

Original Papers

Polish Psychological Bulletin
2011, vol. 42(4), 205-214
DOI - 10.2478/v10059-011-0027-5

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Integration of Schwartz's value theory and Scheler's concept of value in research on the development of the structure of values during adolescence

A proposal is presented in the article of integrating Schwartz's circular model of values (1992, 1994, 2006) with Scheler's concept of values (Brzozowski, 1995). The main research goals were: 1) empirical verification of the attempt to include the values of Scheler into the circle of Schwartz's values; 2) use of the concept and measurement of Scheler's values to describe the development of the value structure during adolescence. Two studies were conducted in a group of 988 persons aged from 15 to 20 years. The Scheler Value Scale of Brzozowski (1995) was used along with the new version of the Schwartz's Portrait Value Questionnaire (Schwartz et al., 2011). In the first study, multidimensional scaling of multitrait-multimethod (MTMM) matrix was carried out, into which were introduced the indexes of Scheler's values and the indexes of Schwartz's value types. In this way, it was demonstrated that it is possible to include Scheler's values in the four higher order values within Schwartz's circle of values. In the second study, it was shown that by using the Schelerian values to analyse the development of the value structure, similar results were obtained to those that were acquired with the aid of instruments intended to measure values in Schwartz's approach. The structure becomes differentiated with age and takes on the shape of a circle.

Keywords: Structure of values, circle of values, development of values, adolescence

Introduction

The value concept has recently been gaining in significance in psychology. It is one of the candidates for the variable explaining many behaviours that people consciously undertake when setting goals for themselves and striving towards their achievement. The approach to values that is dominant in contemporary psychology is the circular model of values proposed by Schwartz (1992, 1994, 2006). It turned out to be particularly useful in social and cross-cultural psychology. One of the value measurements developed by Schwartz (abridged version of the *Portrait Value Questionnaire* PVQ-21) was introduced into the European Social Survey which has made available data from representative samples from almost all European countries, which is quite unique in psychological research. The large number of studies confirming the basic premises of the circular model of values have constituted the starting point for using the theory in other areas of psychology also. For example Cieciuch (2012), in his polemic with McCrae (2009), proposed a modification of the Bif Five Factor

Theory, by introducing to the description of the first level of personality, apart from traits, values that are understood motivationally.

Over the last few years, it has also turned out that the Schwartz's theory of values is supplying useful instruments to analyse development and shape the value structure in developmental psychology. Berzonsky, Cieciuch, Duriez and Soenens (2011) propounded values to be introduced in the analysis of the traditional approach of identity styles. According to their proposal, identity styles are a formal aspect of identity (*how identity*), whereas values are an element of the content aspect of identity (*what identity*). In recent years, additionally, an interesting shift has taken place in the research conducted on the value structure to the periods before the traditionally studied adolescence. This became possible thanks to the proposal to measure values in the late childhood stage of Döring and colleagues (Döring, Blauensteiner, Aryus, Drögekamp, & Bilsky, 2010; Cieciuch, Harasimczuk, & Döring, 2010).

Values also appear as one of the key categories in positive psychology. The leading representatives of this

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This research was supported by Grants (N N106 132439) in the years 2010–2012 from the Polish Ministry of Science and Higher Education to the first author.

Table 1
Ten Schwartz's value types (1992).

universalism	understanding, appreciation, tolerance, and protection for the welfare of all people and for nature, justice, wisdom, peace
benevolence	preservation and enhancement of the welfare of people with whom one is in frequent personal contact (family, friends), friendship, love
tradition	respect, commitment, and acceptance of the customs and ideas that one's culture or religion imposes on the individual
conformity	restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms
security	safety, harmony, and stability of society, social order, personal, family and national safety
power	social status and prestige, control or dominance over people and resources
achievement	personal success through demonstrating competence according to social standards
hedonism	pleasure and sensuous gratification for oneself
stimulation	excitement, novelty, and challenge in life
self-direction	independent thought and action—choosing, creating, exploring, freedom

current of psychology – Peterson and Seligman (2004) - use the term *values in action*.

However, there are also other value concepts and measurements present in literature on the subject. This poses a particular challenge for the Schwartz's circular model of values because the theses it entails have implications concerning the universalism of the structure and completeness of the value catalogue propounded within the model. This article constitutes an attempt to theoretically and empirically integrate the two approaches to values that are popular in Polish psychology, namely, the Schwartz's value theory and Scheler's value concept, the psychological interpretation and measurement of which was propounded by Brzozowski (1995, 2007). The integration shall take place in the perspective of developmental psychology and the process of formation of the value structure during adolescence and early adulthood shall be analysed.

The main goals of the presented research shall, therefore, be: 1) empirical verification of the theoretically conducted attempt to include the values of Scheler in the circle of Schwartz's values; 2) use the concept and measurement of Scheler's values to describe the development of the value structure during adolescence.

The Schwartz Values Theory

Values are defined by Schwartz (1992, 1994) by connecting cognitive and motivational categories. Values are, therefore, in his approach beliefs (cognitive aspect), which place this concept in the cognitive tradition of Rokeach. Values as beliefs concern desired goals that people set themselves, but they are goals that go beyond concrete actions and situations. These goals motivate people to act and the choice of these goals-values by a person is designated by their basic motivational dispositions (motivational aspect). In combining both aspects, Schwartz sometimes calls values cognitive representations of the motivational goals (Schwartz & Bilsky, 1994)

The most significant element of the proposal of Schwartz (1992, 1994, 2006) is the explicit distinction

of the value catalogue from the structure of values. In traditional approaches, for instance in that of Rokeach, as well as in the Schelerian value concept of Brzozowski (2007), two traits of the value system are emphasised. The first of them is hierarchisation - values create a hierarchy – from the most preferred to the least preferred. The second, traditionally emphasised value system trait is the finite catalogue of values. The number of values is not very large and is relatively universal. Thus, people differ between themselves not in terms of the number or types of preferred values, but in terms of their hierarchy. Problems in each concept appear, however, when this value catalogue has to be identified.

In the approach of Schwartz, individual value preferences also assume a hierarchical form. Therefore, people differ between themselves in terms of what is more or less important to them, hence, the value hierarchy is an individual difference. However, Schwartz (1992, 1994, 2006) formulates two more strong theses. The first of them concerns the structure: individual value hierarchies are formulated according to the rules of a universal value structure. This structure assumes a circular continuum shape. The second thesis concerns the catalogue: The value catalogue is universal, finite and exhaustive; it is comprised of 10 types of values. The catalogue propounded by Schwartz constitutes, therefore, a proposal of a comprehensive description of human values. The circular model of values has been presented on Figure 1, while the description of the 10 types of values has been presented in Table 1.

The spread of the value types on the circle is organised by the principle of similarity and dissimilarity of motivational goals that are at the foundation of given value types. On the opposite sides of the circle are opposing values (e.g. stimulation and security), that cannot be fulfilled at the same time in one action, thus, their simultaneous high preference is also difficult. Values are located beside each other on the circle (e.g. stimulation and self-direction) are based on similar motives and can be realised in one behaviour (Schwartz, 1992, 1994).

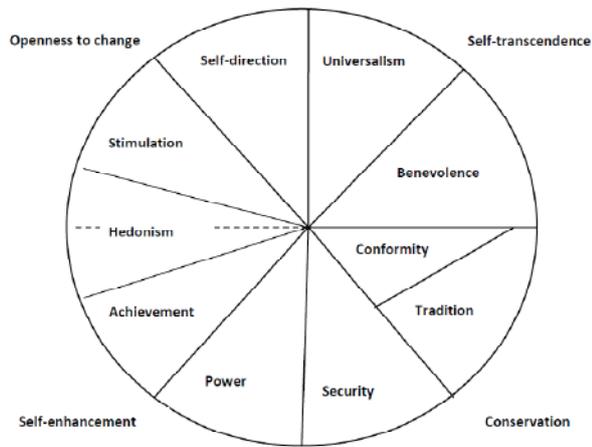


Figure 1. Schwartz's (1992, 1994) circular model of values.

The ten types of values that have been identified can - on a more general level - be described in two dimensions that create four meta categories. These dimensions and the higher order values created by them constitute: self-enhancement (achievements, power) versus self-transcendence (universalism, benevolence) and conservation (security, conformity, tradition) versus openness to change (stimulation, self-direction). Hedonism belongs to two higher order values at the same time: openness to change and self-enhancement.

The ambitions of the universalism of the catalogue and the circular structure have strong confirmation in the broad in scope cross-cultural studies (Schwartz, Melech, Lehman, Burgess, Harris, & Owen, 2001; Spini, 2003; Schwartz, 2006; Bilsky, Janik, & Schwartz, 2011). However, alternative conceptualisations of values and competitive value catalogues also exist in psychology. They therefore constitute a significant challenge for the Schwartz model. The competitive value theory of Schwartz does not pose any particular problems for the concept of Schelerian values developed by Brzozowski (1995, 2007). The fact that two alternative models to describe a given phenomenon exist is a completely normal situation in the social sciences. From the point of view of Schwartz's model, however, the situation looks somewhat different, as it assumes the universalism of both the catalogue and the structure. Thus, the very existence of an alternative constitutes a theoretical challenge.

In the currently modified value theory of Schwartz (Schwartz, et al. 2011), more emphasis is placed on the

first thesis, highlighting that values form a continuum. This means, in consequence, that each division of the circular continuum into value types is, to some extent, arbitrary. Therefore, the circular continuum can be divided into 4 higher order values, 10 value types, and even, as was shown by Ciecuch and Schwartz (2012), into 15 types in the data collected with the aid of the PVQ-40, designed to measure 10 types. In the modified value theory of Schwartz, with the aid of the new instrument (PVQ-5x) the circular continuum is divided into as many as 19 types (Schwartz et al., 2011). In this situation, the question regarding whether values from other conceptualisations can be located on the circular continuum propounded by Schwartz is even more intriguing. In Polish literature on the subject, the Schelerian value concept of Brzozowski (1995, 2007) is very popular among investigators, thus, it would be worthwhile to attempt to integrate these very approaches, and this shall constitute the object of the next part of this article.

The Scheler Value Concept

The Scheler value concept, as the name suggests, refers to Scheler. Max Scheler, a German phenomenologist, did not author the psychological value theory, but a philosophical one that was constructed in opposition to the Kant's ethical formalism. Values, in the approach of Scheler, are entities that are objective, cognised and discovered by the person during acts of intuition. However, Brzozowski (1995, 2007) used the concept of Scheler to construct a value catalogue and measure by slightly modifying Scheler's original catalogue and constructing the *Scheler Values Scale* (SVS). The catalogue of Schelerian values that was derived from philosophy also has the ambition of describing the universalism of values. The empirical methodology of psychology does not possess the instruments to resolve the veracity of the theses about the objectivity of values (which was posited by Scheler), and deliberations on the philosophical premises of research on values conducted in the field of psychology deserves separate, extensive analysis. This article, therefore, will only analyse the content of the values from the Schelerian catalogue along with the possibility of integrating them with the catalogue of Schwartz. Table 2 presents the values from the Schelerian catalogue, along with their brief description.

Table 2
Schelerian value types measured with Scheler Value Scale of Brzozowski (1995).

hedonistic values	pleasure, erotic love, possession, comfort, affluent life
vital values	physical condition, fitness, resistance to tiredness
aesthetic values	elegance, taste, regularity of features, order of things, harmony
values of truth	intelligence, open mind, knowledge, wisdom
moral values	benevolence, love, helping others, peace, reliability, politeness, frankness, honesty
sacred values	1) patriotic – country, nation, fatherland, patriotism 2) religious – God, faith, salvation

Study 1 – Integration Attempt

If the thesis of Schwartz (1994) regarding the universalism of the circular continuum is accepted, then Schelerian values should also have their place on that universal value circle. This inclusion of Scheler's values in the circular continuum of Schwartz shall be performed below on the theoretical level by analysing the significance of Schelerian values, after which it shall be empirically verified in the multidimensional scaling procedure.

Analysing the types of Schelerian values, what was taken into account was their operationalisation in the SVS of Brzozowski (1995) and not the original way of understanding these types in the phenomenology of Scheler. This decision was dictated by the fact that there exists in psychology a catalogue of values that have been operationalised by the measurement instrument of Brzozowski (1995, 2007), and not by the theoretical differentiation of the types conducted by Scheler on a philosophical level.

Based on the Schelerian value catalogue propounded by Brzozowski (1995) and the descriptions of value types proposed by Schwartz (1992, 2006), the following assumptions can be made concerning the similarities between the value types, which were derived from both the mentioned catalogues:

Schelerian hedonistic values are mainly composed of values from the group of hedonistic and power values in the categorisation of Schwartz. Hedonism in Schwartz's model entails elements of two higher order values: openness to change and self-enhancement. Schelerian hedonistic values correspond to a greater extent to self-enhancement because, apart from the typical hedonistic values (e.g. *pleasure*), they also include values such as *possession* or an *affluent life* that in Schwartz's model belong to the power value. Summing up: Schelerian hedonistic values are located in the area of the circle taken by self-enhancement values.

Schelerian vital values do not have a clear corresponding value in the 10 value types of Schwartz, however, due to their nature (*caring for one's own physical condition, fitness, etc.*) it seems that they belong to self-enhancement values. The health values would be appropriately located with conservation, however, health does not figure in Schelerian vital values. *Vital capacities* are, however, characterised in categories that are closely related to health, thus, it can be expected that placing them in the self-enhancement values will be closer to conservation than openness to change (both higher order values located alongside self-enhancement on Schwartz's value circle).

Schelerian aesthetic values create, from the point of view of Schwartz's categories, a composite group. This is because they are partly nearer hedonistic and vital values, while at the same time being situated also in the self-enhancement area (values such as *elegance, taste, regularity of features*). In the Schelerian aesthetic value catalogue they also include values that are more appropriate

to the self-direction values or universalism (e.g. *order of things, harmony*). A significant problem in measuring Schelerian values is the fact that the respondent only receives a list of values without any direction given as to how they should be understood. Some of the terminology is relatively simple and does not pose any difficulty (e.g. *truthfulness*), while others can be understood in a variety of ways. The ambiguous terms definitely include some of the abovementioned aesthetic values. Recapitulating, it can be acknowledged, therefore, that aesthetic values - as well as the entire scale - is located within the area of self-enhancement values in Schwartz's model, however, on the item level, some of the aesthetic values reveal a greater proximity to other areas of the circle. This may mean that the aesthetic value scale is located, similarly to vital and hedonistic values, in the realm of self-enhancement but closer to the border with openness.

The Schelerian values of truth are relatively unequivocally included in higher order values of openness to change because the majority of them is close to self-direction. It is worth adding, however, that some of the given items (e.g. *wisdom*) reveal a similarity with universalism, therefore, with the higher order values of self-transcendence, which is located alongside openness. Schelerian moral values correspond to benevolence and universalism, that is, the higher order values of self-transcendence in Schwartz's model.

The operationalisation of sacred values is quite problematic. Their description performed by Scheler, as well as that suggested on the theoretical level by Brzozowski (2007), would suggest the self-transcendence value. However, the operationalisation of sacred values in the *Scheler Values Scale* consists of the identification of both 4 religious values (e.g. *God, salvation*) and 6 patriotic values (e.g. *fatherland, country*). This type of operationalisation causes these values to correspond to the higher order values of conservation in Schwartz's model.

If the above theoretical discussion would prove to be pertinent, empirical analyses should reveal the location of the Schelerian values on the value circle of Schwartz.

Based on the theoretical analyses conducted above, the following hypotheses were formulated:

Hypothesis 1. Schelerian values are connected with corresponding values on the value circle of Schwartz.

Hypothesis 1A. Hedonistic, vital and aesthetic values are located in the area of the higher order values of self-enhancement, however, vital values are located closer to the border with conservation, and aesthetic values closer to the border with openness.

Hypothesis 1B. Truth values are located in the area of the openness to change.

Hypothesis 1C. Moral values are located in the area of the self-transcendence.

Hypothesis 1D. Sacred values are located in the area of the conservation.

The hypotheses were verified in the multidimensional scaling procedure (MDS) (Borg & Groenen, 2005), which enables the verification of the distribution of the values on the circle because the relations between the variables are graphically presented. In multidimensional scaling, variables are treated as points and are distributed in a manner wherein the distances between them correspond to the relationships between them. The distance between the variables depends on their correlation – the higher the correlation, the closer the points are in relation to each other. The programme performing the multidimensional scaling finds the specified configuration of distances between the variables and then verifies to what extent it correctly reflects the relationships observed within the data. The Stress-1 measure was used as a measure of goodness of fit (Borg & Groenen, 2005).

The space modelled with the aid of the scaling is then analysed by the investigator, who draws lines grouping the points obtained, which represent given variables. In verifying the circle structure it is expected that in this way circle wedges will be identified that have a common starting point in the centre and that will include the identified types of values.

The hypotheses posited in the study are quite strong. They assume the possibility of performing a precise inclusion of Schelerian values in Schwartz's circular model of values. In order to verify the hypotheses thus posited, a special form of multidimensional scaling was used. All the Schelerian value types and all the value types from Schwartz's model were input for analysis. It was expected, however, that not only will the points representing the variables be situated in the appropriate wedges of the circle (representing higher order values), but additionally, the measurement taken by the *Scheler Values Scale* of Brzozowski (1995) was also taken into account as an alternative measurement of the same higher order values that are measured by the PVQ-5x of Schwartz. Thus, the method of analysis that was implemented was that proposed by Bilsky and Schwartz (2008). It consists of dividing the space of points obtained in the multidimensional scaling according to two criteria – the content criterion of the values (formulated in hypotheses 1A, 1B, 1C and 1D) and the method criterion. It is, therefore, expected that the obtained structure will assume the form of a radex pattern (Borg & Groenen, 2005), wherein it will be possible to graphically identify both the types of values as well as the methods that were used.

Measures

Two instruments were implemented to measure value preferences: *Scheler Values Scale* of Brzozowski (SVS) (1995) and a new version of the *Portrait Values Questionnaire* (PVQ-5x) of Schwartz in the Polish

adaptation of Cieciuch (Schwartz et al., 2011).

In the *Scheler Values Scale* (SVS) the respondent receives a list of 50 values. His task is to evaluate each of them on a scale of 0 to 100. An indicator of the preference of a given type of value is the mean of the value evaluation for the given type. Indicators of all the scales, counted according to the key, were introduced into the multidimensional scaling.

In the *Portrait Values Questionnaire* (PVQ-5x), the respondent receives a set of items describing another person in the categories of things, that are important for them. The task of the respondent is to evaluate the similarity of the described person to oneself on a 6-point scale (ranging from 1 – *not like me at all*, to 6 – *very much like me*). In these studies the fifth, experimental version of the questionnaire was used. It is intended to measure 19 types of values. As was shown with the aid of confirmatory factor analysis, by Cieciuch, Davidov, Vecchione and Schwartz (2011) – the new 19 types of values can be reduced to broader categories corresponding to the 10 types in the classic model of Schwartz. In these studies, the PVQ-5x was used to measure the 10 classic types of values, which have been discussed in Table 1 and have been presented in Figure 1. In the calculations of the preference indicators of each of the value types, the correction recommended by Schwartz (2006) was implemented in the manner of using the scale, by calculating the difference in the preference of a given type of value and the mean calculated from all the items.

Respondents and procedure

168 persons took part in the study (45% women and 55% men) aged between 17 and 20 years ($M = 18.3$; $SD = 0.9$). The studies were conducted in groups during lessons in secondary schools. The studies were anonymous and voluntary. The data were collected in schools by Teodozja Gieras.

Results

Figure 2 presents a multidimensional scaling (MDS) of the multitrait-multimethod matrix

It turned out that all the Schelerian values were located – according to the posited hypotheses – in the appropriate areas of the circle of values.

Hypothesis 1A was therefore confirmed, which not only predicted the Schelerian values to be belong to the higher order values of Schwartz but also their precise location. Multidimensional scaling confirmed the theoretical assumptions – virtual, hedonistic and aesthetic values were located in the same area of the circle as hedonistic values, achievements and power (therefore, the self-enhancement higher order values). Furthermore – in accordance with the predictions formulated in hypothesis 1A – vital values

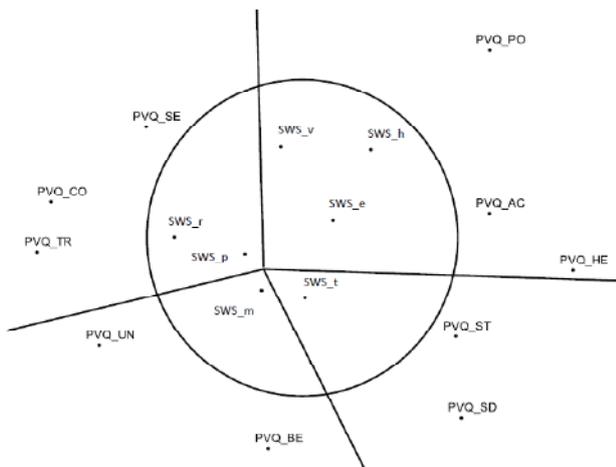


Figure 2. Two-dimensional ordinal MDS of the multitrait-multimethod (MTMM) matrix, Stress-1=.155.

Note: PVQ – values measured with PVQ; SWS – values measured with SWS; SE – security, CO – conformity, TR – tradition, UN – universalism, BE – benevolence, SD – self-direction, ST – stimulation, HE – hedonism, AC – achievement, PO – power; r – religious values, p – patriotic values, m – moral values, t – truth values, e – aesthetic values, h – hedonistic values, v – vital values.

were located closer to the conservation higher order values, while aesthetic values were closer to the openness higher order values.

Also hypothesis 1B was confirmed – the Schelerian values of truth were situated in the same area of the circle as self-direction and stimulation values, thus, together with them creating the higher order values of openness to change. In accordance with hypothesis 1C, Schelerian moral values were situated in the same area as the benevolence and universalism values, creating with them the higher order values of self-transcendence. According to hypothesis 1D, sacred values (both religious and patriotic) were located in the same area as tradition, conformity and security, together with them creating the higher order values of conservation.

It also turned out that it was possible to separate both methods of measurement. The values measured with the aid of the SVS were located in the central part of the circle, while the value types measured with the PVQ-5x were situated on the outside. This result, in effect, authorises the treatment of Schelerian values as specific sub-types of the higher order values in Schwartz's model.

Study 2 Development Of The Value Structure

In the first study, it turned out that Schelerian values have their place in the circle model of Schwartz (1992, 2006). The question, therefore, arises whether the development of the value structure described already in respects of the theory of Schwartz will also be verified in the measurement of Schelerian values.

Development of the value system in the field of Schwartz's theory was described, among others, by Ciecuch (2009), who analysed data derived from 8181 adolescents and young adults from 19 European countries. In the conducted analyses he showed that regardless of the preferences, the value structure is differentiated, which means that in subsequent developmental stages, adolescents make differentiations between an increasingly greater number of value types. In the conducted analyses, however, Ciecuch (2009) concentrated more on the distinguishability of the types than on the circle structure because confirmatory factor analysis was used. However, multidimensional scaling testing the circle structure of values during middle adolescence was used by Liem, Martin, Nair, Bernardo, Prasetya (2011). In studies conducted in the Philippines, Indonesia and Australia it turned out that already in middle adolescence the circle value structure is formed with the theoretically supposed layout of four higher order values, although not always with a clearly formed 10 values types.

Direct analyses of the development of the circle value structure during a still younger developmental stage have become possible thanks to the instrument measuring values during childhood of Döring and colleagues (2010), the Polish adaptation of which was prepared by Ciecuch, Harasimczuk and Döring (2010). This is the *Picture Based Value Survey for Children* (PBVS-C). The studies (Ciecuch, Harasimczuk, & Döring, 2010; Harasimczuk, Ciecuch, & Döring, 2011) have shown that with age the value structure becomes increasingly more differentiated (i.e. the value types become distinguishable), but already in late childhood the structure assumes a circular shape in accordance with the model postulated by Schwartz.

Hypotheses

In light of the presented results it can be stated that if the measurement instrument is adapted to the developmental capacities and abilities of the respondents (as in the case of the PBVS-C), then the circular value structure can be identified as early as in the childhood stage. The first study that was discussed above suggests that Schelerian values are located on the value circle in predictable areas, and the *Scheler Values Scale* can be treated as an alternative measurement of certain fragments of Schwartz's higher order values of values. The SVS scale requires, however, advanced cognitive skills to a much greater degree than the PVQ and PBVS-C. This is because in the SVS the respondents are presented with abstract names of values, while in the PVQ they are given descriptions of people and in the PBVS-C, the behaviours are presented on pictures.

Taking the above into consideration it can, therefore, be expected that Schelerian values in subsequent developmental stages create an increasingly regular circle structure, although empirical verification with the aid of

the SVS will reveal it in later stages than the verification discussed above with the use of the PVQ and PBVS-C. Due to the abstract names of values, studies in late childhood (primary school) seem completely impossible to conduct. This is why the studies were begun in the early adolescence stage (lower level secondary school). The following hypotheses were, therefore, posited:

2A. Values measured with the use of the SVS create a circle structure in late adolescence.

2B. During early adolescence, this structure has not yet taken shape.

Verification of the above hypotheses would suggest that the development of the value structure consists of drawing closer to the circle model.

Measures, Respondents and Procedure

The *Scheler Values Scale* by Brzozowski (1995) was used in the study. A description of the technique was outlined in the first study. The studies were conducted in groups during lessons that were held in secondary schools. The studies were anonymous and voluntary.

The studies were conducted in a group of 820 persons from three developmental stages:

1) early adolescence (15-year-old lower secondary school pupils): N = 182 (54% girls and 46% boys); 2) middle adolescence (18-year-old upper secondary school pupils): N = 343 (56% girls and 44% boys); 3) late adolescence (students): N = 295 (80% girls and 20% boys) aged from 20 to 25 years (M = 21.6, SD = 1.2). The university student stage in traditional periodisations was considered to actually belong to the early adulthood stage, the beginning of which is considered, for instance by Gurba (2011), in the 20-23 age group. Recently, however, among others thanks to the emerging adulthood concept of Arnett (2004), the borderline between adolescence and adulthood has shifted towards a somewhat older age. This is why the student stage has been referred to in this study as late adolescence.

Results

Figures 3, 4 and 5 present the results of multidimensional scaling for: early adolescence (figure 3), middle adolescence (figure 4) and late adolescence (figure 5).

Unlike the analyses conducted in the first study, this time it was not scales that were introduced to multidimensional scaling but all the SVS items. According to expectations, the structure is clearly differentiated with age. The following regularities were observed in this scope: In all developmental periods, the respondents in general identified the following types of values: religious, patriotic, moral and truth. In the early adolescence the remaining values (aesthetic, hedonistic and vital values) formed one area. In the early adolescence the values do not create a circle structure with the four wedges of the circle that

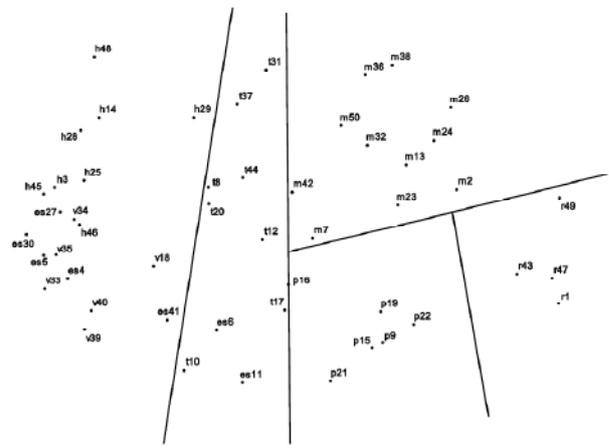


Figure 3. Multidimensional Scaling display of value structure measured with SWS in early adolescence Stress-1 = .196.

r – religious values, p – patriotic values, m – moral values, t – truth values, e – aesthetic values, h – hedonistic values, v – vital values;

The number next to the abbreviation of each value name corresponds to its order in the questionnaire.

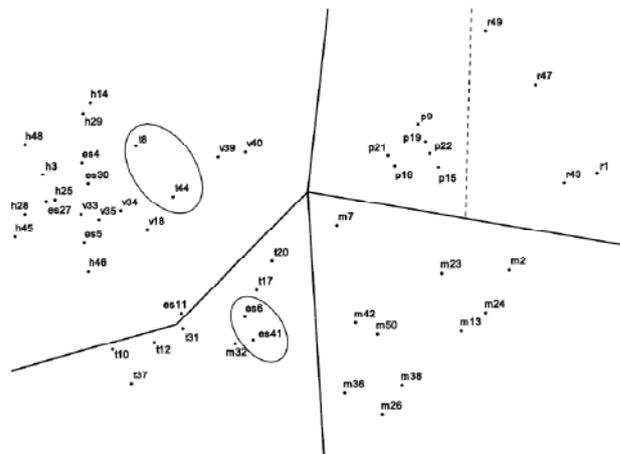


Figure 4. Multidimensional Scaling display of value structure measured with SWS in middle adolescence, Stress-1 = .168.

r – religious values, p – patriotic values, m – moral values, t – truth values, e – aesthetic values, h – hedonistic values, v – vital values;

The number next to the abbreviation of each value name corresponds to its order in the questionnaire.

correspond to the four higher order values proper to the model of Schwartz. The value of truth is divided from the remaining values by the connected aesthetic, vital and hedonistic values.

The value structure during middle adolescence looks somewhat different. It turned out that it assumes a shape similar to the circle structure with four wedges. Only four items were located in a manner that was not consistent with expectations: two aesthetic values (*harmony* and the *order of things*) were located in the area of the truth value, while the two values of truth (*intelligence* and *knowledge*) were located in the area taken by the combined hedonistic, vital and aesthetic values.

In late adolescence, the value structure to a great extent does not contain any exceptions. However, Figure 5 shows

were obtained that were incorrectly positioned. It is worth pointing out that the analyses were conducted on the item level, which means that as many as 50 values were introduced into the analysis. The result in which only four values were located in different areas to those that were expected is, therefore, a big success. Further analysis of these four items supplied additional interesting conclusions about the way that adolescents understand values.

Two aesthetic values were incorrectly located (*harmony* and the *order of things*). Considering the discussion presented in the theoretical part, this result is understandable seeing that these very aesthetic values reveal a certain relation to self-direction and universalism values in Schwartz's classification (1992, 2006). Thus, both these aesthetic values shifted from the area corresponding to self-enhancement (Schelerian aesthetic values) to the area designated to openness (Schelerian truth value).

Another two badly located items in middle adolescence were the value of truth (*intelligence* and *knowledge*), which were clearly shifted towards the direction proper to self-enhancement in Schwartz's classification. Such a result obtained in multidimensional scaling signifies that the motivational meaning of both these values is different from the remaining truth values. The shift towards self-enhancement signifies that the respondents understand these values rather in categories of achievements (a Schwartz value category belonging to the higher order values of self-enhancement).

During the late adolescence stage, the Schelerian value structure, analysed on the level of items, overall without any exceptions recreates the assumed circle structure of four wedges that correspond to the four higher order values. Only the slight shifts of the three items could be eliminated by accepting broken lines, which is admissible in multidimensional scaling (Borg & Groenen, 2005).

The results of both conducted studies suggest, therefore, that 1) Schelerian values can be included in Schwartz's circular model of values (1992, 1994, 2006). Schelerian values that were absent from Schwartz's model (e.g. vital and aesthetic values) turned out to be a slightly different conceptualisation of the area of the circle taken by self-enhancement values; 2) the development of the value structure during adolescence consists of it taking on the form of a circle with several types of values aligned in relation to each other based on the principle of similarities and dissimilarities described by Schwartz.

The modified value theory of Schwartz (Schwartz et al., 2011) admits different methods of dividing the value circle continuum, therefore, the studies conducted within this article argue in favour of the thesis that the Schwartz value theory can constitute a plane where various approaches and studies conducted within psychology can become integrated.

It seems that one direction of study in particular is worthy of pursuing. Peterson and Seligman (2004), in their values in action concept within positive psychology, propose another way of conceptualisation, classification and measurement of values, different from that of Schwartz. It would, therefore, be worthwhile attempting to integrating both approaches both in theoretical and empirical terms.

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