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## ARTICLE

# On the Role of Security in the System of Personal Values: Are Conservatives Prioritizing Security?

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### **ABSTRACT**

Security is a value contained in most theories of personal values. Yet, while the relations among the most basic values are clear and reliable, the role of security in the system of values remains ambiguous. People striving for security are often also striving for tradition and conformity but sometimes they are focusing more on other values (such as health values, for example). Based on eight representative surveys (N = 24,000) in several German cities between 1998 and 2022, the author shows that when measuring security without suggesting a particular meaning of this notion, security takes a relatively central position within the system of values and their components (shown by multidimensional scaling, MDS). People striving for security also emphasize the importance of law and order, working hard, and having a good family life as guiding principles in their lives. Conformity is not that important for them, and having an exciting life is even negatively correlated. Age has little impact on the MDS structure of values and their components, even though people exhibit substantial changes in the relative weights they assign to many values as they get older.

Keywords: Personal values; Security; Value circle; Age; Gender; Multidimensional scaling

# 1. Introduction

Personal values are key variables in macro-management. Personal values are defined as broad beliefs that act as guiding principles in a person's life [1-3].

Research has identified a small set of basic values that hold universally for all persons. Today's most prominent value theory by Schwartz [1], for example, distinguishes ten basic values, i.e., power, achieve-

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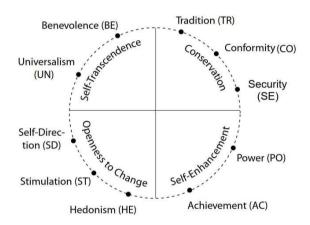
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ment, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security. These values are modeled as points on a circular scale, with four segments called higher-order values (**Figure 1**). It is predicted that the various values are dynamically related to each other. For example, persons who strongly strive for Conservation should automatically care less for Openness to Change. On the other hand, persons striving for security (SE) should also value tradition (TR) and conformity (CO).



**Figure 1.** Idealized circle structure of ten basic values and four higher-order values.

Numerous studies have supported the value circle <sup>[1,4,5]</sup>. Security, however, has been found to play unclear or different roles in the system of personal values. Various authors <sup>[1,6,7]</sup> have shown that SE lies in the neighborhood of TR/CO and PO/AC if the values are assessed using the instrument that is typical for most value studies, the Portrait Value Questionnaire (PVQ21 <sup>[8]</sup>). If, however, one uses the Individual Values Reflexive Scale (IVRS <sup>[9]</sup>) and codes its items in the categories of the Schwartz theory, the value circle is supported again, but SE is now positioned close to self-transcendence values (UN, BE) <sup>[7,10-12]</sup>.

The PVQ21 measures a person's priority for security by asking the respondents to rate how similar they feel to a person described by two items: (1) It is important for her to live in secure surroundings. She avoids anything that might endanger her safety; (2) it is very important to him that his country be safe from threats from within and without. He is con-

cerned that social order be protected <sup>[8]</sup>. The IRVS, in contrast, constructs an SE index based on an item that asks the respondents to rate "Striving for security" (without addressing particular components of security) and the item "Living health-consciously". Thus, PVQ- and IRVS-based measurements of security are automatically pulled into the direction of conservation values and "green" values, respectively.

Other instruments use other items. Schwartz et al. in their refined value theory [5,13,14], differentiate between societal security and personal security. They then use an extended version of the PVQ, the PVQ-RR, that measures social security with three items focusing on national security, a strong state, and social order and stability. The three items on personal security focus on avoiding things that endanger the respondent's safety, personal security, and secure environments. The refined theory, however, leaves both SE categories in the group of conformity values on the circle. Thus, SE remains theoretically in conflict with values such as self-direction or nature protection. Hanel et al. [15], using the PVQ-RR, report that security lies in between TR and BE, but—in its more social rather than personal components—relatively close to the center of the value circle. This more central location of SE components is also reported by Schwartz et al. [5]. However, these authors locate SE almost opposed to BE, in between TR and PO.

Measuring the psychological importance of security by items that focus on certain components of security always comes with the risk that these components do not match the respondents' notions of security. The Schwartz Value Scale (SVS) [16], for example, assesses security by referring to national security, family security, social order, cleanliness, and reciprocation of favors. Hence, the SVS does not offer the respondent the same value components when asked to rate security as the PVQ21. Cleanliness, for example, is not contained in the PVQ items. This component comes from the Rokeach Value Survey (RVS) [17], where it is considered an instrumental value, i.e., a guiding principle that only serves to reach intrinsic values. They are values that really count and for which one would possibly even go to extremes. For benevolence or hedonism, for example, even sacrificing oneself seems conceivable but not for security. Thus, security, once more, takes on a special role among basic personal values.

A mismatch between the researchers', the respondents', and the instruments' notions of security can lead to unexpected findings. Biber et al. [6] derive theoretically how persons' value preferences are related to the way people approach other people in social relationships, measured in terms of their preferences for the four models (e.g., authority ranking (AR)) of the Relational Models theory [18]. They find empirically that "all hypothesized relationships were confirmed... except the relationship between tradition/security and ARsub" (p. 621). The reason for this unexpected finding may be a mismatch of the various notions of security.

Security also plays a special role in value dictionaries constructed by lexical methods. In Aavik & Allik's listing [19], safety occurs only in certain subforms such as national security and family security. In Renner's listing [20], safety is completely missing, even though he asked "experts" to select from a comprehensive dictionary "nouns and adjectives that possibly described personal or societal values", while being "over-inclusive in order to compile a list as comprehensive as possible" (p. 129).

Ponizovskiy et al. [21] propose another value dictionary. Beginning with Schwartz's ten basic values, their final dictionary shows 85 entries for the value security (e.g., caution, clean, menace, safety, security, stable, threat, violence). The relative frequency of such notions in texts generated by a person is taken as an indicator of how much this person prioritizes particular values. The authors report that the persons' value scores with seven out of the ten basic values measured by this method correlated significantly with the corresponding value indexes based on the Schwartz Value Survey. For SE, however, the correlation was r = 0.00.

Studies focusing on psychological security (e.g., Maslow <sup>[22]</sup>) typically assume that security is a complex psychological object. Dzhamalova et al. <sup>[23]</sup>, for example, remark in the fear-of-crime context: "...

the psychological security of urban residents should be a complex multidimensional structure rather than a simple one-dimensional structure... the psychological security of urban residents can be divided into three categories: psychological, social, and environmental" (p. 2). Fear-of-crime researchers often explicitly address such components but do not collect data on the other basic values. Thus, one cannot assess how the various security components are related to values such as tradition or hedonism.

Belic et al. [24] are more comprehensive in their study. They propose to "treat values as superordinate constructs whose meanings rest on their subordinate constructs idiosyncratic to every person" (p. 1280). To identify the subordinate constructs of each of Schwartz's ten basic values, they choose a qualitative approach, asking a sample of 281 "emerging adults" in Serbia two questions: "Imagine a person who finds [value of interest] important. What does that person do? How does she/he behave?" (p. 1283). For security, they report that "The most prominent subordinate construct of Security reflects the need for maintaining social relations (Social cohesion)" (p. 1288). Moreover, they find considerable overlap of the subordinate constructs of the basic values, which suggests how to explain the observed psychological distances among the values [25].

To better understand how respondents understand security and its role as a guiding principle relative to other values, one could also interview the respondents on how they arrived at their judgments after they completed a survey questionnaire. Yet, such qualitative interviews [26] may simply be "too cognitive" to adequately uncover the reasons for the more or less spontaneous answers to an overall security item in an anonymous survey. In the study below, we aim at understanding the respondents' notion of security by relating the respondents' observed importance scores for "security" to the importance scores of various other personal values and their components. No particular meaning is suggested when asking the respondents to rate the importance of "security". That is, no definition is given for security, and no components or subordinate constructs are suggested. We thus leave it to the respondents to interpret the notion of security. Such single-item ratings have been shown to be remarkably reliable and valid, and they may even explain more variance in dependent variables than summated rating scales that construct their scale scores by averaging rating scores across a set of items assumed to represent how the respondent perceives the object of interest [27-31].

For the structure of items that measure values and their components, we predict that the Schwartz value circle is replicated at the level of the basic values (and, approximately, also at the level of their indicator items) but that security—if measured in a non-focused way—does not exhibit a close relation to tradition and conformity (as in **Figure 1**), because striving for security should, for many people, also be related to emphasizing health issues, preserving the natural environment, seeking reliable social partners and valuing other conditions related more to the primary social environment.

Moreover, we expect that this value structure is similar for persons of all ages because previous studies have shown that only the weights assigned to different values change systematically with age, but the structure of the values remains essentially stable [7,11]. What this means for an individual is easiest to understand in the ideal-point unfolding model [32]. The individual must seek a compromise in his/her striving for various values. Given that the values form a geometric structure as in **Figure 1**, this compromise defines the person's ideal point in value space. If the person shifts his/her ideal point closer to value X, he/ she automatically moves away from values opposing X. Hence, changing value priorities does not necessarily imply a change in the structure of the values [10].

For gender, there is a tendency for women to be closer to self-transcendence than men who tend to prioritize self-enhancement [33]. The value circle, however, is essentially the same for men and women. Hence, we do not predict that the role of security differs for men and women.

More clarity about the role of security within the system of personal values is important because different studies use different measurement instruments. Based on the data collected, evidence-based actions are often planned and implemented, in particular in organizational contexts. Such actions are likely to be effective only if what is measured corresponds to what is meant by the employees.

# 2. Method

## 2.1 Samples

Our data come from surveys focusing on fear of crime and crime prevention in six German cities: Freiburg (F), Heidelberg (HD), Mannheim (MA), Pforzheim (PF), and Friedrichshafen (FN); all cities are located in the state of Baden-Württemberg <sup>[9,12,34]</sup>. All samples were random samples of citizens registered in these cities. The minimum age was 14 years in each sample.

The surveys were conducted in the period from 1998 to 2022. The FH98, HD09, and HD17 surveys were run as mail surveys. The MA12, MA16, and MA20 surveys were mixed mail and online surveys. The PF20 and FN22 surveys were online surveys.

All surveys were anonymous. No incentives were offered for participating in the surveys. However, a letter signed by the mayor of the respective city asked the selected persons to support the city's administration by providing data needed to prevent crimes. The time window of data collection was three weeks in all surveys.

The surveys varied in their sample size between 5,000 and 16,000 persons. The return rates were about 30% in each survey. This compares well to the participation rate of the (interviewer-based) European Social Survey in Germany [35]. The realized sample sizes ranged from 28% (HD09) to 36% (MA16), with 24,000 persons overall. The demographics of the participants compared closely to the demographics of the respective populations. Females were slightly over-represented (by about 5%), and older persons (aged 40 years or older) were also somewhat over-represented (by about 6%).

## 2.2 Measurement instruments

The questionnaires used in the surveys contained mostly questions focusing on problems related to crimes such as the respondents' and their relatives' history of victimization, the respondents' social capital, their perception of political and economic threats, their fear of crime, their subjective well-being, and their opinions on the city's actions to prevent crime.

Each survey used the IRVS scale to measure personal values with the items shown in **Table 1**. In three surveys (MA16, HD17, and PF20), the PVQ21 (German version <sup>[36]</sup>) was also employed in addition to the IRVS.

The items of the IRVS are introduced as follows: "People have certain ideas that govern their life and their thinking. We are interested in your ideas. Please consider what you are really after in your life: How important are the things and life orientations that we have listed here? Please take a look at the various issues and mark on a scale from 1 to 7 how important they are for you. 'Seven' means that it is very important, and 'one' means that it is completely unimportant. With the values in between, you can grade the importance of the issues." [9]. [translated from German by author].

Of items #23 ("Believe in God") and #22 ("Religion and religious faith"), only one item was used in each survey. Items #34 to #40 were not employed in every survey (see the "NA" entries in **Table 1**). Hence, the statistical results for these items are based on fewer respondents than items asked in all surveys. Two items (#38, #40) were presented in only one survey each. However, the number of respondents is still large in each case (4,111 and 5,198, respectively). The order of the items in the questionnaires was always as shown in **Table 1**. Item #1 "Respecting law and order" was always the first item.

All surveys asked for the respondents' gender and age. Age was measured in years or decades, and then always recorded into the categories 1 = "up to 19 years", 2 = "20-29 years", etc. up to "80+".

## 2.3 Statistical data analysis

All statistical analyses were run in the R environment [37]. For Multidimensional Scaling (MDS) of the item inter-correlations, the R-package SMACOF [38] was utilized. The default of all MDS analyses was ordinal MDS and a 2-dimensional solution space with a Torgerson starting configuration. The model fit of the MDS solution (*Stress*) was assessed utilizing both random benchmarks and permutation tests [39]. The rating scores of all items on personal values were centered, person by person, so that the ratings should be interpreted as relative importance scores, where "relative" means "relative to the individual's mean importance ratings".

All MDS solutions were fitted to the overall MDS solution in **Figure 1** by Procrustean transformations. Such transformations eliminate meaningless differences between any two MDS configurations, i.e. differences that are not based on the data [40]. The similarity of any two configurations was measured by Pearson correlations across the point coordinates and tested for statistical significance using permutation tests [41].

# 3. Results

We first check the structure of Schwartz's ten basic values based on the data collected by the PVQ in three surveys (MA16, HD17, PF20) with N=8,272. The MDS representation of the inter-correlations of the basic values is shown in Figure 2 (left panel). The model fit is excellent (Stress = 0.02) and highly significant. The solution largely supports the theoretical expectations: (1) The points representing the various values form an almost perfect circle; (2) the wedge-like sectors of the four higher-order values (see gray partitioning lines in the plot) contain the ten personal values as predicted; they also satisfy the predicted oppositions of the higher-order values; and (3) the value points are ordered on the circle as theoretically predicted by Schwartz [1]. One notice, in particular, that security (SE) is positioned close to

tradition (TR) and conformity (CO). All three values form the higher-order value conservation which lies opposite of self-direction and the openness-to-change values.

The right-hand side panel of **Figure 2** exhibits the MDS structure of the 21 items of the PVQ21. Its fit is Stress = 0.106\*\*. The Stress-per-point indices range from 2.0% to 7.8%, with an expected contribution percentage of 1/21 or 4.8% per point to the global Stress. Thus, no item can be identified as a misfit or outlier.

Substantively, **Figure 2** (right-hand side) shows that all items constructed to measure the same basic value are close to each other. In particular, the two items measuring security (se1 and se2) are close neighbors. They also lie in the region of the items that measure TR and CO. Moreover, the configuration of PVQ items supports the theoretical value circle. Security, thus, appears to be a conservative value.

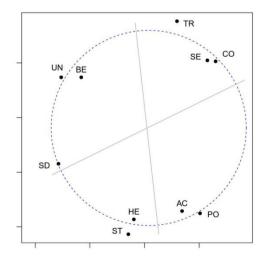
To compare the PVQ-based MDS structure with the IVRS-based observations, we first combine all eight surveys into one joint data set with 24,000 persons and 40 items. Scaling the inter-correlations of these items with MDS leads to a solution with Stress = 0.175\*\*. The MDS plot in **Figure 3** exhibits the higher-order value "dimensions" predicted by Schwartz [1,12]. One notice on the North-West side

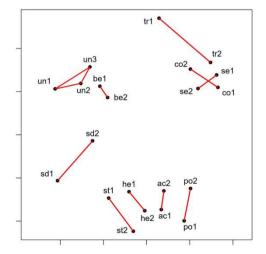
personal values of the Conservation type, opposes values of the Openness-to-Change group at the bottom of the plot. The Self-Enhancement vs. Self-Transcendence type values are found in the South-East and the North-West directions, respectively.

Regarding security, the MDS plot shows that people who strive for security also stress, in particular, the importance of respecting law and order, having a good family life, having a clear conscience, having inner peace and harmony, and healthy living as guiding principles for their lives. What they find relatively unimportant is having an exciting life or having power and influence. Striving for security, moreover, is not closely linked to conservation values.

**Figure 4** shows the MDS configurations for men (N = 10,630) and women (N = 12,758) separately. The fit values of these solutions are Stress = 0.195\*\* and 0.190\*\*, respectively. The solutions are similar to the global solution. Measured objectively, they correlate with the global solution in **Figure 2** with r = 0.970\*\* and 0.980\*\*, respectively.

**Figure 5** shows the MDS configurations of three age cohorts, with age "< 30" (N = 5,004), "30-49" (N = 7,486), and "50+" (N = 6,709), and with *Stress* = 0.170\*\*, 0.193\*\*, and 0.170\*\*, resp. The plots are similar to the overall plot in **Figure 2**. Measured objectively, the similarities are r = 0.814\*\*, 0.959\*\*, and 0.974\*\*, respectively. Thus, the youngest age





**Figure 2.** Left panel: MDS plot of the ten basic values of the Schwartz model, measured by the PVQ21 (N = 8,272); circle optimally fitted to points; gray lines partition the space into higher-order value regions. Right panel: MDS plot of the PVQ21 items; red lines connect items that theoretically measure the same basic values.

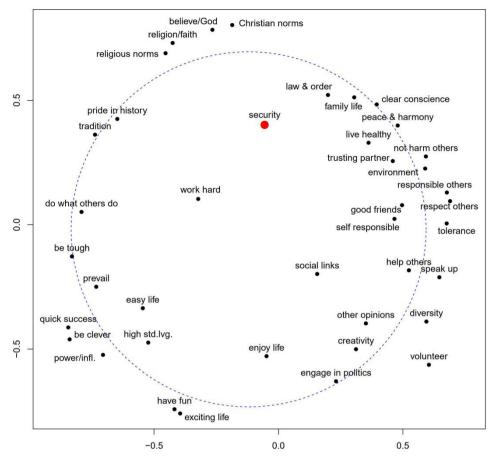


Figure 3. MDS plot of the inter-correlations of the items in Table 1; all samples combined (N = 24,000); the closer two points, the higher the correlation of the items that they represent; circle optimally fitted to points.

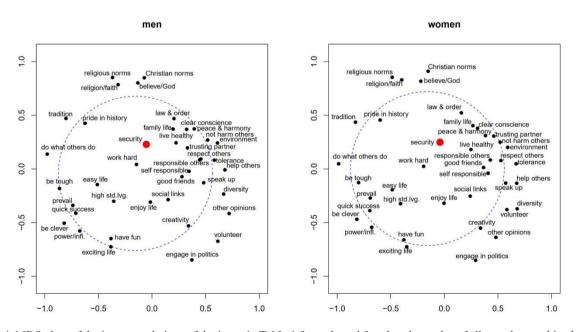
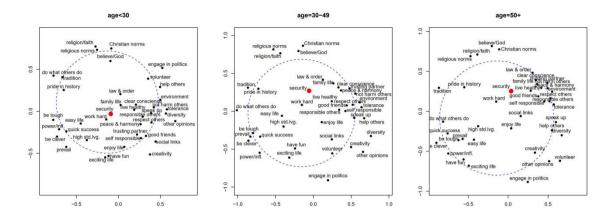


Figure 4. MDS plots of the inter-correlations of the items in Table 1 for male and female subsamples of all samples combined; circles optimally fitted to points.



**Figure 5.** MDS plots of the inter-correlations of the items in **Table 1** for three age cohorts of all samples combined; circles optimally fitted to points.

cohort deviates most from the overall configuration, but the relation of security to other values exhibits the same neighborhood relations to values such as "law & order", "work hard", "live healthy", or "tradition". One notes, moreover, that the cluster of social-emotional values in **Figure 5** tends to become more compact with age. Thus, older persons rate the importance of these values more similarly than younger persons who differentiate more among these values.

**Table 1** exhibits the correlations of item #5 ("Striving for security") with the other IRVS items, shown separately for each survey. The surveys are ordered according to the year in which they were conducted: HD98 was run in 1998, and FN22 in 2021. This allows seeing systematic time-related trends in how overall security correlates with each of the other items. However, no item shows such a trend in a magnitude that would be noteworthy.

One notices in **Table 1** that the persons' reported relative strength of striving for security is most posi-

tively correlated with their (relative) importance ratings of item #1 ("Respecting law and order"), item #8 ("Working hard and being ambitious") and item #15 ("Living a good family life"). The largest negative correlations are found for items #29 ("Living an exciting life"), #10 ("Engaging oneself in politics"), and #3 ("Having power and influence").

**Table 1** also shows the correlations of the importance ratings with the respondents' age. They show that the subjective importance of values of the Openness-to-Change and Self-Enhancement groups is decreasing with age, while those related to Conservation are increasing. The magnitudes of the correlations are remarkably similar to the correlations reported in Borg <sup>[42]</sup>, although here we use relative (i.e., centered) importance ratings, not the observed ratings as in the Borg study. Thus, one can conclude once more that the weights of the various values and their components are systematically changing with age, while the structure of the system of values (**Figure 5**) remains largely stable.

**Table 1.** Correlations of (centered) ratings of 40 IRVS items on personal values with ratings on item #5 ("Striving for security"); eight surveys FH98 ... FN22; "NA" = missing value, i.e. the item was not used in the particular survey; r(item, age) = correlations of (centered) item scores with respondents' age.

	Item	FH 98	HD 09	MA 12	MA 16	HD 17	MA 20	PF 20	FN 22	r(item, age)
N		2,930	1,581	1,908	3,272	2,770	5,198	2,230	4,111	
1	Respecting law and order	0.31	0.37	0.32	0.31	0.36	0.33	0.31	0.31	0.19
2	Having a high standard of living	0.11	0.05	0.11	0.00	0.08	0.11	0.05	0.07	-0.13
3	Having power and influence	-0.12	-0.16	-0.11	-0.20	-0.16	-0.15	-0.23	-0.16	-0.15

Table 1 continued

	Item	FH 98	HD 09	MA 12	MA 16	HD 17	MA 20	PF 20	FN 22	r(item, age)
4	Using your own ideas and creativity	-0.10	-0.02	-0.05	0.05	0.00	0.02	0.01	0.05	-0.11
5	Striving for security	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.04
6	Helping socially disadvantaged groups	-0.05	-0.01	-0.06	0.02	-0.03	-0.02	0.00	0.03	0.04
7	Asserting one's needs and prevailing over others	0.01	-0.03	0.01	-0.03	0.01	-0.01	-0.04	-0.03	-0.05
8	Working hard and being ambitious	0.18	0.18	0.17	0.17	0.18	0.19	0.20	0.21	-0.07
9	Respecting opinions you don't agree with	-0.14	-0.10	-0.12	-0.03	-0.07	-0.10	-0.04	-0.05	-0.10
10	Engaging yourself in politics	-0.23	-0.26	-0.22	-0.18	-0.21	-0.23	-0.16	-0.19	-0.01
11	Enjoying the good things in life	-0.10	-0.05	-0.04	0.03	0.05	0.06	0.11	0.04	-0.20
12	Living and acting on your responsibility	-0.13	0.05	-0.01	0.11	0.11	0.09	0.18	0.07	-0.03
13	Doing what others are doing	-0.09	-0.06	-0.05	-0.12	-0.14	-0.15	-0.24	-0.14	0.04
14	Adhering to traditions	0.02	0.07	0.07	-0.01	0.00	-0.01	-0.08	-0.02	0.19
15	Living a good family life	0.19	0.20	0.11	0.17	0.15	0.15	0.21	0.15	0.09
16	Being proud of German history	0.08	0.03	0.08	-0.03	0.05	0.05	-0.03	0.00	0.25
17	Having a partner one can rely on	0.03	0.03	0.06	0.09	0.05	0.05	0.18	0.07	-0.02
18	Having good friends who respect and accept you	-0.11	-0.04	-0.04	-0.02	-0.01	0.04	0.09	-0.01	-0.10
19	Having a lot of contact with others	-0.14	-0.13	-0.11	-0.11	-0.10	-0.12	-0.07	-0.13	0.01
20	Healthy living	0.03	0.06	0.12	0.02	0.05	0.08	0.07	0.05	0.08
21	Behaving environmentally conscious	-0.05	0.00	-0.04	0.02	0.00	0.01	0.06	0.03	0.16
22	Believe in God	0.00	0.02	NA	-0.04	NA	NA	-0.10	NA	0.17
23	Religion and religious faith	NA	NA	-0.05	NA	-0.06	-0.05	NA	NA	0.21
24	Having a clear conscience	0.07	0.10	0.02	0.18	0.11	0.12	0.13	0.12	0.12
25	Living by Christian norms and values	-0.02	-0.03	NA	-0.06	NA	NA	-0.10	NA	0.28
26	Living by religious norms and values	NA	NA	-0.04	NA	-0.10	-0.09	NA	NA	0.23
27	Living so that others are not harmed	-0.06	0.07	-0.05	0.15	0.08	0.05	0.12	0.10	0.09
28	Living an exciting life	-0.31	-0.33	-0.24	-0.24	-0.25	-0.25	-0.26	-0.25	-0.35
29	Living an easy and comfortable life	0.09	0.04	0.10	0.04	0.05	0.09	0.01	0.03	-0.06
30	A life full of enjoyment	-0.17	-0.20	-0.11	-0.14	-0.14	-0.14	-0.15	-0.15	-0.40
31	Inner peace and harmony	0.05	0.12	0.02	0.14	0.12	0.14	0.12	0.10	0.10
32	Being hard and tough	-0.03	-0.11	-0.09	-0.17	-0.08	-0.11	-0.17	-0.12	0.00
33	Having quick success	0.01	-0.08	-0.06	-0.16	-0.12	-0.13	-0.17	-0.15	-0.21
34	Being clever and smarter than others	-0.02	-0.15	-0.08	-0.17	-0.15	-0.15	-0.18	-0.18	-0.28
35	Showing moral courage	NA	NA	-0.16	NA	-0.06	-0.10	-0.03	-0.03	-0.05
36	Respecting others	NA	NA	-0.09	NA	0.05	0.02	0.11	0.04	-0.04
37	Taking responsibility for others	NA	NA	NA	NA	NA	NA	0.05	-0.03	0.06
38	Engaging in volunteer work	NA	-0.16	0.07						
39	Tolerance	NA	NA	-0.13	NA	-0.09	NA	NA	NA	0.03
40	Promoting a diverse society	NA	NA	NA	NA	NA	-0.20	NA	NA	-0.08

# 4. Discussion

We have shown that strongly striving for security is positively related not only to high importance ratings for rules and order as guiding principles in one's life, but also to prioritizing the importance of hard work, pursuing a good family life, living health-consciously, striving for a clear conscience, and for peace and harmony. People's orientations toward tradition are correlated with their striving for security, and, not surprisingly, the more people prioritize excitement and power, the less they are seeking security.

The psychological neighborhood of security to other values and value components found here would not have been observed if we had used the PVQ21 to measure the values. With this instrument, security is predictably closely related to tradition and conformity (see **Figure 2**). This is important to know because the PVQ21 is probably today's most frequently used instrument for measuring personal values. That is not to say that the results of the PVQ21 are wrong, but they express a particular notion of security that may not fully correspond to what many people mean by security as a guiding principle. Important components of what security means to people are simply not addressed by the PVQ21. The PVQ21-based index of security relies on items that assess a particular and more patriarchal type of security rather than the security generated by the person's primary environment. Thus, it is not surprising that the PVQ21-based index of security as a personal value is highly correlated with tradition and conformity.

More generally, one should take it for granted that none of the basic values is a simple psychological object but rather a *multi-dimensional notion* that is *rich in components and facets*. The predictive power of personal values for attitudes and behavior, therefore, depends on numerous side constraints and, in particular, on the items used to measure them. Yet, the meaning of the issues that the items focus on can differ for different sub-samples (as, for example, the notion of freedom that changes systematically as people get older <sup>[7]</sup>). Moreover, value components not used by the instruments may become important

as the culture changes (e.g., healthy living, racism, diversity, fear of war); or old components become irrelevant (e.g., religion). In such cases, the given instruments need to be adapted.

A further question concerning the role of security—or of any basic value and its components, for that matter—is asking in which way they are not just correlated but functionally related to each other. One such relationship is articulated in the distinction of values as either instrumental or terminal ones. According to Rokeach [17], security is an instrumental value that only serves the achievement of terminal values. Yet, based on extensive empirical data, Schwartz [43] concluded that there is "little support for the idea that the terminal-instrumental distinction is a meaningful basis on which people organize their values" (p. 37). Thus, because of its empirical ineffectiveness, this distinction has largely vanished from today's theories of personal values. On the other hand, thinking in categories of what is a driver, and what an outcome, may still be theoretically useful to better understand the observed relations of closeness and distance. An example is "working hard and being ambitious" and "security", where the former is most likely perceived as a driver of security. Similarly, "living an exciting life" is probably associated with higher levels of risk, and so it would contribute negatively to security. Security, on the other hand, may be seen as a resource that drives a good family life. Other relations of closeness may be based on semantics as, for example, the closeness of "law & order" and security, where "law & order" is simply a component of safety, not an outcome or a driver of safety. Exploring such explanations for the psychological maps exhibited by the MDS configurations could be interesting in future research and lead to insights that can help HR managers to improve people's feelings of security.

Finally, a more technical comment. In the above MDS analyses, we always used centered rating data. That is, we first subtracted the persons' ratings from their mean ratings, person by person. This is often done in value research to correct for each person's response style or because what one wants is each

person's relative importance ratings, where relative means relative to his/her anchor of judgment. We centered the data primarily to make the results comparable to other research in the personal value domain. If one does not center the data, thus analyzing the observed ratings without any preprocessing transformations, the MDS results are somewhat different: The points are spread more evenly through the value space, leading to more points in the central region, with security moving closer to the center of the value circle. Substantively, this leads to the same conclusions. The correlations of the various IRVS items with item #5 are also affected: Their magnitude is higher. For example, for observed ratings, the correlation of items #5 and #1 jumps to 0.50 (on average) compared to 0.33 for the correlations shown in Table 1. However, the pattern of high positive and high negative correlations remains the same.

# **Conflict of Interest**

There is no conflict of interest.

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