Two theories on the test bench: Internal and external validity of the theories of Ronald Inglehart and Shalom Schwartz

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ABSTRACT

In the last decades value research has produced a vast number of theoretical concepts. However, it is unclear how the different value theories relate to each other. This study makes a first step toward a systematic comparison of value theories. It focuses on the individual level of the two approaches that are, at present, probably the most prominent in international research – the theory of basic human values of Shalom Schwartz and the postmodernization theory of Ronald Inglehart. Using data from the World Value Survey and the European Social Survey for West Germany we assess both the internal and the external validity of the two accounts. The results indicate that both value theories have different strengths and weaknesses. Whereas the Inglehart account has lower internal and weaker construct validity, the Schwartz account is somewhat less consistent in its predications. Nevertheless, both value conceptions are able to explain a substantial share of variation in specific attitudes and behavior.

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1. Introduction

The empirical research of the last decades has produced an impressive number of different value orientations. Sometimes values are equated with more or less abstract, positively evaluated objects or states: Health, family, work, religion and many other entities are therefore called values. Sometimes values are related to basic human needs, like the needs for security, affiliation, or love. In the classical tradition values are defined as standards such as the values of freedom, equality, justice, or fairness. Apart from these principle disagreements about the concept of values, there are differences with regard to specific values. Two authors may use the same value name but understand and operationalize the underlying value differently or they assign different value names to very similar sets of indicators.

Different value researchers do not completely ignore each other but they quote the studies of others selectively and usually only in those cases where the findings of the other seem to support their own view.[3] Comprehensive studies of the relationships between different value approaches are completely lacking. It is almost certain that problems of discriminant validity would arise if similar values from different theories were included in one and the same study (Jagodzinski, 2004). International

[3] Hofstede (2001), in his presentation of individualism/collectivism refers to Triandis as well as to Inglehart's post-materialism. Similarly, Inglehart and Welzel (2005) identify autonomy as the common theme of individualism (Triandis) and self-direction (Schwartz) and self-expression values, but they do not analyze these relationships in detail.

comparative studies so far do not allow a comprehensive assessment of advanced value theories. It is true that the World Value Survey 2005 also includes 10 items of the Portrait Value Questionnaire of Schwartz in addition to the indicators of Inglehart's value dimensions. However, it can already be anticipated that 10 items cannot adequately cover the 10 broadly defined value orientations of Shalom Schwartz, which is discussed in more detail in Sections 3.1 and 3.2. Survey research may be reluctant to include the measurement instruments of different value theories into their questionnaires partly because they do not want to confront the respondents with batteries of similar questions and partly because it would increase the costs of such a survey immensely. Therefore, at the moment it cannot be said whether value research violates Occam's principle and multiplies entities, in this case: values, beyond necessity. It is very likely that it does but no one can presently prove this.

In order to overcome the present situation, this paper attempts to systematically compare two very prominent value theories, the theory of basic human values of Shalom Schwartz and the postmodernization theory of Ronald Inglehart (e.g. 1977). Both authors present two-level theories, which distinguish between macro-level cultural values and individual-level value orientations. It is true, the focus of Inglehart's (e.g. 1977) research has recently shifted to such an extent to the macro-level that the micro-level component of his theory can be overlooked. As the postmaterialism theory is only rudimentarily integrated into the new, more encompassing approach, one may gain the impression that we actually deal with two theories, a micro-level theory of postmaterialism and a macro-level theory of self-expression values. This is not the view of Ron Inglehart, however. Even his publications on macro-level cultural change persistently emphasize that cultural change is the result of micro-level value change (see, e.g., Inglehart, 1997; Norris and Inglehart, 2004; Inglehart and Welzel, 2005). The analysis of Inglehart and Baker (2000) further shows that cultural values and individual-level value orientations are operationalized with the same set of indicators. Due to space limitations, we have to confine ourselves exclusively to the key concepts of the individual-level value orientations in both approaches, which for the sake of brevity will be simply called values.

A comparison of two value theories should, first of all, investigate the internal validity of the measurement. Recent methodological studies on the measurement instruments of the ESS give important insights into this field, particularly also into problems of measurement equivalence, but they investigate only rudimentarily the predictive power of the underlying concepts. This is largely consistent with the strategy of Schwartz and his colleagues who mainly concentrated on the internal structure and validity of the values and only sparsely examined the relations between values and external variables. As long as this part of the theory remains less developed, however, the theory is of limited interest for the nonexperimental social sciences, which have always seen the main attraction of value theories in their promise to explain a broad range of beliefs, attitudes, and behaviors by a limited number of values. A comparison of value theories can, therefore, not be based on internal validity alone (Jagodzinski and Manabe, 2009; Opp and Wippler, 1990). Relationships with external variables, which either predict values or are predicted by values, are at least as important.

As both theories relate values to a set of common external variables, the strength and signs of these relationships will be the second criterion, which for the sake of brevity is called external validity of the theory. A theory is externally valid if all relationships have the theoretically predicted signs and the explained variance in all dependent variables is high.[4] Though the predictive power of the values is in the focus of interest, the paper will also investigate the effect of selected exogenous variables on values.

Besides internal and external validity, the parsimony is used as a third standard of comparison. If two value theories have more or less the same explanatory power, the one with fewer values is more parsimonious and, therefore, superior to the other. So we have three criteria which we apply step by step to the two value theories. Before we do this, we very briefly discuss communalities and differences in the theories of Ronald Inglehart (1977) and Shalom Schwartz (1992, 1994). The internal and external validity are examined in Section 3. As the study has to rely on two separate surveys, we use the European Social Survey (ESS) 2004 for measuring the values of Schwartz and the World Value Survey (WVS) 2005 for measuring the values of Inglehart. Needless to say, the external validity can only be assessed with regard to those external variables which are at least similarly measured in both surveys. Results are summarized and discussed in the last section.

2. The two value theories – Similarities and differences

Space limitations do not allow a comprehensive discussion of the two theories. The values of both theories will be very briefly described and compared in Section 2.1. The basic features of the measurement models are examined next (Section 2.2). The last Subsection discusses the relationship between values and a subset of external variables, which are similarly measured in ESS 2004 and WVS 2005. These relationships are summarized in a set of hypotheses (Section 2.3).

2.1. The value concepts

2.1.1. Schwartz

The value theory of Schwartz proposes 10 basic values that are intended to include all the main values recognized across cultures in the world (for a new extension to more than 10 values, see Schwartz and Vecchione, 2011): power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security. These values and the

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[4] Clearly, the external validity is estimated under the assumption that the model is correctly specified. As long as there is no empirical evidence, however, that low external validity is a result of spurious non-correlations, they indicate problems of the examined theory.