

RESEARCH NOTE

Nationalism and Constructive Patriotism: A Longitudinal Test of Comparability in 22 Countries with the ISSP

Eldad Davidov

University of Zurich, Institute of Sociology, Switzerland

Scholars of political psychology have paid considerable attention to the study of national attachment as an individual group association (Ashmore, Jussim, & Wilder, 2001; Knight, 1997). Some of these studies have focused on the interrelationship between national attachment and different theoretical constructs of interests such as religious or ethnic identities (e.g., Davis, 1999; Knight, 1997; Muldoon, Trew, Todd, Rougier, & McLaughlin, 2007; Roccas, Sagiv, Schwartz, Halevy, & Eidelson, 2008; Sidanius, Feshbach, Levin, & Pratto, 1997), authoritarianism, anomie, and general self-esteem (Blank, 2003) or attitudes toward foreigners and tolerance for cultural diversity (Billiet, Maddens, & Beerten, 2003; Blank & Schmidt, 2003; Hjerme, 1998; Li & Brewer, 2004; Raijman, Davidov, Schmidt, & Hochman, 2008). Many of these studies largely differentiate between two types of national attachment: one blind, militaristic, ignorant and obedient (often called nationalism or chauvinism), and another which is genuine, constructive, critical, civic, and reasonable (often called constructive patriotism [CP]; see e.g., Blank, 2003; Blank & Schmidt, 2003; Coenders & Scheepers 1999, 2003; Rothi, Lyons, & Chrysochoou, 2005; Smith & Kim, 2006).

Studying macrolevel changes over time in national attachment is of central importance to the understanding of contemporary societies. However, this involves the consideration of additional methodological issues which are not necessary in the work with cross-sectional data. When change is studied, it is first necessary to guarantee that the concepts are equivalent over time. Only if equivalence is first established can researchers compute changes and interpret them in a meaningful way. This study examines the longitudinal comparability of measurements of nationalism and CP across 22 countries during the period between 1995 and 2003. Using multiple-group confirmatory factor analysis (MG-CFA) and data from the International Social Survey Program (ISSP), I assess configural and metric invariance—necessary conditions for

Correspondence concerning this article should be addressed to Eldad Davidov, University of Zurich, Institute of Sociology, Andreasstrasse 15, 8050 Zurich, Switzerland. E-mail: davidov@soziologie.uzh.ch

the comparability of correlates of the concepts over time, and scalar invariance—a necessary condition for mean comparison over time. Thus, the current contribution has the principal objective of testing whether two aspects of national attachment, nationalism and CP, are equivalent over time. Subjecting their measurements to such a test may enable researchers to meaningfully estimate change over time. Before conducting the empirical test, a brief review of the literature is presented.

Nationalism and Constructive Patriotism

National attachment is a sense of “belongingness” to the nation as a whole (Sidanius et al., 1997; see also Blank, Schmidt, & Westle, 2001). However, it reflects different aspects of an individual’s relationship toward his or her nation. Several authors have proposed to distinguish between the dimensions of national identity rather than studying it as a one-dimensional concept. At first, theoretical distinctions were considered (Schatz, Staub, & Lavine, 1999; Staub, 1997). The studies of Curti (1946), Morray (1959), Sommerville (1981), and Adorno, Frenkel-Brunswik, Levinson, and Sanford (1950) distinguished between “pseudo patriotism”, militaristic patriotism, blind attachment and uncritical conformity on the one hand, and civic “genuine” patriotism that is concerned with the love of the country on the other hand. Empirical studies considered the multidimensionality of national identity from the 1980s (Heaven, Rajab, & Ray, 1985; Ray & Furnham, 1984; Ray & Lovejoy, 1986). In a series of studies, Feshbach has empirically distinguished between two types of national attachment. The first, nationalism, was regarded as national superiority; this is termed also as chauvinism. The second, patriotism, reflected one’s love of country and its major symbols: it was politically a more neutral form of national attachment than nationalism (see Coenders & Scheepers 1999, 2003; Feshbach, 1987, 1992, 1994; Kosterman & Feshbach, 1989). Further empirical work was conducted by Smith and Jarkko (2001); they used the ISSP 1995 data to measure national pride in a cross-national perspective. Their work differentiated between national pride, patriotism, and nationalism (for further analyses with the ISSP 1995 data, see also Coenders & Scheepers, 1999, 2003). Knudsen (1997) conducted similar work but he termed the constructive aspect of national attachment “system legitimacy.”

Blank (2003) and Blank and Schmidt (2003) distinguish between nationalism and patriotism as two distinct concepts from the viewpoint that they may have different results in terms of the formation of attitudes and behavior (Ajzen, 2005). They characterize nationalism as “an idealization of the nation . . . the conviction of one’s own national superiority and the generalized positive judgment of one’s own nation” (p. 262). They argue that nationalism also involves denial of nation-related negative or ambivalent attitudes. They describe patriotism (or “genuine” patriotism, Adorno et al., 1950) with quite the opposite terms. Patriotism rejects an idealization of the nation and reflects a constructive and critical view of it (see also Easton, 1975), support for the system as long as it is in accord with humanistic values, a feeling that the state may be criticized, and acceptance of negative nation-related emotions. From this perspective, nationalism and patriotism are subdimensions of national attachment, which is the more general concept. Bar-Tal (1997) and Schatz and Staub (1997) offered a similar proposition.

Since national attachment implies both nationalistic and patriotic sentiments, it is expected that nationalism and CP are positively associated with each other. However, their consequences in terms of attitudes toward minorities and exclusion are expected to be different. Whereas nationalists are expected to have stronger exclusionary attitudes toward minorities, patriots are expected to be more positive toward immigrants or other minorities (Raijman et al., 2008). Using a representative survey panel data from 1996 in Germany, Blank and Schmidt (2003) tested the validity and reliability of their indicators. However, there were some validity problems in the analyses since some of the factor loadings between the concepts and the indicators were low. Their operationalization was also criticized by Cohrs (2005), who argued that the criterion-related validity of the concepts was not always supported by the data.

Following this line, Davidov (2009) considered how the two concepts of national identity may be measured in a cross-national perspective across the full set of ISSP nations. He proposed a feasible shortened set of items from the ISSP 2003 National Identity Module to operationalize them. This operationalization was shown to possess construct validity in several countries using the ISSP data (see Raijman et al., 2008). Thus, this study did not strive to propose an ultimate set of items to measure nationalism and CP, but rather to suggest a reasonable set of items which is available for a large number of countries and that functions well in these countries. Strict tests of invariance across 34 countries demonstrated that this set of items works well in all ISSP countries and that they display metric invariance, thus allowing the comparison of correlates of nationalism and CP across the countries. However, in the present case, additional tests are necessary to study *change* in nationalism and CP between 1995 and 2003, the two time points in which the ISSP collected data on national identity. In this study, I will test whether change in national attachment as operationalized in Davidov (2009) may be computed meaningfully by subjecting the ISSP national identity data in 1995 and 2003 to strict tests of invariance for each country.

I would like to note that several authors name and operationalize dimensions of national attachment somewhat differently. Some focus on national identity (Blank and Schmidt 2003) whereas others on national pride (Hjerm, 1998, 2003). Also operationalizations differ: whereas Blank and Schmidt (2003) or Davidov (2009) name the constructive reasonable aspect of national attachment patriotism or constructive patriotism, Hjerm (1998, 2003) names it political national pride, and Knudsen (1997) names it system legitimacy. This differentiation between two aspects of national attachment is also somewhat different from the one used by Heath, Martin, and Spreckelsen (2009) of civic and ethnic national identity (see also Hjerm, 1998, 2004; Kunovich, 2009; Smith, 1991), from that of Evans (1996) of active and passive national identity, from that of political and nation-cultural national pride (Hjerm 1998), or of ascriptive and objectivist criteria of national identity (Jones and Smith 2001a, b) (for a general discussion on the multidimensionality of national identity and for an examination of the full range of the indicators, see, e.g., Bonikowski, 2009; Evans & Kelley, 2002; Haller, 1991). In this study, I confine myself to the proposals of Blank and Schmidt (2003), Blank (2003), Coenders (2001), Coenders and Scheepers (1999, 2003), and Davidov (2009) to define and measure national attachment.

In sum, I am not going to propose an uncontroversial definition or operationalization of different forms of national attachment nor suggest how disagreements as to

how national attachment should be best conceptualized and operationalized be solved. Instead, I suggest applying measurements from a previous study (Davidov, 2009) of nationalism (or national superiority) and CP (or system legitimacy) for a longitudinal examination, demonstrate how strict tests of invariance should be conducted on them, and find out whether change may be studied. Researchers applying other instruments to measure nationalism, CP, or other dimensions of national attachment could follow similar procedures to assess whether their instrument may be compared over time.

Testing for Invariance

Before comparing the means of nationalism and CP over time and looking into their evolution, it is necessary to guarantee that the measurement of these variables supports equivalence of their characteristics (Billiet, 2003). The meaning of measurement equivalence is “whether or not, under different conditions of observing and studying phenomena, measurement operations yield measures of the same attribute” (Horn & McArdle, 1992, p. 117). If we do not assess measurement invariance, comparisons of means and associations (like regression coefficients or covariances) across countries or over time might be problematic (Billiet, 2003; Cheung & Rensvold, 2000, 2002; Harkness, Van de Vijver, & Mohler, 2003; Hui & Triandis, 1985). Findings of differences in means or associations may be a result of systematic biases in response patterns or different interpretations of the questions by respondents. Similarly, findings of no difference do not guarantee the absence of “real” differences. Similar principles of testing for equivalence in a cross-cultural framework may be applied also in a longitudinal framework.

Several techniques have been proposed to test for measurement invariance. However, MGCFA (Jöreskog, 1971) is one of the mostly applied techniques. There are two common strategies. The first strategy, the “bottom-up approach,” begins with the least constrained model and gradually increases the number of constraints imposed on the model. The number of constraints is increased until the model is rejected by the data. The second strategy, “the top-down approach,” starts with the most constrained model and gradually decreases the number of constraints until the model is supported by the data. Several sources provide methods for the evaluation of construct equivalence (see, e.g., Cheung & Rensvold, 2002; De Beuckelaer, 2005; Steenkamp & Baumgartner, 1998; Vandenberg, 2002; Vandenberg & Lance, 2000). The present study draws upon these general approaches and applies the “bottom-up-approach” to find out whether even weak forms of invariance are absent.

The lowest level of invariance is “configural” invariance (Horn & McArdle, 1992). Configural invariance requires that factors are measured by the same indicators across time points (or cultural groups). In other words, the confirmatory factor analysis confirms that the items exhibit the same configuration of loadings on their respective latent variables at the different time points.

The test of the higher level of invariance is called “metric invariance.” It requires that the factor loadings between items and factors are equal over time. It is tested by restricting the factor loading of each item on its corresponding factor to be equal. This level of invariance assesses a necessary condition for equivalence of meaning of the concept across the different time points. Guaranteeing metric invariance implies

that the concept relates equally to its indicators (Vandenberg & Lance, 2000) and is a necessary condition to conduct a comparison of factors' correlates.

The next (third) level of invariance, "scalar invariance," should be established to justify comparing the means of the factors across time points (Meredith, 1993; Steenkamp & Baumgartner, 1998). Scalar invariance implies that temporal differences in the means of the observed items are a result of differences in the means of their corresponding constructs and not a result of differences in the intercepts. To test for scalar invariance, one constrains the intercepts of the indicators to be equal over the time points (in addition to the factor loadings) (Sörbom, 1974).

However, several authors have argued that it is not necessary that all factor loadings or intercepts are invariant. Invariance of constructs is guaranteed when at least two indicators per construct are equal across all countries (Byrne, Shavelson, & Muthen, 1989; Steenkamp & Baumgartner, 1998). In other words, for partial metric invariance to hold, it is necessary that only two factor loadings are equal across groups or time points. For partial scalar invariance to hold, one would expect the intercepts of only two indicators per construct to be equal across time points. Thus, if full measurement invariance appears not to hold, we can still resort to this partial measurement invariance. To sum up, to conduct a comparison of construct means over time and to interpret this meaningfully, three levels of invariance need to be assessed: configural, metric, and scalar.

Data and Measurements

The Data Set

The two latest releases of the ISSP's National Identity Module allow us to study the measurement of nationalism and CP at two distinct time points. A total of 24 countries were included in the 1995 data set and 35 countries were included in the 2003 data set. Of these, 22 countries participated in both rounds of the ISSP and provided us with the opportunity to investigate change in nationalism and CP over the last decade. The total number of respondents in the 22 countries included in the study is 55,370. A total of 28,257 of the respondents were interviewed for the 1995 survey and 27,113 respondents were interviewed for the 2003 survey. Table 1 displays the number of respondents who completed the questionnaire in each country and ISSP round. Detailed information about the data may be retrieved from http://www.gesis.org/en/data_service/issp/index.htm.

The Indicators

Based on discussions in the previous section and preliminary confirmatory factor analyses (Davidov, 2009), two questions were chosen to measure nationalism and three to measure CP (factor analyses have shown that only these items load substantially on the constructs nationalism and CP in all countries and time points). CP was measured by three questions about civic and political pride: (a) "How proud are you of [Respondent's Country] in the way democracy works?" (CP1); (b) "How proud are you of [Respondent's Country] social security system?" (CP2); and (c) "How proud

Table 1
Sample Size in Each Country, 1995 and 2003

Country	1995	2003
1. Australia	2,438	2,183
2. Austria	1,007	1,006
3. Bulgaria	1,105	1,069
4. Czech Republic	1,111	1,276
5. Germany—East	612	437
6. Germany—West	1,282	850
7. Great Britain	1,058	873
8. Hungary	1,000	1,021
9. Ireland	994	1,065
10. Japan	1,256	1,102
11. Latvia	1,044	1,000
12. The Netherlands	2,089	1,823
13. New Zealand	1,043	1,036
14. Norway	1,527	1,469
15. Philippines	1,200	1,200
16. Poland	1,598	1,277
17. Russia	1,585	2,383
18. Slovakia	1,388	1,152
19. Slovenia	1,036	1,277
20. Spain	1,221	1,212
21. Sweden	1,206	1,186
22. USA	1,367	1,216
Total number of respondents in the analysis	28,257	27,113

are you of [Respondent's Country] fair and equal treatment of all groups in society?" (CP3) (Knudsen, 1997, names the latent variable behind these questions system legitimacy). The three questions measure pride in civic and social or democratic institutions in the country. They were measured on a 4-point scale ranging from 1 (*not proud at all*) to 4 (*very proud*). Nationalism was measured by two statements: (a) "The world would be a better place if people from other countries were more like the [Country Nationality of the Respondent]" (N1); and (b) "Generally speaking, [Respondent's Country] is a better country than most other countries" (N2). They were measured on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The data were downloaded from <http://zacat.gesis.org/webview/index.jsp>.

Results

The data analysis starts with a computation of 44 variance-covariance input files for each country and time point (22 for 1995 and 22 for 2003). It is followed by single-group (country in a specific time point) analyses and by 22 MGCFA for each country. Each MGCFA includes one country and two time points; each time point is one group in the analysis. Configural, metric, and scalar invariance between 1995 and 2003 are tested sequentially. If model modifications are suggested by the

program, they are introduced into the model until the global model fit is acceptable. Finally, all the analyses are repeated using the raw data and the full information maximum likelihood (FIML) approach which is recommended to deal with the problem of missing values (see Schafer & Graham, 2002). Analyses are conducted with the program Amos 16.0 (Arbuckle, 2005).

To compare between models we do not use the chi-square difference test because it is not recommended when the sample size is large (Cheung & Rensvold, 2002). Instead, we use the criteria suggested by Chen (2007): a change larger than .01 in the comparative fit index (CFI) supplemented by a change larger than .015 in the root mean square error of approximation (RMSEA) will indicate noninvariance for the metric and scalar invariance tests.

In the first step, single-country analyses were conducted with the proposed measurements. With a few exceptions, factor loadings on nationalism and CP in all countries were higher than .5 and most of them were higher than .6 (the outputs may be provided by the author upon request). Such factor loadings combined with a reasonable model fit are sufficient to empirically accept the models (Brown, 2006; for alternative criteria, see Saris, Satorra & Van der Veld, 2009 or Saris & Gallhofer, 2007).

In the next step, I conducted multigroup comparisons for each country separately, where the groups represented the two time points. As Table 2 (columns III–V) shows, none of the configural invariance models can be rejected (Hu & Bentler, 1999; Marsh, Hau, & Wen, 2004). For 15 MGCFA models no modifications are needed. This implies that the measurement of nationalism and CP produces an acceptable fit to the data for these countries in both the 1995 and 2003 data. The factor loadings are all substantial (standardized factor loadings are higher than .50 in almost all countries and higher than 0.6 in most countries and time points) and significant (these outputs may be obtained from the author). A few modifications are needed to achieve a better fit for seven countries. The modifications include adding an error correlation or a cross-loading between a construct and an indicator which was not intended to measure this construct originally. In Latvia and East Germany, for instance, one CP item also partly measures nationalism, and in East Germany, one nationalism item also partly measures CP. These modifications are summarized in the second column (II) of Table 3. From methodological and substantive points of view, these modifications indicate that convergent and discriminant validity (Campbell & Fiske, 1959) are not always fully present since some items are related directly to the other concept as well. Failing to consider these modifications might lead to the rejection of the models and to distorted estimates of model parameters with overestimated factor correlations and distorted structural relations (Marsh et al., 2009). Therefore, it is recommended to look for those modifications and account for them. Furthermore, although significant, the cross-loadings were much weaker than the main loadings so the original meaning of the constructs remains largely unchanged. As Marsh, Hau, and Grayson (2005) have argued, apparently almost no multidimensional instrument in practice provides a good fit without some modifications.

The seventh, eighth, and ninth columns (VII–IX) in Table 2 report the fit indices for the metric invariance model. Metric invariance is necessary in order to be able to compare the correlates of nationalism and CP between 1995 and 2003. None of the

Table 2
Longitudinal Multiple-group Comparison in Each Country, 1995 and 2003: Modifications and Global-fit Measures for the Configural, Metric, and Scalar Invariance Models^a

Country	Configural invariance			Metric invariance			Scalar invariance				
	II. Modification	III. CFI	IV. RMSEA	V. Pelose Modification	VI. CFI	VII. RMSEA	IX. Pelose Modification ^c	X. Modification ^c	XI. CFI	XII. RMSEA	XIII. Pelose
1. Australia	E3↔E4	.991	.029	.999	.989	.025	1.000	E2↔E3 in 1995; In(p1)	.983	.030	1.000
2. Austria		.987	.036	.945	.989	.029	.998	In(p2)	.981	.034	.991
3. Bulgaria		1.000	.000	1.000	1.000	.000	1.000	In(p3)	.984	.027	1.000
4. Czech Republic		.998	.014	1.000	.994	.019	1.000	In(p2)	.993	.019	1.000
5. Germany—East	Na→p2 in 1995; Pa→n1 in 1995	1.000	.000	.995	.995	.021	.990	In(p1)	.992	.024	.990
6. Germany—West	E1↔E5 in 1995	.992	.031	.980	.991	.028	.998	In(p3)	.984	.032	.995
7. Great Britain		.986	.039	.887	.981	.038	.941		.979	.036	.982
8. Hungary		.993	.025	.997	.989	.026	.999	In(p3)	.981	.031	.997
9. Ireland		.982	.033	.971	.982	.029	.968	In(p2)	.981	.027	1.000
10. Japan		.987	.033	.984	.989	.026	1.000		.978	.032	.999
11. Latvia	E2↔E3 in 2003; Na→p1 in 2003	1.000	.000	1.000	.998	.016	1.000	In(p3)	.997	.017	1.000
12. The Netherlands		.997	.015	1.000	.997	.012	1.000		.994	.015	1.000
13. New Zealand	E3↔E4 in 2003	.999	.009	1.000	.998	.011	1.000	In(p1); E2↔E3 in 1995	.992	.020	1.000
14. Norway	E1↔E5 in 2003	.997	.016	1.000	.992	.021	1.000	In(p1)	.990	.022	1.000
15. Philippines		.993	.023	.999	.994	.019	1.000	In(n2); In(p2)	.994	.017	1.000
16. Poland		.993	.023	.997	.991	.023	1.000	In(p1)	.986	.027	1.000
17. Russia		1.000	.000	1.000	1.000	.000	1.000		1.000	.004	1.000
18. Slovakia		.987	.042	.844	.987	.036	.984	In(p2); E4↔E5 in 1995	.986	.036	.990
19. Slovenia		.994	.023	.999	.993	.021	1.000	In(p2)	.993	.019	1.000
20. Spain		.991	.034	.976	.987	.035	.989	In(p2)	.988	.031	.999
21. Sweden		.991	.028	.999	.991	.024	1.000		.985	.028	1.000
22. USA	E2↔E4	.984	.038	.930	.981	.034	.991	In(p3)	.980	.032	.998

^aCanada is not included in the analyses because no data is available for V37 in 1995; Na = Nationalism; Pa = Patriotism; In = Intercept—freeing an equality constraint for an intercept; ↔ freeing a covariance; → freeing a regression or an equality constraint of a regression from Na or Pa to an indicator; see text for a list of items.

^bAdditional modifications to those done in the configural invariance model.
^cAdditional modifications to those done in the metric invariance model.

models can be rejected based on these results. Also, an inspection of the differences in CFI and RMSEA between the configural and the metric invariance models in each country suggests that the metric invariance model is not worse than the configural invariance model. In other words, people display a similar understanding of the concepts in 1995 and 2003. In 21 countries, the data support full longitudinal metric invariance. Only in the Netherlands is partial metric invariance achieved when an equality constraint on one of the factor loadings of CP is released.

Finally, the last four columns of Table 2 (XI–XIII) report the results of the scalar invariance test. Scalar invariance is necessary in order to compare the means of nationalism and CP between 1995 and 2003. The table reports the modification indices required to achieve an acceptable fit for the scalar invariance model and the global fit measures. None of the scalar invariance models can be rejected based on the fit measures. An inspection of the differences in RMSEA and CFI between the metric and the scalar invariance models suggests that the scalar invariance model is not worse than the metric invariance model in all the countries. A few modification indices required freeing the covariance between errors. Most of the modifications required releasing one of the equality constraints of the intercepts of the CP indicators. Thus, in 17 countries partial scalar invariance is established for CP. Full scalar invariance of CP is established for the other five countries. Twenty-one countries display full scalar invariance for the nationalism construct. The Philippines is the only country for which no scalar invariance is verified for nationalism.

In sum, the findings that are presented indicate that metric invariance holds for the full set of 22 countries between 1995 and 2003. This implies that the meaning of the constructs as measured by the chosen indicators has probably not changed in these countries, and the constructs' correlates may be compared over time. Comparing means of nationalism and constructive patriotism is also possible because partial scalar invariance was confirmed. Only in the Philippines does comparing means of nationalism over time remain problematic (for techniques of how to compare latent means, see Little, Slegers, & Card, 2006).

Now, since temporal metric and scalar invariance are established, I would like to compare the means of nationalism and CP across time points. Before doing that, I would like to note that concluding about real change assumes that the samples are representative of the population at each time point and comparable. Possible threats for the comparability of the samples are different nonresponse rates, different sampling designs, or changes in the population in respect with important covariates (in this case such covariates have to be measured in the same way at different time points and controlled for). Thus, testing for measurement invariance is a necessary but not a sufficient condition for mean comparison. Table 3 reports the mean differences in nationalism and CP between 1995 and 2003.

As one can see, in 11 countries there was a significant ($p < .05$) change in the mean level of nationalism (or national superiority). It increased in three countries, Hungary, Russia, and Slovakia. Although there was also a positive and significant change in the mean level of the latent variable of nationalism in the Philippines, we cannot interpret it meaningfully because scalar invariance could not be established over time for this construct. In eight countries, the mean level of nationalism decreased between 1995 and 2003. Constructive patriotism changed significantly ($p < .05$) in 18 countries.

Table 3
Latent Mean Differences in Nationalism and Patriotism, 1995–2003 in each Country

Country	Mean Nationalism 2003– Mean Nationalism 1995	Mean CP 2003– Mean CP 1995
1. Australia	0.033	0.108*
2. Austria	-0.124*	-0.013
3. Bulgaria	-0.203*	-0.352*
4. Czech Republic	-0.050	-0.403*
5. Germany-East	-0.020	0.035
6. Germany-West	0.037	-0.192*
7. Great Britain	-0.056	0.086*
8. Hungary	0.306*	0.424*
9. Ireland	-0.297*	-0.218*
10. Japan	-0.165*	-0.145*
11. Latvia	-0.051	-0.102*
12. The Netherlands	-0.188*	-0.442*
13. New Zealand	-0.037	-0.225*
14. Norway	-0.108*	0.008
15. Philippines	0.354*	0.076*
16. Poland	-0.012	-0.111*
17. Russia	0.171*	0.091*
18. Slovakia	0.171*	-0.083*
19. Slovenia	0.070	0.120*
20. Spain	0.283*	0.136*
21. Sweden	-0.110*	-0.017
22. USA	0.004	0.099*

* $p < .05$.

It increased in eight countries and decreased in 10 other countries. The largest change in the mean of CP was reported in the Netherlands, where it decreased by 0.442. The largest change in nationalism was reported in Hungary, where it increased by 0.306. Thus, nationalism and CP seem to represent concepts that undergo change over time. These figures allow further studies to investigate changes and development in national attachment in these countries in a meaningful way and relate them to contextual variables such as state policies, economic conditions, inflow of immigration, and historical events.

Summary and Conclusions

Studying changes over time and differences across countries in national attachment is of central importance (Smith 2005; Smith & Jarkko, 1998; Smith & Kim, 2006). However, this involves additional methodological difficulties. One has to make sure that the measurement characteristics are invariant before meaningful comparisons over time can be made. As Adcock and Collier (2001) and King, Murray, Salomon, and Tandon (2004) have recently reminded us, measurement equivalence cannot be taken for granted and has to be empirically tested. The ISSP National Identity Module in

1995 and 2003 includes several questions to measure nationalism and CP as two aspects of national attachment. Five of these questions were applied in a previous study (Davidov, 2009) with the 2003 ISSP data. These questions were used in the present study to operationalize the two concepts and examine their longitudinal comparability between 1995 and 2003, across 22 countries which participated in both ISSP rounds. Indeed, studying change over time is often of special interest to social scientists.

Using MGCFA, configural, metric, and scalar invariance were assessed between 1995 and 2003 in each country separately. Nationalism and CP demonstrated a longitudinal metric and scalar equivalence in each of the 22 countries with the exception of the construct nationalism in the Philippines. In particular, comparing the correlates and the means of nationalism and CP across the two surveys is now possible in each of the countries. One may compare the relations between nationalism, CP, and other theoretical constructs of interest between 1995 and 2003. For example, comparing the relations between sociodemographic variables, threat from immigrants, attitudes toward immigration, and national identity over time is possible. If differences in the relationships are found, evidence of temporal metric invariance allows the interpretation of these differences meaningfully. Most importantly, change in the two concepts may be meaningfully studied and linked to contextual variables such as state policies, significant events, or economic conditions.

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References

- Adcock, R., & Collier, D. (2001). Measurement validity: A shared standard for qualitative and quantitative research. *American Political Science Review*, 95(3), 529–546.
- Adorno, T. W., Frenkel-Brunswik, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. New York: Harper & Row.
- Ajzen, I. (2005). *Attitudes, personality, and behavior*. New York: Open University Press.
- Arbuckle, J. L. (2005). *Amos 6.0 user's guide*. Chicago: SPSS.
- Ashmore, R. D., Jussim, L. J., & Wilder, D. (2001). *Social identity, intergroup conflict, and conflict reduction*. Oxford: Oxford University Press.
- Bar-Tal, D. (1997). The monopolization of patriotism. In D. Bar-Tal & E. Staub (Eds.), *Patriotism in the lives of individuals and nations* (pp. 246–270). Chicago: Nelson-Hall.
- Billiet, J. (2003). Cross-cultural equivalence with structural equation modeling. In J. A. Harkness, F. J. R. Van de Vijver & P. P. Mohler (Eds.), *Cross-cultural survey methods* (pp. 247–264). New York, NY: John Wiley.

- Billiet, J., Maddens, B., & Beerten, R. (2003). National identity and attitude toward foreigners in a multinational state: A replication. *Political Psychology*, 24(2), 241–257.
- Blank, T. (2003). Determinants of national identity in East and West Germany: An empirical comparison of theories on the significance of authoritarianism, anomie, and general self-esteem. *Political Psychology*, 24, 259–288.
- Blank, T., & Schmidt, P. (2003). National identity in a united Germany: Nationalism or patriotism? An empirical test with representative data. *Political Psychology*, 24, 289–311.
- Blank, T., Schmidt, P., & Westle, B. (2001). 'Patriotism' – a contradiction, a possibility, or an empirical reality? Paper presented at the ECPR, Grenoble, France, April 2001.
- Bonikowski, B. (2009). *Beyond national identity: Collective schemata of the nation in thirty countries*. Paper presented at the APSA meeting, September 3–6, Toronto, Canada.
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York, NY: The Guilford Press.
- Byrne, B. M., Shavelson, R. J., & Muthén, B. (1989). Testing for the equivalence of factor covariance and mean structures: The issue of partial measurement invariance. *Psychological Bulletin*, 105, 456–466.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait multimethod matrices. *Psychological Bulletin*, 56, 81–105.
- Chen, F. F. (2007). Sensitivity of goodness of fit indices to lack of measurement invariance. *Structural Equation Modeling*, 14, 464–504.
- Cheung, G. W., & Rensvold, R. B. (2000). Assessing extreme and acquiescence response sets in cross-cultural research using structural equations modeling. *Journal of Cross-Cultural Psychology*, 31, 187–212.
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing Measurement invariance. *Structural Equation Modeling*, 9, 233–255.
- Coenders, M. (2001). *Nationalistic attitudes and ethnic exclusionism in a comparative perspective. An empirical study of attitudes toward the country and ethnic immigrants in 22 countries*. Unpublished doctoral dissertation, University of Groningen, Groningen, The Netherlands.
- Coenders, M., & Scheepers, P. (1999). Een internationale vergelijking van nationalisme en etnisch exclusionisme [An international comparison of nationalism and ethnic exclusion]. In W. A. R. Shadid & P. S. Koningsveld (Eds.), *Beeldvormingen interculturele communicatie* (pp. 15–40). Tilburg, The Netherlands: Tilburg University Press.
- Coenders, M., & Scheepers, P. (2003). The effect of education on nationalism and ethnic exclusionism: An international comparison. *Political Psychology*, 24, 313–343.
- Cohrs, J. C. (2005). Patriotismus- sozialpsychologische aspekten [Patriotism - social-psychological aspects]. *Zeitschrift für Sozialpsychologie*, 36, 3–11.
- Curti, M. (1946). *The roots of American loyalty*. New York: Columbia University Press.
- Davidov, E. (2009). Measurement equivalence of nationalism and constructive patriotism in the ISSP: 34 countries in a comparative perspective. *Political Analysis*, 17, 64–82.

- Davis, C. T. (1999). Revisiting group attachment: Ethnic and national identity. *Political Psychology*, 20(1), 25–47.
- De Beuckelaer, A. (2005). *Measurement invariance issues in international management research*. Unpublished doctoral dissertation, Limburgs Universitair Centrum, Limburg, The Netherlands.
- Easton, D. (1975). A re-assessment of of the concepts of political support. *British Journal of Political Science*, 5, 435–457.
- Evans, M. D. R. (1996). National identity. *WvA: Worldwide Attitudes*, 1996.03.22, 1–6.
- Evans, M. D. R., & Kelley, J. (2002). National pride in the developed world: Survey data from 24 nations. *International Journal of Public Opinion Research*, 14, 303–338.
- Feshbach, S. (1987). Aggression, national attachment and the search for peace: Psychological perspectives. *Aggressive Behavior*, 13, 315–325.
- Feshbach, S. (1992). Parental attachments, national attachments and attitudes towards war: Some further explorations and thoughts. In A. Fraczek & H. Zumkley (Eds.), *Socialization and aggression*. New York: Springer.
- Feshbach, S. (1994). Nationalism, patriotism and aggression: A clarification of functional differences. In L. R. Huesmann (Ed.), *Aggressive behavior: Clinical perspectives*. New York: Plenum.
- Haller, M. (1991). *Ethnic and national consciousness and identification in comparative perspective: Proposal to the ISSP*. Graz, Austria: MS, Institut für Soziologie der Universitaet Graz.
- Harkness, J. A., van de Vijver, F. J. R., & Mohler, P. Ph. (Eds.) (2003). *Cross-cultural survey methods*. New York: John Wiley.
- Heath, A., Martin, J., & Spreckelsen, T. (2009). Cross-national comparability of survey attitude measures. *International Journal of Public Opinion Research*, 21, 293–315.
- Heaven, P. C. L., Rajab, D., & Ray, J. J. (1985). Patriotism, racism, and the disutility of the ethnocentrism concept. *Journal of Social Psychology*, 125, 181–185.
- Hjerm, M. (1998). National identities, national pride, and xenophobia: A comparison of four western countries. *Acta Sociologica*, 41(4), 335–347.
- Hjerm, M. (2003). National sentiments in eastern and western Europe. *Nationalities Papers*, 31, 413–429.
- Hjerm, M. (2004). Defending liberal nationalism – At what cost? *Journal of Ethnic & Migration Studies*, 30, 41–57.
- Horn, J. L., & McArdle, J. (1992). A practical and theoretical guide to measurement invariance in aging research. *Experimental Aging Research*, 18, 117–144.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1–55.
- Hui, C. H., & Triandis, H. C. (1985). Measurement in cross-cultural psychology. A review and comparison of strategies. *Journal of Cross-Cultural Psychology*, 16, 131–152.
- Jöreskog, K. G. (1971). Simultaneous factor analysis in several populations. *Psychometrika*, 36, 409–426.

- Jones, F. L., & Smith, P. (2001a). Diversity and commonality in national identities: An exploratory analysis of cross-national patterns. *Journal of Sociology*, 37, 45–63.
- Jones, F. L., & Smith, P. (2001b). Individual and societal bases of national identity. *European Sociological Review*, 17, 103–118.
- King, G., Murray, C. J. L., Salomon, J. A., & Tandon, A. (2004). Enhancing the validity and cross-cultural comparability of measurement in survey research. *American Political Science Review*, 98(1), 191–207.
- Knight, K. (1997). Students of nationalism. *West European Politics*, 20, 173–179.
- Knudsen, K. (1997). Scandinavian neighbours with different character? Attitudes toward immigrants and national identity in Norway and Sweden. *Acta Sociologica*, 40, 223–243.
- Kosterman, R., & Feshbach, S. (1989). Toward a measure of patriotic and nationalistic attitudes. *Political Psychology*, 10, 257–274.
- Kunovich, R. M. (2009). The sources and consequences of national identification. *American Sociological Review*, 74, 573–593.
- Li, Q., & Brewer, M. B. (2004). What does it mean to be an American? Patriotism, nationalism, and American identity after 9/11. *Political Psychology*, 25, 727–739.
- Little, T. D., Slegers, D. W., & Card, N. A. (2006). A non-arbitrary method of identifying and scaling latent variables in SEM and MACS models. *Structural Equation Modeling*, 13, 59–72.
- Marsh, H. W., Hau, K.-T., & Grayson, D. (2005). Goodness of fit evaluation in structural equation modeling. In A. Maydeu-Olivares & J. McCordle (Eds.), *Psychometrics: A Festschrift to Roderick P. McDonald* (pp. 275–340). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Marsh, H. W., Hau, K.-T., & Wen, Z. (2004). In search of golden rules: Comment on hypothesis-testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu and Bentler's (1999) findings. *Structural Equation Modeling*, 11, 320–341.
- Marsh, H. W., Muthén, B., Asparouhov, T., Lüdtke, O., Robitzsch, A., Morin, A. J. S., et al. (2009). Exploratory structural equation modeling, integrating CFA and EFA: Application to students' evaluations of university teaching. *Structural Equation Modeling*, 16, 439–476.
- Meredith, W. (1993). Measurement invariance, factor analysis and factorial invariance. *Psychometrika*, 58, 525–543.
- Murray, J. P. (1959). *Pride of state*. Boston: Beacon.
- Muldoon, O. T., Trew, K., Todd, J., Rougier, N., & McLaughlin, K. (2007). Religious and national identity after the Belfast Good Friday Agreement. *Political Psychology*, 28(1), 89–103.
- Raijman, R., Davidov, E., Schmidt, P., & Hochman, O. (2008). What does a nation owe non-citizens? National attachments, perception of threat and attitudes to granting citizenship rights in a comparative perspective. *International Journal of Comparative Sociology*, 49(2–3), 195–220.
- Ray, J. J., & Furnham, A. (1984). Authoritarianism, conservatism, and racism. *Ethnic and Racial Studies*, 7, 406–412.

- Ray, J. J., & Lovejoy, F. H. (1986). The generality of racial prejudice. *Journal of Social Psychology*, 126, 563–564.
- Roccas, S., Sagiv, L., Schwartz, S., Halevy, N., & Eidelson, R. (2008). Toward a unifying model of identification with groups: Integrating theoretical perspectives. *Personality and Social Psychology Review*, 12, 280–306.
- Rothi, D. M., Lyons, E., & Chrysochoou, X. (2005). National attachment and patriotism in a European nation: A British study. *Political Psychology*, 26(1), 135–155.
- Saris, W. E., & Gallhofer, I. N. (2007). *Design, evaluation and analysis of questionnaires for survey research*. New York: Wiley.
- Saris, W. E., Satorra, A., & van der Veld, W. (2009). Testing structural equation models or detection of misspecifications? *Structural Equation Modeling*, 16, 561–582.
- Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, 7, 147–177.
- Schatz, R. T., & Staub, E. (1997). Manifestations of blind and constructive patriotism: Personality correlates and individual group relations. In D. Bar-Tal & E. Staub (Eds.), *Patriotism in the lives of individuals and nations* (pp. 229–246). Chicago: Nelson-Hall Publishers.
- Schatz, R. T., Staub, E., & Lavine, H. (1999). On the varieties of national attachment: Blind versus constructive patriotism. *Political Psychology*, 20(1), 151–174.
- Sidanius, J., Feshbach, S., Levin, S., & Pratto, F. (1997). The interface between ethnic and national attachment. *Public Opinion Quarterly*, 61, 102–133.
- Smith, A. D. (1991). *National identity*. London: Penguin Books.
- Smith, T. W. (2005). National pride: Over time and across countries. *GSSNews*, 19, 3–4.
- Smith, T. W., & Jarkko, L. (1998). *National pride: A cross-national analysis*. GSS Crossnational Report No. 19. Chicago: NORC.
- Smith, T. W., & Jarkko, L. (2001). *National pride in cross-national perspective*. Unpublished manuscript.
- Smith, T. W., & Kim, S. (2006). National pride in comparative perspective. *International Journal of Public Opinion Research*, 18, 127–136.
- Sörbom, D. (1974). A general method for studying differences in factor means and factor structure between groups. *British Journal of Mathematical and Statistical Psychology*, 27, 229–239.
- Sommerville, J. (1981). Patriotism and war. *Ethics*, 91, 568–578.
- Staub, E. (1997). Blind versus constructive patriotism: Moving from embeddedness in the group to critical loyalty and action. In D. Bar-Tal & E. Staub (Eds.), *Patriotism in the lives of individuals and nations* (pp. 213–228). Chicago: Nelson-Hall.
- Steenkamp, J.-B. E. M., & Baumgartner, H. (1998). Assessing measurement invariance in cross national consumer research. *Journal of Consumer Research*, 25, 78–90.
- Vandenberg, R. J. (2002). Towards a further understanding of and improvement in measurement invariance methods and procedures. *Organizational Research Methods*, 5, 139–158.
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices and recommendations for organizational research. *Organizational Research Methods*, 3(1), 4–69.

Biographical Note

Eldad Davidov is a Professor of Sociology at the University of Zurich, Switzerland. His research interests are applications of structural equation modeling to survey data, especially in cross-cultural and longitudinal research. Applications include human values, national identity, and attitudes toward immigrants and other minorities.