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Measuring Value Orientations with the Use of S.H. Schwartz's Value Portraits

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Abstract

The study acquaints readers with two methods of measuring value orientations developed by S.H. Schwartz. Attention is focused especially on the Portrait Values Questionnaire that was used in the European Social Survey in 2002 and 2004. The analysis in the study uses ESS 2002 data sets from ten selected countries (the Czech Republic, Greece, Hungary, Ireland, the Netherlands, Norway, Poland, Slovenia, Spain, Switzerland) and creates four higher order value types (conservation, openness to change, self-transcendence, self-enhancement). It is then shown how strongly these types are represented in each of the countries included in the analysis and how the percentages of represented types change in relation to sex, age, education, and religiosity. For the Czech Republic the odds of each of the types are modelled in relation to age, education, and religiosity.

Měření hodnotových orientací metodou hodnotových portrétů S.H. Schwartze

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Abstrakt

Studie seznamuje čtenáře se dvěma metodami měření hodnotových orientací, které vyvinul S. H. Schwartz. Pozornost je zejména soustředěna na metodu dotazníku hodnotových portrétů, která byla použita v Evropském sociálním výzkumu 2002 a 2004. Na datových souborech z deseti vybraných zemí (Česko, Holandsko, Irsko, Maďarsko, Norsko, Polsko, Řecko, Slovinsko, Španělsko, Švýcarsko) z roku 2002 jsou vytvořeny čtyři hodnotové typy vyššího řádu (konzervace, otevřenost změně, překročení sebe sama, posílení ega). Je prezentováno, jak jsou tyto typy v jednotlivých zemích zastoupeny a jak se toto zastoupení proměňuje podle pohlaví, věku, vzdělání a zbožnosti. Pro Českou republiku jsou navrženy rovněž modely chování šancí jednotlivých typů v souvislosti s věkem, vzděláním a zbožností.

Messung von Werteorientierung mit der WertePortrait-Methode (PVQ) von S.H. Schwartz

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Abstraktum

Die Studie stellt zwei Methoden der Feststellung von Werteorientierungen vor, die von S. H. Schwartz entwickelt wurden. Sie beschäftigt sich vor allem mit der Methode der Portrait Value Questionnaires (PVQ), die beim European Social Survey 2002 und 2004 eingesetzt wurde. An den Datensätzen aus zehn ausgewählten Ländern (Tschechien, Niederlande, Irland, Ungarn, Norwegen, Polen, Griechenland, Slowenien, Spanien, Schweiz) aus dem Jahr 2002 werden vier Werttypen höherer Ebene (Bewahrung, Offenheit gegenüber Veränderungen, Selbstübertreffung, Ego-Stärkung) gebildet. Es wird gezeigt, wie diese Typen in den einzelnen Ländern verteilt sind und wie sich diese Verteilung je nach Geschlecht, Alter, Bildung und Religiosität ändert. Für die Tschechische Republik werden außerdem Modelle für das Chancenverhalten der einzelnen Typen im Zusammenhang mit dem Alter, der Bildung und der Religiosität entworfen.

Schlüsselworte

Werteorientierung, Portrait Value Questionnaire, Wertefeststellung nach Schwartz, Werttypen, Bewahrung, Offenheit gegenüber Veränderungen, Selbstübertreffung, Ego-Stärkung, European Social Survey

1. Introduction

At first glance, the topic of this article may appear somewhat abstract and more suited to psychologists than sociologists, but this is not so. Value portraits were included in the prestigious European Social Survey[1] questionnaire in 2002 and 2004, and this practise is sure to continue in the years to come. In literature published on the subject in recent years four scales have appeared most frequently for use in measuring values – Hofstede's scale (1980, 1991) Rokeach's (1967, 1973), Inglehart's (1977, 1997) and Schwartz's (1992, 1996, 2001, 2003a, 2003b). While the first two of these scales are not as common in the Czech Republic, Inglehart's four-item and twelve-item versions of batteries for measuring materialist and post-materialist values are well known and frequently used (e.g. Rabušic 2000; Řeháková 2001a, 2001b). Inglehart's scales are grounded in theory, respondents understand them well, and they are meaningfully related to many variables that researchers are interested in, but they tend to be criticised for their heavy dependence on contemporary economic conditions (Clarke et al. 1999). Currently the most frequently used method of measuring value orientations is the Schwartz Value Survey (SVS) (Schwartz 1992), which aims to be universal and comprehensive. The SVS method is used abundantly by social psychologists and by people studying the differences between the value orientations of various cultures, and it is a generally respected method.

S.H. Schwartz,[2] who developed this survey method, was aware that the concept of values is one that unites the different interests of all scientists dealing with human behaviour, whether they are psychologists, sociologists, or anthropologists. His early research projects in this field, beginning at the end of the 1980s, were very broadly based. They set out to clarify how the value priorities of individuals are influenced by their social experiences, especially by their place in the social structure, and also by their specific experiences (such as immigration, for example). The projects also endeavoured to determine how value priorities influence the choice of behaviour, attitudes, and action in the fields of politics, religion and the environment, etc. From the start Schwartz has focused his research on the issue of multicultural and international differences in value priorities, and for this

1   The European Social Survey (ESS) is a new, academically run social survey designed to map and explain the interactions between changing European institutions and attitudes and behavioural patterns among the diverse populations of Europe. In 2002 twenty-three states took part in the survey, including all 15 EU member states at that time (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, UK), 5 accession countries (Czech Republic, Hungary, Poland, Slovenia, Turkey) plus Norway, Switzerland and Israel. The project, which is run by a central coordinating team led by Roger Jowel, takes a rigorous approach to the use of methodology. The questionnaire in 2002 was comprised of two parts, the main questionnaire and the supplementary questionnaire, which among other things contains value portraits. The questionnaire in 2004 was organised in a similar way. The ESS project is funded under the EC 5th Framework Programme and also receives support from the European Science Foundation. More information can be found at: www.europeansocialsurwey.org.
2   Shalom H. Schwartz is a professor of psychology at the Hebrew University in Jerusalem.

purpose he needed to discover whether any universal value structure common to all people exists, whether the values in that structure mean the same thing or something similar to everyone, and whether the structure is comprehensive. In tandem with surveys on values carried out around the world Schwartz repeatedly revised and modified his theory of values. An instrument for measuring values was also developed. This process, which will be described in greater detail further on, continues still.

2. The Development of the Theory

Schwartz and Bilsky (1987, 1990) developed a conceptual definition of values, which contains five formal attributes of values that surfaced repeatedly in literature on this topic. Values (a) are concepts or beliefs, (b) pertain to desirable end-states or behaviour, (c) transcend specific situations, (d) guide the selection or evaluation of behaviour and events, and (e) are ordered by relative importance. Understood in this manner, values differ from attitudes in terms of their general, abstract character and their hierarchical ordering. To the formal attributes of values, Schwartz and Bilsky also added the following understanding: the crucial content aspect of a value is the type of 'motivational goal' or interest it expresses. They derived a typology of different value contents by reasoning that values represent three universal requirements of human existence: meeting the biological needs of the individual, the essential coordination of social interaction, and the survival of the group and the satisfaction of their interests. Eight types of values were determined on this basis: prosocial, restrictive conformity, enjoyment, achievement, maturity, self-direction, security, and power.

The theory also specified the dynamic relations between value types. The actions people take in pursuit of these values have psychological, practical, and social consequences that are either compatible or conflict with the pursuit of other types of values. The results of surveys on types of values, which were conducted in seven considerably different countries showed that there is strong evidence suggesting a universal compatibility between the value types that support trouble-free social relations (security type, restrictive conformity type, prosocial type), between the value types relating to self-enhancement (achievement type, enjoyment type), and between the value types that express satisfaction or confidence in individuality (maturity type, self-direction type). Strong support was also found to suggest the universality of the conflict between emphasis on independence of thought and action and conformist self-control (self-direction type as opposed to restrictive conformity type), and between interest in others and pursuit of personal achievement (prosocial type as opposed to achievement type). Another finding was that in the case of all the countries involved in the research a two-dimensional representation of the value space showed the values of enjoyment, achievement, and self-direction types to form a continuous block of adjacent values facing opposite another continuous block of adjacent values contained in the prosocial, restrictive conformity and security types. The values for maturity were situated on the borderline between these two blocks.

3. Modification of the Theory

The first modification to the theory was made on the basis of results taken from empirical surveys and referred to the content of the value types (Schwartz 1992). Two altogether new types were derived that had not previously been mentioned or even empirically studied: tradition and stimulation. A question was raised about the inclusion of spirituality, and it was also proposed to modify four of the original types (enjoyment, maturity, security, prosocial). The original eight types then grew to become eleven, which are described below:

1. **Self-direction**. The defining goal of this type is independence of thought, freedom of action, creativity and curiosity. This type is derived from the needs to control and command and the need for autonomy and independence.

2. **Stimulation**. The motivational goal of this type is excitement, novelty, and challenge in life. The type is derived from the assumption that an optimum level of stimulation requires that stimuli be varied and diverse.

3. **Hedonism**.[3] The motivational goal is enjoyment, pleasure, and sensuous self-gratification. The value type is derived from the need for enjoyment and the pleasure that arises from the satisfaction of that need.

4. **Achievement**. The defining goal of this type is personal achievement, which is manifested by means of capability judged according to social standards. A competent performance is the precondition for gaining the resources necessary for survival, for successful social relationships, and for the successful functioning of institutions.

5. **Power.** The main goal of this type is to attain social status and prestige, and control or dominance over people and resources. Clearly, a certain degree of status differentiation is necessary for the functioning of institutions. In order for this to be a justifiable fact and for people to accept it they must consider power a value. Power and achievement are values that are oriented toward social esteem. While achievement emphasises the active demonstration of capability in a specific interaction, power emphasises the attainment or maintenance of a dominant position within the more general social system.

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3   Formerly the 'enjoyment' type.

6. **Security**. The motivational goal of this type is a person's own security, harmony, and stability, but also the security of society and relationships. This value type stems from basic individual and group needs.[4]

7. **Conformity**.[5] The defining goal of this type is the maintenance of self-control or self-discipline in actions, pleasures, and initiatives, where there is a possibility that the pursuit of them could disturb or threaten others and offend against social expectations or norms. The type is based on the premise that individuals suppress inclinations that could be socially disruptive or could pose a threat to the smooth functioning of the group.

8. **Tradition.** Groups all over the world develop symbols and customs that represent their shared experience and fate. Traditional ways of behaviour become a symbol for group solidarity, an expression of the group's uniqueness, and an assumed guarantee of its survival. They often take the form of religious rituals and behavioural norms. The motivational goal of traditional values is respect, loyalty, and the adoption of the customs and ideals that are recognised by that particular culture or religion.

9. **Spirituality**. Theologians, philosophers, and sociologists of religion emphasise that the basic significance of traditional beliefs and customs lies in the fact that they imbue life with meaning and order in a response to the apparent meaninglessness or absurdity of everyday existence. Spiritual interests are understood as interests that relate to the most basic meaning of the existence of reality. If answers to questions about this meaning are among the most elementary of human needs, then spiritual values can form another universal type. The motivational goal of such values is inner harmony and meaning in life perceived by means of transcending everyday reality.

10. **Benevolence**. This is a more narrowly defined version of the prosocial type. While the prosocial type related to an interest in the prosperity of all people, benevolence concentrates on an interest in the prosperity of those people with whom we are in daily contact. The motivational goal is to preserve and enhance the prosperity of people whom we encounter often.

11. **Universalism**. This type encompasses the former maturity type and part of the former prosocial type. The motivational goal is the understanding, recognition, tolerance and protection of the prosperity of all people and nature. It can be derived from the requirements for ensuring survival. The inability to accept others who are different and to behave justly toward them leads to life-threatening conflicts, and the failure to protect the environment leads to the destruction of the natural resources that life depends on.

Schwartz's revision of the original motivational types and the addition of new ones necessitated the formulation of new hypotheses on the dynamic relationships between all the types. The formulation of these new hypotheses was based on the results of surveys in which the original eight types of values were used. If values are regarded as goals, then their attainment serves personal and/or collective interests. On this basis, Schwartz formulated the hypothesis that the values primarily serving individual interests (power, achievement, hedonism, stimulation, self-direction) form one con-

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4   The original type was modified by also including within it the value of individual security.
5   Formerly the 'restrictive conformity' type.

tiguous block that lies opposite another contiguous block of adjacent values, which in turn comprises three types of values that serve primarily collective interests (benevolence, tradition, conformity). Universalism and security are situated on the borderline between the two blocks. The spiritual type is most likely to be situated somewhere in the collective block, perhaps between benevolence and tradition, or possibly even between benevolence and universalism.

Along with this hypothesis, Schwarz formulated other, more refined hypotheses, based on an analysis of the similarity of the goals defining each type of value, and the psychological, social, and practical effects of simultaneously pursuing pairs of compatible types. Tradition and conformity were designated as compatible types (both emphasise self-control and subordination), as were conformity and security (both emphasise the protection of order and harmony in relationships), security and power (both emphasise the need to avoid threats and uncertainties or the need to overcome them by means of control over relationships and resources), power and achievement (both emphasise social superiority and respect), achievement and hedonism (both have something to do with self-indulgence), hedonism and stimulation (both convey a demand for pleasurable excitement), stimulation and self-direction (both include an inner motivation toward mastery and an openness to change), self-direction and universalism (both express trust in one's own judgement and contentment with life's diversity), universalism and benevolence (both relate to improving the lot of others and overcoming selfish interests). The hypothesis also put benevolence and tradition next to each other, although no rational explanation was found for their compatibility.

Self-direction and stimulation conflict with conformity, tradition and security, because their emphasis on independent thought and action and their support for change is in conflict with the submissive self-control, maintenance of traditions, and protection of stability that are stressed by the latter. Universalism and benevolence lie opposite to achievement and power, because the acceptance of others as equals and an interest in their welfare is in conflict with the assertion of oneself and the effort to dominate. Hedonism conflicts with conformity and tradition, because indulging in one's own wishes is irreconcilable with self-control and the acceptance of external restrictions. Spirituality conflicts with hedonism, power and achievement, as the search for meaning in life by transcending everyday reality is inconsistent with the pursuit of sensual and material enjoyments.

On the basis of further empirical surveys conducted in numerous countries around the world it was demonstrated that people distinguish ten types of values. Spirituality, at least as operationalised here (inner harmony, a spiritual life, meaning in life, detachment from worldly concerns), is not one of the universal types of values. On the other hand, the data did not offer any support for the notion that the theory may be missing yet other types of values. The hypotheses about the dynamic structure of the types of values, and their compatibilities and conflicts, were essentially confirmed, and they are presented in Figure 1. The pattern of conflicting and compatible relations postulated in the theory is circular, and this circular arrangement in which the types of values are ordered represents a motivational continuum. If one were to divide the circle into nine sections and begin, for example, with universalism, benevolence would be found in the next section, followed in the third section by two values – conformity, which is close to the centre of the circle, and tradition, which is close to the circle's edge. Security is in the fourth section, followed by power, achievement, hedonism, and stimulation in the subsequent sections up to self-direction in the ninth section. The closer any two values in any direction around the circle are, the more similar their motivations are; the

farther apart they are, the more opposed their motivations.[6] The structure of the values can be expressed in two orthogonal dimensions. The first dimension puts self-enhancement and self-transcendence at opposite ends, and the types of values that lie along this dimension are power and achievement, which primarily emphasise pursuit of one's own interests, as opposed to universalism and benevolence, the types of values that are interested in the welfare and interests of others. The second dimension puts openness to change in opposition to conservation, and the types of values along this dimension are self-direction and stimulation (independent action, thought, and feelings, readiness for new experiences) in opposition to security, conformity, and tradition types of values (self-restraint, order, resistance to change). Hedonism contains both the elements of openness to change and elements of self-enhancement.

Figure 1. Theoretical model of relations among ten motivational types of values

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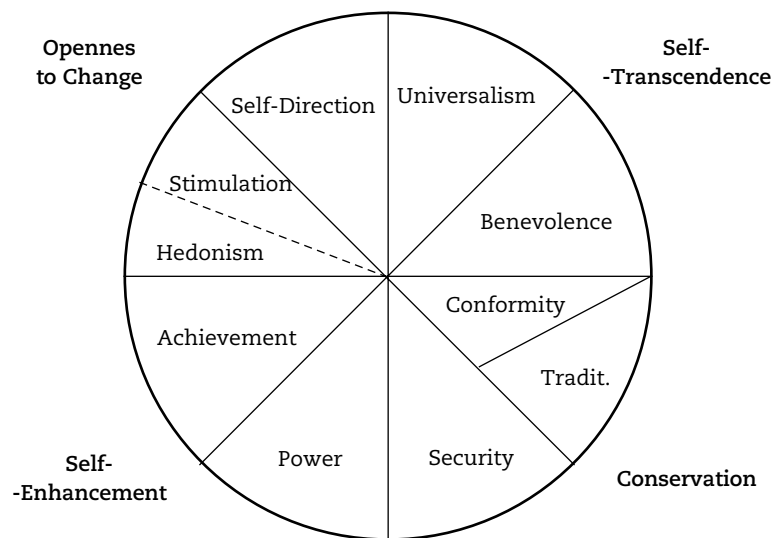
6   Surveys to date in 18 countries have shown that the set of ten value types is complete. The expected value structure appeared in all the research samples (Schwartz 2001).

4. Measuring Value Orientations with the Use of the SVS Method

The first method of measuring value orientations that Schwartz developed was the Schwartz Value Survey (SVS) (Schwartz 1992). In the SVS method respondents are asked to assess 57 values[7] according to how important they are as 'guiding principles of your life'. Each value is specified with an explanation in brackets,[8] and the respondent assesses the values on a nine-point scale, from 7 (very important) to –1 (opposed to my values). These specific values measure ten theoretically based value orientations. *Power*: social power, authority, wealth, preserving one's public image, social recognition; *Achievement*: successfulness, capability, ambition, influence, intelligence; *Hedonism:* pleasure, enjoyment of life, self-indulgence. *Stimulation*: daring, a varied life, an exciting life; *Self-direction*: curiosity, creativity, freedom, choosing one's own goals, independence, self-respect; *Universalism:* protection of the environment, unity with nature, the world of beauty, tolerance, social justice, wisdom, equality, world at peace, inner harmony; *Benevolence*: helpfulness, honesty, forgiveness, spirituality, true friendship, emotional and intellectual intimacy, meaning in life; *Tradition*: accepting one's lot in life, devoutness, humility, respect for traditions, moderacy, detachment from worldly concerns; *Conformity*: obedience, respect for one's parents and the elderly, politeness, self-control; *Security*: cleanliness, national security, reciprocation of services, social order, family security, sense of belonging, health.

7   Originally there were 56 values; one was later omitted because it was not easily understood, and two other values were also added.
8   See Schwartz (1992).

5. Determining Value Orientations with the Use of Value Portraits

The Schwartz Value Survey demands a high level of abstract thinking, and it therefore poses some difficulty for people with lower levels of education, young people, and people in countries where the education system puts little emphasis on abstract thought. In addition, it is very demanding on time. For this reason Schwartz developed another research instrument – the Portrait Values Questionnaire (PVQ) (Schwartz et al. 2001) – which is designed to be more concrete, and thus accessible to all groups, and it is less time demanding. It is nonetheless intended to measure the same ten types of values. The PVQ contains brief verbal portraits of 29 different people. For example: *It is important to him to listen to people who are different from him. Even when he disagrees with them, he still wants to understand them;* this portrait describes a person for whom universal values are important. *It is important to him to command people's respect. He wants people to do what he says;* this portrait describes someone who likes the 'taste of power'. For each verbal portrait respondents indicate how much they feel that they resemble the person described by ticking one of six possible responses: very much like me, like me, little like me, not like me, not like me at all. In this way respondents are comparing the portraits with themselves, and not themselves with the portraits. Comparing others with oneself focuses the person's attention on the value-relevant aspects of the others portrayed, whereas comparing oneself with others can draw too much attention to the actual person, so that the respondent becomes aware of too many other attributes of the person, including ones irrelevant to the task at hand. Respondents may consequently overlook similar values because they are unable to detect other characteristics of their own in the portrait. There are moreover two versions of the PVQ, one for women and one for men.[9]

It is worth emphasising the point that the PVQ determines similarity in terms of a person's goals and aspirations (values) rather than similarity on the basis of certain features. People who appreciate or esteem a certain goal need not necessarily possess the characteristics that correspond with that goal. Similarly, people who do have the relevant characteristics need not value the corresponding goal. For example, people who have a high estimation of creativity as the guiding principle of their lives need not necessarily be creative, while creative people may accord that characteristic very little significance as a guiding principle in their lives. A respondent who says that someone for whom thinking about new ideas and creativity is important is someone very much like them reveals

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9   The persons described in the two PVQ are absolutely the same. The only difference is that they describe a woman when the respondent is female and a man when the respondent is male. For example: 'Having a good time is important to her. She likes to "spoil" herself". : 'Having a good time is important to him. He likes to "spoil" himself".

the importance they ascribe to the values of self-direction, but they may not themselves be creative at all.

The SVS and PVQ methods of measuring value priorities significantly differ from each other in several regards. The PVQ measures values indirectly; the SVS directly. The PVQ produces an assessment of the similarity between a portrait and a respondent. The SVS produces an arrangement of values according to their order of importance as the guiding principles in a respondent's life. The stimuli in the PVQ are people, portrayed through their goals, aspirations and wishes, while the stimuli in the SVS are abstract values. The SVS uses a nine-point scale, which contains positive and negative numbers, and some points are even indicated verbally. The PVQ asks respondents to choose one of six verbally described alternatives. With the use of the MTMM approach (multitrait-multimethod), Schwartz et al. (2001) demonstrated that the SVS and the PVQ are equivalent for measuring the ten types of values. However, the internal reliability of the items that measure a particular value type with the aid of the PVQ is usually lower than it is in the case of the SVS.[10] There are two reasons for this: the sum of indices in the PVQ contains too few items, and many types of values have conceptually broad definitions that comprise a greater number of components. But the items have been selected so that they overlap with the various conceptual components of the value type, and not in order to redundantly measure a single concept. The PVQ, with 29 portraits,[11] contains two portraits each for stimulation, hedonism, and power, three each for self-direction, achievement, security, conformity, and benevolence, and four portraits each for tradition and universalism. Although it takes at most ten minutes to fill in the PVQ variant with 29 portraits (Schwartz et al. 2001), in the 2002 European Social Survey a variant with 21 portraits was used, at the recommendation of S. Schwartz, who estimated it takes five to six minutes to fill it in. Here I present the wording of this variant for a male respondent.[12]

Universalism
C. It is important to him that every person in the world be treated equally. He wants justice for everybody, even for people he doesn't know.
H. It is important to him to listen to people who are different from him. Even when he disagrees with them, he still wants to understand them.
S. He strongly believes that people should care for nature. Looking after the environment is important to him.

Benevolence
L. It is very important to him to help the people around him. He wants to care for other people.
R. It is important to him to be loyal to his friends. He wants to devote himself to people close to him.

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10   For the PVQ method, Cronbach's alpha hovers between approx. 0.37 and 0.79, and for the SVS method between approx. 0.45 to 0.76, and the internal consistency was lower for the PVQ in eight out of ten values.

11   There also exist other variants; in one study, for example, a variant with 40 portraits was used (see Bamberg et al. 2001), and in the European Social Survey in 2002 a variant with 21 portraits was used.

12   The portraits are ordered alphabetically in the questionnaire and are introduced with the sentence, 'Now I will briefly describe some people to you. Please listen to each description and tell me how much that person is or is not like you.' The respondent has a card with the possible responses: 'Very much like me', 'Like me', 'A bit like me', 'Little like me', 'Not like me', 'Not like me at all'.

Conformity

G. It is important to him that people do what they are told. He thinks people should follow rules at all times, even when no one is watching.

P. It is important to him always to behave properly. He wants to avoid doing anything people would say is wrong.

Tradition

I. It is important to him to be humble and modest. He tries not to draw attention to himself.

T. Tradition is important to him. He tries to do what his religion requires and to follow the customs he has learned in his family.

E. It is important to him to live in secure surroundings. He avoids anything that might endanger his safety.

N. It is important to him that his government guarantees security to him. He wants the state to be strong enough for it to be able to protect its citizens.

Power

B. It is important to him to be rich. He wants to have a lot of money and expensive things.

Q. It is important to him to command people's respect. He wants people to do what he says.

Achievement

D. It is very important to him to show his abilities. He wants people to admire what he does.

M. Being very successful is important to him. He hopes people appreciate what he has attained.

Hedonism

J. Having a good time is important to him. He likes to 'spoil' himself.

U. He seeks every chance he can to have fun. It is important to him to do things that give him pleasure.

Stimulation

F. He likes surprises and is always looking for new things to do. It is important to him to do lots of different things in life.

O. He looks for adventures and likes to take risks. Having an exciting life is important to him.

Self-direction

A. Thinking up new ideas and being creative is important to him. He likes to do things in his own original way.

K. It is important to him to make his own decisions about what he does. He likes to be free to plan and to choose his activities for himself.

The reliability of the indices in this variant is low for the same reason that was cited for the PVQ variant with 29 portraits, but it is possible to combine adjacent types of values and to create more reliable indices of broader value orientations, for example, taking conservation as an average of the

conformity, security and tradition items, openness to change as an average of the self-direction, stimulation, and hedonism,[13] self-enhancement as the average of power and achievement, and self-transcendence as the average of benevolence and universalism. Schwartz (2001) points out one other possible way to create broader value orientations, in which self-direction, stimulation, hedonism, achievement, and power are all represent individual interests, while benevolence, conformity and tradition all represent collective interests. Universalism and security are transitional items, and they represent interests that contain both individual and collective components.

Schwartz (2003a) has also proposed other principles that organise the structure of values. One example is how values relate to anxiety and fear. Values such as conformity, tradition, security, and power are possible means of dealing with fear and anxiety. People try to avoid conflicts (conformity), preserve the current order (tradition, security), or take active control against threats (power). Values like universalism, benevolence, self-direction, stimulation, and hedonism express motivations that are free from fear and anxiety. From this perspective, achievement has a dual role: achieving social standards can be a means of controlling anxiety and can also be a confirmation of capability. Schwartz also shows (2003a) that on the basis of the results of confirmatory factor analysis it is possible to legitimately combine the adjacent values into higher types. This approach is consistent with the idea of the motivational continuum, and it gives researchers some room to create types of a 'higher order' particularly useful for the topic of research, but on the condition that the types are created out of adjacent values. So, for example, universalism and self-direction can combine to produce 'intellectual openness' as a type, or power and security can become 'control over uncertainty'.

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13 Given that hedonism contains elements of openness to change and elements of self-enhancement, its classification depends on empirical results. In the majority of cases it is closer to self-direction and stimulation than it is to power and achievement.

6. Empirical Findings from the ESS 2002

As mentioned in the introduction, value portraits were used in the European Social Survey 2002, in which 21 European countries took part. Respondents for the ESS were selected using complex random sampling. When this study was being prepared the data sets for all the countries were not yet available. In addition to availability of data one of the criteria for my selection of countries for analysis was that they display as much social and geographical heterogeneity as possible. I selected both those countries that at the time of the survey were not EU member states – Slovenia (1363)[14], Hungary (1444), Czech Republic (1063), and Poland (1805) – and countries that already were EU member states – Greece (2373), the Netherlands (2183), Norway (1714), Ireland (1671), and Spain (1576). I also included Switzerland (1853) in the analysis, which is neither a member of the EU nor a candidate for membership. First of all it is necessary to determine what is the level of the internal reliability of the PVQ items in the selected countries. On the basis of these findings it can then be decided whether it is possible to continue using the individual types or whether it is necessary to use higher order types in the analysis. We can then proceed to observing how the occurrence of different value types relates to sex, age, education, and religiosity in individual countries. In the following analysis special attention is devoted to the situation in the Czech Republic.

6.1 The internal reliability of the PVQ items and the two-dimensional representation of their relationships

The internal reliability of the items that measure each of the individual types of values in the Czech data set from the ESS 2002 is low:[15] universalism ($\alpha = 0.555$), benevolence ($\alpha = 0.540$), conformity ($\alpha = 0.541$), tradition ($\alpha = 0.352$), security ($\alpha = 0.505$), power ($\alpha = 0.484$), achievement ($\alpha = 0.678$), hedonism ($\alpha = 0.701$), stimulation ($\alpha = 0.643$), self-direction ($\alpha = 0.562$). In accordance with DeVellis' reliability criterion (2003: 95-96), only achievement and hedonism would be acceptable in this case. The results from the other countries are quite similar. Given these poor results the analysis will instead focus on higher order value types – conservation, openness to change, self-enhancement, and self-transcen-

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14 The figures in the brackets indicate the size of the survey sample.
15 Opinions on what level of Cronbach's alpha can be considered to be acceptable considerably differ. Here I present the opinion of R. F. DeVellis (2003: 95-96): an alpha value below 0.60 is unacceptable, between 0.60 and 0.65 it is undesirable, between 0.65 and 0.70 it is minimally acceptable, between 0.70 and 0.80 it is respectable, and between 0.80 and 0.90 it is very good. A value well above 0.90 suggests that consideration be given to shortening the scale.

dence – which exhibit greater internal reliability, as Table 1 shows. None of the values is unacceptable according to DeVellis' criterion, and one is undesirable (0.643). The others are within the limits of minimally acceptable and respectable.

Table 1. Cronbach's alpha values

Type	Conservation	Openness to change	Self-trans-cendence	Self-enhancement
Country				
Greece	0.698	0.783	0.753	0.661
Slovenia	0.729	0.746	0.648	0.658
Hungary	0.681	0.704	0.703	0.682
Czech Republic	0.671	0.771	0.700	0.753
Poland	0.735	0.791	0.697	0.653
Switzerland	0.701	0.704	0.643	0.657
Netherlands	0.711	0.697	0.693	0.740
Norway	0.717	0.790	0.686	0.758
Ireland	0.737	0.773	0.736	0.725
Spain	0.757	0.802	0.792	0.703

Figures 2 and 3 present two-dimensional representations of the relationships between the PVQ items using nonmetric multidimensional scaling for the Czech Republic. Ideally, the figures should correspond to the theoretical model of the circular arrangement of values that was presented in Figure 1. The items are shown as points in a two-dimensional space, and the distance between the points reflects the reciprocal relationship between the items, expressed as a Pearson correlation coefficient.[16] Figure 2 was developed using the Alscal multidimensional scaling program and Figure 3 with the Proxcal module of SPSS 12.0.[17] Both approaches work with 'blind optimisation', because they cannot work otherwise. It was not a confirmatory approach, and therefore no conclusions are to be drawn from the fact that the solution did not correspond exactly to the theoretical model with the circular arrangement of values in Figure 1 (more so in the case of the Proxscal than the Alscal

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16 The adequacy of the two-dimensional space is substantiated by the values S-stress = 0.197, stress = 0.129, RSQ = 0.926 for Figure 2 and normalised stress = 0.009, stress – I = 0.096, stress – II = 0.198, S – stress = 0.017, D. A. F. = 991, Tucker's congruence coefficient = 0.995 for Figure 3.

17 S. Schwartz and his students use for this purpose a Similarity Structure Analysis (SSA) based on the studies by Borg, Lingoes (1987), Borg and Shye (1993) and Guttman (1968). It is well known that it is possible to obtain very varied representations with almost identical stress values (the indicator of whether a certain representation is appropriate). There exist scaling programmes that search for representations that have additional qualities derived for example from the character of the data or that correspond to some theoretical model. In such a case this is a confirmatory similarity structure analysis (Borg, Lingoes 1987, p. 189). Although in the literature I had available to me Schwartz in no place mentions the term 'confirmatory SSA', from the texts it is clear that he uses some such program and searches for solutions that most resemble his theoretical model – the circular arrangement of value types – and he almost always finds it.

solution).[18] The representations in Figures 2 and 3 show what was already obvious from the reliability analyses – it is not possible to work with the ten values, and only the higher-order value types are feasible in this analysis. For the other countries the two-dimensional representation of relationships between the PVQ items is also adequate and is similar to the Czech one.

Figure 2. Value structure in the sample (the Alscal solution)
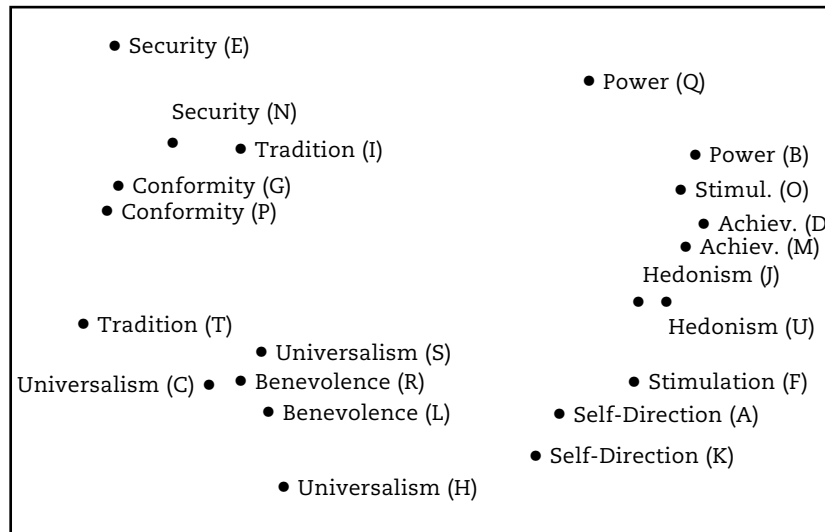
Figure 3. Value structure in the sample (the Proxscal solution)
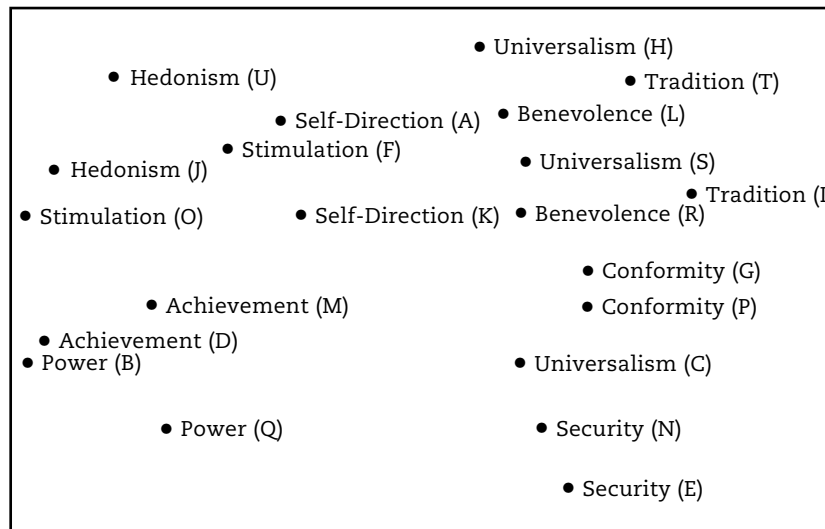
18   It does not matter that in Figure 2 universalism is located on the lower left and not the upper right part of the figure. That it is turned around like this does not play any role here or in the theoretical model.

6.2 Value types – conservation, openness to change, self-enhancement, self-transcendence

For the purpose of finding out how these types are represented in the samples, a problem that does not appear to have been dealt with at all in the related literature, I created variables out of the value types: 'conservation', 'openness to change', 'self-enhancement', and 'self-transcendence'. The numerical value of the 'conservation' variable for a given respondent was determined from the mean of numerical values the respondent gave in the ESS 2002 for items E, N, G, P, I, T, where the response 'very much like me' was assigned a 6, 'like me' 5, 'a bit like me' 4, 'little like me' 3, 'not like me' 2, and 'not like me at all' 1. The other variables were created in a similar manner. The variable 'openness to change' reflects items A, K, F, O, J, U,[19] the variable 'self-enhancement' reflects items B, Q, D, M, and the variable 'self-transcendence' reflects items C, H, S, L, R. A respondent was categorized as a 'conservation' type, if the numerical value the respondent gave for 'conservation' was higher than the values for the variables 'openness to change', 'self-enhancement', 'self-transcendence'. The other types – 'openness to change', 'self-enhancement', and 'self-transcendence' – were created in a similar manner.[20] Finally, the variable 'value orientations' was created, the values of which are the individual types.

Table 2 shows the distribution of this variable along with the adjusted residuals in individual countries. In terms of the distribution of the value orientations variable, the Czech Republic most resembles Hungary, Ireland, Spain, and Greece.[21] The extreme countries are Poland on the one hand, where there is a high percentage of the 'conservation' type, and Switzerland on the other, where there is a high percentage of the 'self-transcendence' type. The Czech Republic is closer to Poland than to Switzerland. The dominant type in all the countries is 'self-transcendence', the lowest percentage of which is in Poland, and the highest in Switzerland. The 'conservation' type is much less represented in the countries of Western Europe than in the countries of Central Europe, which is consistent with the results of Schwartz and Bardi (1997), who found that conservation values are more important in Eastern Europe than in Western Europe.[22]

19 The items for hedonism proved to be closer to the items for self-direction (A, K) and stimulation (F, O) than the items for power (B, Q) and achievement (D, M), and therefore I included them under openness to change and not under self-enhancement. This applies to all the countries I am working with here. It does not however apply, for example, to Great Britain, and for that reason I have not included Great Britain in the analysis.
20 In each of the countries there were a certain number of respondents who had more than one maximum value. In Greece such respondents represented 3.8%, in Slovenia 4.2%, in Hungary 2.4%, in the Czech Republic 3.1%, in Poland 4.7%, in Switzerland 1.1%, in the Netherlands 1.9%, in Norway 1.6%, in Ireland 4.0%, and in Spain 2.8%. I am working further only with 'pure types'.
21 This statement is based on an analysis of Table 2 and on the results of correspondence analyses that the author has.
22 The studies the author is basing this on were carried out in 21 European countries, including the Czech Republic, in 1988-1993, and value orientations were measured with the SVS method. The data were collected among secondary school teachers and post-secondary school students.

Table 2. Distribution of the value orientations variable in individual countries and the adjusted residuals

Type	Conservation	Openness to change	Self-trans- cendence	Self-enhancement
Country				
Greece	37.7%	9.2%	46.0%	7.1%
	14.0	-6.5	-9.2	3.0
Slovenia	28.3%	18.8%	46.8%	6.1%
	2.1	5.8	-6.1	0.6
Hungary	27.5%	14.3%	51.4%	6.8%
	1.5	0.9	-2.8	1.8
Czech Republic	32.1%	10.8%	50.4%	6.7%
	4.8	-2.7	-3.0	1.4
Poland	40.2%	10.3%	42.0%	7.4%
	14.4	-4.1	-11.3	3.1
Switzerland	8.5%	16.6%	71.8%	3.0%
	-18.0	4.2	15.5	-5.4
Netherlands	15.7%	18.1%	61.8%	4.4%
	-11.5	6.6	6.9	-2.8
Norway	19.0%	15.1%	61.3%	4.6%
	-6.8	2.0	5.6	-2.1
Ireland	25.7%	12.3%	56.0%	5.9%
	-0.1	-1.4	1.0	0.3
Spain	26.6%	9.5%	57.8%	6.1%
	0.7	-4.8	2.4	0.7

6.3 Value orientations in relation to sex, age, education, and religiosity

The relationships between sex, age, education, and religiosity and each of the ten values have often been examined using correlation coefficients (see e.g. Schwartz et al. 2001). On the basis of the results of these calculations I derived several hypotheses on the relationship between a particular value orientation and sex, age, education, and religiosity.

Hypothesis 1. Women more often than men belong to the conservation and self-transcendence types, while men more often than women belong to the openness to change and self-enhancement types.
This hypothesis is supported by some psychoanalytic, cultural-feminist, and evolutionary theories (e.g. Prince-Gibson and Schwartz 1998), according to which women put more emphasis on expressive-communal values, such as benevolence, while men stress agentic-instrumental values, such as power. However, according to interactionist theories (e.g. Deaux and Major 1990) no consistent gender differences should exist.

Hypothesis 2. The percentage of the conservation and self-transcendence types increases with increasing age. The percentage of the openness to change and self-enhancement types decreases with increasing age.
The older people are, the more anchored they are in social networks, the more they adhere to their customary patterns of behaviour, and the less they are exposed to changes and new challenges. This means that with the increase in age the percentage of the conservation type should be expected to increase and the percentage of the openness to change type should be expected to decrease. As soon as people start a family and obtain a firm employment position, they cease to concentrate only on themselves and begin to take an interest in the well being of others. Therefore, with the increase in age the percentage of the self-enhancement type should decrease and the percentage of the self-transcendence type should increase.

Hypothesis 3. As the level of education increases the percentage of the openness to change type increases and the percentage of the conservation type decreases.
This hypothesis is based on the experience that the higher the level of education the greater a person's intellectual openness, flexibility, curiosity, and creativity is, including greater openness to non-routine ideas and activities. On the other hand, the better the education, the less conformity and the less the recognition of traditional values there is.

Hypothesis 4. As the degree of religiosity rises, the percentage of the conservation type increases and the percentage of the openness to change and the self-enhancement types decreases.
Here I am making the assumption that religiosity bears with it an inherent tendency toward conformity and traditional values, and that it is irreconcilable with hedonism, stimulation values, and the craving for achievement and power.

The data from the ESS 2002 show that only in one-half of the countries surveyed (Greece, Slovenia, Hungary, Poland, and Spain) is it possible to say that women significantly more often than men belong to the conservation type. In the other countries there is no significant difference between the sexes. Women belong to the self-transcendence type significantly more often than men in Slovenia, Hungary, the Czech Republic, Switzerland, the Netherlands, Norway, and Ireland, but in the remaining three countries (Greece, Poland, and Spain) there is again no significant difference between men and women. Conversely, men belong to the openness to change and self-enhance-

ment types significantly more often than women. With regard to openness to change this is true in all the countries except Ireland, where the percentage is the same for both sexes. For the self-enhancement type this is true in all the countries except Switzerland and Norway, where again no significant difference was found between men and women. These findings refute the universal validity of hypothesis 1, which can only be fully confirmed by the data for Slovenia and Hungary, while its second part can be confirmed only by the data for Greece, the Czech Republic, Poland, the Netherlands, and Spain. The results for the Czech Republic are presented in Table 3.[23]

Table 3. Distribution of percentages and adjusted residuals in the classification of sex x type (Czech Republic)

Type	Conservation	Openness to change	Self-trans-cendence	Self-enhancement
Sex				
Male	30.6%	14.3%	46.8%	8.3%
	-1.0	3.8	-2.3	2.0
Female	33.7%	7.1%	54.0%	5.2%
	1.0	-3.8	2.3	-2.0

Goodman's and Kruskal's tau = 0.005, approximate level of significance = 0.002.

With respect to the influence of age on value orientations, only the results relating to the conservation type and the openness to change type confirm hypothesis 2. In all the countries it is found that as age increases the percentage of the conservation type increases and the percentage of the openness to change type decreases. However, this increase or decrease is not uniform or identical in all countries. The remaining part of hypothesis 2 is not supported by the data for the countries in this analysis. All that can be said is that in the majority of these countries the self-enhancement type is represented most in the 16-34 age group and least in the 65+ category. The predominant model of representation for the self-transcendence type is first an increase and then a decrease with varying intensity in the different countries. Table 4 presents the situation in the Czech Republic.[24]

23 The results for the other countries are available from the author.
24 The data for the other countries are available from the author.

Table 4. Distribution of percentages and adjusted residuals in the classification of age x type (Czech Republic)

Type	Conservation	Openness to change	Self-trans-cendence	Self-enhancement
Age				
16–24	6.6%	41.5%	41.5%	10.4%
	-6.0	10.9	-1.9	1.6
25–34	25.0%	12.5%	50.0%	12.5%
	-1.9	0.7	-0.1	2.9
35–44	32.5%	11.8%	49.1%	6.5%
	0.1	0.5	-0.4	-0.1
45–54	28.6%	7.1%	56.3%	8.0%
	-1.4	-2.0	2.1	0.9
55–64	38.1%	3.3%	55.8%	2.8%
	1.9	-3.5	1.6	-2.3
65–74	46.6%	3.1%	47.3%	3.1%
	3.8	-3.0	-0.8	-1.8
75–94	56.1%	1.5%	39.4%	3.0%
	4.3	-2.5	-1.8	-1.2

Goodman's and Kruskal's tau = 0.056, approximate level of significance = 0.000.

The data used in the examination of the influence of education on value orientations refers only to respondents who at the time of the survey were at least 25 years old. The reason for this is that after that age the education category is not usually likely to change further. In all the countries hypothesis 3 can be confirmed only as it pertains to the conservation type, the percentage of which really falls rapidly with increasing education levels.[25] With regard to the openness to change type, in none of the countries does the percentage decline with increasing education. In some countries we can find an increase (for example, in Greece, Slovenia, Poland, Switzerland, the Netherlands, and Norway), and in the others no really significant change occurs. The percentage of the self-transcendence type has a tendency to increase with increasing education, with two exceptions – Switzerland and the Netherlands, where the percentage of this type does not change with the increase in education. Something similar can be said for the percentage of the self-enhancement type; it does not significantly decline with increasing education in any country, while in the Netherlands, Norway and Ireland it grows, and elsewhere it remains unchanged. The situation in the Czech Republic is presented in Table 5.[26]

25 This analysis draws on an international categorisation of education using 6 categories: 0 = incomplete primary education, 1 = primary or first stage of basic, 2 = lower secondary or second stage of basic, 3 = upper secondary, 4 = post secondary but non-tertiary, 5 = first stage of tertiary, 6 = second stage of tertiary. These categories are here narrowed to three: 1 = 0, 1, 2; 2 = 3; 3 = 4, 5, 6. In addition to this categorisation used for each country, the national categorisation, which is used in Table 5, is also recorded. In Table 5 as well as in Table 9 and Table 10, lower secondary refers to secondary education concluded without the school-leaving examination known as 'maturita', while upper secondary refers to secondary education completed with the school-leaving examination, 'maturita'.
26 The results for the other countries are available from the author.

Table 5. Distribution of percentages and adjusted residuals for respondents aged 25 and over in the classification of education x type (Czech Republic)

Type	Conservation	Openness to change	Self-trans-cendence	Self-enhancement
Education				
Primary	49.5%	3.0%	45.5%	2.0%
	3.1	-1.7	-1.2	-1.9
Lower secondary	41.1%	6.5%	47.8%	4.7%
	3.1	-0.6	-1.8	-1.8
Upper secondary	29.7%	8.0%	53.3%	9.0%
	-2.5	0.8	0.9	2.3
Higher	20.6%	9.9%	61.1%	8.4%
	-3.8	1.4	2.4	1.1

Goodman's and Kruskal's tau = 0.018, approximate level of significance = 0.000.

In the ESS 2002 the question on religiosity read as follows: 'How religious are you – regardless of whether you belong to any specific religion?' The respondent answered on an eleven-point Likert scale, with verbal specifications only at the initial and end values (00 = not religious at all, 10 = very religious). The frequency distribution in percentages for the Czech Republic is: 'I'm not religious at all' – 00 (27.6%), 1 (14.0%), 2 (10.8%), 3 (9.0%), 4 (4.7%), 5 (12.4%), 6 (5.2%), 7 (5.9%), 8 (4.9%), 9 (2.9%), 'I'm very religious' – 10 (2.4%). The Czech Republic clearly has the least religious population of all the countries. Its polar opposite in this regard is Greece, while Poland and Ireland are also considerably religious, followed by Switzerland, the Netherlands, Slovenia, Hungary, Spain, and Norway.[27]

With increasing religiosity the percentage of the conservation type increases in all the countries, with the exception of Norway, where it increases only in relation to weak religiosity (categories 0–3) and middle-levels of religiosity (categories 4–6). The increase in the percentage of the conservation type in relation to the increase in religiosity is particularly strong in the very religious countries (Greece, Poland, Ireland), and even in Spain. The part of hypothesis 4 relating to the influence of religiosity on the percentage of the conservation type is confirmed by the data for all the countries with the exception of Norway. Conversely, with the increase in religiosity the percentage of openness to change decreases in all countries, confirming the relevant formulation in hypothesis 4. This phenomenon is particularly notable in Greece, Poland, Switzerland, the Netherlands, and Ireland. With increasing religiosity, the percentage of the self-enhancement type does not change considerably in Greece, Slovenia, Switzerland, and Norway, while in the other countries it is possible to observe a downward trend, as put forth in hypothesis 4. With the increase in religiosity the percentage of the self-transcendence type increases in Switzerland, the Netherlands, and Norway, while it decreases it Greece, Poland, and Spain, and remains without change in Slovenia, Hungary, the Czech Republic and Ireland. The case of the Czech Republic is presented in Table 6.[28]

27 This order is derived from the results of the correspondence analyses, which are available from the author.
28 Data on the other states are available from the author.

Table 6. Distribution of percentages and adjusted residuals in the classification of religiosity x type (Czech Republic)

Type	Conservation	Openness to change	Self-trans-cendence	Self-enhancement
Religiosity				
0, 1, 2, 3	27.0%	13.7%	50.5%	8.8%
	4.7	3.9	0.2	3.5
4, 5, 6	40.2%	6.5%	49.5%	3.7%
	2.7	-2.2	-0.2	-1.9
7, 8, 9, 10	42.8%	4.8%	50.0%	2.4%
	3.1	-2.7	-0.1	-2.4

Goodman's and Kruskal's tau = 0.013, approximate level of significance = 0.000.

6.4 The odds of the conservation type, openness to change type, and self-enhancement type in relation to age, education, and religiosity: the case of the Czech Republic

In the text below the odds of the conservation type are defined as the frequency of the conservation type divided by the frequency of the self-transcendence type, i.e. as the probability of the occurrence of the conservation type divided by the probability of the occurrence of the self-transcendence type.[29] The odds of the openness to change type and the odds of the self-enhancement type are defined analogically. The concept of odds enables more detailed analyses of the relationships between the value orientation variable (explained variable) and other variables (explaining variables).

Hypothesis A. The odds of the conservation type grow with increasing age. The odds of openness to change and self-enhancement decline with increasing age.

Hypothesis B. The odds of the conservation type decrease with increasing education. The odds of the openness to change type and the self-enhancement type grow with increasing education. (Hypothesis B relates to the population aged 25 and over).

Hypothesis C. Age and education influence the odds of the conservation type, the openness to change type, and the self-enhancement type, independently of one another. The influences of age and education are roughly the same. (Hypothesis C relates to the population aged 25 and over).

Hypothesis D. Age and religiosity influence the odds of the conservation type, the openness to change type, and the self-enhancement type, independently of one another. The influence of age is stronger than the influence of religiosity. With increasing religiosity the odds of the conservation type increase and the odds of the openness to change type and the self-enhancement type decrease.

To test hypothesis A, the first possible model is one that postulates a uniform increase in the odds of the conservation type with increasing age and a uniform increase in the odds of the openness to change type and the self-enhancement type with increasing age.[30] This means that the odds ratio of the conservation type for all adjacent age categories (second and first, third and second, etc.) is constant and greater than one, the odds ratio of the openness to change type for all adjacent age categories is constant and less than one, and the odds ratio of the self-enhancement type for all adjacent age categories is constant and less than one. For this model, $G^2 = 24.156$, df = 12, P = 0.019.[31] Given that P is less than 0.05, we must reject the model. This model is very restrictive. In order to make it more flexible, we will no longer demand that the odds ratios of all adjacent age categories be constant. The saturated model with contrasts for the age variable to compare the adjacent age categories shows that a number of the model's parameters have absolutely no significance, and it is therefore possible to leave out some effects. The goal is to arrive at the model with the lowest number of parameters (i.e. with the largest number of degrees of freedom) and which is acceptable, i.e.

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29 I chose as the control type, i.e. the type the others are compared with, the self-transcendence type because it is dominant.
30 Age in the model is divided into six categories: 16–24, 25–34, 35–44, 45–54, 55–64, 65–94.
31 G^2 is a statistic of the goodness-of-fit test and observed data (likelihood ratio chi square), df is the number of degrees of freedom, P is the attained significance.

where P > 0.05, which will not create large adjusted residuals (say, in absolute values, no greater than 2.20), and which will not lack any significant parameter of the saturated model. I found two such models.

Model M1 postulates that the odds of the conservation type are the same for the second, third, fourth and fifth age category, that the odds of openness to change are the same for the second and third age category, and the same for the fourth, fifth, and sixth age category. Model M1 further postulates that the odds of self-enhancement are the same for the first two age categories, for the third and the fourth, and finally also for the fifth and the sixth. The expected odds established on the basis of model M1 are presented in Table 7. For model M1, $G^2 = 8.225$, df = 9, P = 0.512, there is one maximum adjusted residual and it has a value of 2.15, and all the others have an absolute value of less than 1.96. Model M2 agrees with model M1 with regard to the requirements for the odds of conservation and the odds of self-enhancement. It differs from it with regard to the requirements for the odds of openness to change. It postulates that the odds of openness to change are the same for the second and third age group, and for the fifth and sixth. Model M1 is nested in model M2, as all the parameters that are in model M1 are also present in model M2. The expected odds calculated on the basis of M2 are in Table 8. For model M2, $G^2 = 3.701$, df = 8, P = 0.883, the maximum adjusted residual is one, and it has a value of –1.22. According to the chi-square criterion model M1 is worse than model M2, as $G^2(M1) – G^2(M2) = 4.524$ and this value is greater than 3.841, which is the critical value of the chi-square distribution with one degree of freedom (1 = df(M1) – df(M2) and at the level $\alpha = 0.05$. According to the Bayesian criterion, model M1 is better than model M2, because coefficient BIC(M1) = -54.176 is a more negative number than BIC(M2) = -51.767.[32] Thus we arrive at two diffe-rent conclusions. Model M2 is probably preferable here because in M2 the coefficients characterising the odds ratio of openness to change for the fourth and fifth age categories and the fifth and sixth age categories are significantly different from one.

According to model M2 the odds of the conservation type in the 25-34 age category are 3.7 times greater than in the 16-24 age category. This increase is significant because z = 3.14. There is then only a slight movement, which can be considered negligible. The odds ratio of the conservation type for the third and second, fourth and third, and fifth and fourth age categories are equal to one. Another significant increase in the odds of the conservation type (1.9 times, z = 3.75) appears for the oldest age category. The odds of the openness to change type are highest in the youngest age group. In the next age group there is a very small decrease in the odds of the openness to change type: the odds ratio for the first and second age categories is 0.24, z = -5.24. In the 35-44 age category the odds of the openness to change type are the same as in the preceding age category, but in the 45-54 age category another significant decrease occurs in the odds of the openness to change type, roughly to one-half of the preceding value (the odds ratio is 0.53, z = -2.08). In the 55-64 age category there is again a significant decrease in the odds of the openness to change type: the odds ratio in this and in the preceding age category is 0.43, z = -2.10. In the oldest age category the odds of the openness to change type remain at the level in the preceding age category. The odds of the self-enhancement type are, as expected, highest in the youngest age group. However, they do not begin decreasing immediately in the next age category, but rather start to diminish with the 35-44 age group, where they fall to one-half (the odds ratio for the self-enhancement type in the second and third age group is 0.54, z = -2.22). In the 45-54 category there is no significant change in the odds, and there is no sig-

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32 BIC(M) = $G^2(M) – df(M) \times \ln n(M)$, where $n(M)$ is the number of observations that model M is working with.

nificant change up to the 55-64 age category: the odds ratio of the self-enhancement type for the fifth and fourth age groups is 0.41, z = -2.48. Hypothesis A is, therefore, not valid. The odds of the conservation type are not an increasing function of age groups, but they are their non-decreasing function. The odds of the openness to change type and the self-enhancement type are not decreasing functions of age groups, but they are their non-increasing functions.

Table 7. Expected odds of the conservation type, openness to change type, and self-enhancement type in comparison with the self-transcendence type from model M1

Type	Conservation	Openness to change	Self-enhancement
Age			
16–24	0.161	1.021	0.260
25–34	0.586	0.246	0.260
35–44	0.586	0.246	0.137
45–54	0.586	0.085	0.137
55–64	0.586	0.085	0.059
65–94	1.128	0.085	0.059

Table 8. Expected odds of the conservation type, openness to change type, and self-enhancement type in comparison with the self-transcendence type from model M2

Type	Conservation	Openness to change	Self-enhancement
Age			
16–24	0.161	1.021	0.260
25–34	0.589	0.247	0.260
35–44	0.589	0.247	0.139
45–54	0.589	0.130	0.139
55–64	0.589	0.056	0.058
65–94	1.098	0.056	0.058

To test hypothesis B the first possible model is one that postulates a uniform change in the odds of the conservation type, openness to change, and self-enhancement in the case of increasing education. This is model M3. It fits the data very well, as $G^2 = 3.480$, df = 6, P = 0.747, there is one maximum adjusted residual and it equals –1.40. According to model M3 the odds of the conservation type uniformly decrease with increasing education, and the odds of the openness to change type and the self-enhancement type uniformly increase with increasing education, but only the odds of the conservation type show significant changes (z = -4.67), while the odds of the self-enhancement type change less (z = 1.74), and the change in the odds of the openness to change type are not at all significant (z = 1.23). Model M3 is therefore modified in such a way that the odds of the openness to change type are constant for all levels of education, and the resulting model is M4.

Model M4 also fits the data well, as G^2 = 5.00, df = 7, P = 0.660, there is one maximum adjusted residual and it equals 1.44. According to model M4 the odds of the conservation type significantly decrease with increasing education (z = -5.04), the odds of the openness to change type do not change with increasing education, and the odds of the self-enhancement type grow with increasing education (z = 1.61), but the growth is not significant (the significance of this value is close to the value of 0.1 in a two-sided test and 0.05 in a one-sided test). One further simplification can thus be made in which only the uniform decrease of the odds of the conservation type is retained and it is assumed that the odds of the other types do not change with increasing education. This model is M5.

Even model M5 is still very acceptable, as G^2 = 7.612, df = 8, P = 0.472, the maximum adjusted residual is one and it equals 1.78. There are therefore three competing models – M3, M4, M5 – and it holds that M5 $\subset$ M4 $\subset$ M3. Both according to the chi-square criterion and according to the Bayesian criterion, M5, the simplest model, emerges from the competition as recommended (see Table 9).[33] Nonetheless, model M4 should not be dismissed either (see Table 10). On the basis of this discussion there is no reason to reject hypothesis B as it pertains to the odds of the conservation type, but it must be rejected as it pertains to the odds of openness to change. What has yet to be determined is the behaviour of the self-enhancement type.

Table 9. Expected odds of the conservation, openness to change, and self-enhancement types in comparison with the self-transcendence type from the M5 model, for respondents aged 25 and over

Type	Conservation	Openness to change	Self-enhancement
Education			
Primary	1.333	0.138	0.124
Lower secondary	0.846	0.138	0.124
Upper secondary	0.537	0.138	0.124
Higher	0.341	0.138	0.124

Table 10. Expected odds of the conservation, openness to change, and self-enhancement types in comparison with the self-transcendence type from the M4 model, for respondents aged 25 and over

Type	Conservation	Openness to change	Self-enhancement
Education			
Primary	1.281	0.138	0.080
Lower secondary	0.833	0.138	0.103
Upper secondary	0.542	0.138	0.134
Higher	0.352	0.138	0.174

33 G^2(M4) – G^2(M3) = 1.522 < 3.841 = $\chi^2_{1;\,0.05}$ → there is no evidence that M4 fits the data worse than M3. G^2(M5) – G^2(M4) = 2.610 < 3.841 = $\chi^2_{1;\,0.05}$ → there is no evidence that M5 fits the data worse than M4. G^2(M5) – G^2(M3) = 4.132 < 5.991 = $\chi^2_{2;\,0.05}$ → there is no evidence that M5 fits the data worse than M3. BIC(M3) = -37.447, BIC(M4) = -42.746, BIC(M5) = -46.975 → the recommended model is M5.

One valid question is whether age and education have an effect on the odds of the value types independently, and which of these factors is stronger (see hypothesis C). Again the data here refers only to respondents aged 25 and over, as is true throughout this article whenever education is being taken into consideration. In order to satisfy the applicability conditions of logit models, we need to form two categories of education instead of four, namely without 'maturita' (e.g. primary education or secondary education without the school-leaving examination) and with 'maturita' (e.g. secondary education with the school-leaving examination or higher) and create three age groups (25–34, 35–54, 55–94). Model M6, which tests the independence of the effect of age and education, i.e. the model that does not contain the interaction effect of these variables, fits the data very well: $G^2 = 3.251$, df = 6, P = 0.777, there are two maximum adjusted residuals and they are equal to –1.61 and +1.61. It can therefore be said that age and education influence the odds of value types independently of one another. This assumption of independence is already contained in model M7, and it moreover assumes a uniform change of value odds with increasing age and the influence of education on the odds of the conservation type and the self-enhancement type, but not on the openness to change type. The model fits the data very well: $G^2 = 5.850$, df = 10, P = 0.828, there is one maximum adjusted residual and it equals –1.54.

Model M8 represents a further simplification of model M7, it leaves out the influence of education on the odds of the self-enhancement type, which in the previous model was insignificant at the 0.05 level in a two-sided test (z = -1.751). For model M8, $G^2 = 9.018$, df = 11, P = 0.620, there is one maximum adjusted residual and it equals 1.60. For models M6, M7, and M8 it applies that M8 $\subset$ M7 $\subset$ M6. According to the chi-square test and according to the Bayesian test the recommended model is M8 (see Table 11).[34] But judging from Table 12 M7 may be preferable, and here arises a dilemma analogical to that of deciding between models M4 and M5. In model M7 the influences of age and education on the odds of the conservation type differ significantly at the 0.1 level, but not at the 0.05 level (z = 1.74), and it is the influence of education that is greater. The odds of the openness to change type are not influenced by education at all, but they are affected by age. The influences of age and education on the odds of the self-enhancement type are not significantly different (z = 0.60). In model M8 there is a significant difference between the influences of age and education on the odds of the conservation type (z = 2.02), and it is the influence of education that is greater. The odds of the other two value types are influenced only by age. Only the part of hypothesis C referring to the independence of the effects of age and education on the odds of the value types cannot be rejected.

34   G^2(M7) – G^2(M6) = 2.599 < 9.488 = $\chi^2_{4; 0.05}$ → there is no evidence that M7 fits the data worse than M6.
G^2(M8) – G^2(M7) = 3.168 < 3.841 = $\chi^2_{1; 0.05}$ → there is no evidence that M8 fits the data worse than M7. G^2(M8) – G^2(M6) = 5.767 < 11.07 = $\chi^2_{5; 0.05}$ → there is no evidence that M8 fits the data worse than M6.
BIC(M6) = -37.675, BIC(M7) = -62.361, BIC(M8) = -66.014 → the recommended model is M8.

Table 11. Expected odds of the conservation, openness to change, and self-enhancement types in comparison with the self-transcendence type from model M8, for respondents aged 25 and over

Age	Education	Conservation	Openness to change	Self-enhancement
25–34	Without maturita[35]	0.622	0.299	0.270
	With maturita[36]	0.318	0.299	0.270
35–54	Without maturita	0.838	0.146	0.131
	With maturita	0.429	0.146	0.131
55–94	Without maturita	1.128	0.071	0.064
	With maturita	0.577	0.071	0.064

Table 12. Expected odds of the conservation, openness to change, and self-enhancement types in comparison with the self-transcendence type in model M7, for respondents aged 25 and over

Age	Education	Conservation	Openness to change	Self-enhancement
25–34	Without maturita	0.604	0.298	0.200
	With maturita	0.323	0.298	0.332
35–54	Without maturita	0.817	0.146	0.098
	With maturita	0.437	0.146	0.162
55–94	Without maturita	1.106	0.071	0.048
	With maturita	0.591	0.071	0.079

Hypothesis D is first tested using model M9, which omits the interactive effect of age and religiosity. This model is acceptable, as G^2 = 11.537, df = 12, P = 0.484, there is one maximum adjusted residual and it equals 2.09. Therefore, it is possible to assume that age and religiosity do influence the odds of value types independently of one another. The parameters of model M9 clearly confirm that with the increase in religiosity the odds of the conservation type increase and the odds of the openness to change type and the self-enhancement type decrease, as claimed in hypothesis D. However, an even more parsimonious model than M9 is model M10, which assumes that the odds increase or decrease uniformly. While this model has a slightly higher value for the G^2 statistic than model M9 does (G^2 = 13.988), it has an additional six degrees of freedom (df = 18), the attained significance is P = 0.730 and the maximum adjusted residual equals 1.84 and there is only one. Model M10

35 It means secondary education concluded without the school-leaving examination known as 'maturita' or lower.
36 It means secondary education completed with the school-leaving examination known as 'maturita' or higher.

is nested in model M9 and is preferred both according to the chi-square and according to the Bayesian criterion.[37]

The expected odds of the value types calculated according to model M10 are presented in Table 13. With increasing religiosity there is a significant increase in the odds of the conservation type with coefficient 1.19; z = 2.06. With increasing age there is a significant increase in the odds of the conservation type with coefficient 1.50; z = 4.01. In a two-sided test the influences of age and religiosity on the odds of the conservation type do not differ, even at the 10% level, as z = 1.638. A one-sided test, which can be used here given that hypothesis D claims the influence of age to be stronger, shows that the influence of age is significantly stronger (α = 0.10) than the influence of religiosity. With an increase in religiosity there is a significant decrease in the odds of the openness to change type with coefficient 0.67; z = -2.82. In this case the influence of age is also stronger than the influence of religiosity, z = 4.36. With the increase in religiosity there is a significant decrease in the odds of the self-enhancement type with coefficient 0.54; z = -3.42. With increasing age there is a significant decrease in the odds of the self-enhancement type with coefficient 0.54; z = -3.38. In this case, unlike the claim in hypothesis D, the influence of age and religiosity do not differ significantly; z = 0.01.

Table 13. Expected odds of the conservation, openness to change, and self-enhancement types in comparison with the self-transcendence type in model M10

Age	Religiosity	Conservation	Openness to change	Self-enhancement
16–34	0, 1	0.324	0.728	0.367
	2–4	0.385	0.489	0.199
	5–10	0.458	0.329	0.108
35–54	0, 1	0.486	0.231	0.199
	2–4	0.578	0.156	0.108
	5–10	0.687	0.105	0.059
55–94	0, 1	0.729	0.074	0.107
	2–4	0.866	0.049	0.058
	5–10	1.030	0.033	0.032

37 G^2(M10) – G^2(M9) = 2.451 < 12.59 = $\chi^2_{6;\,0.05}$ → there is no evidence that M10 fits the data worse than M9. BIC(M9) = -71.487, BIC(M10) = -110.548 → the recommended model is M10.

7. Closing Summary

The objective of this article was to present information on the methods of measuring values that were developed by S.H. Schwartz and that are often used in international comparisons. It began with an outline of the development of Schwartz's theory, followed by the definitions of eight value types and a specification of the dynamic relations between them. The reader was then acquainted with the modifications that were made to the theory, which settled in the end with ten value types and a circular pattern of conflicting and compatible relationships between them. In the next part a brief description was made of the SVS method of measuring value orientations. Greater attention was then devoted to the PVQ method, which was used in 2002 in the European Social Survey, a study in which the Czech Republic also participated. Consequently, that part of the article is devoted to an analysis of the results of the Portrait Values Questionnaire conducted in ten selected countries, focusing on the internal reliability of the PVQ items, on the two-dimensional representation of their relationships, and on the creation of a typology of respondents on the basis of their professed values. It was shown that the internal reliability of the items measuring individual value types is in all the countries low. A more satisfactory situation is detected when use is instead made of value types of a higher order, and these were then used to develop a value typology of respondents. Among the other findings is that there are considerable differences between countries with regard to this typology. Poland, with the strongest representation of the conservation type and the weakest representation of the self-transcendence type, and Switzerland, where the exact opposite is true, were the two countries that differed from each other most. In this respect the Czech Republic was much more like Poland than Switzerland. Four hypotheses were formulated about value orientations in relation to sex, age, education, and religiosity. Not one of the hypotheses was fully supported by the data, and even here there existed large differences between countries.

In the Czech Republic significantly more men fell under the openness to change type and the self-enhancement type and significantly more women could be found in the self-transcendence type, so from this perspective gender differences do exist. Age also fundamentally influences percentage representation in the conservation and openness to change types. Openness to change is particularly common among the youngest age group, up to 24 years of age. Immediately in the next age group there is a sharp fall in the percentage of this type, and the percentages continue to decrease, though less sharply, in the subsequent age groups. The pattern in which the conservation type is represented is just the opposite. The self-transcendence type does not experience any such dramatic changes, and its development follows a flat parabolic curve with the lowest values for the youngest and oldest age groups and the highest values for the 45-64 age group. This is the clearly predominant type in the 25-64 age range. The self-enhancement type is generally represented the least, and is most often found among young people.

Education also comes across as a differential factor. With increasing education the conservation type declines. For the Czech ESS 2002 respondents with primary education it was moreover the predominant type. This is of course also augmented by the fact that today in the Czech Republic it is mainly among the older generation that people aged over 25 have primary as their last level of education. The openness to change type increases with increasing education. There is a large difference in the percentage of this type among people with primary education and the percentage in the next level of education – secondary without 'maturita'. An intervening factor even here is the fact that again it is primarily among the older generation that there are people with primary education, and it is the older generation that is also least open to change. The self-transcendence type increases with increasing education. The biggest increase can be observed among people with complete secondary and higher levels of education. The self-enhancement type is a minority type among people with primary education, and while it does increase it does so only to the category of complete secondary education. Also, the level of religiosity changes the distribution of types. People who are more religious much more often belong to the conservation type and are much less often found in the openness to change and self-enhancement types in comparison with people who are not at all religious or are not very religious. Religiosity has no effect at all on the percentage of the self-transcendence type, and this type is dominant at all levels of religiosity.

Another four hypotheses about the influence of age, education and religiosity on the odds of the conservation type, openness to change type and self-enhancement type in comparison to the self-transcendence type were verified only on the Czech data set. These hypotheses were not fully supported by the data either. The odds of the conservation type are a non-decreasing function of age groups and the odds of openness to change and self-enhancement are a non-increasing function of age groups. The odds of the conservation type decrease with increasing education, while the odds of the openness to change type and the self-enhancement type are not affected by education. With increasing religiosity the odds of the conservation type increase and the odds of the openness to change type and the self-enhancement type decrease.

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Summary

The study focuses on the construction of value types and the relationship between their occurrence in the population and position in the social structure. The value types are constructed on the basis of results drawn from the Value Portraits Questionnaire, which was developed by S.H. Schwartz and was used in the European Social Survey 2002. The study begins by outlining the course of development of the theory of value types and the instruments used to measure them. A brief description is given of the measurement of value orientations using the Schwartz Value Survey (SVS). More space is then devoted to the method of measuring value orientations using the Portrait Values Questionnaire (PVQ). Drawing on data from ten countries, selected from among the twenty-three countries that took part in the European Social Survey 2002, the internal reliability of the PVQ items and of four higher order value types – conservation, openness to change, self-transcendence, and self-enhancement – is tested. Although the reliability of the PVQ items is low, the reliability of the higher order types is acceptable. The distribution of the population among the four value types is presented and compared in each of the ten countries included in the analysis. The predominant type in all the countries is the self-transcendence type. Extreme countries in this regard are Poland at one end, with a high proportion of the conservation type, and Switzerland at the other end, with a high proportion of the self-transcendence type. In this sense the Czech Republic is closer to Poland than Switzerland. A number of hypotheses are formulated and tested about the changes in the distribution of types in relation to sex, age, education, and religiosity. Special attention is devoted to the situation in the Czech Republic. The analysis reveals that none of the hypotheses is universally valid. In all the countries, with increasing age the percentage of the conservation type increases and the percentage of the openness to change type decreases. Also, in all the countries the percentage of the conservation type decreases with increasing education and the percentage of the openness to change type decreases with increasing religiosity. Hypotheses on the odds of the conservation, openness to change, and self-enhancement types in relation to the self-transcendence type and in connection with age, education and religiosity are formulated specifically for the Czech Republic. The results demonstrate that age and religiosity affect the odds of the conservation, openness to change, and self-enhancement types independently of one another and that the odds of the conservation type grow with increasing age and religiosity and the odds of openness to change decrease with increasing age and religiosity.

Shrnutí

Text se zabývá konstrukcí hodnotových typů konzervace, otevřenost změně, překročení sebe sama a posílení ega a souvislostí jejich výskytu v populaci s umístěním v sociální struktuře. Hodnotové typy jsou konstruovány na základě výsledků z dotazníku hodnotových portrétů, který vytvořil S. H. Schwartz a který byl použit v Evropském sociálním výzkumu 2002. Nejprve je podán přehled vývoje teorie hodnotových typů a měřicích nástrojů k jejich zjišťování. Stručně je popsáno měření hodnotových orientací metodou SVS (Schwartz Value Survey). Více prostoru je věnováno metodě zjišťování hodnotových orientací pomocí dotazníku hodnotových portrétů PVQ (Portrait Values Questionnaire). Na datech z deseti zemí, které byly vybrány z 23 zemí, které se Evropského sociálního výzkumu v roce 2002 zúčastnily, je dokumentována vnitřní reliabilita položek PVQ a hodnotových typů vyššího řádu. Ačkoliv reliabilita jednotlivých položek je nízká, reliabilita hodnotových typů vyššího řádu je přijatelná. Je ukázáno a porovnáno rozdělení populace do čtyř výše uvedených typů v každé z deseti zkoumaných zemí. Převažujícím typem je ve všech zemích typ překročení sebe sama. Extrémními zeměmi jsou na jedné straně Polsko s vysokým podílem konzervačního typu a na druhé straně Švýcarsko s vysokým zastoupením typu překročení sebe sama. Česká republika je podobnější Polsku než Švýcarsku. Jsou formulovány a následně ověřovány hypotézy o proměnách těchto rozdělení v souvislosti s pohlavím, věkem, vzděláním a zbožností. Speciální pozornost je věnována situaci v České republice. Ukazuje se, že žádná z hypotéz nemá univerzální platnost. Ve všech zemích se s přibývajícím věkem zvětšuje zastoupení typu konzervace a zmenšuje zastoupení typu otevřenost změně. Ve všech zemích se také zmenšuje zastoupení typu konzervace s rostoucím vzděláním a zastoupení typu otevřenost změně s rostoucí zbožností. Speciálně pro Českou republiku jsou formulovány a ověřovány hypotézy o chování šancí typu konzervace, otevřenost změně a posílení ega vztažených k typu překročení sebe sama v souvislosti s věkem, vzděláním a zbožností. Z výsledků jmenujme alespoň ten, že věk a zbožnost působí na šance typů konzervace, otevřenost změně a posílení ega nezávisle na sobě a to tak, že šance typu konzervace se zvětšují s rostoucím věkem a zbožností a šance otevřenost změně a posílení ega se zmenšují s rostoucím věkem a zbožností.

Zusammenfassung

Der Text beschäftigt sich mit der Konstruktion der Werttypen Bewahrung, Offenheit gegenüber Veränderungen, Selbstübertreffung und Ego-Stärkung sowie mit den Zusammenhängen zwischen ihrem Auftreten in der Bevölkerung und der Stellung in der sozialen Struktur. Die Werttypen wurden anhand von Ergebnissen aus Portrait Value Questionnaires (PVQs), die von S. H. Schwartz entwickelt und im European Social Survey verwendet wurden, konstruiert. Zuerst wird ein Überblick über die Entwicklung der Werttypentheorie und der Messinstrumente zu ihrer Feststellung gegeben. Dann wird die Feststellung von Wertorientierungen mit der SVS-Methode (Schwartz Value Survey) kurz beschrieben. Mehr Raum wird dann der Methode zur Feststellung von Wertorientierungen mithilfe von PVQs eingeräumt. Anhand von Daten aus zehn Ländern, die aus den 23 Ländern ausgewählt wurden, die am European Social Survey 2002 teilnahmen, wird die interne Verlässlichkeit der PVQ-Daten und der Daten der Werttypen höherer Ebene dokumentiert. Auch wenn die Verlässlichkeit der einzelnen Daten niedrig ist, ist die Verlässlichkeit der Werttypen höherer Ebene akzeptabel. Es wird die Verteilung der Bevölkerung in die vier oben genannten Werttypen in jedem der zehn untersuchten Länder gezeigt und verglichen. Der vorwiegende Typ ist in allen Ländern der Typ „Selbstübertreffung". Extreme Länder sind auf der einen Seite Polen mit einem hohen Anteil des Bewahrungstyps und auf der anderen Seite die Schweiz mit einem hohen Anteil des Typs „Selbstübertreffung". Tschechien ähnelt mehr Polen als der Schweiz. Es werden Hypothesen über die Veränderungen dieser Aufteilung im Zusammenhang mit dem Geschlecht, dem Alter, der Bildung und der Religiosität formuliert und im Anschluss überprüft. Dabei wird der Situation in Tschechien besondere Aufmerksamkeit geschenkt. Es zeigt sich, dass keine der Hypothesen universelle Gültigkeit besitzt. In allen Ländern steigt mit zunehmendem Alter der Anteil des Bewahrungstyps, und der Typ „Offenheit gegenüber Veränderungen" sinkt. In allen Ländern verringern sich auch der Anteil des Bewahrungstyps mit zunehmender Bildung und der Anteil „Offenheit gegenüber Veränderungen" mit zunehmender Religiosität. Speziell für Tschechien werden – bezogen auf den Typ „Selbstübertreffung" – Hypothesen zum Chancenverhalten der Typen „Bewahrung", „Offenheit gegenüber Veränderungen" und „Ego-Stärkung" im Zusammenhang mit Alter, Bildung und Religiosität formuliert und überprüft. Von den Ergebnissen sei hier nur genannt, dass Alter und Religiosität auf die Chancen der Typen „Bewahrung", „Offenheit gegenüber Veränderungen" und „Ego-Stärkung" unabhängig voneinander einwirken, und zwar so, dass die Chancen des Bewahrungstyps sich mit zunehmendem Alter und zunehmender Religiosität erhöhen, und die Chancen für Offenheit gegenüber Veränderungen und für Ego-Stärkung mit zunehmendem Alter und zunehmender Religiosität abnehmen.

Sociologické studie/Sociological Studies

Sociologické texty/Sociological Papers

Sociologické texty/Sociological Papers *were published to 2003. Sociologické studie/Sociological Studies is a continuation of the previous series, publishing the working papers by researchers from the Institute of Sociology ASCR and their colleagues.*

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Where to find us?

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SDA

SOCIOLOGICAL DATA ARCHIVE

SDA collects computerised data files from sociological surveys. Its main objective is to make Czech sociological data publicly available for academic, educational and other non-commercial purposes. Other activities of the Archive include the promotion of data dissemination and secondary analysis, and support for special research projects. SDA is a member of the CESSDA (Council of European Social Science Data Archives). An electronic data catalogue and access to services is provided via the Internet: **http://archiv.soc.cas.cz**

Institute of Sociology
of the Academy of Sciences
of the Czech Republic

In April 2004 an informative publication on the structure and research activities of the Institute of Sociology AS CR was published. It provides an overview of the directions of research in contemporary sociology at the Institute of Sociology AS CR.
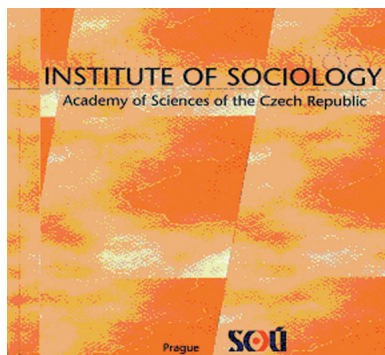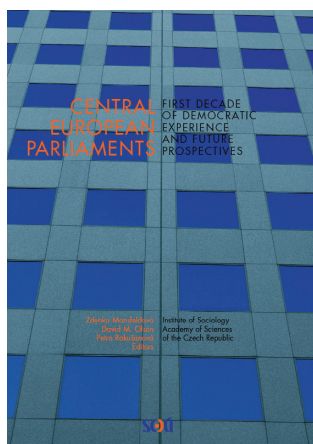
Central European Parliaments: First Decade of Democratic Experience and the Future Prospectives

Mansfeldová, Z., Olson, D.M., Rakušanová, P. (eds.)

The contributions included in this edited volume are based on contributions presented at the international workshop "Central European Parliaments: First Decade of Democratic Experience and the Future Prospective" held in Prague 6 – 8 November 2003 and a concluding paper by D. M. Olson, summarising the ideas and results of the round table titled Possibilities of Cooperation and Co-ordination of Comparative Research.

The main objective of the workshop was to gather scholars engaged in field research, and to go beyond the isolated research studies on national parliaments and their actors that dominated the past decade of research by launching international co-operative investigations in the next decade and to assess priorities in parliamentary research for the forthcoming years. Based on the current trends in the Czech Parliament and on existing research, attenarliaments: First Decade of Democratic Experience and the Future Prospective. Prague: Institute of Sociology of the Academy of Sciences of the Czech Republic. ISBN: 80-7330-067-2.

●●● periodical titles

Sociologický časopis / Czech Sociological Review
Sociologické studie
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Kontext: časopis pro gender a vědu
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Other Publications

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Value Orientations in Society

head of department:
Mgr.et Mgr. Klára Plecitá, Ph.D.

members of department:
PhDr. Dana Hamplová, Ph.D.
Bc. Jana Chaloupková
PhDr. Martin Kreidl, M.A., Ph.D.
PhDr. Tomáš Lebeda
RNDr. Blanka Reháková, CSc.
Mgr. Petra Šalamounová

The primary aim of the research department is to conduct research on values and attitudes, their continuity and changes, and their relationship to human behaviour. The research aim of the department is founded on the assumption that deeply rooted human values and attitudes assist in directing, assessing, explaining and perhaps even "predicting" human behaviour. Values and attitudes stand behind the social, political and economic changes in societies, and these have a reciprocal effect on the changes to values and attitudes. The department aims also to systematically study the relationship between values and other social structures of modern societies, particularly socio-demographic structures, as value systems not only determine these other structures but are also (re-)produced by them.

While Czech society lies at the centre of the department's research interest, preference is given to research that allows for international comparisons. One important task of the department is its responsibility for conducting regular research into values in the Czech Republic as a part of the "European Social Survey".

Thematically the department focuses especially on studying continuity and change in general value orientations (political, religious, moral, family etc.) and cultural and national value orientations (national, identity, cultural identity and other value-based group identities etc.).

The department was founded in 2002. Previously, the members of this department had participated in the projects run by the department of Demographic Behaviour of the Population and by the Social Stratification department.

At present the department is working on the following projects:
ISSP 2002 and 2003 – the Family and the Nation in a Comparative Perspective (2002-2004); Democratic Values (2001-2003); European Social Study (ESS) (2001-2003); Models of Entry into Marriage in the Czech Republic 1989-2002 (2002-2004); and Changes in Fertility and Family Behaviour in Connection with the Current Social Transformation of the Czech Republic (2001-2003).

A sample of completed projects includes:
International Social Survey Programme (ISSP 1998 – Religion, ISSP 2000 – the Environment, ISSP 2001 – Social Networks); The Demographic Behaviour of the Population of the Czech Republic during the Transformations of Society after 1989; The Family and Reproductive Behaviour among the Young Generation in the 1990s; The Natural Population Turnover in the Czech Lands in the 17th and 18th Centuries.

WWW http://www.europeansocialsurvey.com

●●● research departments

Public Opinion Research Centre (CVVM)
Jiří Vinopal
♦ Our Society

Czech Border Regions
Václav Houžvička

Gender & Sociology

Economic Sociology
Jiří Večerník
♦ Socio-economics of Housing

Value Orientations in Society
Klára Plecitá-Vlachová
♦ European Social Survey

Local and Regional Studies
Tomáš Kostelecký

Sociology of Education and Stratification
Petr Matějů

Sociological Data Archive
Jindřich Krejčí

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Lubomír Brokl
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Social Structure Studies
Milan Tuček

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Press and Publications Department
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**Measuring Value Orientations with the Use
of S.H. Schwartz's Value Portraits**

Blanka Řeháková