

## Measuring Schwartz' second order value orientations using a new scale for survey research

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### Introduction

- Survey researchers have become more and more interested in values during the last years.
- Values allow to predict various kinds of socio-political attitudes and behaviors, e.g.:
  - Security values  $\xrightarrow{+}$  Opposition to Immigration
  - Universalism  $\xrightarrow{-}$  Voting for right-wing parties
- Following Schwartz and Boehnke (2004), the ten values types proposed by Schwartz are organized according to a modified quasi-circumplex with two dimensions marked in red and green colour:

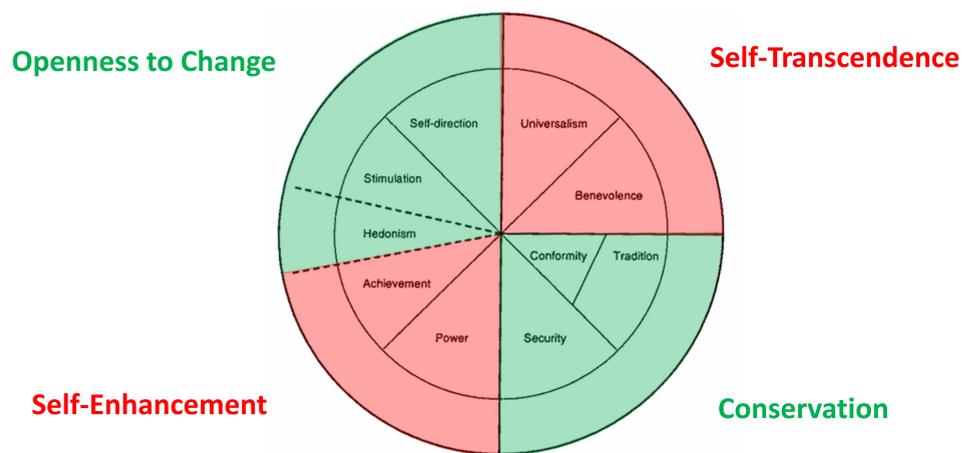


Figure 1. Quasi-circumplex structure of Schwartz' values.

### Research Aims

- Values are usually assessed using the 40 items of the Portrait Value Questionnaire (PVQ; Schwartz et al., 2001).
- Surveys (e.g., ESS) require short, valid, and reliable instruments. However, such a scale is still missing.
- In order to obtain a short scale, the number of constructs assessed had to be reduced. Therefore, instead of assessing the 10 value types, we selected PVQ-items that serve as good indicators for the two second order dimensions:
  - Self-Enhancement vs. Self-Transcendence**
  - Openness to Change vs. Conservation**

### Methods

#### Sample.

- Adult Online Sample ( $N = 1.200$ ; Cohrs et al., 2005)
- Random-Route Sample ( $N = 1.966$ ; Hinz et al., 2005)
- Student Sample ( $N = 336$ ; Schmidt et al., 2007)

#### Measure.

PVQ (German); 1 = very dissimilar, 6 = very similar.

#### Item Selection.

- Inspection of Descriptives
- Factorial Structure: Principal Component Analysis (PCA, VARIMAX)  
Multi-Dimensional Scaling (MDS; PROXSCAL, Ordinal)
- Content Validity (cf. Knoppen & Saris, 2009)

### Results

Three separate PCAs (2 orthogonal factors, Tab. 1) yielded similar loadings for the majority of selected items. The MDS analysis (Stress1=.10, DAF=.99, TCC=1.00, Fig. 2) revealed the expected relationships among these items.

Table 1. Factor loadings of the PVQ-items in 3 different samples.

Items	Study Cohrs		Study Hinz		Study Schmidt	
	1	2	1	2	1	2
AC_13 Successful	-.69	.04	-.64	.22	-.71	-.06
AC_32 Getting ahead	-.67	.14	-.51	.28	-.64	-.02
UN_29 Justice	.64	-.03	.56	-.05	.66	-.10
PO_2 Rich	-.61	-.09	-.61	.11	-.66	-.06
AC_24 Ambitious	-.61	.07	-.33	.37	-.45	-.01
UN_19 Environment	.60	.09	.51	.03	.50	.04
UN_23 Peace	.60	.25	.51	.01	.59	-.02
PO_39 Leader	-.57	.21	-.57	.16	-.50	-.01
UN_3 Equality	.56	-.02	.46	.06	.51	-.07
PO_17 To be in charge	-.55	.15	-.67	.09	-.45	-.01
AC_4 Abilities	-.54	-.01	-.59	.15	-.52	-.04
UN_40 Nature	.53	-.40	.41	-.16	.30	.08
TR_38 Modest	.50	-.32	.06	-.63	.29	-.36
TR_9 Satisfied	.46	.26	.24	-.52	.47	-.04
UN_8 Understand	.45	.03	.28	-.05	.59	-.01
BE_33 Forgiving	.44	.03	.34	-.12	.34	-.11
BE_12 Care	-.37	.07	-.38	.04	-.58	.04
BE_27 Support	.36	.05	.50	.08	.44	.06
BE_18 Loyal	.23	.05	.50	.07	.30	.12
ST_30 Surprises	-.02	.65	-.48	.38	.06	.63
ST_6 Different things	-.02	.64	-.40	.37	.10	.60
CO_16 Behave properly	-.12	-.61	.11	-.51	-.11	-.57
ST_15 Risks	-.04	.60	-.68	.16	.02	.59
CO_7 Rules	-.12	-.59	-.11	-.62	-.14	-.37
SE_5 Surroundings	-.14	-.57	.28	-.28	-.16	-.29
CO_28 Obedient	-.05	-.55	.27	-.39	.01	-.41
SD_11 Own decisions	.05	.55	.18	.54	.07	.39
SE_21 Clean	-.09	-.51	.43	-.28	-.20	-.43
TR_25 Customs	-.07	-.50	.18	-.50	-.16	-.48
CO_36 Polite	.12	-.50	.39	-.39	.21	-.41
HE_26 To spoil himself	-.14	.49	-.18	.35	-.25	.41
SE_14 Country be safe	-.31	-.48	.30	-.16	-.21	-.14
HE_37 Enjoy life	-.17	.47	-.23	.43	-.17	.69
SD_1 Creative	.15	.42	-.22	.51	.18	.32
HE_10 Fun	-.09	.41	-.09	.45	-.10	.62
SE_35 Social Order	-.15	-.39	.29	-.14	-.04	-.13
SD_22 Curious	.18	.35	.03	.44	.30	.17
SD_34 Independent	-.10	.29	.12	.45	-.06	.32
TR_20 Religious	.13	-.24	-.07	-.53	.14	-.43
SE_31 Stay healthy	.01	-.13	.46	-.04	-.21	-.06

#### Interpretation of Component 1:

Self-Enhancement  
↕  
Self-Transcendence

#### Interpretation of Component 2:

Openness to Change  
↕  
Conservation

#### Note.

Items selected for the new short scale are highlighted.  
1 = First component  
2 = Second component

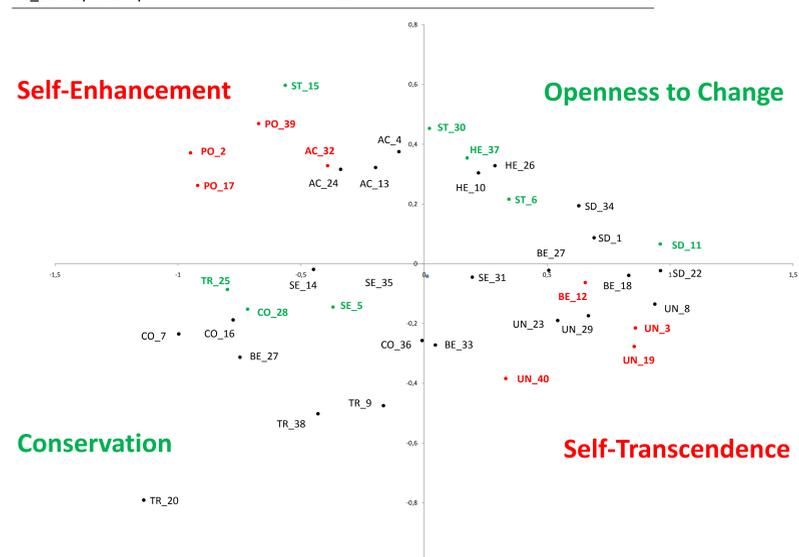


Figure 2. MDS of 40 PVQ-items ( $N = 1.200$ ). Items of the new scale are highlighted.

### Conclusions

- 16 PVQ-items were selected in order to provide a new short scale that assesses the second order value factors within a short period of time.
- The findings indicate that the selected items organize according to their hypothesized structure. However, some items (e.g., ST\_15, SE\_5) showed varying factor loadings across samples. Thus, the items were modified.
- Future studies will explore the new scale's factorial and predictive validity.