Mini Review

Value development in mid-adulthood: an exploration

Mini review

Two approaches have dominated research on human value preferences during the last decades, namely the ones associated with the names Ronald Inglehart and Shalom Schwartz. Up to now, neither of these approaches has bothered much about how value preferences develop across the lifespan. Both Inglehart and Schwartz implicitly or explicitly seem to assume that in general terms value preferences of people are more or less stable from when individuals become of age. The current study explores the intraindividual development of value preferences among individuals from (late) adolescence to their mid-forties. The sample used for this comprehensive exploration is an unusual one. Data stem from a longitudinal study of West German adolescent peace movement activists and sympathizers who were first surveyed in 1985 during the high time of the East-West antagonism, which saw demonstrations of well over a million participants in the then capital of the Federal Republic of Germany, Bonn. Two hundred forty one of originally 1492 participants were followed for what are now well over 30 years; they were surveyed every 3½ years through 10 waves of data gathering. At the onset of the study, participants were on average 14 years old, though with a broad range from eight to twenty years of age.

As spelt out in more detail by Boer & Boehnke,[1] Inglehart's[2] analysis of societal change—itself based on Maslow's[3,4] work on human needs—offers a theory of value preferences, claiming two positions. Inglehart suggests that

1. Values are formed in early socialization and their development concludes during late adolescence.

2. Individuals' value priorities focus on those life aspects that were deprived or showed some deficiencies in needs' fulfillment during childhood or adolescence.

Those basic assumptions lead to the differentiation between survival values vs. self-expression values in Inglehart's[5] value taxonomy. An additional value dimension distinguishes traditional vs. secular-rational orientations toward authority. This value dimension is premised on security needs and their fulfillment. Norris[6] security thesis argues that in contexts of high insecurity people turn to traditional religious values, since religious institutions provide security and uncertainty management, whereas in highly developed, secure contexts, individuals rely more on secular values. Hence, value priorities seem closely related to fundamental human needs and their fulfillment within specific macro-contextual and social environments.

Schwartz's[7] conceptual considerations take a different road by going back to the thinking of Milton Rokeach[8] and Clyde Kluckhohn.[9] Rokeach[8,10] distinguished between terminal and instrumental values in his value–attitude–behavior pyramid. He argued that terminal values (encompassing desirable end states) facilitate instrumental values (encompassing desirable ways of doing things), which in turn affect attitudes that then determine behavioral intentions. Developing this idea further, Schwartz[7] spelt out a comprehensive set of values that relate systematically to each other, comprising a consistent system of complementary and conflicting values that serves as guiding principle in people's lives. Schwartz argues that the human values' system serves three requirements of human life: biological needs, the coordination of social interactions, and the survival of the group.

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Most importantly, these requirements need to be negotiated against each other by reconciling and prioritizing one's values as behavioral guides. The guidance functions of values have been summarized by Rohan[11] in terms of what type of judgments they influence:

1. As guides for survival.

2. As guides for goodness.

3. As guides for best possible living.

4. For ordering the importance of requirements and desires.

Some of these judgments point toward needs-based functions of values, which thereby also seem linked to the guidance function of values.[12]

The present paper, firstly, offers material on intraindividual changes in value preferences measured within the Inglehart paradigm among individuals (peace movement activists and sympathizers) between 1988/89 (the second wave of the study) and 2016 in altogether nine waves of data gathering. A three-item scale (at that time) meant to assess materialist values as theorized by Inglehart in his 1977 seminal work was part of the questionnaire. The measure is taken as a proxy measure for survival values (as opposed self-expression values), as later conceptualized by Inglehart.[2] The three items read, "If you do not perform, you will not be happy either," "The most important thing in life is performance," and "Success in school or at work is the most important thing in life." Response scales ranged from '0' ('not at all true') to '3' (completely true'). Alpha consistencies were between .65 (Wave 9) and .77 (Wave 2). Simultaneously, also from Wave 2 to Wave 10 of the study, traditional (religious) values were assessed with three-items also, using the same response format. The instrument is meant to measure—as a proxy—traditional vs. secular rational values. Items read, "There is life after death," "God is the world; he is in all things that are around us," and "God is above all; he created the world." Alpha consistencies varied between .81 (Wave 1) and .87 (Wave 5).

Secondly, a one-item-each measure of the 10-value version of the Schwartz value circumplex was included as of Wave 5 of the study. At that time (1999) study participants were on average 28 years old. The ten items were adapted from the original Schwartz Value Survey, and read 'helpfulness' (**BE**nevolence), 'respect for tradition' (**TR**adition), 'politeness' (**CO**nformity), 'social order' (**SE**curity), 'social power' (**PO**wer), 'success' (**AC**hievement), 'pleasure' (**HE**donism), 'daringness' (**ST**imulation), 'creativity' (**Self-D**irection), and

'protection of the environment' (**UN**iversalism). In its exact form, this selection deviated from the Schwartz Value Survey (SVS) from 1992 in that it dropped the short explanatory phrase. Additionally, values presented as adjectives in the SVS were converted to nouns. The response format for the ten items was modelled after what Schwartz used for the Schwartz Value Survey:[7] '-1' (opposed to my values), '0' (not important), '1' [no label], '2' [no label], '3' (important), '4' [no label], '5' [no label], '6' (very important), and '7' (extremely important).

The presentation offers extended evidence on how preferences changed across the lifespan for materialist values as theorized by Inglehart, for traditional as opposed to secular-rational values, the second Inglehart dimension of value preferences, and for the ten Schwartz values. There are two general hypotheses that can be extracted from developmental studies of value preferences:

1. Value preferences stay more or less stable across the lifespan after adolescence.

2. Value preferences that favor the preservation of the status quo increase across the life span. The second hypothesis essentially relies on folklore wisdom that people become ever more conservative the older they get.

In order to test the two hypotheses, repeated measure analyses of covariance were conducted, with Wave (nine levels) as within-subject factor, and Age as a covariate. Age was partialled, because the sample encompassed a highly dispersed group of participants: The youngest and the oldest participant were 13 years of age apart. Analyses were performed on complete datasets, i.e., for participants who responded to all items under scrutiny in a given analysis. However, analyses reproduced for data matrices where missing data were imputed, yielded substantively identical results for Inglehart values and very similar results for the Schwartz values (see below). Findings for the two Inglehart value preferences are found in Table 1. Both analyses yielded non-significant results for the within-subjects factor. For Materialism, the Greenhouse-Geisser-adjusted F score was 1.48, p=.183 with 5.88/740.99 degrees of freedom. For Traditionalism, the Greenhouse-Geisser-adjusted F score was 0.80, p=.562 with 5.63/703.72 degrees of freedom. Thus, for both value preferences no significant change in mean preference occurred across the lifespan from late adolescence to the mid-forties of the study participants. It also became evident that not only did means not shift, but value preferences also became ever more stable in the sense that people with markings relatively high remained high and people with relatively low markings remained low. This emerges from across-time correlations (so-called stabilities), which were always highly significant and went up from r=.33 (Wave 2/Wave 3) to r=.71 (Wave 9/Wave 10) for Materialism, and from r=.61 (Wave 3/Wave 4)[1] to r =.83 (Wave 9/ Wave 10) for Traditionalism.

Table 2 documents findings for the ten Schwartz values.

Table 1 Means of materialism and traditional values from 1988/89 to 2016/17

Wave	Year of Data Gathering	Average Age of Sample	Mean Score Materialism	Mean Score Traditionalism
2	1988/89	17.5	0.75	1.32
3	1992	21	0.74	1.15
4	1995/96	24.5	0.82	1.12
5	1999	28	0.82	1.16
6	2002/03	31.5	0.83	1.19
7	2006	35	0.91	1.18
8	2009/10	38.5	0.83	1.19
9	2013	42	0.80	1.08
10	2016/17	45.5	0.8	1.08

Table 2 Means of schwartz values from 1999 to 2016/17

Value	Wave 5 (Rank)	Wave 6 (Rank)	Wave 7 (Rank)	Wave 8 (Rank)	Wave 9 (Rank)	Wave 10 (Rank)
Universalism	5.01 (2)	4.81 (2)	4.96 (2)	5.13 (2)	5.36 (2)	5.18 (2)
Benevolence	5.38 (1)	5.42 (1)	5.42 (1)	5.43 (1)	5.67 (1)	5.53 (1)
Tradition	2.25 (9)	2.22 (9)	2.45 (9)	2.63 (9)	2.85 (9)	2.49 (9)
Conformity	4.29 (4)	4.52 (3)	4.74 (3)	4.64 (3)	4.92 (3)	4.84 (3)
Security	4.26 (7)	4.12 (6)	4.42 (4)	4.58 (4)	4.73 (4)	4.66 (4)
Power	1.96 (10)	1.89 (10)	2.01 (10)	2.04 (10)	1.97 (10)	1.89 (10)
Achievement	4.28 (6)	4.16 (5)	4.12 (5)	3.98 (6)	4.10 (6)	3.91 (6)
Hedonism	4.29 (5)	3.91 (7)	3.87 (7)	3.79 (7)	3.92 (7)	3.78 (7)
Stimulation	2.93 (8)	2.92 (8)	2.94 (8)	2.92 (8)	3.11 (8)	3.18 (8)
Self-Direction	4.37 (3)	4.18 (4)	4.01 (6)	4.05 (5)	4.24 (5)	4.20 (5)

Of all ten Schwartz values, only Hedonism values (italicized) changed significantly over time when analyses are based on participants with full data matrices. For hedonist value preferences, the Greenhouse-Geisser adjusted F score was 4.27, p=.001 with 4.52/565.35 degrees of freedom. There was a significant downward trend (F(1/125)=12.01, p=.001. Furthermore, the interaction of the within-subject factor Wave and the covariate Age was also significant (F(4.52/565.35)=4.07, p=.002. Whereas in earlier waves older participants had lower hedonism values, in most recent waves no age differences were found anymore. For the fully imputed data matrix, the decrease in hedonism means was significant only on the 10% probability level, whereas the decrease in achievement value preferences (italicized) rose to significance on the 5% probability level.

What do these findings suggest?

Overall, value preferences are remarkably steady across the lifespan from late adolescence to mid adulthood. First, their development shows consistency. This is suggested by the fact that both Materialism and Traditionalism yield very similar (and sufficiently high–Materialism–or very high–Traditionalism) alpha consistency coefficients. That finding suggests that values do not change their meaning across the lifespan. Secondly, the two value preferences also emerged as highly stable. This is evidenced by the fact that stabilities (across-time correlations) are very high from the beginning of the study, but also increase in size across the waves of data gathering. Lastly, there are very few shifts in mean preferences are observable. This does not only become evident via the many non-significant results for test of mean differences across time. It also becomes evident via the fact that five of the ten Schwartz values retain their preference rank across six waves of data gathering (participants being around 28 in Wave 5 and around 45 in Wave 10): Benevolence (1), Universalism (2), Stimulation (8), Tradition (9), and Power (10). Furthermore, ranks of all ten values remain unchanged through the last three waves of data gathering.

Obviously, the current study lacks ground for generalizations. It clearly is a study of an extraordinary, unusual sample, namely early-age peace movement activists and sympathizers, who are most likely more conscious with regard to their own value preferences than are other segments of the German population. It could, thus, very well be that steadiness in value preferences is overemphasized among participants of the present study. However, what the study is nevertheless able to show is that there is hardly any ground for challenging the traditional stability hypothesis for intraindividual value development across the lifespan: Value preferences—measured under whichever paradigm—are highly stable during adulthood among people who have developed a value consciousness early in their lives.

[1]The correlation for ratings from Waves 2 and 3 was r=.63.

Conflict of interest

The author declares that there is no conflict of interest.

References

1. Boer D, Boehnke K. What are values? Where do they come from? A developmental perspective. In: Brosch T & Sander D, editors. *Handbook of Value: Perspectives from Economics, Neuroscience, Philosophy, Psychology and Sociology.* Oxford: Oxford University Press;2015:129−151.

2. Inglehart R. *The silent revolution.* Princeton, NJ: Princeton University Press; 1977.

3. Maslow AH. *Motivation and personality.* New York, NY US: Harper & Row; 1970.

4. Maslow AH. *Toward a psychology of being.* 3rd ed. New York: Wiley; 1999.

5. Inglehart R. *Modernization and postmodernization.* Princeton, NJ: Princeton University Press; 1997.

6. Norris P, Inglehart R. *Sacred and secular: Religion and politics worldwide.* Cambridge: Cambridge University Press; 2004.

7. Schwartz SH. Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology.* 1992;25:1–65.

8. Rokeach M. *The nature of human values.* New York: Free Press; 1973.

9. Kluckhohn C. Values and value orientations in the theory of action. An exploration in definition and classification. In: Parsons T, Shils E, editors. *Toward a general theory of action.* Cambridge, MA: Harvard University Press. 1951.

10. Rokeach M. Beliefs, attitudes, and values: A theory of organization and change. San Francisco: Jossey-Bass; 1968.

11. Rohan MJ. A Rose by Any Name? The Values Construct. *Personality and Social Psychology Review.* 2000;4(3):255−277.

12. Fischer R, Milfont TL, Gouveia VV. Does social context affect value structures? Testing the within-country stability of value structures with a functional theory of values. *Journal of Cross-Cultural Psychology.* 2011;42(2):253–270.