

SHORT REPORT

Value structure and priorities: Other-report account

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BACKGROUND

The aim of this study was to examine the Schwartz model of values in other-report data. We specifically tested the circular structure and priorities of personal values observed in ratings made by well-acquainted informants.

PARTICIPANTS AND PROCEDURE

We analysed self- and other-reports of preferences of 19 basic and four higher-order values provided by 422 participants ($M_{age} = 30.02$, $SD_{age} = 13.99$) using the Portrait Value Questionnaire (PVQ-5x).

RESULTS

The self-other agreement corrected for measurement bias ranged from .29 to .78 for basic values and from .51 to .67

for higher-order values. The findings indicated that basic values measured via other-reports form a circular structure consistent with the Schwartz theory. The hierarchy of values based on other-reports only slightly differed from the hierarchy based on self-reports.

CONCLUSIONS

The results suggest that both self- and other-ratings of personal values yield meaningful information that contributes to each.

KEY WORDS

personal values; circular structure; other-reports; self-other agreement

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BACKGROUND

Personal values are defined as trans-situational life goals that guide perception and behaviour (Schwartz, 1992; Schwartz et al., 2012). According to Schwartz (1992), basic values form a circular structure that reflects the motivations underlying them. The relations among values are determined by motivational conflicts and compatibilities: Values are situated close to other values on the circle that share with them the same broad motivational goal and opposite values based on conflicting motivation. They are organised along two bipolar dimensions: openness to change vs. conservation and self-enhancement vs. self-transcendence (Schwartz, 1992). This pattern of organisation, typically found by using multidimensional scaling (MDS), has been replicated in numerous studies spanning different cultures and using a variety of questionnaires (e.g. Bilsky, Janik, & Schwartz, 2011; Döring et al., 2015; Schwartz, 1992; Schwartz et al., 2001, 2012). Recently, the circular structure of values has also been confirmed within persons (Borg, Bardi, & Schwartz, 2015). However, all these tests of circular structure of personal values were conducted on data collected through self-reports. There has been no study verifying the structure of values in other-ratings conducted so far.

Similarly, the hierarchy of value priorities – the importance people ascribe to certain values as guiding principles in their lives – has been studied in various groups and cultures but only on self-report data (e.g. Cieciuch, Davidov, Algesheimer, & Schmidt, *in press*; Döring et al., 2015; Schwartz & Bardi, 2001). Despite some between-group differences, Schwartz and Bardi (2001) found a pan-cultural hierarchy of values based on results from self-report inventories with benevolence, self-direction, and universalism on the top and power, tradition, and stimulation on the bottom.

In this research, for the first time we implemented an other-report approach to verify the postulate that personal values form a circular structure and to explore the hierarchy of value priorities. We also examined self-other agreement in assessing value importance.

OTHER-REPORT APPROACH IN PERSONALITY

The personality research is mostly based on self-report. However, there are problems associated with self-report measures that make them insufficient for assessing an individual's personality. For instance, people may respond in a socially desirable or self-serving way. They also apply diverse response styles that affect results from a self-report inventory (Dobewall & Aavik, 2016). An alternative solution that overcomes these limitations is the use of ratings provided by informants who know the target well, such as

family members, romantic partners, or friends. Other-ratings of personality are especially useful when self-reports cannot be obtained: for example, in cases of very young children and targets who have passed away (Dobewall & Aavik, 2016). This method may also be useful in situations that have the highest risk of social desirability bias, for instance, in personality assessments in an organisational context (Connolly, Kavanagh, & Viswesvaran, 2007).

Informant-rating is a part of the accepted methodological toolbox in research on personality traits. The degree of agreement between self- and other-ratings is commonly used to assess the accuracy of self-report inventories. Several studies have shown moderate self-other agreement in the Big Five personality traits. The average self-other correlations found in the meta-analysis by Connolly et al. (2007) ranged from .30 for Agreeableness to .45 for Extraversion and in the meta-analysis by Connelly and Ones (2010) from .29 for Agreeableness to .41 for Extraversion. The self-other agreement was higher when other-reports were obtained from well-acquainted informants. When the rater was a family member, the average self-other correlations ranged from .37 for Agreeableness to .48 for Extraversion (Connelly & Ones, 2010).

OTHER-REPORTS OF PERSONAL VALUES

It is surprising that the other-report approach, accepted in studies on personality traits, has been rarely applied to studies on personal values (Dobewall, Aavik, Konstabel, Schwartz, & Realo, 2014). Self-reports of values seem to have an even greater risk of social desirability bias than self-reports of traits because the former are more evaluative (Schwartz, 1992; Schwartz, Verkasalo, Antonovsky, & Sagiv, 1997). Hence, other-report data usefully enrich studies on personal values.

One possible explanation for the lack of interest in the other-report approach for measuring preferences of values might be that values are considered too subjective to be judged by others (Hitlin & Piliavin, 2004). While traits are defined as descriptions of observed patterns of behaviour, values are defined as beliefs used by individuals to judge desirability or importance of behaviour (Schwartz, 1992).

However, some recent findings suggest that values may be accurately judged in a similar way to traits. In the study by McDonalds and Letzring (2016), values were rated by participants as more visible than traits, but the item-level accuracy of judgment was higher for traits. Lee, Ashton, Pozzebon, Bourdage, and Ogunfowora (2009) found self-other agreement correlations comparable to those obtained for basic traits at the level of the two major value dimensions and in less agreement at the level of 10 basic values

in comparison with HEXACO personality facets. Finally, Dobewall et al. (2014) showed that the four higher-order values were assessed by well-acquainted judges with accuracy similar to those for the Big Five personality traits.

Additional evidence for the usefulness of other-rating of values comes from a study conducted by Dobewall and Aavik (2016). The results indicated that informant-reports of values were as stable across time as self-rated values and other-ratings of traits.

CURRENT STUDY

In this study, we focused on assessing the agreement between self- and other-report data on values (Hypothesis 1) and verifying two (not studied before) aspects of Schwartz's value model in other-report data (Hypothesis 2 regarding the circular structure and research question regarding the hierarchy of value priorities).

Self-other agreement in values. First, we assessed the accuracy of other-ratings of preferences of four higher-order values and 19 basic values distinguished in the refined version of Schwartz et al.'s theory (2012). So far, the accuracy of other-ratings of values has been examined on higher-order values (Dobewall et al., 2014), on 10 basic values (Lee et al., 2009), and the item-level (McDonald & Letzring, 2016), but not on 19 basic values from the refined theory.

We also analysed the level of similarity and assumed similarity between targets and observers. Similarity is defined as zero-order correlation between target self-rating and observer self-rating, and assumed similarity is defined as zero-order correlation between observer self-rating and observer rating of target (Paunonen & Hong, 2013).

We corrected self-other agreement in two ways: for the bias caused by measurement error and for assumed similarity. The first correction was made in the way proposed by Schmidt and Hunter (1996): We divided each agreement correlation by the square root of the product of the reliability coefficients of the self- and other-ratings. To overcome the bias caused by assumed similarity, we computed a partial correlation between self- and other-ratings, controlling for observer self-rating (Paunonen & Hong, 2013). We expected that the self-other agreement would be similar to that obtained in previous studies (Hypothesis 1).

Circular structure of values in other-report data. Second, we aimed to verify the circular structure of personal values on other-report data. This purpose was the most important for us because the postulate about circular structure of values is crucial for the Schwartz theory and has not been tested on other-report data before. Since it has been confirmed in numerous studies using diverse methodological strategies, we also expected its confirmation on data obtained from well-acquainted informants (Hypothesis 2).

Hierarchy of value priorities in other-report data.

Third, we compared the hierarchy of values obtained in self-reports with the hierarchy of values obtained in other-reports. We had no specific expectation regarding possible differences between the two hierarchies. This is because the patterns of value preferences have not been examined before in other-reports. Thus we asked the research question: how similar are the two hierarchies.

PARTICIPANTS AND PROCEDURE

The study was conducted on a Polish sample of 422 people (58.50% women; gender not provided for 4.00%). The age of participants ranged from 15 to 88 years ($M = 30.02$, $SD = 13.99$; age not provided for 5.70%). The sample consisted of well-acquainted dyads: Both persons of each dyad provided a self-report of his/her value preferences and a report of value preferences for their partner (210 dyads; for two participants there was no self-report from their partners). All dyads were closely related: 26.10% were friends, 24.70% were spouses, 23.50% were romantic partners, 11.80% were siblings, 8.10% were parent and child, 0.90% were grandmother and grandchild, one person was assessed by an uncle, and 4.70% did not provide the type of acquaintanceship.

MEASUREMENT INSTRUMENT

For measuring value preferences, we used the revised version of the Portrait Values Questionnaire used in the original study on value model refinement (PVQ-5x; Schwartz et al., 2012). We used the 48 items (two to three items measuring each of the 19 basic values) proposed by Schwartz et al. (2012). Basic values were grouped in higher-order values in a way proposed by Cieciuch, Davidov, Vecchione, Beierlein, and Schwartz (2014). Each participant filled out the same questionnaire twice: assessing how similar the participant is to the person described in items and then how similar this person is to the participant's partner. Judgments were made based on a six-point scale from 1 (*not like me/not like my close other*) to 6 (*very much like me/very much like my close other*). Cronbach's α for each value scale in self- and other-reports are presented in Table 1 in the Results section. For all analyses, value scores were mean-centered (Schwartz et al., 2012).

RESULTS

SELF-OTHER AGREEMENT

We first examined the agreement between self- and other-reports of value preferences. In Table 1 we

Table 1
Self-observer agreement, similarity, and assumed similarity for personal values

Value	Cronbach's α		Self-other agreement	Self-other agreement corrected for α 's	Similarity	Assumed similarity	Self-other agreement corrected for similarity
	Self-reports	Other-reports					
Basic values							
Self-direction-thought	.61	.64	.37	.59	.04	.18	.37
Self-direction-action	.61	.70	.31	.47	.16	.22	.29
Stimulation	.64	.60	.34	.55	.16	.16	.32
Hedonism	.65	.71	.53	.78	.12	.13	.53
Achievement	.67	.66	.38	.57	.14	.16	.37
Power-resources	.75	.79	.49	.64	.17	.19	.48
Power-dominance	.69	.78	.34	.46	.12	.11	.34
Face	.50	.48	.17	.35	.12	.10	.16
Security-personal	.71	.75	.41	.56	.11	.20	.40
Security-societal	.57	.68	.21	.34	.05	.09	.22
Conformity-rules	.79	.83	.41	.51	.13	.19	.40
Conformity-interpersonal	.72	.77	.35	.47	-.03	.01	.36
Tradition	.77	.84	.51	.63	.15	.20	.50
Humility	.48	.49	.27	.56	.00	.13	.27
Benevolence-dependability	.64	.74	.20	.29	-.01	.02	.20
Benevolence-caring	.75	.77	.38	.50	.09	.09	.38
Universalism-concern	.70	.77	.39	.53	.11	.14	.38
Universalism-nature	.87	.87	.36	.41	.13	.15	.36
Universalism-tolerance	.59	.66	.23	.37	.04	.06	.22
Higher-order values							
Openness to change	.78	.81	.47	.59	.13	.18	.46
Conservation	.84	.88	.56	.65	.18	.16	.56
Self-transcendence	.83	.88	.44	.51	.14	.15	.44
Self-enhancement	.69	.72	.47	.67	.16	.17	.46

Note. Openness to change – mean of hedonism, stimulation, self-direction-action, and self-direction-thought; conservation – mean of humility, conformity-interpersonal, conformity-rules, tradition, security-societal, security-personal, and face; self-transcendence – mean of benevolence-caring, benevolence-dependability, universalism-nature, universalism-tolerance, and universalism-concern; self-enhancement – mean of achievement, power-resources, and power-dominance.

presented Cronbach's α for each of 19 basic values and for four higher-order values, separately for self- and other-reports; then correlation coefficients for self-other agreement; correlation coefficients corrected for measurement bias (Schmidt & Hunter, 1996); and after that, coefficients of similarity, assumed similarity, and correlation coefficients for self-other agreement corrected for assumed similarity (partial correlation between target self-rating and observer rating of target, controlling for observer self-rating).

Cronbach's α for basic values ranged from .48 (humility) to .87 (universalism-nature) in self-reports and from .48 (face) to .87 (universalism-nature) in other-reports. Alphas for higher-order values ranged from .69 (self-enhancement) to .84 (conservation) in self-reports and from .72 (self-enhancement) to .88 (conservation and self-transcendence) in other-reports. Some alphas were low due to the very short size of the scales (only two items long). Using Schmidt's and Hunter's (1996) correction for measurement bias somehow resolved this issue.

Table 2

The comparison of hierarchies of value importance between self- and other-reports

Self-report		Other-report	
Value	<i>M</i>	Value	<i>M</i>
Basic values			
Benevolence-caring	.99	Benevolence-caring	.81↓
Self-direction-action	.63	Self-direction-action	.64
Benevolence-dependability	.57	Benevolence-dependability	.53
Security-personal	.56	Security-personal	.47
Self-direction-thought	.44	Self-direction-thought	.33↓
Security-societal	.21	Achievement	.16↑
Universalism-concern	.21	Hedonism	.15
Hedonism	.09	Universalism-concern	.09↓
Achievement	.02	Security-societal	.00↓
Universalism-tolerance	-.02	Face	-.02↑
Face	-.14	Tradition	-.17↑
Conformity-interpersonal	-.24	Universalism-tolerance	-.18↓
Tradition	-.26	Stimulation	-.20
Stimulation	-.29	Conformity-interpersonal	-.32
Universalism-nature	-.49	Power-resources	-.38↑
Conformity-rules	-.66	Humility	-.54↑
Power-resources	-.67	Conformity-rules	-.55
Humility	-.73	Power-dominance	-.59↑
Power-dominance	-.95	Universalism-nature	-.75↓
Higher-order values			
Openness to change	.37	Openness to change	.35
Self-transcendence	.25	Self-transcendence	.10↓
Conservation	-.16	Self-enhancement	-.01↑
Self-enhancement	-.20	Conservation	-.16

Note. ↓ – significantly less important than in self-report based on *t*-test; ↑ – significantly more important than in self-report based on *t*-test.

DISCUSSION

For the first time, we used an other-report approach for measuring the preferences of personal values not only to assess its accuracy but to test the circular structure of values and explore the patterns of value priorities. We analysed self- and other-reports of preferences of 19 basic and four higher-order values provided by well-acquainted dyads.

The results of MDS confirmed that 19 basic values measured via other-reports formed a circular structure. The order of values around the motivational circle slightly deviated from the theorised one, but was largely consistent with those for self-reports obtained in the same study. The deviations from the

theorised order of values were not more substantial than reported in other studies conducted on self-report data (Schwartz et al., 2012).

Schwartz's (1992; Schwartz et al., 2012) postulate about the organisation of values around the motivational circle has been supported by self-report data collected by using various inventories (based on the Schwartz theory and constructed by a lexical method; e.g. Borg, Dobewall, & Aavik, 2016; Schwartz, 1992), as well as among and within persons (Borg et al., 2015). Now, the results of this study provide another piece of evidence for the circular structure of personal values: other-report data.

Our findings indicate that other-reports of value preferences may serve as a valuable contribution to

self-reports. The reliability of other-reports of values in this study was at the same level as reliability of self-reports, regarding Cronbach's α coefficients. The accuracy of other-ratings assessed as self-other agreement was comparable with those for personality traits obtained in other studies (Dobewall et al., 2014; Paunonen & Hong, 2013). Assumed similarity was relatively low and reflected the true similarity between target and observer.

The hierarchy of values based on other-reports was largely consistent with that based on self-reports. The first five and the last five values in both hierarchies were the same. In general, in both self- and other-reports openness to change values were rated as most important, followed by self-transcendence values. This similarity between the two hierarchies indicates that self-ratings of value priorities are not as largely biased by social desirability as it might be supposed, at least in comparison with ratings provided by well-acquainted others. The same conclusion was reached by Schwartz et al. (1997), who analysed the relationships between socially desirable responding and self-reported value ratings.

However, there were some differences between the two hierarchies. In self-report self-enhancement values were least important preceded by conservation values, while in other-report conservation values were assessed as least important. Self-enhancement values were rated as more important and self-transcendence values were rated as less important in other- than in self-reports. Self-enhancement values represent personal focus and self-transcendence represent social focus, thus the former might be considered less desirable than the latter (Schwartz et al., 1997). This is consistent with the finding that self-other agreement for some values is higher than for others. McDonald and Letzring (2016) showed that basic values differ in visibility and evaluative strength, which affects self-other agreement. They suggested that some values might be more accurately judged by the self (less observable), whereas other values (more observable and less evaluative) might be more accurately judged by others. Some evidence for this idea may be found in the results of this study. Achievement (one of the self-enhancement values), judged as one of the most visible values in the study by McDonald and Letzring, was not among the values of highest self-other agreement in their study or in our study. Achievement also took different positions in hierarchies based on self- and other-reports. It is possible that achievement is one of those values judged better by observers than by the self. Further examination of this issue might be a suggestion for future research. It can be made, for instance, by comparison of self- and other-ratings of achievement importance as predictors of objective behavioral criterion. Assessing one's own conservation values as more important than self-enhancement values and other's conservation values as less important

than their self-enhancement values can also be interpreted in terms of agentic-communion dimension of perception (Abele & Wojciszke, 2014).

One limitation of this study is that we used other-reports from only one informant, while it is advised to have several raters (Rauthmann, 2017). However, despite this fact, the level of accuracy we obtained was similar to that from the study by Dobewall et al. (2014) with two informants for each target. The second limitation is that the informants were recruited by the targets, and such informants might tend to portray them in an overly positive way (the letter of recommendation effect; Leising, Erbs, & Fritz, 2010). Another limitation is that the other-report was made by participants always after self-report, which might bias the similarity.

CONCLUSIONS

We conclude that the value circle postulated by the Schwartz theory (Schwartz, 1992; Schwartz et al., 2012) exists not only in self-report data but also in other-report data. The hierarchies of values in self-ratings and in other-ratings are largely consistent, which indicates that self-report of values is not as biased by social desirability as we might suppose. The level of congruence between self- and other-ratings suggests that both measurement approaches may be useful in studies on personal values and that they contribute to each other.

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