey of academic research studies. In J. M. Post (Ed.), *The psychological assessment of political leader*s (pp. 11-38). Ann Arbor: University of Michigan Press.

Winter, D. G., John, O. P., Stewart, A. J., Klohnen, E. C. and Duncan, L. E. (1998). Traits and motives: Toward an integration of two traditions in personality research. *Psychological Review*, 105(2): 230-250.

Woods, S. A. and Hampson, S. E. (2005). Measuring the big five with single items using a bipolar response scale. *European Journal of Personality,* 19(5): 373-390.

Wurm, L. H. and Fisicaro, S. A. (2014). What residualizing predictors in regression analyses does (and what it does not do). *Journal of Memory and Language*, 72: 37-48.

Wuthnow, R. (1999). Mobilizing civic engagement: The impact of religious involvement. In T. Skocpol and M. P. Fiorina (Eds.), *Civic engagement in American democracy* (p.331-363). Washington: Brookings Institution Press.

Wuthnow, R. (2008). The sociological study of values. *Sociological Forum*, 23(2): 333-343.

Zukauskienė, R. and Malinauskienė, O. (2009). The effect of personality traits and personal values on adolescent prosocial orientation. *Socialinis Darbas*, 8(2): 97-107.

# A. Appendix – Chapter 4

**Table A1 – Main characteristics of the German population and three GESIS Panel samples**

| | | German population | | GESIS Panel samples | | |
|---|---|---|---|---|---|---|
| | | **31.12.2013 (N=55'612'646)** | **31.12.2015 (N=56'494'847)** | **Active panel at the end of recruitment (N=4938)** | **First panel wave participants[a] (N=4218)** | **Empirical subsample used[b] (N=2891)** |
| | | % | % | % | % | % |
| Gender | Male | 50.1 | 50.5 | 48.1 | 48.0 | 47.0 |
| | Female | 49.9 | 49.5 | 51.9 | 52.0 | 53.0 |
| Marital status | Single | 34.4 | 36.0 | 30.3 | 29.3 | 24.5 |
| | Married / Registered partnership (RP) | 53.5 | 51.8 | 57.8 | 59.2 | 62.6 |
| | Widowed / RP died | 2.7 | 2.6 | 3.3 | 3.2 | 3.4 |
| | Divorced / RP annulled | 9.5 | 9.4 | 8.6 | 8.3 | 8.5 |
| Citizenship | Germans | 89.5 | 87.5 | 94.7 | 95.4 | 96.4 |
| | Foreigners | 10.5 | 12.5 | 5.3 | 4.6 | 3.4 |
| Age | 18-30 years | 22.1 | 22.6 | 21.0 | 18.3 | 14.0 |
| | 31-50 years | 40.4 | 39.0 | 39.0 | 38.6 | 36.4 |
| | 51-70 years | 37.5 | 38.5 | 40.0 | 43.1 | 49.5 |
| Region | West | 80.2 | 80.6 | 80.8 | 80.9 | 80.6 |
| | East (incl. West-Berlin) | 19.8 | 19.4 | 19.2 | 19.1 | 19.3 |

Note: the percentages in cells refer only to the 18-70 years old population. [a] The total number of observations is 4298. [b] The total number of observations is 3042.

The statistics for the whole German population have been retrieved from www.destatis.de and those for the GESIS panel samples are drawn from GESIS Panel Longitudinal Core Studies (2014-2016).

**Table A2 – Indices of the Big Five scales reliability**

| | Inter-items Pearson's correlations | Cronbach's Alpha | Spearman-Brown reliability coefficient |
|---|---|---|---|
| Openness to experience | .279*** | .42 | .44 |
| Conscientiousness | .229*** | .36 | .37 |
| Extraversion | .497*** | .66 | .66 |
| Agreeableness | .117*** | .21 | .21 |
| Neuroticism | .326*** | .49 | .49 |

*** p<0.001
Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.
N=3042.

**Table A3 – The Big Five factor-loading matrix resulting from exploratory factor analysis**

| | Extracted Components | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| **Big Five items** | **E** | **N** | **O** | **(-)C** | **(-)A** |
| *I am reserved* | **-.829** | .126 | -.035 | .058 | -.018 |
| *I am generally trusting* | .270 | .181 | .167 | .248 | **-.676** |
| *I tend to be lazy* | -.179 | .024 | .048 | **.754** | .264 |
| *I am relaxed, handle stress well* | -.035 | **-.833** | .035 | .127 | -.036 |
| *I have little artistic interest* | .049 | -.034 | **-.801** | .009 | .126 |
| *I am outgoing, sociable* | **.816** | -.056 | .098 | -.110 | -.030 |
| *I tend to find fault with others* | .228 | .228 | .092 | .243 | **.747** |
| *I do a thorough job* | .020 | .016 | .148 | **-.735** | .203 |
| *I get nervous easily* | -.272 | **.743** | -.021 | .162 | .003 |
| *I have an active imagination* | .203 | -.095 | **.767** | -.090 | .100 |

Extraction method: Principal Component Analysis (PCA) with varimax rotation. Eigenvalues>1.
Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.
N=3042.

**Table A4 – Goodness-of-fit indices for measurement models of the Big Five**

| Model | $X^2$ | d.f. | P | CFI | RMSEA | SRMR | AIC | BIC |
|---|---|---|---|---|---|---|---|---|
| CFA[a] | 437.900 | 27 | <.01 | .821 | .071 | .041 | 82418 | 82646 |
| RI-CFA[b] | *264.916* | 25 | <.01 | .893 | .058 | .038 | *78737* | *78975* |
| EFA[c] | 64.729 | 7 | <.01 | .975 | .052 | .018 | 82084 | 82433 |
| RI-EFA | 22.504 | 4 | <.01 | .992 | .039 | .007 | 82014 | 82381 |

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany, N=3042.

ESEM method using maximum likelihood estimation with robust standard errors. 'RI' stands for 'Random intercept'.
An acceptable fit is achieved when CFI ≥ .90, RMSEA ≤ .08, SRMR ≤ .08, while CFI ≥ .95, RMSEA ≤ .05, SRMR ≤ .05 indicate an excellent fit (see Marsh et al. 2004). Models with smaller values of AIC and BIC are preferred to those with higher values.

[a] Residual variances of items A1 and N2 set to 0. [b] Residual variance of item A1 set to 0. RI-CFA required a listwise procedure in order to be estimated (N=2088). As the $X^2$, AIC and BIC are highly sensitive to the sample size, their values (in italics) cannot be directly compared to those of the other models. [c] Residual variances of items A1 and N1 set to 0.

**Table A5 – Indices of the four higher-order value-types scales reliability**

| | Cronbach's Alpha | Spearman-Brown reliability coefficient |
|---|---|---|
| Openness to change | .72 | .71 |
| Self-Transcendence | .66 | .68 |
| Conservation | .56 | .56 |
| Self-Enhancement | .68 | .69 |

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany, N=3042.

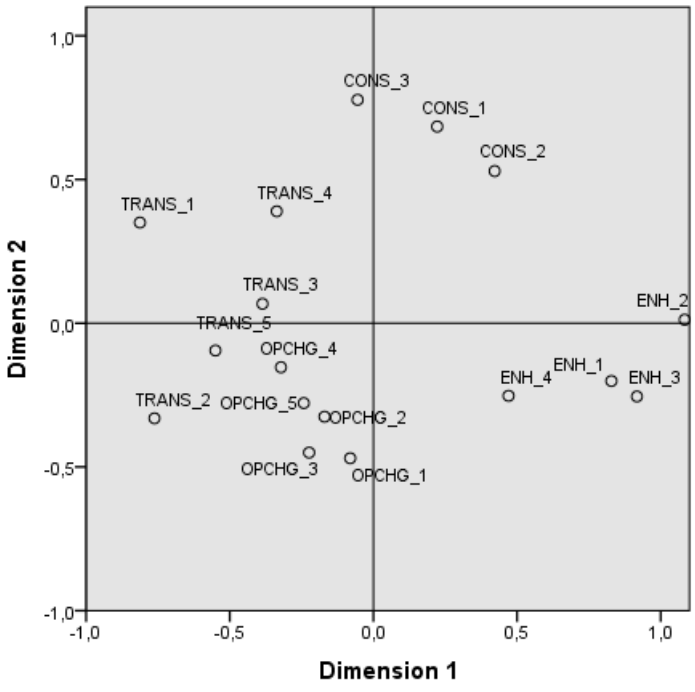
**Table A6 – Goodness-of-fit indices for measurement models of higher-order value types**

| Model | $X^2$ | d.f. | P | CFI | RMSEA | SRMR | AIC | BIC |
|---|---|---|---|---|---|---|---|---|
| CFA | 2104.757 | 113 | <.01 | .837 | .076 | .060 | 142285 | 142628 |
| RI-CFA | 1519.083 | 112 | <.01 | .885 | .064 | .056 | 141700 | 142050 |

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany, N=3042.

ESEM method using maximum likelihood estimation. 'RI' stands for 'Random intercept'.
An acceptable fit is achieved when CFI ≥ .90, RMSEA ≤ .08, SRMR ≤ .08, while CFI ≥ .95, RMSEA ≤ .05, SRMR ≤ .05 indicate an excellent fit (see Marsh et al. 2004). Models with smaller values of AIC and BIC are preferred to those with higher values.

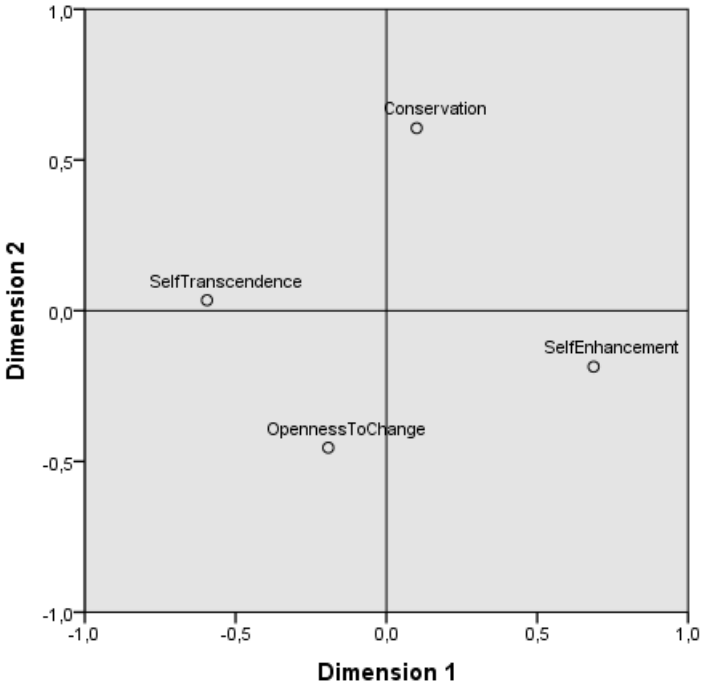
**Figure A1 – Graphical representation of the 17 value items in a two-dimensional space**




***Normalized Raw Stress:*** **.03**
***Stress-1:*** **.17**

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany, N=3042.
ENH = Self-enhancement, CONS = Conservation, TRANS = Self-transcendence, OPCHG = Openness to change
MDS (PROXSCAL) analysis (Busing et al. 1997) with Torgerson initial configuration, two dimensions.
Stress-1 value: .05 = good, .10 = fair, .20 = poor; Normalized raw stress value: < .15 = good, > 0.25 = poor (Kruskal 1964).

**Figure A2 – Graphical representation of the 4 higher-order value-types in a two-dimensional space**




***Normalized Raw Stress: .01***
***Stress-1: .10***

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany, N=3042.
MDS (PROXSCAL) analysis (Busing et al. 1997) with Torgerson initial configuration, two dimensions.
Stress-1 value: .05 = good, .10 = fair, .20 = poor; Normalized raw stress value: < .15 = good, > 0.25 = poor (Kruskal 1964)

**Table A7 – Bivariate correlations of the Big Five and the four higher-order value-types**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| 1. Openness to experience | 1 | | | | | | | |
| 2. Conscientiousness | .086*** | 1 | | | | | | |
| 3. Extraversion | .180*** | .181*** | 1 | | | | | |
| 4. Agreeableness | .043** | .062*** | .032† | 1 | | | | |
| 5. Neuroticism | -.054** | -.094*** | -.203*** | -.053** | 1 | | | |
| 6. Openness to change | .235*** | .079*** | .108*** | -.023 | -.204*** | 1 | | |
| 7. Self-Transcendence | .107*** | .066*** | -.013 | .291*** | .027 | .023 | 1 | |
| 8. Conservation | -.168*** | .132*** | -.080*** | .031† | .051** | -.418*** | -.276*** | 1 |
| 9. Self-Enhancement | -.137*** | -.211*** | -.011 | -.245*** | .089*** | -.446*** | -.631*** | -.204*** |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany, N=3042.

Correlation coefficients: Pearson's R.

**Table A8 – Personal characteristics of respondents from the first personality module of the GESIS Panel**

| | Panelists who remained active[a] (N=3002) | | Drop-outs (N=1033) | | Mean-comparison test | | | Levene's robust variance-comparison test | |
|---|---|---|---|---|---|---|---|---|---|
| ***The Big Five*** | **Mean** | **SD** | **Mean** | **SD** | **Mean diff.** | **t** | **Sign.** | **W** | **Sign.** |
| Openness to experience | 3.38 | 0.86 | 3.42 | 0.88 | 0.04 | 1.23 | 0.220 | 0.11 | 0.741 |
| Conscientiousness | 3.93 | 0.72 | 3.85 | 0.76 | -0.08 | -3.09 | 0.002 | 6.23 | 0.013 |
| Extraversion | 3.20 | 0.89 | 3.30 | 0.87 | 0.10 | 3.04 | 0.002 | 0.40 | 0.525 |
| Agreeableness | 3.12 | 0.72 | 3.14 | 0.72 | 0.02 | 0.82 | 0.415 | 0.00 | 0.957 |
| Neuroticism | 2.88 | 0.84 | 2.86 | 0.81 | -0.01 | -0.46 | 0.643 | 1.70 | 0.192 |
| ***Higher-order personal values*** | | | | | | | | | |
| Conservation | -0.17 | 0.68 | -0.24 | 0.72 | -0.07 | -2.71 | 0.007 | 3.53 | 0.060 |
| Self-Transcendence | 0.42 | 0.45 | 0.41 | 0.48 | -0.01 | -0.75 | 0.453 | 6.29 | 0.012 |
| Openness to change | 0.48 | 0.41 | 0.49 | 0.44 | 0.00 | 0.24 | 0.807 | 7.69 | 0.006 |
| Self-Enhancement | -1.01 | 0.68 | -0.94 | 0.71 | 0.06 | 2.49 | 0.013 | 2.40 | 0.121 |

Data: GESIS Panel Longitudinal Core Study (2014), Germany. N=3045.

[a] Those respondents are part of the final sample used in this research. 40 other respondents who did not participate in the first module dedicated to personality traits and personal values but who did take part in the following waves were further included in the final sample (N=3042).

**Table A9 – Original and new variables measuring individual's resources and other socio-demographic characteristics**

| | Question wording | Original GESIS variable | Recoded variable |
|---|---|---|---|
| Level of education | *"Do you have a university degree?"* | 1. No degree of a (technical) college or university<br>2. University of cooperative education degree<br>3. College for administration degree<br>4. Technical College degree<br>5. University degree | 1. No degree<br>2. University of cooperative education/University of Applied Sciences degree<br>3. University degree |
| Income | *"How high is the average net income of your household, meaning the sum of all net incomes and social security/welfare benefits of people living inside your household?"* | 1. Under 900 €<br>2. 900 up to 1300 €<br>3. 1300 up to 1700 €<br>4. 1700 up to 2300 €<br>5. 2300 up to 3200 €<br>6. 3200 up to 4000 €<br>7. 4000 up to 5000 €<br>8. 5000 up to 6000 €<br>9. 6000 € and more | 1. Low-level household income (<2300€)<br>2. Average household income (2300-4000€)<br>3. High-level household income (>4000€) |
| Age | *"When were you born?"* | Scale (1943-1995) | 1. 18-30 years old<br>2. 31-50 years old<br>3. 51-64 years old<br>4. 65+ years old |
| Employment status | *"Which employment situation fits you?"* | 1. Full-time employed<br>2. Part-time employed<br>3. Partial retirement, not at the workplace anymore<br>4. Marginal employment, 450-Euro-Job, Minijob<br>5. One-Euro-Job, with purchase of unemployment benefit II<br>6. Occasionally or irregularly employed<br>7. In vocational training, training/apprenticeship<br>8. In retraining<br>9. Volunteer social year / volunteer ecological year<br>11. Maternity, parental leave or other leave of absence<br>12. Not employed | 1. Unemployed/not at the workplace<br>2. Part-time or irregularly employed<br>3. Full-time employed |
| Parenthood | *"Are there any children under the age of 16 living in your household and if so, how many?"* | 0. None<br>1. 1<br>2. 2<br>3. 3 and more | 0. None<br>1. 1 or more |
| Religiosity | *"For each of the following, indicate how important it is in your life : Religion"* | 1. Not at all important<br>2. Not very important<br>3. Quite important<br>4. Very important | |
| Gender | *"Gender of respondent"* | 1. Male<br>2. Female | 0. Male<br>1. Female |
| Living area | *"How far is it from where you live to the center of the nearest large city?"* | 1. In the center of a big city<br>2. Under 10 km<br>3. 10 up to 25 km<br>4. 25 up to 40 km<br>5. 40 up to 60 km<br>6. 60 km and more | 1. In a large city center or under 10 km<br>2. 10-40 km<br>3. More than 40 km |

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

**Table A10 – Classic individual-level determinants of group participation (full models)**

| VARIABLES | **Any group participation** *(vs. no participation)* M1 | **Political participation** *(vs. social, non-political participation)* M2 | **Party participation** *(vs. SMO participation)* M3 |
|---|---|---|---|
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 0.055* | 0.044 | -0.017 |
| | [0.011 - 0.100] | [-0.011 - 0.099] | [-0.139 - 0.105] |
| University degree | 0.083*** | 0.090** | -0.066 |
| | [0.036 - 0.130] | [0.030 - 0.150] | [-0.187 - 0.055] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | -0.073*** | 0.030 | -0.023 |
| | [-0.114 - -0.031] | [-0.021 - 0.081] | [-0.135 - 0.090] |
| High-level household income (>4000€) | 0.033 | 0.009 | -0.024 |
| | [-0.010 - 0.076] | [-0.042 - 0.060] | [-0.140 - 0.092] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 0.089** | 0.055 | -0.003 |
| | [0.032 - 0.146] | [-0.020 - 0.131] | [-0.168 - 0.163] |
| 51-64 years old | 0.043† | 0.072* | 0.026 |
| | [-0.003 - 0.088] | [0.017 - 0.127] | [-0.098 - 0.150] |
| ≥ 65 years old | 0.072* | 0.033 | 0.236** |
| | [0.008 - 0.135] | [-0.044 - 0.111] | [0.075 - 0.398] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 0.051* | 0.039 | -0.095 |
| | [0.003 - 0.099] | [-0.021 - 0.099] | [-0.218 - 0.028] |
| Part-time or irregularly employed | 0.070** | 0.018 | -0.129* |
| | [0.024 - 0.117] | [-0.040 - 0.076] | [-0.257 - -0.001] |
| Children under 16 living in the household | 0.163*** | -0.056* | -0.005 |
| | [0.124 - 0.202] | [-0.109 - -0.004] | [-0.131 - 0.121] |
| Religiosity | 0.105*** | 0.032** | 0.020 |
| | [0.085 - 0.125] | [0.010 - 0.054] | [-0.027 - 0.068] |
| **Sociodemographic controls** | | | |
| Gender (women) | -0.017 | -0.110*** | -0.142** |
| | [-0.053 - 0.020] | [-0.156 - -0.064] | [-0.242 - -0.042] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | -0.038† | 0.004 | -0.062 |
| | [-0.080 - 0.004] | [-0.046 - 0.054] | [-0.177 - 0.053] |
| More than 40 km from a large city | -0.011 | 0.042† | 0.063 |
| | [-0.052 - 0.029] | [-0.008 - 0.091] | [-0.045 - 0.172] |
| Observations | 2350 | 1692 | 435 |
| Pseudo $R^2$ | 0.093 | 0.037 | 0.059 |
| Log-likelihood | -1233 | -933.8 | -283.4 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are binary logistic regressions; average marginal effects and their confidence intervals are reported.

**Table A11 – Classic individual-level determinants of group participation (Firth's penalized)**

| VARIABLES | **Any group participation** *(vs. no participation)* M1 | **Political participation** *(vs. social, non-political participation)* M2 | **Party participation** *(vs. SMO participation)* M3 |
|---|---|---|---|
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 1.367* | 1.270 | 0.933 |
| | [1.051 - 1.776] | [0.949 - 1.699] | [0.553 - 1.571] |
| University degree | 1.628** | 1.595** | 0.760 |
| | [1.212 - 2.186] | [1.183 - 2.151] | [0.452 - 1.276] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | 0.675*** | 1.176 | 0.910 |
| | [0.539 - 0.845] | [0.896 - 1.544] | [0.563 - 1.472] |
| High-level household income (>4000€) | 1.222 | 1.054 | 0.903 |
| | [0.939 - 1.589] | [0.797 - 1.393] | [0.551 - 1.480] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 1.671** | 1.360 | 0.989 |
| | [1.181 - 2.364] | [0.909 - 2.033] | [0.494 - 1.979] |
| 51-64 years old | 1.266† | 1.472* | 1.112 |
| | [0.985 - 1.627] | [1.091 - 1.987] | [0.660 - 1.874] |
| ≥ 65 years old | 1.501* | 1.208 | 2.757** |
| | [1.031 - 2.186] | [0.786 - 1.857] | [1.296 - 5.866] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 1.331* | 1.232 | 0.673 |
| | [1.010 - 1.753] | [0.897 - 1.690] | [0.397 - 1.141] |
| Part-time or irregularly employed | 1.493** | 1.103 | 0.584† |
| | [1.133 - 1.968] | [0.803 - 1.514] | [0.338 - 1.008] |
| Children under 16 living in the household | 2.784*** | 0.733* | 0.978 |
| | [2.090 - 3.708] | [0.543 - 0.989] | [0.571 - 1.674] |
| Religiosity | 1.818*** | 1.186** | 1.089 |
| | [1.609 - 2.054] | [1.053 - 1.336] | [0.888 - 1.335] |
| **Sociodemographic controls** | | | |
| Gender (women) | 0.910 | 0.556*** | 0.559** |
| | [0.740 - 1.119] | [0.434 - 0.712] | [0.368 - 0.848] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | 0.807† | 1.024 | 0.774 |
| | [0.637 - 1.022] | [0.775 - 1.353] | [0.477 - 1.256] |
| More than 40 km from a large city | 0.937 | 1.248† | 1.303 |
| | [0.741 - 1.184] | [0.961 - 1.621] | [0.820 - 2.070] |
| Constant | 0.565** | 0.203*** | 1.313 |
| | [0.399 - 0.799] | [0.133 - 0.310] | [0.623 - 2.768] |
| Observations | 2350 | 1692 | 435 |
| Tjur's D | 0.104 | 0.042 | 0.077 |
| Log-likelihood | -1201 | -902.7 | -260.9 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are Firth's penalized likelihood logistic regressions; odds ratios and their confidence intervals are reported.

**Table A12 – Multinomial regressions for classic individual-level determinants of group participation**

| | Basis outcome: *« No group participation at all »* | | | Basis outcome: *« Non-political participation »* | |
|---|---|---|---|---|---|
| VARIABLES | Non-political participation | SMO participation | Party participation | SMO participation | Party participation |
| **Resources** | | | | | |
| Level of education (Ref.: No degree) | | | | | |
| Cooperative educ./applied sciences degree | 1.276† | 1.555* | 1.671* | 1.220 | 1.319 |
| | [0.969 - 1.682] | [1.004 - 2.409] | [1.109 - 2.520] | [0.817 - 1.822] | [0.908 - 1.915] |
| University degree | 1.406* | 2.427*** | 1.967** | 1.751** | 1.421† |
| | [1.031 - 1.918] | [1.565 - 3.765] | [1.253 - 3.088] | [1.190 - 2.578] | [0.952 - 2.122] |
| Income (Ref.: average income (2300-4000€/month)) | | | | | |
| Low-level household income (<2300€) | 0.652*** | 0.804 | 0.729 | 1.238 | 1.122 |
| | [0.515 - 0.827] | [0.545 - 1.188] | [0.498 - 1.066] | [0.859 - 1.786] | [0.785 - 1.602] |
| High-level household income (>4000€) | 1.226 | 1.413 | 1.197 | 1.152 | 0.974 |
| | [0.932 - 1.612] | [0.930 - 2.145] | [0.792 - 1.809] | [0.794 - 1.673] | [0.673 - 1.409] |
| Age (Ref.: 31-50 years old) | | | | | |
| 18-30 years old | 1.571* | 2.078* | 2.242** | 1.311 | 1.448 |
| | [1.093 - 2.257] | [1.183 - 3.651] | [1.240 - 4.056] | [0.779 - 2.208] | [0.834 - 2.515] |
| 51-64 years old | 1.121 | 1.552* | 1.800** | 1.398† | 1.626* |
| | [0.862 - 1.458] | [1.014 - 2.376] | [1.166 - 2.779] | [0.940 - 2.077] | [1.085 - 2.435] |
| ≥ 65 years old | 1.406† | 1.001 | 2.726** | 0.701 | 1.929* |
| | [0.946 - 2.091] | [0.523 - 1.915] | [1.490 - 4.986] | [0.383 - 1.284] | [1.106 - 3.367] |
| Employment status (Ref.: Full-time employed) | | | | | |
| Unemployed/not at the workplace | 1.245 | 1.834** | 1.230 | 1.495† | 1.006 |
| | [0.930 - 1.668] | [1.177 - 2.859] | [0.784 - 1.929] | [0.990 - 2.257] | [0.660 - 1.531] |
| Part-time or irregularly employed | 1.453* | 1.863** | 1.104 | 1.307 | 0.793 |
| | [1.089 - 1.937] | [1.189 - 2.918] | [0.677 - 1.799] | [0.867 - 1.971] | [0.504 - 1.246] |
| Children under 16 living in the household | 3.009*** | 2.080** | 2.319*** | 0.697† | 0.769 |
| | [2.241 - 4.040] | [1.317 - 3.286] | [1.464 - 3.674] | [0.466 - 1.041] | [0.514 - 1.151] |
| Religiosity | 1.752*** | 1.923*** | 2.203*** | 1.097 | 1.256** |
| | [1.542 - 1.989] | [1.598 - 2.315] | [1.839 - 2.640] | [0.934 - 1.289] | [1.075 - 1.468] |
| **Sociodemographic controls** | | | | | |
| Gender (women) | 1.046 | 0.802 | 0.450*** | 0.748† | 0.419*** |
| | [0.842 - 1.300] | [0.565 - 1.139] | [0.315 - 0.643] | [0.538 - 1.039] | [0.300 - 0.586] |
| Living area (Ref.: 10-40 km from a large city) | | | | | |
| In a large city center or within 10 km | 0.806† | 0.949 | 0.721 | 1.180 | 0.886 |
| | [0.629 - 1.033] | [0.643 - 1.401] | [0.478 - 1.086] | [0.825 - 1.689] | [0.604 - 1.299] |
| More than 40 km from a large city | 0.886 | 0.953 | 1.192 | 1.091 | 1.337† |
| | [0.693 - 1.132] | [0.642 - 1.413] | [0.825 - 1.723] | [0.759 - 1.568] | [0.956 - 1.870] |
| Constant | 0.469*** | 0.045*** | 0.049*** | 0.095*** | 0.105*** |
| | [0.327 - 0.674] | [0.024 - 0.083] | [0.027 - 0.090] | [0.054 - 0.167] | [0.060 - 0.183] |
| Observations | | 2311 | | 1687 | |
| Pseudo R-squared | | 0.068 | | 0.042 | |
| Log-likelihood | | -2434 | | -1211 | |

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.
Models are multinomial logistic regressions; relative risk ratios and their confidence intervals are reported.

# B. Appendix – Chapter 5

**Table B1 – The direct effects of the Big Five on group participation (full models)**

| VARIABLES | Any group participation *(vs. no participation)* M1 | Political participation *(vs. social, non-political participation)* M2 | Party participation *(vs. SMO participation)* M3 |
|---|---|---|---|
| **The Big Five** | | | |
| Openness to experience | 0.024* | 0.039** | -0.035 |
| | [0.005 - 0.044] | [0.014 - 0.063] | [-0.091 - 0.022] |
| Conscientiousness | -0.008 | -0.032* | 0.012 |
| | [-0.033 - 0.017] | [-0.062 - -0.001] | [-0.059 - 0.083] |
| Extraversion | 0.039*** | 0.028* | 0.057* |
| | [0.019 - 0.059] | [0.003 - 0.053] | [0.002 - 0.112] |
| Agreeableness | 0.029* | 0.007 | -0.022 |
| | [0.005 - 0.053] | [-0.023 - 0.036] | [-0.092 - 0.047] |
| Neuroticism | -0.021† | -0.014 | 0.004 |
| | [-0.043 - 0.000] | [-0.041 - 0.013] | [-0.057 - 0.065] |
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 0.049* | 0.037 | -0.012 |
| | [0.005 - 0.093] | [-0.017 - 0.092] | [-0.133 - 0.110] |
| University degree | 0.075** | 0.074* | -0.043 |
| | [0.028 - 0.122] | [0.014 - 0.134] | [-0.166 - 0.081] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | -0.068** | 0.029 | -0.015 |
| | [-0.110 - -0.027] | [-0.022 - 0.080] | [-0.129 - 0.099] |
| High-level household income (>4000€) | 0.031 | 0.010 | -0.030 |
| | [-0.012 - 0.073] | [-0.041 - 0.061] | [-0.146 - 0.086] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 0.084** | 0.048 | -0.003 |
| | [0.027 - 0.140] | [-0.026 - 0.123] | [-0.169 - 0.163] |
| 51-64 years old | 0.038† | 0.076** | 0.022 |
| | [-0.007 - 0.083] | [0.021 - 0.132] | [-0.103 - 0.147] |
| ≥ 65 years old | 0.064† | 0.035 | 0.238** |
| | [-0.000 - 0.128] | [-0.043 - 0.113] | [0.075 - 0.401] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 0.055* | 0.042 | -0.099 |
| | [0.008 - 0.103] | [-0.017 - 0.102] | [-0.222 - 0.024] |
| Part-time or irregularly employed | 0.070** | 0.014 | -0.130* |
| | [0.024 - 0.117] | [-0.044 - 0.072] | [-0.257 - -0.002] |
| Children under 16 living in the household | 0.157*** | -0.052† | -0.006 |
| | [0.118 - 0.196] | [-0.105 - 0.000] | [-0.133 - 0.121] |
| Religiosity | 0.104*** | 0.033** | 0.022 |
| | [0.084 - 0.124] | [0.011 - 0.055] | [-0.026 - 0.070] |
| **Sociodemographic controls** | | | |
| Gender (women) | -0.024 | -0.113*** | -0.141** |
| | [-0.061 - 0.014] | [-0.161 - -0.065] | [-0.247 - -0.035] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | -0.041† | -0.003 | -0.050 |
| | [-0.083 - 0.001] | [-0.053 - 0.047] | [-0.167 - 0.066] |
| More than 40 km from a large city | -0.011 | 0.041 | 0.068 |
| | [-0.051 - 0.029] | [-0.009 - 0.091] | [-0.041 - 0.176] |
| Observations | 2343 | 1687 | 433 |
| Pseudo $R^2$ | 0.108 | 0.048 | 0.068 |
| Log-likelihood | -1209 | -919.6 | -279.6 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are binary logistic regressions; average marginal effects and their confidence intervals are reported.

**Table B2 – The direct effects of the Big Five on group participation (with left-right control)**

| VARIABLES | **Any group participation** *(vs. no participation)* M1 | **Political participation** *(vs. social, non-political participation)* M2 | **Party participation** *(vs. SMO participation)* M3 |
|---|---|---|---|
| **The Big Five** | | | |
| Openness to experience | 0.023* | 0.033* | -0.024 |
| | [0.003 - 0.043] | [0.008 - 0.058] | [-0.080 - 0.032] |
| Conscientiousness | -0.007 | -0.027† | 0.001 |
| | [-0.032 - 0.019] | [-0.058 - 0.004] | [-0.069 - 0.072] |
| Extraversion | 0.040*** | 0.029* | 0.052† |
| | [0.019 - 0.060] | [0.004 - 0.054] | [-0.002 - 0.107] |
| Agreeableness | 0.025* | 0.004 | -0.005 |
| | [0.001 - 0.049] | [-0.026 - 0.033] | [-0.074 - 0.064] |
| Neuroticism | -0.022* | -0.016 | 0.004 |
| | [-0.044 - -0.000] | [-0.043 - 0.011] | [-0.056 - 0.065] |
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 0.048* | 0.044 | -0.038 |
| | [0.003 - 0.092] | [-0.012 - 0.099] | [-0.157 - 0.081] |
| University degree | 0.076** | 0.059* | -0.038 |
| | [0.028 - 0.124] | [0.000 - 0.118] | [-0.159 - 0.083] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | -0.061** | 0.019 | -0.022 |
| | [-0.103 - -0.019] | [-0.032 - 0.070] | [-0.133 - 0.090] |
| High-level household income (>4000€) | 0.036 | 0.013 | -0.037 |
| | [-0.007 - 0.079] | [-0.038 - 0.065] | [-0.151 - 0.078] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 0.085** | 0.068† | -0.047 |
| | [0.027 - 0.142] | [-0.009 - 0.144] | [-0.210 - 0.117] |
| 51-64 years old | 0.037 | 0.074** | 0.005 |
| | [-0.008 - 0.083] | [0.019 - 0.130] | [-0.120 - 0.130] |
| ≥ 65 years old | 0.067* | 0.037 | 0.227** |
| | [0.002 - 0.132] | [-0.041 - 0.115] | [0.066 - 0.388] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 0.053* | 0.047 | -0.101 |
| | [0.005 - 0.102] | [-0.013 - 0.108] | [-0.222 - 0.021] |
| Part-time or irregularly employed | 0.069** | 0.009 | -0.121† |
| | [0.022 - 0.116] | [-0.049 - 0.066] | [-0.247 - 0.005] |
| Children under 16 living in the household | 0.158*** | -0.049† | -0.019 |
| | [0.118 - 0.197] | [-0.102 - 0.004] | [-0.145 - 0.106] |
| Religiosity | 0.104*** | 0.047*** | -0.004 |
| | [0.083 - 0.124] | [0.024 - 0.069] | [-0.053 - 0.046] |
| **Sociodemographic controls** | | | |
| Gender (women) | -0.024 | -0.122*** | -0.123* |
| | [-0.062 - 0.015] | [-0.170 - -0.074] | [-0.228 - -0.019] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | -0.043* | -0.012 | -0.029 |
| | [-0.085 - -0.000] | [-0.062 - 0.038] | [-0.144 - 0.086] |
| More than 40 km from a large city | -0.007 | 0.040 | 0.069 |
| | [-0.048 - 0.033] | [-0.010 - 0.090] | [-0.038 - 0.176] |
| Self-placement on a left-right scale[(a)] | -0.003 | -0.031*** | 0.045*** |
| | [-0.012 - 0.006] | [-0.042 - -0.020] | [0.024 - 0.067] |
| Observations | 2296 | 1656 | 429 |
| Pseudo $R^2$ | 0.107 | 0.064 | 0.095 |
| Log-likelihood | -1183 | -891.6 | -268.8 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are binary logistic regressions; average marginal effects and their confidence intervals are reported.

[(a)] A higher score indicates a rightist position.

**Table B3 – The direct effects of the Big Five on group participation (Firth's penalized)**

| VARIABLES | Any group participation *(vs. no participation)* M1 | Political participation *(vs. social, non-political participation)* M2 | Party participation *(vs. SMO participation)* M3 |
|---|---|---|---|
| **The Big Five** | | | |
| Openness to experience | 1.152* [1.026 - 1.293] | 1.233** [1.075 - 1.414] | 0.865 [0.679 - 1.102] |
| Conscientiousness | 0.953 [0.824 - 1.102] | 0.842* [0.712 - 0.995] | 1.051 [0.776 - 1.422] |
| Extraversion | 1.254*** [1.114 - 1.412] | 1.163* [1.015 - 1.334] | 1.270† [0.998 - 1.617] |
| Agreeableness | 1.181* [1.029 - 1.356] | 1.038 [0.883 - 1.220] | 0.911 [0.675 - 1.229] |
| Neuroticism | 0.884† [0.780 - 1.002] | 0.928 [0.802 - 1.075] | 1.016 [0.781 - 1.322] |
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 1.325* [1.016 - 1.728] | 1.229 [0.916 - 1.649] | 0.952 [0.565 - 1.604] |
| University degree | 1.560** [1.155 - 2.107] | 1.476* [1.087 - 2.003] | 0.837 [0.493 - 1.421] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | 0.687** [0.547 - 0.863] | 1.170 [0.888 - 1.541] | 0.939 [0.577 - 1.530] |
| High-level household income (>4000€) | 1.208 [0.926 - 1.576] | 1.057 [0.798 - 1.400] | 0.883 [0.537 - 1.451] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 1.636** [1.149 - 2.328] | 1.317 [0.875 - 1.983] | 0.986 [0.489 - 1.991] |
| 51-64 years old | 1.239 [0.959 - 1.599] | 1.513** [1.115 - 2.052] | 1.094 [0.644 - 1.857] |
| ≥ 65 years old | 1.446† [0.985 - 2.123] | 1.220 [0.787 - 1.890] | 2.789** [1.288 - 6.040] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 1.371* [1.036 - 1.813] | 1.256 [0.913 - 1.727] | 0.662 [0.388 - 1.129] |
| Part-time or irregularly employed | 1.505** [1.137 - 1.991] | 1.082 [0.786 - 1.489] | 0.583† [0.337 - 1.007] |
| Children under 16 living in the household | 2.712*** [2.030 - 3.621] | 0.748† [0.552 - 1.011] | 0.976 [0.566 - 1.681] |
| Religiosity | 1.826*** [1.613 - 2.067] | 1.197** [1.060 - 1.352] | 1.096 [0.891 - 1.348] |
| **Sociodemographic controls** | | | |
| Gender (women) | 0.872 [0.700 - 1.085] | 0.545*** [0.419 - 0.708] | 0.563* [0.361 - 0.876] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | 0.790† [0.622 - 1.004] | 0.983 [0.742 - 1.303] | 0.811 [0.495 - 1.327] |
| More than 40 km from a large city | 0.937 [0.740 - 1.187] | 1.244 [0.956 - 1.620] | 1.325 [0.832 - 2.111] |
| Constant | 0.187*** [0.073 - 0.484] | 0.132*** [0.043 - 0.405] | 1.000 [0.131 - 7.617] |
| Observations | 2343 | 1687 | 433 |
| Tjur's D | 0.121 | 0.055 | 0.087 |
| Log-likelihood | -1163 | -875.8 | -247.3 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are Firth's penalized likelihood logistic regressions; odds ratios and their confidence intervals are reported.

**Table B4 – Multinomial regressions for the Big Five and group participation**

| | Basis outcome: *« No group participation at all »* | | | Basis outcome: *« Non-political participation »* | |
|---|---|---|---|---|---|
| VARIABLES | Non-political participation | SMO participation | Party participation | SMO participation | Party participation |
| **The Big Five** | | | | | |
| Openness to experience | 1.090 | 1.466*** | 1.234* | 1.352** | 1.139 |
| | [0.966 - 1.230] | [1.203 - 1.786] | [1.016 - 1.499] | [1.125 - 1.625] | [0.950 - 1.366] |
| Conscientiousness | 0.990 | 0.821 | 0.876 | 0.824† | 0.886 |
| | [0.850 - 1.153] | [0.646 - 1.044] | [0.689 - 1.115] | [0.661 - 1.029] | [0.708 - 1.109] |
| Extraversion | 1.207** | 1.223* | 1.587*** | 1.019 | 1.321** |
| | [1.066 - 1.366] | [1.005 - 1.488] | [1.303 - 1.934] | [0.850 - 1.221] | [1.100 - 1.586] |
| Agreeableness | 1.160* | 1.283* | 1.159 | 1.101 | 0.993 |
| | [1.004 - 1.340] | [1.015 - 1.620] | [0.921 - 1.458] | [0.887 - 1.368] | [0.802 - 1.230] |
| Neuroticism | 0.898 | 0.815† | 0.809* | 0.914 | 0.908 |
| | [0.788 - 1.023] | [0.660 - 1.007] | [0.656 - 0.998] | [0.752 - 1.112] | [0.747 - 1.104] |
| **Resources** | | | | | |
| Level of education (Ref.: No degree) | | | | | |
| Cooperative educ./applied sciences degree | 1.250 | 1.467† | 1.614* | 1.173 | 1.292 |
| | [0.946 - 1.651] | [0.943 - 2.281] | [1.065 - 2.447] | [0.783 - 1.758] | [0.886 - 1.884] |
| University degree | 1.381* | 2.111** | 1.883** | 1.542* | 1.388 |
| | [1.007 - 1.893] | [1.347 - 3.309] | [1.187 - 2.987] | [1.038 - 2.292] | [0.921 - 2.090] |
| Income (Ref.: average income (2300-4000€/month)) | | | | | |
| Low-level household income (<2300€) | 0.665*** | 0.798 | 0.740 | 1.207 | 1.135 |
| | [0.523 - 0.844] | [0.537 - 1.185] | [0.503 - 1.088] | [0.833 - 1.749] | [0.791 - 1.630] |
| High-level household income (>4000€) | 1.212 | 1.424 | 1.165 | 1.169 | 0.961 |
| | [0.920 - 1.598] | [0.934 - 2.169] | [0.767 - 1.770] | [0.804 - 1.701] | [0.662 - 1.394] |
| Age (Ref.: 31-50 years old) | | | | | |
| 18-30 years old | 1.554* | 2.049* | 2.127* | 1.298 | 1.383 |
| | [1.076 - 2.245] | [1.151 - 3.648] | [1.164 - 3.887] | [0.762 - 2.210] | [0.791 - 2.419] |
| 51-64 years old | 1.105 | 1.568* | 1.783* | 1.441† | 1.658* |
| | [0.846 - 1.442] | [1.016 - 2.419] | [1.145 - 2.776] | [0.963 - 2.156] | [1.100 - 2.501] |
| ≥ 65 years old | 1.367 | 0.978 | 2.646** | 0.705 | 1.920* |
| | [0.913 - 2.048] | [0.504 - 1.901] | [1.422 - 4.923] | [0.381 - 1.304] | [1.087 - 3.391] |
| Employment status (Ref.: Full-time employed) | | | | | |
| Unemployed/not at the workplace | 1.277 | 1.906** | 1.270 | 1.531* | 1.027 |
| | [0.951 - 1.716] | [1.216 - 2.988] | [0.804 - 2.006] | [1.011 - 2.317] | [0.673 - 1.569] |
| Part-time or irregularly employed | 1.462* | 1.832** | 1.126 | 1.257 | 0.797 |
| | [1.093 - 1.956] | [1.165 - 2.882] | [0.688 - 1.842] | [0.831 - 1.900] | [0.506 - 1.255] |
| Children under 16 living in the household | 2.927*** | 2.072** | 2.234*** | 0.715 | 0.774 |
| | [2.175 - 3.940] | [1.306 - 3.287] | [1.402 - 3.558] | [0.477 - 1.072] | [0.516 - 1.163] |
| Religiosity | 1.758*** | 1.937*** | 2.246*** | 1.102 | 1.276** |
| | [1.545 - 2.000] | [1.604 - 2.339] | [1.866 - 2.703] | [0.936 - 1.298] | [1.088 - 1.496] |

# APPENDIX – CHAPTER 5

| | **Basis outcome:** ***« No group participation at all »*** | | | **Basis outcome:** ***« Non-political participation »*** | |
|---|---|---|---|---|---|
| VARIABLES | Non-political participation | SMO participation | Party participation | SMO participation | Party participation |
| **Sociodemographic controls** | | | | | |
| Gender (women) | 1.004 | 0.783 | 0.411*** | 0.755 | 0.397*** |
| | [0.798 - 1.264] | [0.541 - 1.134] | [0.282 - 0.601] | [0.533 - 1.069] | [0.279 - 0.566] |
| Living area (Ref.: 10-40 km from a large city) | | | | | |
| In a large city center or within 10 km | 0.802† | 0.883 | 0.694† | 1.112 | 0.863 |
| | [0.625 - 1.030] | [0.595 - 1.311] | [0.457 - 1.054] | [0.774 - 1.598] | [0.585 - 1.273] |
| More than 40 km from a large city | 0.887 | 0.948 | 1.203 | 1.079 | 1.347† |
| | [0.693 - 1.137] | [0.637 - 1.410] | [0.829 - 1.747] | [0.749 - 1.556] | [0.961 - 1.890] |
| Constant | 0.183*** | 0.012*** | 0.011*** | 0.065*** | 0.058*** |
| | [0.068 - 0.492] | [0.002 - 0.061] | [0.002 - 0.056] | [0.015 - 0.289] | [0.013 - 0.258] |
| Observations | | 2304 | | 1594 | |
| Pseudo R-squared | | 0.081 | | 0.053 | |
| Log-likelihood | | -2392 | | -1192 | |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

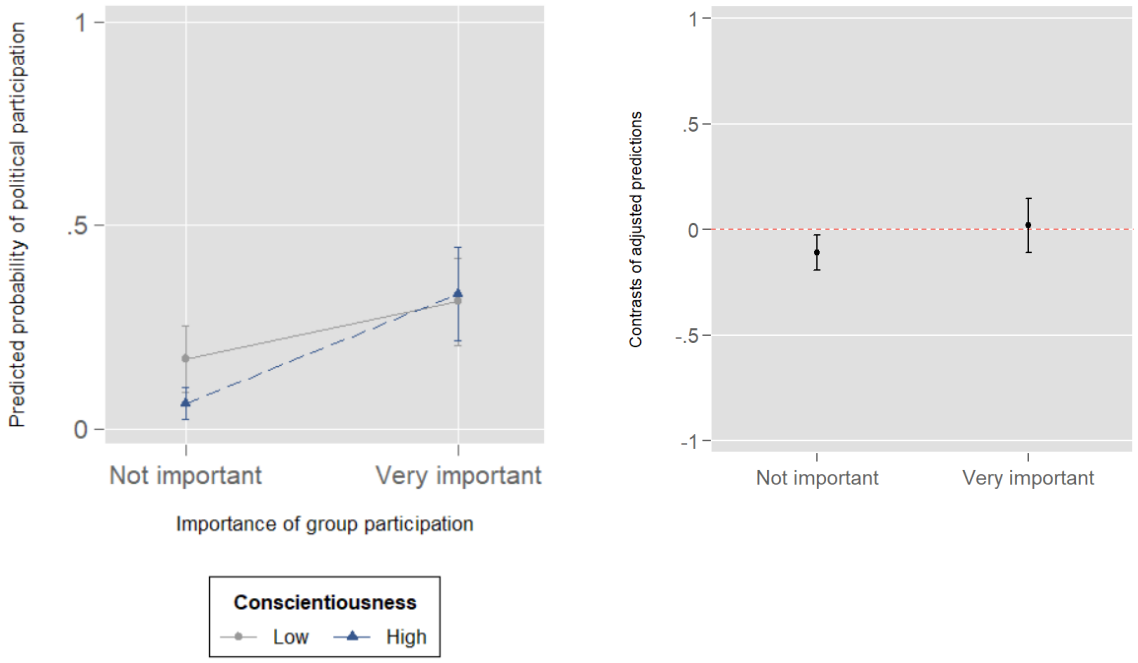
Models are multinomial logistic regressions; relative risk ratios and their confidence intervals are reported.

**Table B5 – Trait-resource substitution effects on group participation**

| VARIABLES | Any group participation *(vs. no participation)* | |
|---|---|---|
| **The Big Five** | | |
| Openness to experience (O) | 1.120 | [0.973 - 1.288] |
| Conscientiousness (C) | 0.953 | [0.823 - 1.104] |
| Extraversion (E) | 1.444** | [1.127 - 1.849] |
| Agreeableness (A) | 1.178* | [1.025 - 1.354] |
| Neuroticism (N) | 0.887† | [0.781 - 1.006] |
| **Resource-substitution effects** | | |
| O * Level of education | | |
| O * Cooperative educ./applied sciences degree | 1.134 | [0.830 - 1.549] |
| O * University degree | 1.090 | [0.790 - 1.503] |
| E * Age | | |
| E * 18-30 years old | 1.000 | [0.685 - 1.460] |
| E * 51-64 years old | 0.821 | [0.616 - 1.095] |
| E * ≥ 65 years old | 1.042 | [0.661 - 1.641] |
| E * Employment status | | |
| E * Unemployed/not at the workplace | 0.939 | [0.684 - 1.288] |
| E * Part-time or irregularly employed | 1.001 | [0.746 - 1.344] |
| E * Children (1 or more) | 0.763† | [0.558 - 1.044] |
| E * Religiosity | 1.009 | [0.876 - 1.162] |
| **Resources** | | |
| Level of education (Ref.: No degree) | | |
| Cooperative educ./applied sciences degree | 1.332* | [1.019 - 1.742] |
| University degree | 1.565** | [1.153 - 2.124] |
| Income (Ref.: average income (2300-4000€/month)) | | |
| Low-level household income (<2300€) | 0.688** | [0.546 - 0.865] |
| High-level household income (>4000€) | 1.222 | [0.934 - 1.598] |
| Age (Ref.: 31-50 years old) | | |
| 18-30 years old | 1.639** | [1.147 - 2.341] |
| 51-64 years old | 1.225 | [0.946 - 1.586] |
| ≥ 65 years old | 1.485* | [1.000 - 2.205] |
| Employment status (Ref.: Full-time employed) | | |
| Unemployed/not at the workplace | 1.364* | [1.029 - 1.809] |
| Part-time or irregularly employed | 1.504** | [1.134 - 1.994] |
| Children under 16 living in the household | 2.720*** | [2.033 - 3.640] |
| Religiosity | 1.850*** | [1.630 - 2.100] |
| **Sociodemographic controls** | | |
| Gender (women) | 0.870 | [0.698 - 1.085] |
| Living area (Ref.: 10-40 km from a large city) | | |
| In a large city center or within 10 km | 0.781* | [0.613 - 0.995] |
| More than 40 km from a large city | 0.929 | [0.732 - 1.179] |
| Constant | 1.968*** | [1.449 - 2.673] |
| Observations | 2343 | |
| Pseudo $R^2$ | 0.110 | |
| Log-likelihood | -1207 | |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1
Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.
Binary logistic regression; odds ratios and their confidence intervals are reported.
Interaction terms are mean centered.

**Figure B1 – The joint effect of the perceived importance of associational involvement and conscientiousness on political participation probability (adjusted predictions and their contrasts with 95% CIs)**



# C. Appendix – Chapter 6

**Table C1 – The direct effects of personal values on group participation (full models)**

| VARIABLES | **Any group participation** *(vs. no participation)* M1 | **Political participation** *(vs. social, non-political participation)* M2 | **Party participation** *(vs. SMO participation)* M3 |
|---|---|---|---|
| **Higher-order personal values** | | | |
| Conservation | -0.020 | -0.095*** | 0.165*** |
| | [-0.045 - 0.005] | [-0.124 - -0.067] | [0.107 - 0.223] |
| Self-Enhancement | -0.017 | -0.072*** | 0.122*** |
| | [-0.042 - 0.008] | [-0.103 - -0.042] | [0.060 - 0.184] |
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 0.053* | 0.043 | -0.003 |
| | [0.009 - 0.098] | [-0.012 - 0.098] | [-0.120 - 0.113] |
| University degree | 0.075** | 0.058† | 0.018 |
| | [0.027 - 0.123] | [-0.000 - 0.116] | [-0.102 - 0.137] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | -0.076*** | 0.019 | -0.010 |
| | [-0.117 - -0.034] | [-0.031 - 0.068] | [-0.118 - 0.098] |
| High-level household income (>4000€) | 0.034 | 0.017 | -0.065 |
| | [-0.009 - 0.076] | [-0.034 - 0.067] | [-0.176 - 0.046] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 0.087** | 0.050 | 0.001 |
| | [0.030 - 0.144] | [-0.025 - 0.126] | [-0.162 - 0.163] |
| 51-64 years old | 0.041† | 0.059* | 0.036 |
| | [-0.005 - 0.087] | [0.005 - 0.113] | [-0.085 - 0.158] |
| ≥ 65 years old | 0.073* | 0.030 | 0.255** |
| | [0.009 - 0.137] | [-0.047 - 0.107] | [0.101 - 0.408] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 0.051* | 0.040 | -0.119* |
| | [0.003 - 0.099] | [-0.019 - 0.099] | [-0.235 - -0.002] |
| Part-time or irregularly employed | 0.067** | 0.008 | -0.111† |
| | [0.021 - 0.114] | [-0.049 - 0.064] | [-0.235 - 0.013] |
| Children under 16 living in the household | 0.165*** | -0.060* | -0.005 |
| | [0.126 - 0.203] | [-0.112 - -0.009] | [-0.127 - 0.116] |
| Religiosity | 0.108*** | 0.041*** | -0.015 |
| | [0.087 - 0.128] | [0.020 - 0.063] | [-0.062 - 0.032] |
| **Sociodemographic controls** | | | |
| Gender (women) | -0.021 | -0.128*** | -0.083 |
| | [-0.058 - 0.016] | [-0.173 - -0.082] | [-0.183 - 0.017] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | -0.039† | -0.016 | -0.016 |
| | [-0.082 - 0.003] | [-0.066 - 0.033] | [-0.128 - 0.096] |
| More than 40 km from a large city | -0.011 | 0.035 | 0.077 |
| | [-0.051 - 0.029] | [-0.014 - 0.084] | [-0.027 - 0.181] |
| Observations | 2345 | 1689 | 433 |
| Pseudo $R^2$ | 0.096 | 0.065 | 0.119 |
| Log-likelihood | -1227 | -904.1 | -264.1 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are binary logistic regressions; average marginal effects and their confidence intervals are reported.

**Table C2 – The direct effects of personal values on group participation (with left-right control)**

| VARIABLES | **Any group participation** *(vs. no participation)* M1 | **Political participation** *(vs. social, non-political participation)* M2 | **Party participation** *(vs. SMO participation)* M3 |
|---|---|---|---|
| **Higher-order personal values** | | | |
| Conservation | -0.017 | -0.083*** | 0.139*** |
| | [-0.043 - 0.009] | [-0.113 - -0.053] | [0.076 - 0.203] |
| Self-Enhancement | -0.015 | -0.060*** | 0.104** |
| | [-0.041 - 0.011] | [-0.092 - -0.029] | [0.040 - 0.168] |
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 0.051* | 0.047† | -0.021 |
| | [0.007 - 0.096] | [-0.008 - 0.103] | [-0.138 - 0.095] |
| University degree | 0.076** | 0.048 | 0.010 |
| | [0.028 - 0.124] | [-0.009 - 0.106] | [-0.110 - 0.129] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | -0.068** | 0.010 | -0.008 |
| | [-0.110 - -0.026] | [-0.040 - 0.060] | [-0.116 - 0.101] |
| High-level household income (>4000€) | 0.039† | 0.016 | -0.060 |
| | [-0.004 - 0.082] | [-0.035 - 0.068] | [-0.171 - 0.051] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 0.089** | 0.067† | -0.030 |
| | [0.031 - 0.147] | [-0.011 - 0.144] | [-0.193 - 0.133] |
| 51-64 years old | 0.041† | 0.061* | 0.017 |
| | [-0.005 - 0.087] | [0.006 - 0.115] | [-0.105 - 0.139] |
| ≥ 65 years old | 0.075* | 0.035 | 0.239** |
| | [0.011 - 0.140] | [-0.043 - 0.112] | [0.086 - 0.393] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 0.049* | 0.043 | -0.120* |
| | [0.000 - 0.097] | [-0.016 - 0.103] | [-0.237 - -0.004] |
| Part-time or irregularly employed | 0.065** | 0.005 | -0.115† |
| | [0.018 - 0.113] | [-0.052 - 0.062] | [-0.239 - 0.009] |
| Children under 16 living in the household | 0.165*** | -0.057* | -0.014 |
| | [0.126 - 0.204] | [-0.109 - -0.005] | [-0.136 - 0.108] |
| Religiosity | 0.107*** | 0.050*** | -0.022 |
| | [0.086 - 0.127] | [0.028 - 0.072] | [-0.070 - 0.026] |
| **Sociodemographic controls** | | | |
| Gender (women) | -0.020 | -0.131*** | -0.078 |
| | [-0.058 - 0.017] | [-0.176 - -0.085] | [-0.178 - 0.022] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | -0.041† | -0.019 | -0.009 |
| | [-0.084 - 0.002] | [-0.069 - 0.030] | [-0.121 - 0.104] |
| More than 40 km from a large city | -0.007 | 0.038 | 0.073 |
| | [-0.048 - 0.034] | [-0.012 - 0.087] | [-0.031 - 0.177] |
| Self-placement on a left-right scale[a] | -0.002 | -0.020*** | 0.023* |
| | [-0.012 - 0.007] | [-0.032 - -0.009] | [0.000 - 0.046] |
| Observations | 2298 | 1658 | 429 |
| Pseudo $R^2$ | 0.095 | 0.073 | 0.126 |
| Log-likelihood | -1200 | -883.8 | -259.6 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are binary logistic regressions; average marginal effects and their confidence intervals are reported.

[a] A higher score indicates a rightist position.

**Table C3 – The direct effects of personal values on group participation (Firth's penalized)**

| VARIABLES | **Any group participation** *(vs. no participation)* M1 | **Political participation** *(vs. social, non-political participation)* M2 | **Party participation** *(vs. SMO participation)* M3 |
|---|---|---|---|
| **Higher-order personal values** | | | |
| Conservation | 0.895 | 0.589*** | 2.105*** |
| | [0.775 - 1.033] | [0.499 - 0.694] | [1.560 - 2.842] |
| Self-Enhancement | 0.907 | 0.669*** | 1.738*** |
| | [0.785 - 1.049] | [0.562 - 0.795] | [1.283 - 2.353] |
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 1.353* | 1.271 | 0.985 |
| | [1.040 - 1.760] | [0.945 - 1.710] | [0.574 - 1.690] |
| University degree | 1.548** | 1.371* | 1.082 |
| | [1.149 - 2.086] | [1.007 - 1.865] | [0.621 - 1.888] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | 0.664*** | 1.111 | 0.955 |
| | [0.530 - 0.832] | [0.841 - 1.466] | [0.577 - 1.580] |
| High-level household income (>4000€) | 1.229 | 1.098 | 0.744 |
| | [0.943 - 1.600] | [0.826 - 1.459] | [0.444 - 1.246] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 1.655** | 1.334 | 1.000 |
| | [1.165 - 2.352] | [0.879 - 2.025] | [0.476 - 2.103] |
| 51-64 years old | 1.254† | 1.388* | 1.174 |
| | [0.974 - 1.615] | [1.023 - 1.883] | [0.674 - 2.044] |
| ≥ 65 years old | 1.512* | 1.192 | 3.306** |
| | [1.035 - 2.210] | [0.768 - 1.848] | [1.487 - 7.349] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 1.328* | 1.246 | 0.586† |
| | [1.008 - 1.751] | [0.903 - 1.720] | [0.338 - 1.016] |
| Part-time or irregularly employed | 1.471** | 1.045 | 0.605† |
| | [1.115 - 1.940] | [0.757 - 1.441] | [0.342 - 1.071] |
| Children under 16 living in the household | 2.831*** | 0.710* | 0.975 |
| | [2.122 - 3.776] | [0.523 - 0.962] | [0.555 - 1.713] |
| Religiosity | 1.847*** | 1.260*** | 0.935 |
| | [1.632 - 2.090] | [1.114 - 1.425] | [0.751 - 1.164] |
| **Sociodemographic controls** | | | |
| Gender (women) | 0.887 | 0.494*** | 0.691 |
| | [0.719 - 1.094] | [0.382 - 0.638] | [0.442 - 1.081] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | 0.800† | 0.911 | 0.930 |
| | [0.631 - 1.015] | [0.684 - 1.212] | [0.557 - 1.552] |
| More than 40 km from a large city | 0.939 | 1.207 | 1.416 |
| | [0.742 - 1.187] | [0.925 - 1.575] | [0.874 - 2.296] |
| Constant | 0.506*** | 0.126*** | 3.311** |
| | [0.350 - 0.733] | [0.080 - 0.200] | [1.412 - 7.768] |
| Observations | 2345 | 1689 | 433 |
| Tjur's D | 0.106 | 0.075 | 0.152 |
| Log-likelihood | -1189 | -868.4 | -238.5 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are Firth's penalized likelihood logistic regressions; odds ratios and their confidence intervals are reported.

**Table C4 – Multinomial regressions for personal values and group participation**

| | Basis outcome: *« No group participation at all »* | | | Basis outcome: *« Non-political participation »* | |
|---|---|---|---|---|---|
| VARIABLES | Non-political participation | SMO participation | Party participation | SMO participation | Party participation |
| **Higher-order personal values** | | | | | |
| Conservation | 1.034 | 0.449*** | 0.905 | 0.418*** | 0.858 |
| | [0.886 - 1.206] | [0.358 - 0.562] | [0.710 - 1.153] | [0.338 - 0.516] | [0.683 - 1.078] |
| Self-enhancement | 1.009 | 0.503*** | 0.907 | 0.483*** | 0.890 |
| | [0.866 - 1.177] | [0.392 - 0.645] | [0.712 - 1.156] | [0.381 - 0.613] | [0.709 - 1.117] |
| **Resources** | | | | | |
| Level of education (Ref.: No degree) | | | | | |
| Cooperative educ./applied sciences degree | 1.272† | 1.524† | 1.667* | 1.227 | 1.326 |
| | [0.964 - 1.677] | [0.975 - 2.384] | [1.104 - 2.517] | [0.810 - 1.858] | [0.912 - 1.928] |
| University degree | 1.396* | 1.868** | 1.899** | 1.358 | 1.380 |
| | [1.020 - 1.912] | [1.185 - 2.945] | [1.203 - 2.998] | [0.903 - 2.041] | [0.920 - 2.070] |
| Income (Ref.: average income (2300-4000€/month)) | | | | | |
| Low-level household income (<2300€) | 0.651*** | 0.704† | 0.712† | 1.105 | 1.094 |
| | [0.513 - 0.825] | [0.471 - 1.054] | [0.486 - 1.043] | [0.754 - 1.620] | [0.765 - 1.566] |
| High-level household income (>4000€) | 1.226 | 1.506† | 1.199 | 1.258 | 0.977 |
| | [0.932 - 1.614] | [0.982 - 2.309] | [0.792 - 1.816] | [0.856 - 1.851] | [0.675 - 1.416] |
| Age (Ref.: 31-50 years old) | | | | | |
| 18-30 years old | 1.573* | 1.991* | 2.231** | 1.276 | 1.441 |
| | [1.090 - 2.272] | [1.109 - 3.575] | [1.226 - 4.061] | [0.733 - 2.223] | [0.822 - 2.525] |
| 51-64 years old | 1.130 | 1.463† | 1.780** | 1.263 | 1.588* |
| | [0.867 - 1.472] | [0.950 - 2.254] | [1.150 - 2.755] | [0.840 - 1.898] | [1.058 - 2.386] |
| ≥ 65 years old | 1.420† | 1.023 | 2.694** | 0.675 | 1.880* |
| | [0.952 - 2.117] | [0.527 - 1.987] | [1.464 - 4.957] | [0.361 - 1.261] | [1.072 - 3.297] |
| Employment status (Ref.: Full-time employed) | | | | | |
| Unemployed/not at the workplace | 1.239 | 1.885** | 1.231 | 1.554* | 1.006 |
| | [0.925 - 1.660] | [1.198 - 2.966] | [0.784 - 1.933] | [1.014 - 2.381] | [0.660 - 1.534] |
| Part-time or irregularly employed | 1.444* | 1.753* | 1.101 | 1.194 | 0.788 |
| | [1.081 - 1.928] | [1.112 - 2.761] | [0.675 - 1.797] | [0.782 - 1.824] | [0.500 - 1.240] |
| Children under 16 living in the household | 3.058*** | 2.075** | 2.344*** | 0.659* | 0.761 |
| | [2.274 - 4.111] | [1.304 - 3.301] | [1.477 - 3.720] | [0.437 - 0.996] | [0.508 - 1.141] |
| Religiosity | 1.757*** | 2.132*** | 2.229*** | 1.217* | 1.269** |
| | [1.544 - 1.999] | [1.761 - 2.581] | [1.854 - 2.679] | [1.028 - 1.439] | [1.083 - 1.488] |

# APPENDIX – CHAPTER 6

| | **Basis outcome: *« No group participation at all »*** | | | **Basis outcome: *« Non-political participation »*** | |
|---|---|---|---|---|---|
| VARIABLES | Non-political participation | SMO participation | Party participation | SMO participation | Party participation |
| **Sociodemographic controls** | | | | | |
| Gender (women) | 1.043 | 0.683* | 0.432*** | 0.622** | 0.404*** |
| | [0.836 - 1.301] | [0.476 - 0.981] | [0.300 - 0.623] | [0.440 - 0.879] | [0.287 - 0.568] |
| Living area (Ref.: 10-40 km from a large city) | | | | | |
| In a large city center or within 10 km | 0.816 | 0.843 | 0.702† | 1.003 | 0.845 |
| | [0.636 - 1.046] | [0.564 - 1.259] | [0.465 - 1.062] | [0.689 - 1.460] | [0.574 - 1.244] |
| More than 40 km from a large city | 0.894 | 0.945 | 1.194 | 1.053 | 1.318 |
| | [0.699 - 1.143] | [0.632 - 1.413] | [0.825 - 1.726] | [0.724 - 1.532] | [0.942 - 1.845] |
| Constant | 0.471*** | 0.017*** | 0.045*** | 0.036*** | 0.095*** |
| | [0.321 - 0.693] | [0.009 - 0.034] | [0.024 - 0.086] | [0.019 - 0.068] | [0.053 - 0.172] |
| Observations | | 2306 | | 1684 | |
| Pseudo R-squared | | 0.086 | | 0.078 | |
| Log-likelihood | | -2380 | | -1161 | |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are multinomial logistic regressions; relative risk ratios and their confidence intervals are reported.

**Table C5 – The direct effects of personal values on group participation (Openness to change and Self-Transcendence)**

| VARIABLES | **Any group participation** *(vs. no participation)* M1 | **Political participation** *(vs. social, non-political participation)* M2 | **Party participation** *(vs. SMO participation)* M3 |
|---|---|---|---|
| **Higher-order personal values** | | | |
| Openness to change | 0.024 | 0.107*** | -0.061 |
| | [-0.018 - 0.065] | [0.058 - 0.155] | [-0.174 - 0.051] |
| Self-Transcendence | 0.025 | 0.124*** | -0.302*** |
| | [-0.013 - 0.062] | [0.079 - 0.169] | [-0.395 - -0.208] |
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 0.054* | 0.046† | -0.011 |
| | [0.009 - 0.098] | [-0.008 - 0.101] | [-0.127 - 0.104] |
| University degree | 0.076** | 0.068* | -0.012 |
| | [0.029 - 0.124] | [0.010 - 0.126] | [-0.130 - 0.106] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | -0.075*** | 0.018 | -0.017 |
| | [-0.117 - -0.034] | [-0.032 - 0.068] | [-0.125 - 0.091] |
| High-level household income (>4000€) | 0.034 | 0.019 | -0.064 |
| | [-0.008 - 0.077] | [-0.032 - 0.069] | [-0.175 - 0.047] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 0.089** | 0.066† | -0.016 |
| | [0.032 - 0.145] | [-0.010 - 0.143] | [-0.178 - 0.146] |
| 51-64 years old | 0.040† | 0.056* | 0.053 |
| | [-0.005 - 0.086] | [0.002 - 0.110] | [-0.067 - 0.174] |
| ≥ 65 years old | 0.072* | 0.022 | 0.253** |
| | [0.008 - 0.136] | [-0.054 - 0.098] | [0.098 - 0.408] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 0.050* | 0.038 | -0.101† |
| | [0.002 - 0.098] | [-0.021 - 0.097] | [-0.218 - 0.016] |
| Part-time or irregularly employed | 0.067** | 0.007 | -0.093 |
| | [0.020 - 0.114] | [-0.050 - 0.064] | [-0.217 - 0.031] |
| Children under 16 living in the household | 0.165*** | -0.058* | 0.005 |
| | [0.126 - 0.203] | [-0.109 - -0.006] | [-0.117 - 0.128] |
| Religiosity | 0.107*** | 0.037*** | -0.004 |
| | [0.087 - 0.127] | [0.015 - 0.059] | [-0.051 - 0.042] |
| **Sociodemographic controls** | | | |
| Gender (women) | -0.022 | -0.133*** | -0.061 |
| | [-0.058 - 0.015] | [-0.179 - -0.088] | [-0.160 - 0.037] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | -0.039† | -0.015 | -0.017 |
| | [-0.082 - 0.003] | [-0.065 - 0.034] | [-0.128 - 0.095] |
| More than 40 km from a large city | -0.011 | 0.033 | 0.098† |
| | [-0.052 - 0.029] | [-0.016 - 0.082] | [-0.005 - 0.202] |
| Observations | 2346 | 1690 | 433 |
| Pseudo $R^2$ | 0.096 | 0.062 | 0.125 |
| Log-likelihood | -1227 | -906.8 | -262.5 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are binary logistic regressions; average marginal effects and their confidence intervals are reported.

**Figure C1 – The effect of self-enhancement values on group participation probability depending on age (adjusted predictions and their contrasts with 95% CIs)**

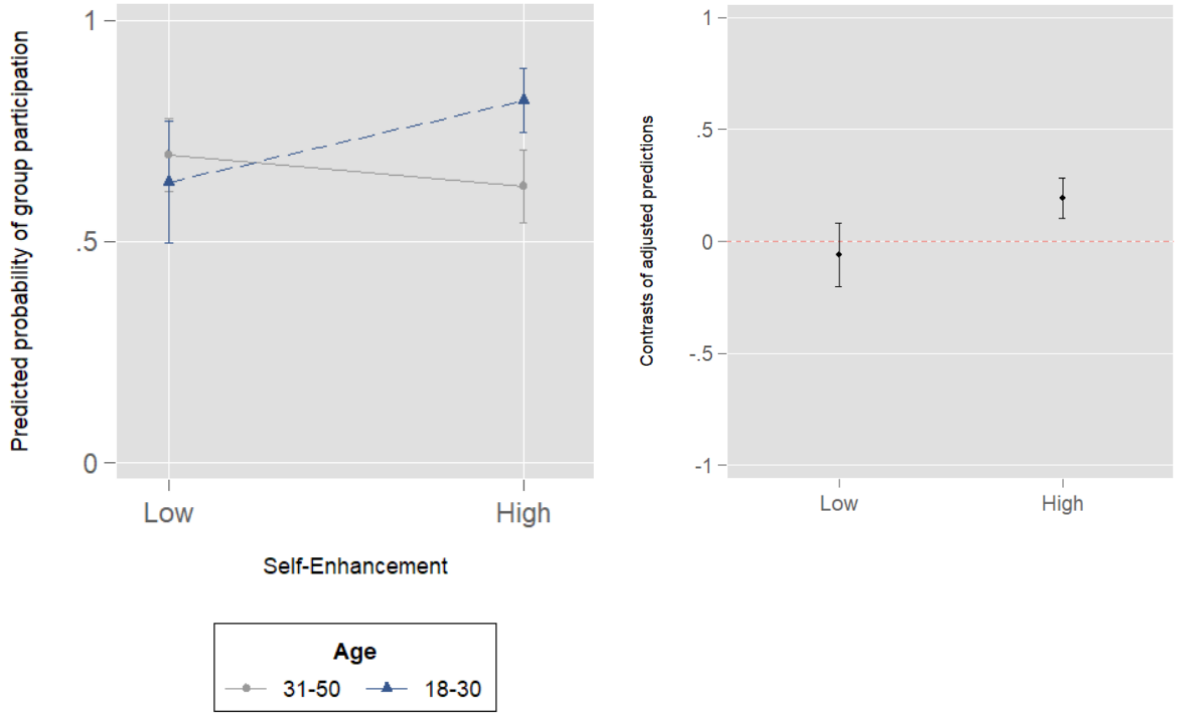
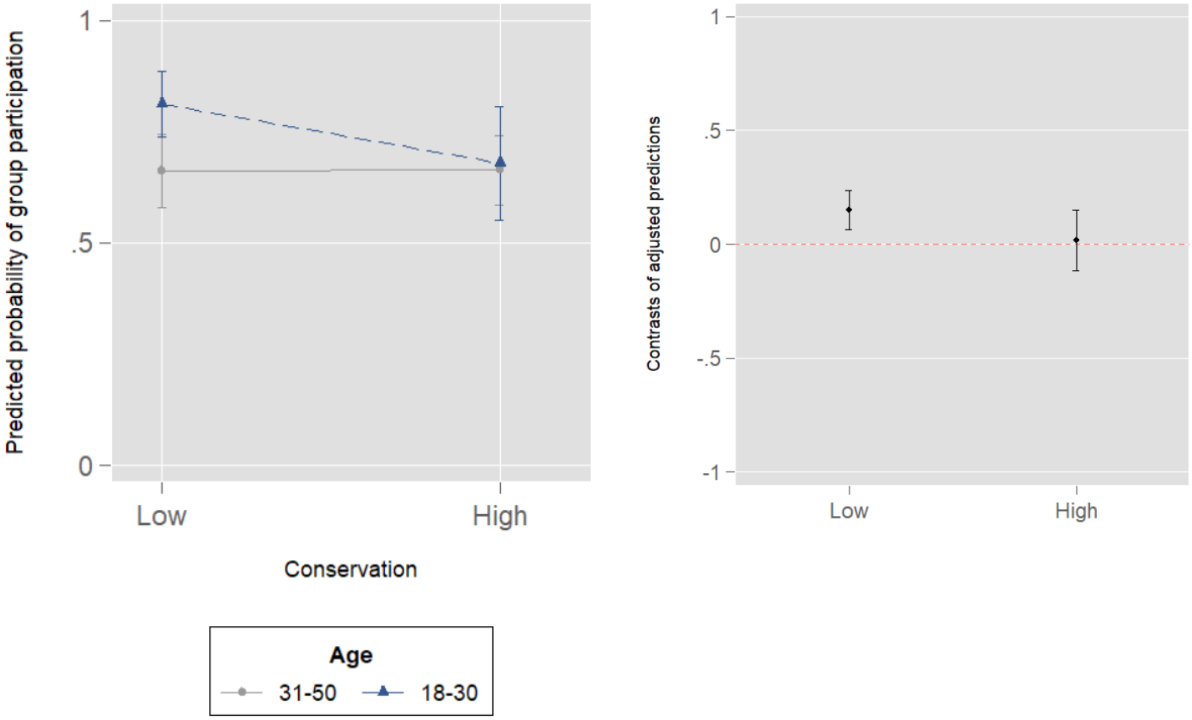



**Figure C2 – The effect of conservation values on group participation probability depending on age (adjusted predictions and their contrasts with 95% CIs)**



# D. Appendix – Conclusion

**Table D1 – The effects of the Big Five and personal values on group participation (full models)**

| VARIABLES | **Any group participation** *(vs. no participation)* M1 | **Political participation** *(vs. social, non-political participation)* M2 | **Party participation** *(vs. SMO participation)* M3 |
|---|---|---|---|
| **The Big Five** | | | |
| Openness to experience | 0.023* | 0.023† | 0.003 |
| | [0.003 - 0.043] | [-0.002 - 0.048] | [-0.053 - 0.058] |
| Conscientiousness | -0.008 | -0.030† | -0.003 |
| | [-0.033 - 0.018] | [-0.061 - 0.000] | [-0.072 - 0.066] |
| Extraversion | 0.039*** | 0.027* | 0.045† |
| | [0.019 - 0.059] | [0.002 - 0.052] | [-0.008 - 0.099] |
| Agreeableness | 0.028* | -0.006 | -0.003 |
| | [0.004 - 0.052] | [-0.036 - 0.024] | [-0.071 - 0.066] |
| Neuroticism | -0.020† | -0.004 | -0.020 |
| | [-0.041 - 0.002] | [-0.030 - 0.023] | [-0.080 - 0.040] |
| **Higher-order personal values** | | | |
| Conservation | -0.009 | -0.086*** | 0.166*** |
| | [-0.034 - 0.017] | [-0.115 - -0.057] | [0.107 - 0.225] |
| Self-enhancement | -0.003 | -0.072*** | 0.125*** |
| | [-0.030 - 0.023] | [-0.104 - -0.040] | [0.061 - 0.190] |
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 0.047* | 0.039 | -0.006 |
| | [0.003 - 0.092] | [-0.015 - 0.094] | [-0.121 - 0.110] |
| University degree | 0.071** | 0.052† | 0.017 |
| | [0.023 - 0.120] | [-0.006 - 0.110] | [-0.104 - 0.137] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | -0.069** | 0.022 | -0.007 |
| | [-0.110 - -0.027] | [-0.028 - 0.072] | [-0.116 - 0.102] |
| High-level household income (>4000€) | 0.030 | 0.016 | -0.063 |
| | [-0.012 - 0.073] | [-0.034 - 0.067] | [-0.174 - 0.049] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 0.081** | 0.043 | -0.003 |
| | [0.024 - 0.139] | [-0.032 - 0.118] | [-0.166 - 0.159] |
| 51-64 years old | 0.038 | 0.065* | 0.038 |
| | [-0.008 - 0.083] | [0.010 - 0.119] | [-0.084 - 0.160] |
| ≥ 65 years old | 0.067* | 0.037 | 0.252** |
| | [0.002 - 0.131] | [-0.041 - 0.115] | [0.096 - 0.409] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 0.055* | 0.039 | -0.119* |
| | [0.007 - 0.103] | [-0.020 - 0.098] | [-0.236 - -0.002] |
| Part-time or irregularly employed | 0.069** | 0.004 | -0.116† |
| | [0.022 - 0.115] | [-0.052 - 0.061] | [-0.239 - 0.006] |
| Children under 16 living in the household | 0.158*** | -0.055* | -0.006 |
| | [0.119 - 0.197] | [-0.107 - -0.003] | [-0.129 - 0.117] |
| Religiosity | 0.106*** | 0.043*** | -0.014 |
| | [0.086 - 0.126] | [0.021 - 0.065] | [-0.061 - 0.034] |
| **Sociodemographic controls** | | | |
| Gender (women) | -0.026 | -0.129*** | -0.077 |
| | [-0.064 - 0.012] | [-0.176 - -0.081] | [-0.182 - 0.028] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | -0.040† | -0.018 | -0.014 |
| | [-0.082 - 0.002] | [-0.067 - 0.031] | [-0.127 - 0.099] |
| More than 40 km from a large city | -0.010 | 0.035 | 0.081 |
| | [-0.050 - 0.030] | [-0.014 - 0.084] | [-0.023 - 0.185] |
| Observations | 2341 | 1687 | 433 |
| Pseudo $R^2$ | 0.109 | 0.071 | 0.126 |
| Log-likelihood | -1206 | -897.4 | -262.1 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are binary logistic regressions; average marginal effects and their confidence intervals are reported.

**Table D2 – The effects of the Big Five and personal values on group participation (with left-right control)**

| VARIABLES | **Any group participation** *(vs. no participation)* M1 | **Political participation** *(vs. social, non-political participation)* M2 | **Party participation** *(vs. SMO participation)* M3 |
|---|---|---|---|
| **The Big Five** | | | |
| Openness to experience | 0.022* | 0.021† | 0.004 |
| | [0.002 - 0.042] | [-0.004 - 0.046] | [-0.052 - 0.059] |
| Conscientiousness | -0.006 | -0.026† | -0.006 |
| | [-0.032 - 0.020] | [-0.057 - 0.005] | [-0.075 - 0.064] |
| Extraversion | 0.039*** | 0.028* | 0.044 |
| | [0.019 - 0.060] | [0.003 - 0.053] | [-0.009 - 0.097] |
| Agreeableness | 0.025* | -0.006 | 0.005 |
| | [0.000 - 0.049] | [-0.036 - 0.024] | [-0.064 - 0.073] |
| Neuroticism | -0.020† | -0.007 | -0.016 |
| | [-0.042 - 0.002] | [-0.033 - 0.020] | [-0.075 - 0.044] |
| **Higher-order personal values** | | | |
| Conservation | -0.006 | -0.074*** | 0.141*** |
| | [-0.033 - 0.020] | [-0.104 - -0.043] | [0.077 - 0.205] |
| Self-enhancement | -0.002 | -0.059*** | 0.108** |
| | [-0.029 - 0.025] | [-0.092 - -0.026] | [0.042 - 0.175] |
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 0.046* | 0.043 | -0.023 |
| | [0.001 - 0.091] | [-0.012 - 0.099] | [-0.139 - 0.093] |
| University degree | 0.074** | 0.044 | 0.009 |
| | [0.025 - 0.122] | [-0.014 - 0.102] | [-0.112 - 0.129] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | -0.062** | 0.014 | -0.007 |
| | [-0.103 - -0.020] | [-0.036 - 0.064] | [-0.117 - 0.102] |
| High-level household income (>4000€) | 0.035 | 0.016 | -0.058 |
| | [-0.008 - 0.078] | [-0.035 - 0.067] | [-0.169 - 0.053] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 0.083** | 0.060 | -0.034 |
| | [0.025 - 0.140] | [-0.017 - 0.137] | [-0.196 - 0.129] |
| 51-64 years old | 0.037 | 0.067* | 0.020 |
| | [-0.009 - 0.083] | [0.012 - 0.121] | [-0.103 - 0.144] |
| ≥ 65 years old | 0.069* | 0.040 | 0.237** |
| | [0.005 - 0.134] | [-0.039 - 0.118] | [0.080 - 0.394] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 0.053* | 0.043 | -0.120* |
| | [0.005 - 0.101] | [-0.017 - 0.103] | [-0.237 - -0.002] |
| Part-time or irregularly employed | 0.068** | 0.003 | -0.119† |
| | [0.021 - 0.115] | [-0.054 - 0.060] | [-0.242 - 0.004] |
| Children under 16 living in the household | 0.159*** | -0.052† | -0.016 |
| | [0.119 - 0.198] | [-0.104 - 0.000] | [-0.139 - 0.108] |
| Religiosity | 0.105*** | 0.051*** | -0.022 |
| | [0.084 - 0.126] | [0.029 - 0.073] | [-0.070 - 0.027] |
| **Sociodemographic controls** | | | |
| Gender (women) | -0.025 | -0.132*** | -0.076 |
| | [-0.064 - 0.013] | [-0.180 - -0.084] | [-0.181 - 0.029] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | -0.042† | -0.020 | -0.009 |
| | [-0.084 - 0.001] | [-0.069 - 0.030] | [-0.123 - 0.104] |
| More than 40 km from a large city | -0.007 | 0.038 | 0.076 |
| | [-0.047 - 0.034] | [-0.011 - 0.088] | [-0.028 - 0.180] |
| Self-placement on a left-right scale[a] | -0.003 | -0.020*** | 0.023* |
| | [-0.012 - 0.007] | [-0.032 - -0.009] | [0.000 - 0.046] |
| Observations | 2294 | 1656 | 429 |
| Pseudo $R^2$ | 0.107 | 0.079 | 0.132 |
| Log-likelihood | -1180 | -877.5 | -257.8 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are binary logistic regressions; average marginal effects and their confidence intervals are reported.

(a) A higher score indicates a rightist position.

**Table D3 – The effects of the Big Five and personal values on group participation (Firth's penalized)**

| VARIABLES | Any group participation *(vs. no participation)* M1 | Political participation *(vs. social, non-political participation)* M2 | Party participation *(vs. SMO participation)* M3 |
|---|---|---|---|
| **The Big Five** | | | |
| Openness to experience | 1.144* | 1.136† | 1.012 |
| | [1.016 - 1.287] | [0.988 - 1.306] | [0.781 - 1.312] |
| Conscientiousness | 0.957 | 0.845† | 0.985 |
| | [0.826 - 1.109] | [0.712 - 1.004] | [0.715 - 1.356] |
| Extraversion | 1.252*** | 1.162* | 1.228 |
| | [1.111 - 1.411] | [1.012 - 1.335] | [0.956 - 1.578] |
| Agreeableness | 1.177* | 0.968 | 0.987 |
| | [1.022 - 1.356] | [0.819 - 1.144] | [0.717 - 1.359] |
| Neuroticism | 0.893† | 0.980 | 0.914 |
| | [0.787 - 1.013] | [0.844 - 1.137] | [0.692 - 1.207] |
| **Higher-order personal values** | | | |
| Conservation | 0.953 | 0.619*** | 2.116*** |
| | [0.822 - 1.104] | [0.523 - 0.732] | [1.558 - 2.872] |
| Self-enhancement | 0.982 | 0.668*** | 1.760*** |
| | [0.842 - 1.146] | [0.557 - 0.802] | [1.283 - 2.413] |
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 1.312* | 1.246 | 0.973 |
| | [1.006 - 1.712] | [0.925 - 1.680] | [0.568 - 1.667] |
| University degree | 1.527** | 1.332† | 1.075 |
| | [1.128 - 2.069] | [0.975 - 1.820] | [0.613 - 1.888] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | 0.684** | 1.131 | 0.968 |
| | [0.545 - 0.860] | [0.855 - 1.496] | [0.582 - 1.610] |
| High-level household income (>4000€) | 1.204 | 1.095 | 0.754 |
| | [0.922 - 1.571] | [0.823 - 1.457] | [0.449 - 1.266] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 1.612** | 1.289 | 0.981 |
| | [1.129 - 2.301] | [0.845 - 1.965] | [0.465 - 2.069] |
| 51-64 years old | 1.235 | 1.437* | 1.185 |
| | [0.956 - 1.595] | [1.056 - 1.956] | [0.676 - 2.076] |
| ≥ 65 years old | 1.470† | 1.237 | 3.247** |
| | [0.999 - 2.162] | [0.793 - 1.929] | [1.443 - 7.305] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 1.368* | 1.240 | 0.586† |
| | [1.034 - 1.811] | [0.897 - 1.713] | [0.336 - 1.022] |
| Part-time or irregularly employed | 1.491** | 1.024 | 0.592† |
| | [1.127 - 1.974] | [0.741 - 1.417] | [0.335 - 1.046] |
| Children under 16 living in the household | 2.741*** | 0.732* | 0.973 |
| | [2.050 - 3.665] | [0.538 - 0.994] | [0.549 - 1.723] |
| Religiosity | 1.843*** | 1.269*** | 0.940 |
| | [1.626 - 2.089] | [1.120 - 1.438] | [0.753 - 1.173] |
| **Sociodemographic controls** | | | |
| Gender (women) | 0.862 | 0.489*** | 0.710 |
| | [0.690 - 1.076] | [0.374 - 0.641] | [0.443 - 1.139] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | 0.794† | 0.904 | 0.937 |
| | [0.625 - 1.010] | [0.678 - 1.204] | [0.558 - 1.571] |
| More than 40 km from a large city | 0.942 | 1.212 | 1.441 |
| | [0.743 - 1.193] | [0.928 - 1.584] | [0.887 - 2.342] |
| Constant | 0.181*** | 0.113*** | 2.265 |
| | [0.070 - 0.468] | [0.037 - 0.348] | [0.270 - 19.019] |
| Observations | 2341 | 1687 | 433 |
| Pseudo $R^2$ | 0.121 | 0.082 | 0.158 |
| Log-likelihood | -1155 | -849 | -226.9 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are Firth's penalized likelihood logistic regressions; odds ratios and their confidence intervals are reported.

**Table D4 – Multinomial regressions for the Big Five, personal values, and group participation**

| | Basis outcome: *« No group participation at all »* | | | Basis outcome: *« Non-political participation »* | |
|---|---|---|---|---|---|
| VARIABLES | Non-political participation | SMO participation | Party participation | SMO participation | Party participation |
| **The Big Five** | | | | | |
| Openness to experience | 1.106 | 1.246* | 1.234* | 1.159 | 1.123 |
| | [0.977 - 1.251] | [1.019 - 1.523] | [1.012 - 1.504] | [0.961 - 1.397] | [0.934 - 1.350] |
| Conscientiousness | 0.996 | 0.813 | 0.877 | 0.818† | 0.884 |
| | [0.853 - 1.163] | [0.635 - 1.041] | [0.687 - 1.119] | [0.649 - 1.031] | [0.705 - 1.109] |
| Extraversion | 1.209** | 1.220† | 1.589*** | 1.008 | 1.318** |
| | [1.067 - 1.370] | [0.999 - 1.489] | [1.303 - 1.938] | [0.836 - 1.216] | [1.097 - 1.584] |
| Agreeableness | 1.179* | 1.148 | 1.160 | 0.969 | 0.976 |
| | [1.016 - 1.368] | [0.903 - 1.459] | [0.916 - 1.467] | [0.773 - 1.216] | [0.785 - 1.215] |
| Neuroticism | 0.894† | 0.887 | 0.814† | 1.001 | 0.917 |
| | [0.783 - 1.020] | [0.718 - 1.096] | [0.658 - 1.007] | [0.819 - 1.222] | [0.752 - 1.118] |
| **Higher-order personal values** | | | | | |
| Conservation | 1.086 | 0.486*** | 1.015 | 0.434*** | 0.912 |
| | [0.927 - 1.273] | [0.386 - 0.613] | [0.790 - 1.305] | [0.350 - 0.539] | [0.722 - 1.153] |
| Self-enhancement | 1.089 | 0.537*** | 0.998 | 0.478*** | 0.905 |
| | [0.925 - 1.282] | [0.413 - 0.699] | [0.772 - 1.291] | [0.372 - 0.614] | [0.713 - 1.147] |
| **Resources** | | | | | |
| Level of education (Ref.: No degree) | | | | | |
| Cooperative educ./applied sciences degree | 1.242 | 1.472† | 1.606* | 1.218 | 1.294 |
| | [0.940 - 1.642] | [0.939 - 2.308] | [1.058 - 2.437] | [0.803 - 1.846] | [0.887 - 1.887] |
| University degree | 1.394* | 1.791* | 1.868** | 1.299 | 1.355 |
| | [1.013 - 1.918] | [1.129 - 2.840] | [1.173 - 2.976] | [0.860 - 1.963] | [0.897 - 2.046] |
| Income (Ref.: average income (2300-4000€/month)) | | | | | |
| Low-level household income (<2300€) | 0.667*** | 0.730 | 0.734 | 1.115 | 1.119 |
| | [0.525 - 0.848] | [0.487 - 1.096] | [0.499 - 1.081] | [0.758 - 1.639] | [0.779 - 1.607] |
| High-level household income (>4000€) | 1.201 | 1.491† | 1.157 | 1.262 | 0.965 |
| | [0.911 - 1.585] | [0.970 - 2.291] | [0.761 - 1.760] | [0.856 - 1.859] | [0.665 - 1.401] |
| Age (Ref.: 31-50 years old) | | | | | |
| 18-30 years old | 1.549* | 1.876* | 2.124* | 1.232 | 1.387 |
| | [1.069 - 2.246] | [1.035 - 3.401] | [1.157 - 3.898] | [0.702 - 2.165] | [0.787 - 2.443] |
| 51-64 years old | 1.115 | 1.504† | 1.780* | 1.316 | 1.630* |
| | [0.853 - 1.458] | [0.971 - 2.328] | [1.141 - 2.775] | [0.873 - 1.985] | [1.079 - 2.463] |
| ≥ 65 years old | 1.382 | 1.031 | 2.672** | 0.695 | 1.920* |
| | [0.920 - 2.074] | [0.526 - 2.021] | [1.432 - 4.985] | [0.369 - 1.307] | [1.085 - 3.397] |
| Employment status (Ref.: Full-time employed) | | | | | |
| Unemployed/not at the workplace | 1.276 | 1.890** | 1.267 | 1.533† | 1.021 |
| | [0.949 - 1.715] | [1.196 - 2.988] | [0.802 - 2.002] | [0.999 - 2.354] | [0.668 - 1.560] |
| Part-time or irregularly employed | 1.461* | 1.724* | 1.118 | 1.156 | 0.786 |
| | [1.091 - 1.956] | [1.091 - 2.723] | [0.682 - 1.831] | [0.755 - 1.770] | [0.498 - 1.239] |
| Children under 16 living in the household | 2.960*** | 2.062** | 2.266*** | 0.683† | 0.774 |
| | [2.196 - 3.988] | [1.291 - 3.294] | [1.420 - 3.615] | [0.451 - 1.034] | [0.514 - 1.165] |
| Religiosity | 1.753*** | 2.135*** | 2.250*** | 1.223* | 1.287** |
| | [1.538 - 1.997] | [1.760 - 2.591] | [1.865 - 2.715] | [1.032 - 1.449] | [1.095 - 1.514] |

# APPENDIX – CONCLUSION

| | Basis outcome: *« No group participation at all »* | | | Basis outcome: *« Non-political participation »* | |
|---|---|---|---|---|---|
| VARIABLES | Non-political participation | SMO participation | Party participation | SMO participation | Party participation |
| **Sociodemographic controls** | | | | | |
| Gender (women) | 1.015 | 0.686† | 0.410*** | 0.637* | 0.391*** |
| | [0.804 - 1.282] | [0.468 - 1.003] | [0.279 - 0.601] | [0.442 - 0.918] | [0.273 - 0.560] |
| Living area (Ref.: 10-40 km from a large city) | | | | | |
| In a large city center or within 10 km | 0.814 | 0.824 | 0.700† | 0.986 | 0.852 |
| | [0.633 - 1.046] | [0.550 - 1.234] | [0.460 - 1.064] | [0.676 - 1.437] | [0.576 - 1.258] |
| More than 40 km from a large city | 0.896 | 0.939 | 1.211 | 1.053 | 1.338† |
| | [0.699 - 1.149] | [0.626 - 1.408] | [0.834 - 1.758] | [0.722 - 1.535] | [0.954 - 1.879] |
| Constant | 0.178*** | 0.010*** | 0.011*** | 0.049*** | 0.057*** |
| | [0.066 - 0.481] | [0.002 - 0.050] | [0.002 - 0.055] | [0.011 - 0.222] | [0.013 - 0.257] |
| Observations | | 2302 | | 1682 | |
| Pseudo R-squared | | 0.096 | | 0.086 | |
| Log-likelihood | | -2350 | | -1151 | |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are multinomial logistic regressions; relative risk ratios and their confidence intervals are reported.

**Table D5 – The effects of the Big Five and personal values on group participation (Openness to change and Self-Transcendence)**

| VARIABLES | **Any group participation** *(vs. no participation)* M1 | **Political participation** *(vs. social, non-political participation)* M2 | **Party participation** *(vs. SMO participation)* M3 |
|---|---|---|---|
| **The Big Five** | | | |
| Openness to experience | 0.024* | 0.025* | -0.002 |
| | [0.004 - 0.044] | [0.000 - 0.050] | [-0.058 - 0.053] |
| Conscientiousness | -0.008 | -0.034* | 0.008 |
| | [-0.033 - 0.017] | [-0.064 - -0.004] | [-0.061 - 0.076] |
| Extraversion | 0.040*** | 0.029* | 0.040 |
| | [0.019 - 0.060] | [0.005 - 0.054] | [-0.013 - 0.094] |
| Agreeableness | 0.026* | -0.012 | 0.023 |
| | [0.002 - 0.051] | [-0.042 - 0.018] | [-0.047 - 0.092] |
| Neuroticism | -0.020† | -0.004 | -0.005 |
| | [-0.042 - 0.002] | [-0.031 - 0.023] | [-0.066 - 0.056] |
| **Higher-order personal values** | | | |
| Openness to change | -0.000 | 0.091*** | -0.067 |
| | [-0.043 - 0.043] | [0.040 - 0.142] | [-0.184 - 0.050] |
| Self-transcendence | 0.012 | 0.128*** | -0.304*** |
| | [-0.027 - 0.051] | [0.082 - 0.175] | [-0.401 - -0.207] |
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 0.048* | 0.042 | -0.012 |
| | [0.004 - 0.093] | [-0.013 - 0.096] | [-0.128 - 0.103] |
| University degree | 0.073** | 0.061* | -0.011 |
| | [0.026 - 0.121] | [0.002 - 0.119] | [-0.130 - 0.108] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | -0.069** | 0.022 | -0.018 |
| | [-0.110 - -0.027] | [-0.028 - 0.072] | [-0.127 - 0.091] |
| High-level household income (>4000€) | 0.031 | 0.018 | -0.064 |
| | [-0.012 - 0.073] | [-0.033 - 0.069] | [-0.175 - 0.046] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 0.083** | 0.054 | -0.015 |
| | [0.026 - 0.139] | [-0.022 - 0.129] | [-0.178 - 0.148] |
| 51-64 years old | 0.037 | 0.063* | 0.052 |
| | [-0.009 - 0.082] | [0.009 - 0.118] | [-0.070 - 0.174] |
| ≥ 65 years old | 0.065* | 0.033 | 0.247** |
| | [0.001 - 0.129] | [-0.044 - 0.111] | [0.088 - 0.406] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 0.054* | 0.036 | -0.097 |
| | [0.006 - 0.102] | [-0.023 - 0.095] | [-0.215 - 0.021] |
| Part-time or irregularly employed | 0.069** | 0.002 | -0.096 |
| | [0.022 - 0.115] | [-0.055 - 0.059] | [-0.220 - 0.028] |
| Children under 16 living in the household | 0.158*** | -0.052* | 0.001 |
| | [0.119 - 0.198] | [-0.104 - -0.000] | [-0.123 - 0.124] |
| Religiosity | 0.105*** | 0.039*** | -0.007 |
| | [0.085 - 0.125] | [0.017 - 0.061] | [-0.053 - 0.040] |
| **Sociodemographic controls** | | | |
| Gender (women) | -0.027 | -0.134*** | -0.067 |
| | [-0.065 - 0.011] | [-0.182 - -0.087] | [-0.171 - 0.037] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | -0.040† | -0.017 | -0.016 |
| | [-0.082 - 0.002] | [-0.066 - 0.032] | [-0.128 - 0.096] |
| More than 40 km from a large city | -0.010 | 0.034 | 0.100† |
| | [-0.050 - 0.030] | [-0.016 - 0.083] | [-0.003 - 0.204] |
| Observations | 2341 | 1687 | 433 |
| Pseudo $R^2$ | 0.108 | 0.070 | 0.13 |
| Log-likelihood | -1206 | -898.4 | -260.9 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1

Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.

Models are binary logistic regressions; average marginal effects and their confidence intervals are reported.

**Table D6 – The joint effects of the Big Five and conservation values**

| VARIABLES | **Any group participation** *(vs. no participation)* M1 | **Political participation** *(vs. social, non-political participation)* M2 | **Party participation** *(vs. SMO participation)* M3 |
|---|---|---|---|
| **The Big Five** | | | |
| Openness to experience (O) | 1.148* | 1.119 | 0.999 |
| | [1.018 - 1.294] | [0.970 - 1.291] | [0.759 - 1.315] |
| Conscientiousness (C) | 0.956 | 0.850† | 1.034 |
| | [0.823 - 1.110] | [0.712 - 1.014] | [0.726 - 1.473] |
| Extraversion (E) | 1.263*** | 1.188* | 1.277† |
| | [1.119 - 1.425] | [1.031 - 1.369] | [0.980 - 1.664] |
| Agreeableness (A) | 1.187* | 0.974 | 0.954 |
| | [1.029 - 1.369] | [0.822 - 1.156] | [0.680 - 1.338] |
| Neuroticism (N) | 0.896† | 0.978 | 0.898 |
| | [0.789 - 1.018] | [0.839 - 1.141] | [0.665 - 1.213] |
| **Higher-order personal values** | | | |
| Conservation | 0.962 | 0.611*** | 2.275*** |
| | [0.829 - 1.116] | [0.513 - 0.728] | [1.620 - 3.195] |
| Self-enhancement | 0.981 | 0.668*** | 1.848*** |
| | [0.839 - 1.147] | [0.556 - 0.804] | [1.326 - 2.574] |
| **Joint effects** | | | |
| O * Conservation | 1.063 | 0.908 | 0.918 |
| | [0.916 - 1.232] | [0.759 - 1.085] | [0.654 - 1.288] |
| C * Conservation | 1.066 | 1.043 | 1.244 |
| | [0.880 - 1.292] | [0.831 - 1.309] | [0.791 - 1.958] |
| E * Conservation | 1.083 | 1.165 | 1.342 |
| | [0.925 - 1.269] | [0.961 - 1.411] | [0.930 - 1.936] |
| A * Conservation | 1.110 | 1.054 | 0.861 |
| | [0.927 - 1.328] | [0.849 - 1.308] | [0.574 - 1.290] |
| N * Conservation | 1.042 | 1.023 | 0.996 |
| | [0.892 - 1.216] | [0.850 - 1.230] | [0.689 - 1.440] |
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 1.315* | 1.264 | 0.999 |
| | [1.006 - 1.719] | [0.935 - 1.710] | [0.569 - 1.754] |
| University degree | 1.545** | 1.350† | 1.147 |
| | [1.137 - 2.098] | [0.984 - 1.851] | [0.636 - 2.069] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | 0.681** | 1.140 | 0.950 |
| | [0.541 - 0.857] | [0.860 - 1.513] | [0.562 - 1.606] |
| High-level household income (>4000€) | 1.210 | 1.094 | 0.707 |
| | [0.925 - 1.583] | [0.820 - 1.460] | [0.410 - 1.218] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 1.606** | 1.287 | 0.944 |
| | [1.122 - 2.301] | [0.838 - 1.976] | [0.435 - 2.046] |
| 51-64 years old | 1.240 | 1.447* | 1.142 |
| | [0.958 - 1.605] | [1.060 - 1.976] | [0.635 - 2.054] |
| ≥ 65 years old | 1.478* | 1.237 | 3.385** |
| | [1.002 - 2.182] | [0.789 - 1.940] | [1.463 - 7.835] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 1.381* | 1.249 | 0.558* |
| | [1.041 - 1.832] | [0.901 - 1.731] | [0.313 - 0.992] |
| Part-time or irregularly employed | 1.492** | 1.016 | 0.560† |
| | [1.124 - 1.980] | [0.731 - 1.411] | [0.309 - 1.016] |
| Children under 16 living in the household | 2.793*** | 0.732* | 0.976 |
| | [2.085 - 3.741] | [0.537 - 0.999] | [0.538 - 1.769] |
| Religiosity | 1.874*** | 1.282*** | 0.940 |
| | [1.650 - 2.127] | [1.130 - 1.456] | [0.747 - 1.182] |

| VARIABLES | **Any group participation** *(vs. no participation)* M1 | **Political participation** *(vs. social, non-political participation)* M2 | **Party participation** *(vs. SMO participation)* M3 |
|---|---|---|---|
| **Sociodemographic controls** | | | |
| Gender (women) | 0.859 | 0.489*** | 0.708 |
| | [0.687 - 1.074] | [0.372 - 0.642] | [0.433 - 1.157] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | 0.796† | 0.902 | 0.927 |
| | [0.625 - 1.014] | [0.675 - 1.206] | [0.541 - 1.587] |
| More than 40 km from a large city | 0.936 | 1.215 | 1.461 |
| | [0.737 - 1.188] | [0.927 - 1.593] | [0.884 - 2.416] |
| Constant | 0.584** | 0.187*** | 1.668 |
| | [0.407 - 0.837] | [0.119 - 0.292] | [0.717 - 3.876] |
| Observations | 2341 | 1687 | 433 |
| Pseudo $R^2$ | 0.110 | 0.073 | 0.134 |
| Log-likelihood | -1204 | -895.7 | -259.6 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1
Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.
Models are binary logistic regressions; odds ratios and their confidence intervals are reported.

**Table D7 – The joint effects of the Big Five and self-enhancement values**

| VARIABLES | Any group participation *(vs. no participation)* M1 | Political participation *(vs. social, non-political participation)* M2 | Party participation *(vs. SMO participation)* M3 |
|---|---|---|---|
| **The Big Five** | | | |
| Openness to experience (O) | 1.144* | 1.126 | 0.980 |
| | [1.016 - 1.289] | [0.977 - 1.298] | [0.744 - 1.291] |
| Conscientiousness (C) | 0.950 | 0.847† | 0.997 |
| | [0.818 - 1.104] | [0.712 - 1.008] | [0.712 - 1.395] |
| Extraversion (E) | 1.255*** | 1.158* | 1.234 |
| | [1.113 - 1.416] | [1.006 - 1.333] | [0.949 - 1.604] |
| Agreeableness (A) | 1.180* | 0.964 | 0.967 |
| | [1.023 - 1.361] | [0.813 - 1.143] | [0.691 - 1.352] |
| Neuroticism (N) | 0.889† | 0.986 | 0.914 |
| | [0.782 - 1.010] | [0.847 - 1.147] | [0.681 - 1.227] |
| **Higher-order personal values** | | | |
| Conservation | 0.945 | 0.621*** | 2.244*** |
| | [0.814 - 1.097] | [0.524 - 0.736] | [1.631 - 3.086] |
| Self-enhancement | 0.968 | 0.676*** | 1.883*** |
| | [0.826 - 1.135] | [0.558 - 0.819] | [1.317 - 2.694] |
| **Joint effects** | | | |
| O * Self-enhancement | 1.112 | 0.805* | 0.811 |
| | [0.953 - 1.297] | [0.667 - 0.971] | [0.570 - 1.154] |
| C * Self-enhancement | 0.995 | 1.128 | 1.156 |
| | [0.820 - 1.208] | [0.893 - 1.425] | [0.753 - 1.776] |
| E * Self-enhancement | 1.014 | 1.013 | 0.980 |
| | [0.861 - 1.194] | [0.835 - 1.230] | [0.674 - 1.426] |
| A * Self-enhancement | 0.901 | 1.010 | 0.894 |
| | [0.750 - 1.083] | [0.809 - 1.260] | [0.593 - 1.348] |
| N * Self-enhancement | 1.007 | 0.949 | 0.941 |
| | [0.848 - 1.196] | [0.773 - 1.166] | [0.656 - 1.350] |
| **Resources** | | | |
| Level of education (Ref.: No degree) | | | |
| Cooperative educ./applied sciences degree | 1.316* | 1.257 | 0.990 |
| | [1.007 - 1.720] | [0.930 - 1.699] | [0.566 - 1.732] |
| University degree | 1.542** | 1.345† | 1.116 |
| | [1.136 - 2.093] | [0.981 - 1.844] | [0.624 - 1.997] |
| Income (Ref.: average income (2300-4000€/month)) | | | |
| Low-level household income (<2300€) | 0.674*** | 1.140 | 0.982 |
| | [0.535 - 0.848] | [0.859 - 1.513] | [0.581 - 1.660] |
| High-level household income (>4000€) | 1.193 | 1.100 | 0.749 |
| | [0.912 - 1.561] | [0.824 - 1.466] | [0.439 - 1.278] |
| Age (Ref.: 31-50 years old) | | | |
| 18-30 years old | 1.622** | 1.267 | 0.962 |
| | [1.133 - 2.324] | [0.827 - 1.943] | [0.445 - 2.080] |
| 51-64 years old | 1.232 | 1.453* | 1.196 |
| | [0.952 - 1.594] | [1.064 - 1.984] | [0.668 - 2.142] |
| ≥ 65 years old | 1.470† | 1.224 | 3.410** |
| | [0.996 - 2.168] | [0.780 - 1.920] | [1.472 - 7.899] |
| Employment status (Ref.: Full-time employed) | | | |
| Unemployed/not at the workplace | 1.374* | 1.247 | 0.555* |
| | [1.036 - 1.822] | [0.899 - 1.731] | [0.311 - 0.991] |
| Part-time or irregularly employed | 1.503** | 1.014 | 0.562† |
| | [1.133 - 1.993] | [0.731 - 1.407] | [0.312 - 1.012] |
| Children under 16 living in the household | 2.760*** | 0.726* | 0.947 |
| | [2.060 - 3.697] | [0.533 - 0.990] | [0.523 - 1.713] |
| Religiosity | 1.862*** | 1.275*** | 0.937 |
| | [1.641 - 2.113] | [1.123 - 1.448] | [0.745 - 1.178] |
| **Sociodemographic controls** | | | |

| VARIABLES | **Any group participation** *(vs. no participation)* M1 | **Political participation** *(vs. social, non-political participation)* M2 | **Party participation** *(vs. SMO participation)* M3 |
|---|---|---|---|
| Gender (women) | 0.859 | 0.484*** | 0.675 |
| | [0.687 - 1.074] | [0.368 - 0.637] | [0.412 - 1.107] |
| Living area (Ref.: 10-40 km from a large city) | | | |
| In a large city center or within 10 km | 0.787† | 0.905 | 0.938 |
| | [0.618 - 1.003] | [0.676 - 1.210] | [0.549 - 1.601] |
| More than 40 km from a large city | 0.933 | 1.222 | 1.477 |
| | [0.735 - 1.184] | [0.932 - 1.602] | [0.893 - 2.443] |
| Constant | 0.594** | 0.191*** | 1.640 |
| | [0.414 - 0.853] | [0.122 - 0.299] | [0.705 - 3.817] |
| Observations | 2341 | 1687 | 433 |
| Pseudo $R^2$ | 0.110 | 0.074 | 0.130 |
| Log-likelihood | -1205 | -894.3 | -261.1 |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1
Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany.
Models are binary logistic regressions; odds ratios and their confidence intervals are reported.

**Figure D1 – The joint effect of openness to experience and self-enhancement values on political participation (adjusted predictions and their contrasts with 95% CIs)**

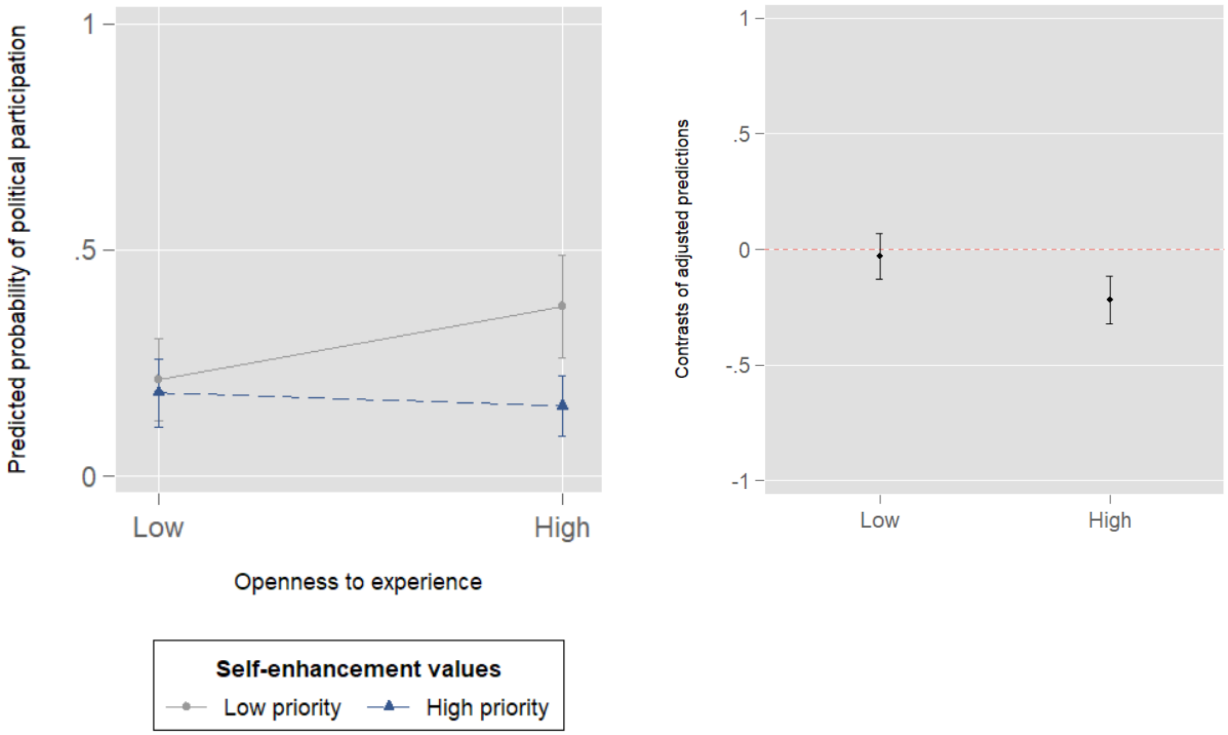


**Figure D2 – The joint effect of openness to experience and openness to change values on political participation (adjusted predictions and their contrasts with 95% CIs)**

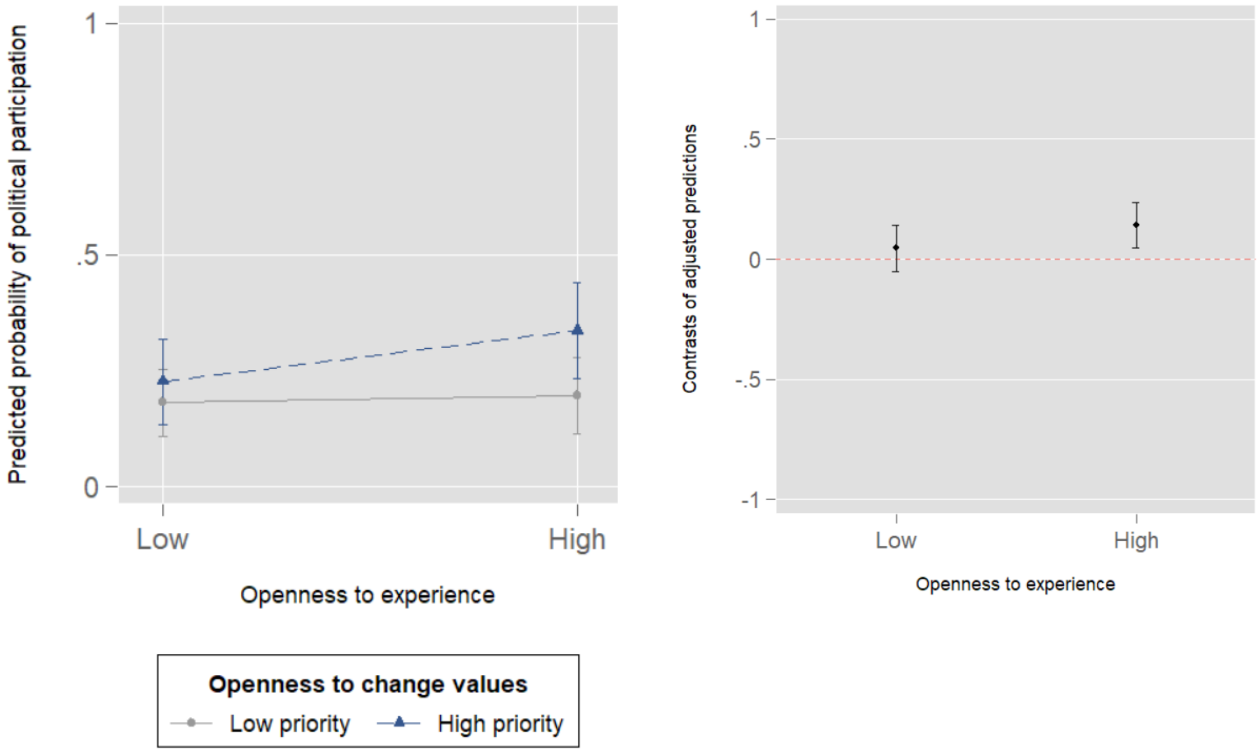



**Figure D3 – The joint effect of conscientiousness and self-enhancement values on political participation (adjusted predictions and their contrasts with 95% CIs)**

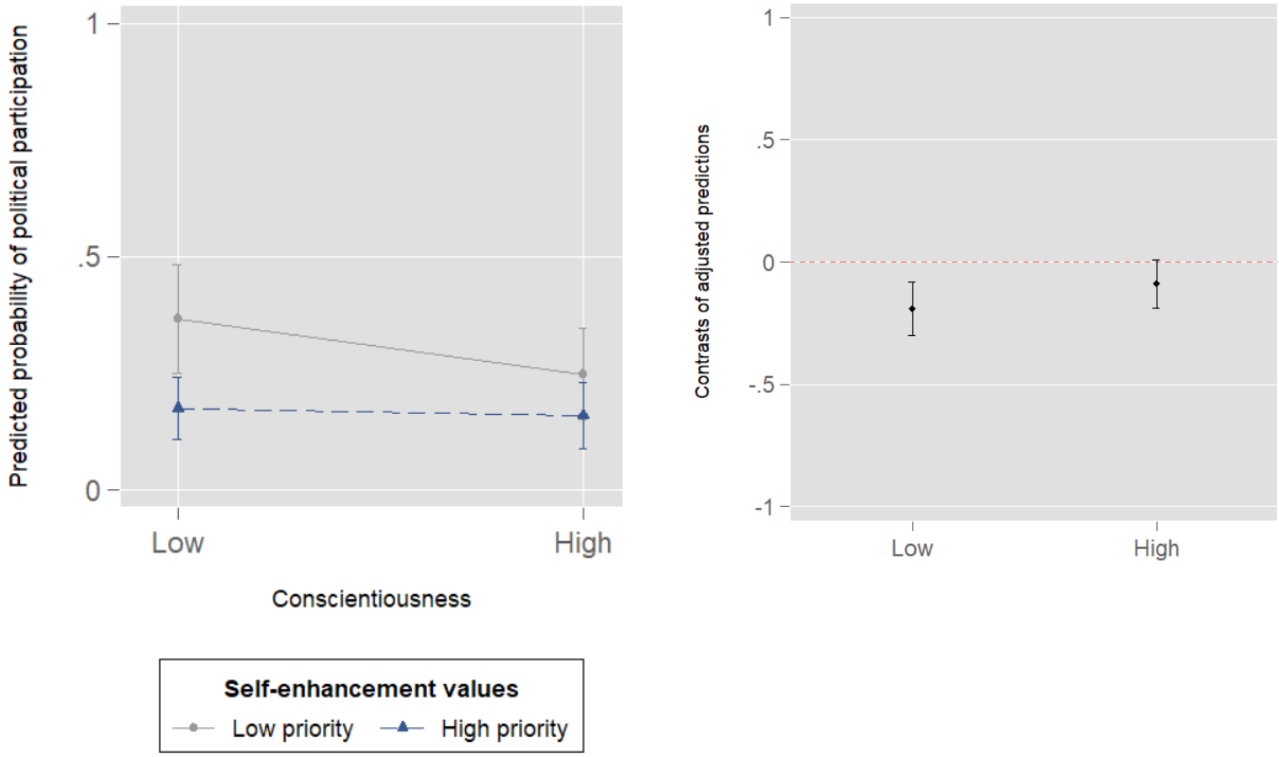


**Table D8 – Pearson bivariate correlations of traits and value items with group participation**

| | | | **Any group Membership** *(vs. no membership)* | **Political membership** *(vs. social, non-political membership)* | **Party membership** *(vs. SMO membership)* |
|---|---|---|---|---|---|
| ***Personality traits*** | O | *I have an active imagination* | **.069***** | **.071***** | -0.006 |
| | | *I have little artistic interest (R)* | **.086***** | **.069***** | **-.155***** |
| | C | *I do a thorough job* | -0.020 | -0.028 | -0.013 |
| | | *I tend to be lazy (R)* | **.042*** | -0.018 | 0.070† |
| | E | *I am outgoing, sociable* | **.122***** | 0.015 | 0.043 |
| | | *I am reserved (R)* | **.093***** | 0.040† | 0.066 |
| | A | *I am generally trusting* | **.098***** | 0.026 | -0.050 |
| | | *I tend to find fault with others (R)* | 0.011 | 0.001 | 0.004 |
| | N | *I get nervous easily* | **-.081***** | **-.099***** | -0.049 |
| | | *I am relaxed, handle stress well (R)* | -0.032† | -0.023 | -0.012 |
| ***Personal values*** *(It is important for him/her…)* | Conserv. | *…to live in a strong state which can defend its citizens* | -0.030† | **-.089***** | **.215***** |
| | | *…to preserve traditional values and convictions* | **.041*** | -0.016 | **.190***** |
| | | *…to obey the law* | **-.044*** | **-.133***** | **.089*** |
| | Self-transc. | *…to take care of the needs of people who matter to him/her* | -0.028 | -0.016 | -0.003 |
| | | *…to help people who matter to him/her* | 0.008 | -0.029 | **-.137***** |
| | | *…that all people, even strangers, are treated fairly* | -0.034† | **.079***** | **-.191***** |
| | | *…to take care of nature* | **.041*** | **.158***** | **-.250***** |
| | | *…to be tolerant towards other people and social groups* | **.047**** | **.047*** | **-.249***** |
| | Op. to change | *…to always form his/her own opinion* | -0.020 | **.087***** | -0.059 |
| | | *…to have the freedom to choose what he/she wants to do* | -0.019 | 0.001 | **-.135***** |
| | | *…to get to the bottom of things and to understand them* | -0.003 | **.083***** | -0.081† |
| | | *…to make a lot of new experiences* | 0.029 | **.068**** | -0.043 |
| | | *…to expand his/her knowledge* | **.045*** | **.071***** | -0.057 |
| | Self-enhanc. | *…that others recognize his/her achievements* | -0.034† | **-.066**** | 0.038 |
| | | *…to show that his/her own achievements are better than those of others* | 0.008 | **-.052*** | **.096*** |
| | | *…to be the one who tells other people what to do* | 0.010 | -0.031 | **.163***** |
| | | *…to be rich* | -0.014 | **-.059**** | **.106*** |

*** p<0.001, ** p<0.01, * p<0.05, † p<0.1. Among correlations significant at the .05 level: $r > .05$; $r > .10$.
(R) denotes reverse-scored item. Estimates are Pearson's R.
Data: GESIS Panel Longitudinal Core Study (2015-2016), Germany. N=3042.