ON THE CONTENT AND STRUCTURE OF VALUES: UNIVERSALS OR METHODOLOGICAL ARTEFACTS?

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Abstract. During the past fifteen years, Shalom Schwartz developed and continuously refined a comprehensive theory on the structure of values. One significant feature of his approach is that it does not confine itself to the mere distinction of value types. Rather, building on Guttman's facet approach, the theory specifies a set of dynamic relations among values by referring to mutual compatibilities and conflicts in the pursuit of the motivational concerns that they express. In addition, and more importantly for the present study, Schwartz summarised these dynamic relation in terms of a two-dimensional bipolar structure. It is this structure which we tried to replicate in our study. Other than Schwartz, however, we did not use the 'Schwartz Value Survey' for this purpose. Instead, we applied a short version of Morris' 'Ways to Live' developed by Dempsey and Dukes, the 'Kilmann Insight Test', and McClelland's 'Personal Values Questionnaire' to a sample of N=144 Canadian marketing students. Data were analysed by means of nonmetric multidimensional scaling. Results show that many though not all features of the Schwartz values model could be replicated. Correspondence with and deviations from the hypothesised structure are discussed, considering both conceptual and methodological differences in values assessment.

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There has been a considerable amount of cross-cultural research on values during the past two decades. Many of the respective studies have been influenced by Schwartz' (1992) values theory. Following his theoretical reasoning, values can be classified according to their motivational content. All in all, ten different content domains have been conceptually distinguished and empirically identified in a multitude of cross-cultural samples (Schwartz, 1994; Schwartz & Sagiv, 1995). However, Schwartz' approach clearly goes beyond a mere nominal distinction of values. Rather, he contends that values are organised dynamically according to their mutual compatibilities and incompatibilities. The structure resulting from this dynamic organisation can be summarised by a two-dimensional model as shown in Figure 1. As can be seen, two basic dimensions put up the values space; they are labelled 'openness to change versus conservation' and 'self-transcendence versus self-enhancement' (see Schwartz 1992, for more detail).

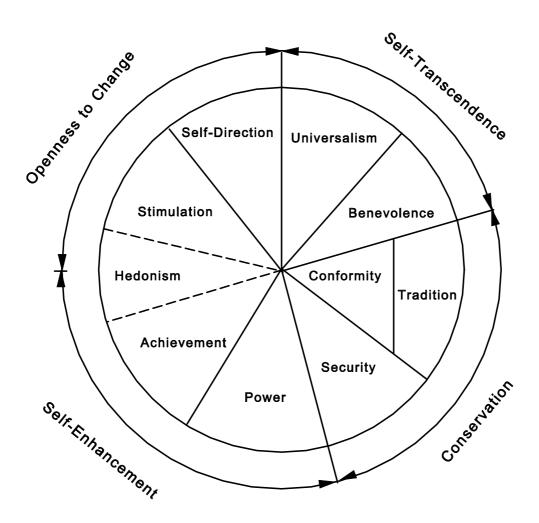


Figure 1: Theoretical model of relations among motivational value types and two basic bipolar value dimensions

While the majority of the aforementioned studies on values structure is based on data collected with the 'Schwartz Value Survey' (SVS; Schwartz, 1992), there is considerable evidence that the organisation of values as postulated by Schwartz is also found with other assessment instruments. Thus, former research using the 'Rokeach Value Survey' (RVS) yielded a configuration which is quite similar to that shown in Figure 1 (Schwartz & Bilsky, 1987, 1990). More recent studies with a newly developed instrument, the 'Portraits Questionnaire' (PQ-29; Schwartz, Lehmann, Melech, Burgess, Harris & Owens, 1998; Bubeck, 1999), provided further support to Schwartz' (1992) approach to values structure. These findings are in perfect line with results from reanalysing values data raised with O'Reilly, Chatman & Caldwell's (1991) 'Organizational Culture Profile' (OCP; cf. Bilsky & Jehn, 1999). Finally, there is some indirect evidence that even data collected with Allport and Vernon's (1931) 'Study of Values' closely match the configuration postulated by his theory (Bilsky & Schwartz, 1994). However, in order to validate further the supposed universality of values structure, additional studies using a variety of other instruments seem desirable.

The present paper summarises structural analyses of data relating to three different approaches to assessing values: Morris' (1956) 'Ways to Live' as specified by Dempsey and Dukes (1966), Kilmann's 'Insight Test' (KIT; Kilmann, 1975), and McClelland's 'Personal Values Questionnaire' (PVQ; McClelland, 1991; Langens, 1996). First, these three approaches are briefly characterised. Next, our study is outlined in some detail and the results of our structural analyses are reported. Finally, these findings are discussed in the light of Schwartz' values theory.

Different approaches to assessing values

'Ways to Live'

Morris (1956) distinguishes three types of values. According to his approach, 'operative values' direct individual behaviour, thus reflecting what the respective person desires (dispositional meaning). 'Conceived values' represent culturally shared conceptions of desirable behaviour (normative meaning). Finally, 'object values' characterise the attribution of significance or importance to an object or event, independently of individual preferences or normative standards (economic meaning).

In order to assess one special kind of conceived values, namely "conceptions of the good life", Morris (1956) developed a special instrument called 'Ways to Live'. Starting from the conception of three basic components of human personality - a *Dionysian*, a *Promethean*, and a *Buddhistic* component - he specified seven value profiles. Empirical studies revealed, however, that the manifold forms of life could not be covered adequately by these alternatives. Therefore, the final version of his instrument was extended in such a way as to encompass 13 different conceptions of life. Each of them was described by a relatively detailed scenario. Subjects were asked to rank these scenarios according to "the kind of life you personally would like to live" (Morris, 1956, p. 15).

Despite some conceptual problems relating to the distinction of the 'desired' and the 'desirable', Morris' cross-cultural work was quite positively evaluated (Braithwaite & Scott, 1991; Kilby, 1993). However, because of the complexity of the different scenarios, applying Morris' 'Ways to Live' proved to be rather demanding and time consuming. Furthermore, the elaborate descriptions partly concealed the focal points of the various scenarios. To overcome these shortcomings, Dempsey and Dukes (1966) developed a short version of this instrument. Aside from shortening and simplifying the instrument, these authors also tried to purify the vignettes from contradictory or misleading information without changing their central meaning at the same time.

The revised version of Morris' 'Ways to Live' served as one out of three instruments in our study. In order to investigate whether and to what extent Schwartz' (1992) two-dimensional model of values structure can be reproduced by means of this research tool, all scenarios were classified according to Schwartz' basic dimensions *a priori* to empirical analysis. Matching was accomplished independently by both authors; the result of this attempt is summarised in Table 1.

WAYS TO LIVE (Morris, 1956; Dempsey & Dukes, 1966)		BASIC VALUE DIMENSIONS (Schwartz, 1992)
path 6	Master threatening forces by constant practical work	self-enhancement
path 3	Show sympathetic concern for others	
path 5	Act and enjoy life through group participation	self-transcendence
path 13	Let oneself be used by the great cosmic purpose	
path 1	Appreciate and preserve the best man has attained	
path 9	Wait in quiet receptivity for joy and	conservation
path 10	peace Control the self and hold firm to high ideals	
path 2	Cultivate independence and self- knowledge	
path 4	Experience festivity and sensuous enjoyment	openness to change
path 7	Admit diversity and accept something from all ways of life	
path 11	Meditate on the inner life	
path 12	Use the body's energy in daring and adventurous deeds	
path 8	Enjoy the simple, easily obtainable pleasure	hedonism

Table 1: A priori classification of Morris' (1956) "Ways to Live", as specified by Dempsey & Dukes (1966), according to Schwartz' (1992) basic value dimensions

'Kilmann Insight Test'

Kilmann's (1972, 1975) research relates to 'interpersonal value constructs' (IVC). These constructs are mental categories "through which an individual perceives and interprets the desirable and undesirable features of interpersonal behavior" (1975, p. 35). In this context, values can be conceived of "as more general oughts that transcend any one context" (Kilmann, 1981, p. 941). Aside from theoretical interest however, concentrating on interpersonal behaviour followed from pragmatic considerations, too. Thus, Kilmann (1981) contends that without addressing some specified realm of behaviour it seems unlikely to arrive at a useful concept of values.

In order to assess 'interpersonal value constructs', he constructed a semi-projective instrument called the 'Kilmann Insight Test' (KIT). In applying the KIT, subjects are asked to respond to six moderately ambiguous pictures likely to be related to managerial activities. While these pictures closely resemble the material used in Murray's 'Thematic Apperception

Test' (TAT), the type of answers elicited from the respondents differs. In fact, subjects working through the KIT are asked to judge each of the pictures with respect to 18 different values. Judgements are made on seven-point scales, ranging from 'not relevant' to 'extremely relevant'.

The KIT-items used for rating the six pictures were taken from Rokeach's (1973) work. More precisely, Kilmann referred to the 18 instrumental values of the 'Rokeach Values Survey' (RVS). The respective RVS-items, however, were partly reformulated in such a way as to include only nouns in the final values list of the KIT. As with Morris 'Ways to Live', the KIT-items were classified according to Schwartz' basic value dimensions (see Table 2). In this case, matching was accomplished by referring to a former study in which Rokeach's instrumental values had been analysed (Bilsky & Schwartz, 1994).

INTERPERSONAL CONSTRUCTS (Kilmann, 1975)	BASIC VALUE DIMENSIONS (Schwartz, 1992)
ambition	
capability	self-enhancement
intellect	
logic	
affection	
broadmindedness	
forgivingness	self-transcendence
helpfulness	
honesty	
responsibility	
obedience	
orderliness	conservation
politeness	
self-control	
courage	
imagination	openness to change
independence	
cheerfulness	hedonism

Table 2: A priori classification of Kilmann's (1975) "Interpersonal constructs" according to Schwartz' (1992) basic value dimensions

'Personal Values Questionnaire'

In his work on human motivation, McClelland (1987; McClelland & Weinberger, 1990; McClelland, Koestner & Weinberger, 1989) distinguishes two kinds of motives: Implicit motives are based on a limited number of biological needs. Explicit motives, in contrast, are self-attributed needs which are "usually activated by explicit, often social, incentives such as rewards, prompts, expectations, or demands" (McClelland, Koestner &

Weinberger, 1989, p. 693). According to McClelland, the former type of motives is accessible to indirect, projective methods only. Explicit motives, on the other hand, are cognitively elaborated and can be adequately assessed by means of questionnaires and self-reports, therefore.

One instrument for measuring explicit motives is the 'Personal Values Questionnaire' (PVQ). This tool was developed by McClelland and his collaborators and has been employed since then in some more recent studies on motivation (McClelland, 1991; Langens, 1996). Following McClelland's conceptual distinction, explicit motives closely match the values concept as used by other researchers. In fact, values are directly referred to in the instruction and in further comments on this instrument: "Values are those factors - activities, behaviors, qualities, beliefs, goals - that you believe are important to do, follow, or strive toward. While you may not always think about your values, you are aware of them and can consciously identify them" (McClelland, 1991, p. 4)².

Other than instruments usually employed in values research, however, the PVQ is not designed to cover the whole values domain. Rather it serves for measuring three explicit motives which are in the focus of many, if not most, motivational studies: achievement, affiliation and power. These motives reflect only one of the two basic dimensions of the Schwartz model, i.e. 'self-transcendence versus self-enhancement' (see Table 3). Each of these motives is measured by 10 items requiring subjects to rate their subjective importance on a six-point scale ranging from 'not important to me' to 'extremely important to me'. In addition to these 30 items, the PVQ includes six fillers.

ITEMS		BASIC VALUE DIMENSIONS
	McClelland (1991)	Schwartz (1992)
achievement	2, 5, 7, 10, 13, 18, 22, 27, 32, 34	
power	3, 8, 14, 16, 17, 21, 24, 28, 30, 36	self-enhancement
affiliation	1, 6, 9, 12, 19, 23, 26, 31, 33, 35	self-transcendence

Table 3: A priori classification of McClelland's (1991) "Personal Values Questionnaire" according to Schwartz' (1992) basic value dimensions

Method

The procedure used for testing the universality of Schwartz' (1992) values taxonomy - independently of the instruments applied for assessing value preferences - closely followed major trends in analysing value structures in cross-cultural research during the past two

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² Langens, personal communication November 13, 1998 (M.K.)

decades (Levy 1986, 1990, Meyer & Ruegg, 1979, Schwartz & Sagiv, 1995). Thus, two consecutive steps had to be taken. First and a priori to empirical analysis, all items of the respective instrument were assigned to Schwartz' basic dimensions according to their motivational content. Provided that this task was accomplished successfully, this a priori assignment had to be confirmed in a second step. This was accomplished by examining whether and to what extent the spatial representation of empirical values data fitted the Schwartz model (Figure 1). As to the first step, Tables 1 - 3 summarise the classification of value items employed in our study. It should be mentioned that, other than with the KIT- and PVQ-items, classification of Morris' 'Ways to Live' caused considerable problems; thus, depending on the perspective taken, the descriptions of several paths (e.g. 6 and 13) may suggest a different focus. Both, the procedure and the results of the second, empirical step are outlined next.

Sample

Our study was realised at the University of Manitoba during October 1998 by the second author³. On the whole, 144 Canadian students participated in this research. Age varied between 17 and 33 years with a mean of 21.2. Sex was nearly equally distributed in our sample, including 74 male and 70 female students. All participants were enrolled in marketing or related subjects.

Students completed the three assessment instruments during class sessions. To control for order effects, presentation was balanced by using six sequences of the instruments.

Data analysis

Schwartz' theoretical work on the structure of values (Schwartz, 1992; Schwartz & Bilsky, 1987, 1990) started from considerations which were closely tied to Facet Theory (c.f. Canter, 1985). This meta-theoretical approach to research is supplemented by a bundle of procedures for data analysis, including non-metric multidimensional scaling (MDS). Since former research on values structure mostly relied on this latter procedure, structural analyses reported here were accomplished be means of non-metric MDS, too, in order to facilitate comparisons with other studies (for additional analyses using PCA, cf. Koch, 1999).

According to the central question of whether the different approaches considered in this study yield value structures that correspond to Schwartz' taxonomy, each of the three data sets collected with the 'Ways to Live', 'Kilmann Insight Test', and 'Personal Values Questionnaire', respectively, was analysed separately by MDS. Analyses were based on Pearson correlation matrices (Borg & Groenen, 1997). Additional MDS, including two or three different data sets at a time, were run to find out whether value data could be represented by joint structures as well. Computations were realised with version 5.0 for Windows of the SYSTAT program package.

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³ We are grateful to Malcolm C. Smith who kindly supported our research

Results

<u>'Ways to Live'</u>. A two-dimensional MDS of Dempsey and Dukes' (1966) short version of Morris' 'Ways to Live' yielded a coefficient of alienation of .26. The corresponding Shepard-Diagram did not reveal any anomalies indicative of a degenerate solution. Figure 2 shows the plot of the respective MDS.

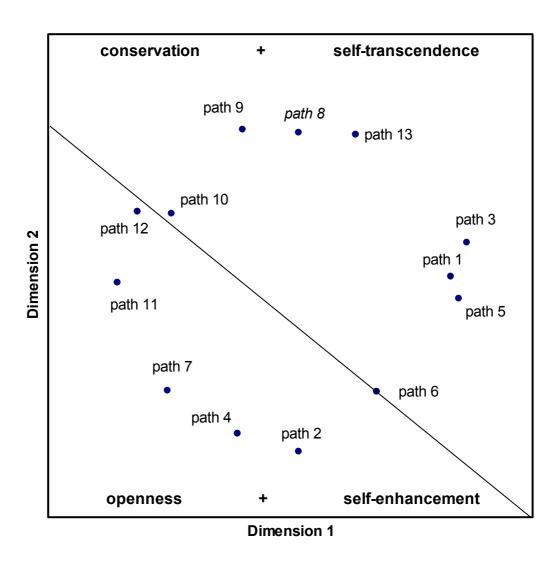


Figure 2: "Ways to Live" - 2-dimensional SSA

As can be seen, the arrangement of the thirteen ways results in a circumplex. Yet, this structure does not reflect the expected form postulated by the Schwartz model (Figure 1). Thus, self-enhancement (path 6) and self-transcendence (paths 3, 5, and 13) - as specified in our a priori classification (Table 1) - show up at the right hand side of the plot, while the openness- (paths 2, 4, 7, 11, and 12) and conservation-items (paths 1, 9, and 10) are located left. Quite obviously, however, a clear separation of conservation and self-transcendence from openness and self-enhancement emerged, as indicated by the straight line in Figure 2. We will come back to this finding in our discussion.

Supplementary to this two-dimensional solution, a three-dimensional was scrutinised, too. While the coefficient of alienation (.15) pointed to some improvement of the resulting split (Borg & Groenen, 1997), the three-dimensional configuration did not offer any information beyond the former one.

<u>'Kilmann Insight Test'</u>. As before, data from the 'Kilmann Insight Test' were analysed by a two-dimensional MDS, resulting in a coefficient of alienation of .20. Again, the Shepard-Diagram did not suggest any anomalies of the two-dimensional solution. The resulting plot is shown in Figure 3. Items whose location deviates from our a priori classification (see Table 2) are printed in italics. Despite these 'dislocations' the basic values structure could be reconstructed quite well.

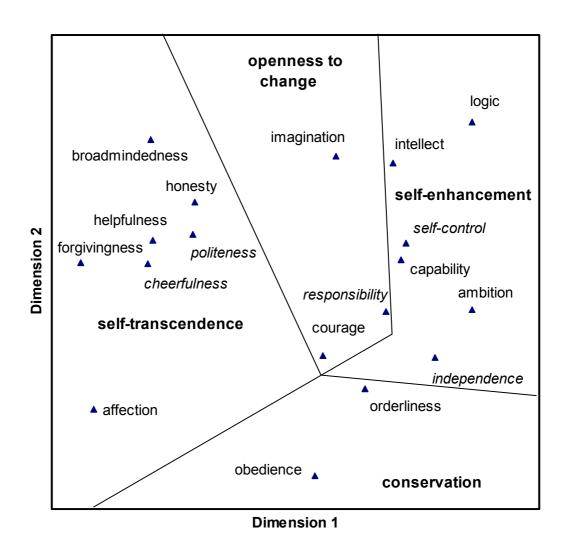


Figure 3: "Kilmann Insight Test" - 2-dimensional SSA

<u>'Personal Values Questionnaire'.</u> PVQ-items again were submitted to a two-dimensional MDS. Scaling yielded a coefficient of alienation of .21. As with the other instruments, the Shepard-Diagram revealed no anomalies. It is evident from Figure 4, that all 30 items could be separated according to the a priori classification. When inspecting this plot, it should be kept in mind that the PVQ contains items that represent only one of the two basic dimensions of Schwartz' values model, i.e., 'self-transcendence versus self-enhancement'.

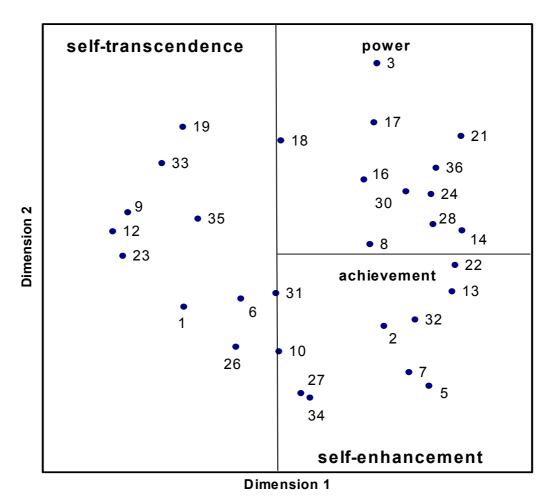


Figure 4: "Personal Values Questionnaire" - 2-dimensional SSA

<u>Joint analyses.</u> Multidimensional scaling of either two or all three sets of value data at a time always resulted in a clear split of assessment methods. In contrast, separation of value items as predicted by our a priori classification turned out successful in only one case: 'self-enhancement versus self-transcendence' could be clearly split in a three dimensional MDS of the KIT- and PVQ-items on dimensions 2 x 3.

Discussion

At first glance, the results of our study look mixed. While multidimensional scaling of McClelland's (1991) 'Personal Values Questionnaire' yields a perfect separation of values along Schwartz' 'self-enhancement versus self-transcendence'-dimension, results concerning the 'Kilmann Insight Test' (Kilmann, 1975) and Dempsey and Duke's (1966) 'Ways to Live' seem less clear.

In fact, five out of 18 values of Kilmann's (1975) instrument did not appear in the predicted region. However, the basic values structure showed up as hypothesised by Schwartz' (1992) taxonomy. Furthermore, we know from cross-cultural research that deviations from the 'ideal' values structure do occur. 'Independence', for instance, happened to show up close to 'self-enhancement' in several other studies, too (cf. Schwartz & Sagiv, 1995). In addition, 'self-control' and 'responsibility', though usually indicators for 'conservation' and 'self-transcendence', may quite reasonably be supposed to change their connotative meaning towards 'self-enhancement' when investigated (a) in a managerial setting as suggested by the instrument applied (KIT), and (b) in a selective sample like the one used in our study (subjects from marketing and related fields).

While the displacement of several items of the Kilmann instrument may be attributable to the managerial context induced by the KIT, the misfits observed in Dempsey and Duke's (1966) 'Ways to Live' seem to be a challenge to the structural approach underlying our analyses. However, the evaluation of this finding, too, proves to be more complex than a direct comparison of our a priori classification (Table 1) with the circumplex (Figure 2) may suggest. As mentioned before, we ran into considerable problems when trying to classify several of the 13 'Ways to Live'. Thus, with regard to path 6, it is by no means clear that this vignette does in fact represent 'self-enhancement'. Rather, reference to 'controlling the world' and to 'threatening forces' may as well be indicative of the 'conservation'-pole of the two-dimensional model. Similarly, why not interpret path 13 in terms of 'conservation' (or, more specifically, 'tradition') instead of 'self-transcendence'? It is probably at least partly in the eye of the beholder which of the different descriptive terms convey the (supposed) core idea of this vignette. Taken seriously, these considerations mean, that the 'Ways to Live' - whether operationalised by Morris (1956) or by Dempsey and Dukes (1966) - may not adequately cover the two-dimensional space of human values as hypothesised by Schwartz. Instead, they seem to be clearly biased towards 'openness to change versus conservation'.

This latter interpretation seems to be in line with our joint analyses, too. As may be remembered, only the combined MDS of McClelland's 'Personal Values Questionnaire' (PVQ) and the 'Kilmann Insight Test' (KIT) resulted in a partition of value items according to motivational content. All other analyses, whether applied to two or to all three instruments, showed but a methods' split. These findings appear less surprising when considering results

from the following perspectives: (a) Only two of our instruments, the PVQ and the KIT, clearly overlap with respect to motivational content as defined by Schwartz' (1992) basic value dimensions. These instruments mainly include items that are indicative of the first dimension, i.e., 'self-transcendence versus self-enhancement'. In contrast, the 'Ways to Live' show a dominant orientation towards Schwartz' second dimension 'openness to change versus conservation'. (b) All three instruments widely differ with respect to item format. Thus, subjects are supposed to rank vignettes in Dempsey and Duke's 'Ways to Live', while asked to rate semiprojective pictures as opposed to ordinary statements in Kilmann's and McClellands instruments, respectively. Given a poor motivational overlap of instruments in all but one of our joint analyses and the distinctive features of item format at the same time, a general separation of motivational domains could hardly be expected. Rather, a methods' split was likely to show up.

Viewed this way, our findings are not a challenge to the universality of the twodimensional values' structure hypothesized by Schwartz (1992). They suggest instead, that (a) the instruments applied in our study represent the basic value dimensions to a different degree, (b) on condition that instruments have motivational elements in common, structural analyses are likely to reveal value structures as suggested by Schwartz' (1992) theory, and (c) method factors may dominate structural analyses otherwise.

Of course, a single study is not sufficient for validating or disvalidating a theoretical approach. In so far, our findings should not be considered isolated when judging the pros and cons of a universal values structure. Furthermore, the empirical setting as well as the sample under study must be taken into account. However, taken together with former findings from structural analyses of the Rokeach Value Survey (Schwartz & Bilsky, 1987, 1990), the Schwartz Value Survey (Schwartz & Sagiv, 1995), the Portraits Questionnaire (Schwartz et al., 1998), the Organisational Culture Profile (Bilsky & Jehn, 1999) or the Study of Values (Bilsky & Schwartz, 1994), the present results seem quite encouraging to stick to the idea of a universal structure of values, and to investigate this structure in some more detail. All in all, findings from this study may be taken as evidence for the heuristic utility of Schwartz' (1992) theoretical approach to the structure of values.

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