Eastern European Transformation and Youth Attitudes toward Violence

Eva M. Groß, Institute for Interdisciplinary Research on Conflict and Violence, Bielefeld University, Germany
Berit Haußmann, German Youth Institute (DJI), Munich, Germany

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Focus: Youth and Violence

Editorial (p. 236)

Editorial Remarks: Youth at Risk Wilhelm Heitmeyer / Steven F. Messner (pp. 237 – 239)

Formations of Violence in Post-Dictatorial Contexts: Logics of Confrontation between the Police and the Young Urban Poor in Contemporary Argentina Alejandro Isla / Daniel Pedro Míguez (pp. 240 – 260)

The Central American Fear of Youth Anika Oettler (pp. 261 – 276)

The Boys are Coming to Town: Youth, Armed Conflict and Urban Violence in Developing Countries Josjah Kunkeler / Krijn Peters (pp. 277 – 291)

Governance, Security and Culture: Assessing Africa's Youth Bulge Marc Sommers (pp. 292 – 303)

Eastern European Transformation and Youth Attitudes Toward Violence Eva M. Groß / Berit Haußmann (pp. 304 – 324)

Intergroup Conflict and the Media: An Experimental Study of Greek Students after the 2008 Riots David Hugh-Jones / Alexa Katsnaidou / Gerhard Riener (pp. 325 – 344)

The Eye of the Beholder: Violence as a Social Process Teresa Koloma Beck (pp. 345 – 356)

Women without Arms: Gendered Fighter Constructions in Eritrea and Southern Sudan Annette Weber (pp. 357 – 370)

Spousal Violence against Women in the Context of Marital Inequality: Perspectives of Pakistani Religious Leaders Rubeena Zakar / Muhammad Zakria Zakar / Alexander Krämer (pp. 371 – 384)
Eastern European Transformation and Youth Attitudes toward Violence

Eva M. Groß, Institute for Interdisciplinary Research on Conflict and Violence, Bielefeld University, Germany
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This cross-national examination of the motives behind adolescent approval of violence in major cities in Germany and four Eastern European transformation societies (Czech Republic, Poland, Russia, Slovenia) draws on Institutional Anomie Theory (IAT), which leads us to expect higher instrumental motivation for violence among adolescents in the transforming societies. Differences in institutional structure and cultural orientations between Germany and the Eastern European societies are assessed using data from ILO and ESS. Analysis of the different motives for violence is based on data collected by the Criminological Research Institute of Lower Saxony (KFN) in Kraków, Volgograd, Ljubljana, Plzen, and Hamburg. Comparability and cross-cultural interpretability of the violence attitude measure is assessed by applying confirmatory factor analyses in multi-group comparisons. A lack of sufficient data meant that specific assumed linkages as implied by IAT could not be established, but the results for a specific instrumental/utilitarian motive for violence and for institutional structure and cultural orientations point to the utility of applying insights from IAT to understanding the dynamics of violence within the Eastern European context of transformation. We find empirical indications that specific features of the family mediate the “Eastern effect” on the instrumental/utilitarian motive. Further research is needed to discover whether economic dominance affects motives for youth violence indirectly via the socialization provided by non-economic institutions rather than directly via cultural orientations.

1. Introduction: Objectives and Theoretical Frame

The recurring theme of youth and violence concerns the social sciences in all societies, whatever their social and political history and situation. The societies of Eastern Europe have experienced strong processes of social transformation since the collapse of communism, as the rapid implementation of the free-market economy and the concomitant capitalist ideology have wrought changes in value orientations in these societies (Thome 2003, Kim and Pridemore 2005). Our central question is whether these circumstances also have an effect on adolescents’ attitudes to violence.

This contribution is a comparative investigation of the extent of the motives that lie behind adolescent approval of violence in major cities in Germany and in four Eastern European transformation societies.

If we are to draw conclusions about the phenomenon of violence as a whole it makes sense to start with approval of violence. We assume that there are different motives for approval of violence, for example economic/instrumental or expressive/hedonistic motives, whereby purposes may range from self-defense over revenge or achieving recognition to simply having fun.

As well as Germany (east and west), our comparative analysis of motives for violence encompasses Russia, Poland, Slovenia, and the Czech Republic. Despite the many historical, linguistic, political, and social differences between them, we agree with Zhao and Cao (2010) these Eastern European countries represent a geographical group whose rapid social transformation represents a different context from Germany. The transformative process set in motion in these countries by the collapse of communism in Eastern Europe was framed by neoliberal global developments and had massive repercussions on their political institutions. While East Germany imported its institutional framework from West Germany, which was already a free-market economy, capitalism
as the new form of order was implemented very suddenly and with full force in the other Eastern European countries.

To interpret our findings we draw on the Institutional Anomie Theory (IAT) of Messner and Rosenfeld (1994, 1997a), which focuses explicitly on the violence-promoting role of the economy in situations where it acquires institutional dominance, and is therefore, in our opinion, highly relevant to the Eastern European countries in the period after the fall of the Iron Curtain. The limited scope of our study precludes a direct test of the IAT, which is not what we set out to accomplish, but we do seek to assess the applicability of central tenets of IAT for an understanding of adolescents' attitudes toward violence in the investigated countries.

We propose that the dominance of economic institutions in Eastern European societies encouraged by the shift to capitalism and the corresponding value orientations arising in the population create a social climate that especially encourages instrumentally motivated violence. This should be reflected in higher approval of instrumental violence by adolescents in Eastern European cities compared to those in the German city of Hamburg.

We begin by describing the IAT in general (section 2), before applying it specifically to the context of social change in Eastern Europe (section 3). A comparative investigation of selected indicators for institutional structure and cultural orientations in Eastern Europe and Germany follows in section 4, before finally we examine the motives for adolescent violence in a theory-led comparative investigation covering five countries (section 5). The question of cross-cultural comparability and interpretability of the measured latent approval of violence scale will be a central concern in this section, and will be investigated by conducting confirmatory factor analyses in a multi-group setting.

2. An Outline of Institutional Anomie Theory
Messner and Rosenfeld’s Institutional Anomie Theory (IAT) (1994, 1997a) builds on and expands Merton’s anomie theory (1938, 1968). Both approaches see the unfettered striving for success in capitalist society as the main component of an anomie culture that can lead to deviant behavior (Bernburg 2002). While Merton deals with features of the stratification system (social structure in the form of unequal distribution of the legal means to achieve the culturally prescribed goal of success) that translate anomie culture into deviant behavior, IAT specifies the institutional configuration that encourages the emergence of an anomie culture (Bernburg 2002, 738). This, according to Bernburg, brings IAT close to Durkheim’s European anomie concept (1893 [1992]), and lends it relevance in connection with social change.

The essence of IAT is that high rates of violent crime arise especially in capitalist market economies where the economy comes to dominate those institutions that are not by nature orientated to economic criteria (Messner and Rosenfeld 1994, 1997a). The focus here is mainly on the explanation of instrumental (Messner and Rosenfeld 1994, 84), or utilitarian (Bjerregaard and Cochran 2008, 32) violent crime. This may involve not just profit in the narrow sense, but also prestige tied to monetary success.

The predominance of the economy and the relative powerlessness of essentially non-economic institutions such as the institution of education or the political system are expressed in the devaluation of non-economic functions and roles, the accommodation of non-economic institutions to economic requirements, and the penetration of economic standards into many non-economic institutions. The consequence of this is anomie in the sense of a largely unrestrained striving for economic success that at least situatively relaxes moral constraints. After the weakening of social control by non-economic institutions, the surviving action-defining criteria are primarily economic values such as success orientation (great pressure on the individual to achieve goals by any means necessary), excessive or egotistical individualism (as opposed to Durkheim’s moral individualism [1991]),1 universalism (where success standards apply equally to all

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1 Moral individualism, which it is argued develops in the course of the modernisation process, regulates social relations more strongly through mutual recognition and empathy, which leads overall to less violence (Karstedt 2001).
members of society), and money fetishism (money becomes the absolute measure of success) (Messner 2003). Egotistical and disintegrative individualism is thus the most fundamental aspect of the cultural base of anomie in modern societies (Messner, Thome, and Rosenfeld 2008, 172).

According to IAT, economic dominance with the corresponding cultural ancillaries creates a lifeworld that fosters criminal and violent behavior. We focus here on the assumed connection between economic dominance and adolescent approval of violence, surmising that in Eastern European societies there will be greater approval of violence, especially for instrumental motives, than in Germany, because we assume that in the transformation societies the cultural influence of the economy is less limited by extra-economic institutions. We next consider whether there is evidence for such a manifestation of institutional anomie in the transformation societies, first theoretically (section 3) and then empirically (section 4).

3. IAT and Societal Transformation
Although IAT was not originally conceived for the analysis of social transformation, it can also be applied fruitfully to the explanation of deviance and violence in that connection. Thome (2003) sees the transformation societies of Eastern Europe, with their still underconsolidated democratic institutions and cultural traditions exposed to the forces of a globally unfettered economy, at heightened risk of social anomie as described by Durkheim (1893 [1992]). Zhao and Cao (2010) are able to confirm this empirically for the Eastern European societies with respect to anomie at the individual level, measured as the “individual’s acceptance of legitimacy of five instrumental crime-related scenarios” (1217). One consequence of this, they write, is the cultural encouragement of excessive individualism. The closeness of Messner and Rosenfeld’s anomie concept to the social anomie of Durkheim (Bernburg 2002) and the way economic institutions primarily direct this specific transformation process suggest that IAT will be highly relevant in this context.

The connection between rapid social transformation and deviance can be explained very well, as also noted by Bernburg (2002), by building on the governing IAT concept of institutional imbalance and applying it to the transformation from communist to capitalist societies. Altogether this accords with Polanyi (describing transformation occurring during an earlier historical period) and with Messner and Rosenfeld, who concur that radical socioeconomic transformation can bring forth massive social problems through a “disembedded” (Polanyi 1957), and thus dominant economy (Messner and Rosenfeld 1994). In the process that transformed the Eastern European communist societies into structurally capitalist societies, their citizens largely adopted the capitalist ideology with its dominant values such as striving for success, money fetish, etc. (Kim and Pridemore 2005). At the same time, for example in Russia through widespread poverty and unemployment (World Bank 2000), they have less legal opportunity to realize material wishes. Economic deprivation and pronounced social inequality can, where other (extra-economic) value orientations lose their balancing influence, lead to increasing deviance, especially in conjunction with anomie as described by Messner and Rosenfeld (Savolainen 2000, Piquero and Piquero 1998). Because economic institutions play a central role in the transformation from communist to capitalist societies, Stamatel (2009, 1427) agrees with Kim and Pridemore (2005) that the practical relevance of other social institutions, especially the political system, will decline. This reduces their social control function. IAT suggests that dominance of the economy in the transformation societies may erode other institutions (already weakened by the rapid speed of change) even more strongly than in the established capitalist societies. In line with this assumption, Kim and Pridemore (2005) find in Russia no moderating effect of extra-economic social institutions in the relationship between negative socio-economic transformation and property crime. In relation to the United States, by contrast, Chamlin and Cochran (1995), and later Piquero and Piquero (1998), are able to show that extra-economic institutions mitigate the effects of economic deprivation on property crime. Thus in Russia at least, the social control function of extra-economic institutions appears to be weakened.

In the following we investigate data from the ESS (European Social Survey) and the ILO (International Labor Organization) to see if there is any evidence to back up these
suppositions. Is the weakening of extra-economic institutions and dominance of the economy more prominent in the investigated transitional societies than in Germany?

4. Economy, Political System, and Cultural Orientations in Germany and Eastern Europe

We wish to compare three central areas with reference to IAT: the economy, the political system, and cultural orientations. Following our description above, IAT, applied to the Eastern European context, clearly implies differences between Germany and the transformation societies for the selected indicators of institutional structure (political system and economy) and cultural orientations, which will be empirically assessed below. While this certainly does not mean that we can prove institutional anomie to exist in Eastern Europe, the investigation might give us an indication as to the validity of central tenets of IAT with reference to the transforming societies.

After a brief description of the available indicators for economy and the political system, we will devote our main attention to the country-specific cultural orientations. Theoretically, these represent the main point of connection to the adolescent attitudes and motivations on which our empirical analysis focus.

In countries where the economy dominates other institutions, according to Bjerregaard and Cochran (2008), well-being is extremely dependent on the forces of the market. Low rates of welfare spending can be interpreted as an indicator of pronounced commodification (commercialization of all areas of society, see Polanyi 1957; Esping-Anderson 1990) and thus economic dominance (Bjerregaard and Cochran 2008, 37; Messner and Rosenfeld 1997b, 1396 ff.; for a critical take on this see Hirtenlehner et al. 2010). Two useful measures of a country’s level of social spending relative to GDP are the ILO’s Total Social Expenditure Index (TSEI) and the Net Total Social Expenditure Index, which is based on the Social Expenditure Database (SOCX, see Adema and Ladaique 2009) and takes into account the country-specific taxation systems and private welfare spending (see Figure 1).

In line with the expectations derived from IAT, both measures clearly indicate the highest social spending in Germany.

Another indicator of the balance between economic institutions and the political system in the various countries is the percentage of respondents in the ESS who report difficulty making ends meet in relation to TSEI. Altogether, Figure 1 plainly shows that social policy in the transformation countries is less orientated on much greater existing needs than in Germany. This is, we believe, associated with elevated commodification of labor (increased market dependency, see Messner and Rosenfeld 1997b). In line with IAT, we interpret this as a pointer to an institutional imbalance between the economy and the political system in the transitional societies.

According to Messner and Rosenfeld, one of the central tasks of the political system is to guarantee public safety. The judiciary and police as components within the set of political in-

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2 The indicators were also compared between the former East and West Germany. With the exception of the indicators for the strength of the political institutions (“trust in country’s parliament,” “trust in the legal system,” “trust in politicians,” “trust in political parties,” and “satisfaction with democracy”), no differences were found between former East and West Germany. This could be due to the fact that East Germany imported its institutional framework from West Germany after the collapse of communism in Eastern Europe. For more detailed results please contact the authors.

3 Respondents were asked about their feeling about the household’s income, answering 1 “living comfortably on present income,” 2 “coping on present income,” 3 “difficult on present income,” or 4 “very difficult on present income.” The variable was dichotomized, and Figure 1 shows the percentage of respondents answering with 3 or 4.
Institutions bear the main responsibility for crime control and peaceful conflict resolution (Messner and Rosenfeld 1994, 72 ff.). IAT, applied to the transitional societies, implies greater trust in the political institutions in Germany in comparison to the transformation societies. The results of our country comparison of trust in parliament, the legal system, and the police are consistent with these expectations (see Figure 2).

The lower overall levels of trust in the political systems in the transitional societies points to their weakened social control in relation to people’s activities, in comparison to Germany, as implied by IAT. The country-specific figures for satisfaction with democracy, the importance of politics, and how often people discuss politics (Figure 4), underline our supposition.6

A similar if less drastic pattern is found for trust in politicians and political parties (Figure 3).

Altogether this strengthens Thome’s thesis (2003) that democratic institutions in transformation societies suffer major difficulties adapting to the speed of change of the economic system. The political system, or polity (Messner and Rosenfeld 1994, 73), appears to play a more important role in everyday life in Germany than in the transformation societies. We interpret this as an indication that polity exerts greater social control in Germany than in the transition societies (as this would be expected to protect from institutional anomie as described by IAT).

The indicators described above give pointers to country-specific imbalances between the economy and the political system. We assume, on the basis of IAT, that the cultural

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4 Respondents were asked how much trust they have in the country’s parliament, in the legal system and in the police (0 “no trust at all” to 10 “complete trust”). The exceptionally large differences in trust in the police and the legal system between Germany and Eastern Europe might play a major role for the different levels of approval of violence among adolescents.

5 Respondents were asked how much trust they have in the country’s politicians and political parties (0 “no trust at all” to 10 “complete trust”).

6 Respondents were asked how satisfied they were with the way democracy works in their country (0 “extremely dissatisfied” to 10 “extremely satisfied”), how important politics is in their life (0 “extremely unimportant” to 10 “extremely important”) and how often they discuss politics/current affairs (recoded for Figure 3: 1 “every day,” 2 “several times a week,” 3 “once a week,” 4 “once a month,” 5 “less often,” 6 “never”).
transformations,\(^7\) which are theoretically particularly relevant in relation to our target group and its attitudes since they possibly create a social climate that especially encourages instrumentally motivated violence, are closely related to economic and political transformations.\(^8\)

As already mentioned, according to Messner and Rosenfeld (1994) the weakened cultural system of an anomic society is recognized above all in value orientations, which become increasingly orientated on economic principles: success, egotistical individualism, and money fetishism (see above).

The ESS country comparison of internationally comparable measured value orientations after Schwartz (2006) (ESS round 1 [2002] and 4 [2008] with Russia) supplies indications that economically shaped value orientations are more likely to be found in the transitional societies (Figure 5).\(^9\)

In line with IAT, with the exception of success orientation, where Germany has only the second-lowest value, all the other indicators point to a more strongly anomic culture in the transitional societies. Thus in 2008 Germans placed significantly less importance than Poles or Russians on being rich and owning wealth.\(^10\) At the same time, Germans see themselves most strongly as people for whom it is important to be loyal and open to friends (shown in Figure 5 as individualism, where high values indicate weak loyalty and lack of openness). Germans also significantly most frequently report helping other people outside their work. We interpret this as an indication of a more strongly dis-integrative individualism (Messner, Thome, and Rosenfeld 2008) in the transformation societies. This impression is reinforced by the country comparison of trust, fairness, and helpfulness (Figure 6).\(^11\)

**Figure 5: Value orientations**

![Figure 5: Value orientations](image)

Success orientation (F=82.2, p<0.001), money fetishism (F=103.3, p<0.001), helpfulness (F=327.6, p<0.001), and individualism (F=117.9, p<0.001).

**Figure 6: Trust, fairness, and helpfulness**

![Figure 6: Trust, fairness, and helpfulness](image)

Perception of trust (F=58.4, p<0.001), fairness (F=135.9, p<0.001) and helpfulness (F=219.1, p<0.001) Note: Pairwise effect sizes indicate significant differences (see footnote 12).

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7 Here we can admittedly represent “transformation” empirically only as momentary snapshots of a process.

8 But this does not represent the empirical core, especially as it also touches on micro/macro issues that are not the subject of the empirical analysis.

9 Schwartz’s value measurement: Respondents were asked: “Now I will briefly describe some people. Please listen to each description and tell me how much each person is or is not like you” (recoded in Figure 5: 1 “Very much like me” to 6 “not like me at all”); Money fetishism: “It is important to him/her to be rich. He/she wants to have a lot of money and expansive things”; success orientation: “being very successful is important to her/him. She/he hopes that people will recognise her/his achievements”; egotistic individualism (not recoded in Figure 5): “It is important to her/him to be loyal to her/his friends. She/he wants to devote herself/himself to people close to her/him”;

10 Effect sizes are calculated as quotient of mean difference and total standard deviation. Effect sizes greater than 0.2 are significant (0.2 is small, 0.5 moderate, 0.8 large) (Nachtigall and Wirtz 1998); effect sizes of money fetish in pairwise country comparisons: DE/PL: d=0.34; DE/RU: d=0.67; in comparison with Slovenia we find a similar trend, but the effect strength is smaller: DE/SI: d=0.1.

11 Respondents were asked whether most people in their country can be trusted, or you can’t be too careful (0 “you can’t be too careful” to 10 “most people can be trusted”), whether most people try to take advantage of you, or try to be fair (0 “most people try to take advantage of me” to 10 “most people try to be fair”), and whether most of the time people are helpful or mostly looking out for themselves (0 “people mostly look out for themselves” to 10 “people mostly try to be helpful”).
People in Germany plainly perceive considerably stronger reciprocal trust, solidarity, and helpfulness in their surroundings than people in Eastern European countries.\(^\text{12}\)

The figures can be interpreted as an indication of the cultural consequences of economic institutional dominance as described by Messner and Rosenfeld. Specifically, we mean a strengthened “by any means necessary” mentality in the transition societies (Messner and Rosenfeld 1994, 17).

It is noteworthy that Slovenia appears to represent an exception among the countries that have undergone system change. In many of the aforementioned indices Slovenia is more similar to Germany than to the other countries. This might reflect the conspicuously successful democratic transformation and the relatively stable consolidation of democracy after secession from Yugoslavia (Tos and Miheljak 2002).

Altogether, however, the described data tend to strengthen our theoretical expectations in relation to institutional anomie and its cultural repercussions in the transitional societies, since the results of the country comparisons of the selected indicators are largely consistent with the respective expectations as implied by IAT.

The analyses that follow below serve to investigate our IAT-led assumption that this overall social climate has an influence on adolescent approval of violence in major cities in these countries. The economic dominance fostered by the shift to capitalism (section 3) and the corresponding value orientations produce, we propose, a social climate that fosters instrumentally motivated violence in particular. This, following the arguments implicit to IAT, should be reflected in stronger approval of instrumental violence among adolescents in Eastern European cities than in Germany. In a nutshell, IAT, applied to the Eastern European context, suggests there should be a distinct instrumental/utilitarian dimension underlying the motives for violence among youths, whereby this motive should be more prevalent in transitional societies than in Germany. Nonetheless it must be acknowledged that on the basis of the available data we are unable to directly establish the assumed linkages in terms of assessing the direct correlation between economic value orientations such as disintegrative individualism and approval of violence in the specific countries. Based on our data, we can only assess indications that point to the validity of the arguments implied by IAT. To do so, we concentrate, as already mentioned, on a cross-national comparison of the motivations behind the approval of violence.

5. City Comparison of Adolescent Approval of Violence

A critical appraisal of the official data reveals the relevance of measuring attitudes to violence in addition to using official data on violent crime for international comparative studies. The suitability of official crime statistics for comparing violent crime internationally is very limited, as they include only offenses that are reported and recorded. So they are strongly dependent on victims’ willingness to report and on police recording methods (Enzmann and Siegmunt 2005). In Eastern Europe the validity of official crime statistics is especially uncertain. In times of political, institutional, and economic upheaval there can be little confidence in the reliability and continuity of police and court recording systems (Sack 1997). Attitudes that precede actual acts of violence (and especially their official registration) become highly relevant in this context if one wishes to conduct international comparisons of the phenomenon.

But the question of international comparability is also a central methodological problem of attitude surveys. Studies centring around attitude measures across different cultural contexts often ignore this issue of comparability of the measured dependent latent construct (e.g. Zhao and Cao 2010). This can turn out to be an essential problem, for example when the dimensionality and factor loadings of the measurement instrument are not equal across the different cultural contexts. In that case, interpretations of different levels of the latent construct or of relevant covariates across nations are at risk of being invalid, since apples and oranges cannot be compared (non-comparative meanings of the

\(^\text{12}\) Pairwise calculations of effect sizes for the overall index (factor analysis yielded a one-factor solution, Cronbach’s alpha = 0.77 in 2002/0.78 in 2008) suggest major differences between Germany and the transition countries (DE/CZ: d=0.34; DE/SL: d=0.39; DE/PL: d=0.64; DE/RU: d=0.51); data from 2008 used to measure effect size for Russia because comparable data were not available for 2002.
dependent latent constructs). When working with latent constructs in a cross-cultural setting, the comparability of the measured latent construct needs to be assessed by testing for cross-cultural invariance of dimensionality, factor loadings (measurement invariance), and intercepts (scalar invariance) of the measurement. This can be achieved by conducting confirmatory factor analysis (CFA), based on exploratory factor analysis (EFA) in a multi-group setting (see Reinecke 2005; Brown 2006). For our cross-cultural analysis of youth attitudes toward violence, especially with respect to our in-depth interest in different comparable motives (dimensions) behind the measured items, the aforementioned problem applies acutely.

We therefore begin with an examination of the applied approval of violence scale, to investigate the dimensionality of the measurement in the different countries exploratively using principal component analysis (section 5.1.1.). We then extract a reduced measuring instrument for approval of violence through CFA following the criterion of partial measurement invariance (Steenkamp and Baumgartner 1998) (section 5.1.2.). Only under this precondition of comparability and cross-cultural interpretability can we in the last step (section 5.2.) investigate the approval of violence across the different countries with a view to assessing the validity of our IAT-led hypotheses that there is a distinct instrumental/utilitarian dimension underlying the motives for violence among youths, and that this motive should be more prevalent in transitional societies than in Germany.

5.1. The City-specific Dimensionality of the Violence Attitude Scale – Assessing Comparability and Cross-Cultural Interpretability of the Latent Dependent Variable

5.1.1 Sample and Explorative Analysis

Our analysis is based on a data set from the Criminological Research Institute of Lower Saxony (KFN), produced by comparable school student surveys in five major cities (Table 1). The central components of the questionnaire developed by KFN were the same in all the cities (first wave 1998; Wetzels et al. 2001). It contains items on attitudes to and experience of violence from the perpetrator and victim perspectives as well as indicators on social status, primary socialization (such as childhood experience of violence or positive parental attention), norm orientations of adults and peers, attitude to violence-legitimizing masculinity norms, and personality characteristics such as self-control.

Random samples of ninth-grade school classes stratified by school type were surveyed in 1998, 1999, and 2000 in Kraków, Volgograd, Ljubljana, and Hamburg. In Plzen a total survey of all school students in ninth grade was conducted. The sample sizes in the individual cities are shown in Table 1. Overall response rates ranged between 80 and 90 percent.

Table 1: The sample

<table>
<thead>
<tr>
<th>Sample</th>
<th>Ljubljana</th>
<th>Hamburg</th>
<th>Volgograd</th>
<th>Plzen</th>
<th>Kraków</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male:</td>
<td>46.5%</td>
<td>48.7%</td>
<td>45.3%</td>
<td>45.4%</td>
<td>51.9%</td>
</tr>
<tr>
<td>(N=899)</td>
<td>(N=1672)</td>
<td>(N=791)</td>
<td>(N=573)</td>
<td>(N=784)</td>
<td></td>
</tr>
<tr>
<td>Female:</td>
<td>53.5%</td>
<td>51.2%</td>
<td>54.7%</td>
<td>54.6%</td>
<td>48.1%</td>
</tr>
<tr>
<td>(N=1035)</td>
<td>(N=1758)</td>
<td>(N=955)</td>
<td>(N=690)</td>
<td>(N=726)</td>
<td></td>
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<td>Age</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(Average)</td>
<td>15.03</td>
<td>15.11</td>
<td>14.56</td>
<td>15.03</td>
<td>15.5</td>
</tr>
<tr>
<td>(S.D.=.80)</td>
<td>(S.D.=.72)</td>
<td>(S.D.=.53)</td>
<td>(S.D.=.47)</td>
<td>(S.D.=.9)</td>
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<td>Education</td>
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<td></td>
</tr>
<tr>
<td>high:</td>
<td>17.4%</td>
<td>38.4%</td>
<td>20.9%</td>
<td>5.5%</td>
<td>33.7%</td>
</tr>
<tr>
<td>middle:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>low:</td>
<td>42.4%</td>
<td>51.6%</td>
<td>12.3%</td>
<td>12.3%</td>
<td>16.3%</td>
</tr>
<tr>
<td>low:</td>
<td>66.8%</td>
<td>82.2%</td>
<td>82.2%</td>
<td>82.2%</td>
<td>50.5%</td>
</tr>
</tbody>
</table>

When we refer in the following to German, Russian, Slovenian, Polish, or Czech adolescents we are referring not to nationally representative samples but to representative samples of adolescents from the respective cities.

The original scale for measuring approval of violence comprises fifteen statements to which respondents were asked to indicate their agreement or disagreement on a four-point scale (1 for “completely disagree” to 4 for “fully agree”). Because certain items were omitted from the survey in particular countries, we concentrated only on the ten items that were included in the questionnaires in all the countries (for items see Appendix 1). As Table 2 shows, the data from the individual samples produce very different factor solutions.
Table 2: Sample-specific factorial structure

<table>
<thead>
<tr>
<th>Country</th>
<th>Factorial Structure</th>
<th>Cronbach’s α</th>
<th>Explained Variance</th>
<th>Factor Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ljubljana</td>
<td>Subscale 1: .80</td>
<td></td>
<td>53.6%</td>
<td>.467</td>
</tr>
<tr>
<td></td>
<td>Subscale 2: .64</td>
<td></td>
<td>[Factor 1: 41.6%]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall: .81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hamburg</td>
<td>.88</td>
<td></td>
<td>51.4%</td>
<td>-</td>
</tr>
<tr>
<td>Volgograd</td>
<td>Subscale 1: .72</td>
<td></td>
<td>48.7%</td>
<td>.333</td>
</tr>
<tr>
<td></td>
<td>Subscale 2: .68</td>
<td></td>
<td>[Factor 1: 35.4%]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall: .76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pizen</td>
<td>.89</td>
<td></td>
<td>48.9%</td>
<td>-</td>
</tr>
<tr>
<td>Kraków</td>
<td>.89</td>
<td></td>
<td>53.8%</td>
<td>-</td>
</tr>
</tbody>
</table>

Ljubljana and Volgograd each exhibit a different two-factor structure, while our explorative factor analysis with Kaiser criterion (eigenvalue > 1 for a separate factor) found a single-factor structure in Hamburg, Kraków, and Plzen (for detailed descriptions of the two-factor solutions see Appendix 2). The factor loading for Item 5 (“If somebody attacks me then I hit back,” defensive motive) in Ljubljana and Kraków was too low, so it had to be excluded from the final factor solution. The same problem arose in Volgograd for Item 10 (“If someone provokes me I quickly turn to violence”).

In her analysis of the very same instrument in Russia, Siegmunt (2005) found exactly the same two-factor structure as we found in Volgograd. She designated the two factors “willingness to commit instrumental violence” and “willingness to commit violence for fun.” However, because explorative analyses suggest that the measurements are not comparable across our five samples we must for the moment desist from naming and interpreting the dimensions, which we refer to as motives in the following. Because comparability of the dependent variables is essential for our investigation and for valid interpretations of the dimensions, confirmatory analyses follow. The objective is to extract a comparable measuring instrument.

5.1.2 Confirmatory Factor Analysis of the Dependent Variables in Multi-group Comparison

The following analyses set out to identify a reduced model measuring comparable latent constructs (attitudes toward violence) across all the countries despite the different country-specific structures of approval of violence found among the adolescents using EFA. Only under this precondition can possible comparable dimensions (motives) be validly interpreted across cultural contexts and subsequently cross-country comparative investigations of the extent of approval of violence be conducted.

First, on the basis of the EFA, we conducted separate CFAs for the three different models identified in each of the countries (for country-specific models see Appendix 3). We then identified a two-factor structure which fits the data best in all cities. Despite it being partly identified in the explorative context, the single-factor structure turned out to be the worst in all the countries in the confirmatory context (see Appendix 3). Based on the two-factor structure with the best model fits, we conducted a multi-group comparison to test for measurement and scalar invariance (equal factor loadings and intercepts of the indicator variables) across the cities, which is a precondition for cross-national mean comparisons.

Altogether across the countries the overall scale exhibits neither scale nor measurement invariance. The criterion of partial measurement invariance (Steenkamp and Baumgartner 1998), under which there must be at least two invariant factor loadings and intercepts across the groups in order to be able to conduct mean comparisons, is not fulfilled by the scale across the five countries either. The same is confirmed by pairwise country comparison of the instrument. Taken together, these findings mean that although the surveyed items adequately map two latent dimensions of violence motivation (in the CFA we could identify one two-factor structure with good fit indices in all five cities), the meanings of these items for these dimensions are not comparable.

Because this lack of comparability precludes conducting cross-national analyses of violence motivation using the overall scale analysed here, we proceeded to extract a reduced measuring model with invariant factor loadings that is generalizable across the countries (Figure 7). Because items 1, 4, and 9 have strong shared influencing factors in all the countries (error correlations), we tested these as the reduced factor of the first motive of approval...
of violence. The second motive is formed from items 12, 13, and 14, following the structure in Ljubljana that fits the data best in all cities apart from Volgograd (see Appendix 3). These three items are also contained in the instrumental motive in Volgograd (Siegmund 2005) and exhibit good loadings.

Table 3: Reduced model of approval of violence, multi-group comparison

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$ (df)</th>
<th>$\Delta \chi^2$</th>
<th>$p$</th>
<th>RMSEA/SRMR</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>269.496 (40)</td>
<td></td>
<td>0.055/0.025</td>
<td>0.986</td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td>295.500 (48)</td>
<td>compared to model 1: 26.0 (8)</td>
<td>n.s.</td>
<td>0.052/0.029</td>
<td>0.984</td>
</tr>
<tr>
<td>Model 3</td>
<td>1520.015 (64)</td>
<td>compared to model 2: 1224.52 (16)</td>
<td>$&lt;0.001$</td>
<td>0.110/0.065</td>
<td>0.909</td>
</tr>
<tr>
<td>Model 4</td>
<td>500.402 (53)</td>
<td>compared to model 2: 204.902 (5)</td>
<td>$&lt;0.001$</td>
<td>0.067/0.034</td>
<td>0.972</td>
</tr>
</tbody>
</table>

Model 1: Baseline
Model 2: Partial measurement invariance (dimension 1: factor loading 1, 4 invariant; dimension 2: factor loading 12, 14 invariant), no mean structure.
Model 3: Partial measurement invariance (dimension 1: factor loading 1, 4 invariant; dimension 2: factor loading 12, 14 invariant) + all intercepts invariant (mean structure).
Model 4: Partial measurement invariance (dimension 1: factor loading 1, 4 invariant; dimension 2: factor loading 12, 14 invariant) + intercepts 1, 4 and 12, 14 invariant + additional release of intercept restriction for Hamburg, Plzen Item 12, Kraków Item 01.

On the other hand, scale invariance (mean comparisons permitted) cannot be assumed, because the model (Model 3) clearly and significantly worsens when the intercepts of the items are fixed across the countries. The comparative fit index (CFI) of 0.909 is no longer acceptable (for a good model fit values should be higher than .93). According to Steenkamp and Baumgartner (1998), however, a comparison of means is also permissible when only the intercepts of the two invariant factor loadings are additionally invariant. Despite minimal releases of these restrictions, Model 4 fulfils this condition adequately given the many groups. Although it remains worse than the case without invariance of intercepts after the $\chi^2$ difference test, it has in itself a very good CFI (0.972); RMSEA (0.067 [0.062; 0.072]) and SRMR (0.034) are also acceptable. Thus this model is used in the following analyses as the cross-country measurement of approval of violence.

We believe that the cross-city comparable two-factor solution provides two dimensions that can be meaningfully

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13 In order to account for possible distortions in the results through deviations from normal distribution, we also calculated the model with the MLR estimation with robust standard errors (an estimation method based on maximum likelihood that is more robust against deviations from normal distribution of the variables). The Scaling Correction Factor was 1.25 and there were no noteworthy deviations of the coefficients from the ML estimators (estimated by maximum likelihood estimation). We therefore chose the ML estimation in order to be able to conduct and interpret Chi-square difference tests.
interpreted in the scope of IAT. With regard to the respective motives for violence, it would appear to make sense to distinguish the factors into approval of violence for instrumental/utilitarian reasons (motive 2), and hedonistic approval of violence (motive 1).

We believe motive 2 to contain clearly purpose-driven ideas about when the use of violence is necessary or permitted, thus making it an instrumental/utilitarian motive in a broader sense. At the same time, it is not a “pure” instrumental motive aiming at monetary success, as would be most clearly defined in the scope of IAT. It is rather “mixed” in the sense of containing aspects of the former collectivist culture, for example in terms of values of honor. Honor in turn may be a compensatory substitution for monetary success offered by collectivistic elements of cultural tradition. Overall, motive 2 clearly contains a stronger instrumental/utilitarian element than motive 1, which has a more pronounced hedonistic element. Motive 1 relates more to individual and personal gratification, recreation/entertainment, and fun in connection with violence, in contrast to the rather collectively pronounced motive 2, as clearly reflected in the three items of motive 1. Alongside Items 1 and 9, which intelligibly elucidate a fun dimension, the purpose of getting noticed (Item 4) is in our view for adolescents, possibly unlike adults, another facet of individual-centered fun and recreation. Since IAT is suggestive of a distinct instrumental/utilitarian dimension implicit in the motivations for violence which does not need to be exclusively aimed at profit in the narrow sense, but can also aim at prestige (see section 2), our findings are so far generally consistent with the expected dimensionality.

From there, we go on to analyze whether there is any variation in the levels of the different motives for violence between the transitional societies and Germany. IAT, applied to the Eastern European context (see section 3), suggests that especially the instrumental/utilitarian motive should be more prevalent in the transitional societies, since the instrumental/utilitarian motive more clearly represents a facet in which violence is approved as a means to achieve a useful objective (e.g., honor as a compensatory substitute for monetary success). The question of more or less morally controlled means to achieve a culturally prescribed and useful goal is, following Merton (1938), also a central point in IAT (Messner and Rosenfeld 1994, 84; Bjerregaard and Cochran 2008, 32).

5.2. Description and Discussion of Findings
First we tested whether the cultural institutional context in the Eastern European transformation societies had any influence at all on the extent of approval of violence and whether this influence differed in relation to the two different motive structures (Figure 8).

Building on Zhao and Cao, whose analysis operationalizes “rapid sociopolitical change” (2010, 1215) in the form of a dummy variable named “nations of Eastern Europe under democratic transition,” we also grouped the investigated Eastern European countries (value 1) as a dummy variable with reference category Germany (value 0). Following Zhao and Cao (2010) we assume that the nations of Eastern Europe have experienced a unique, extremely rapid, shared development trajectory. This makes them of interest for studies of cultural contexts as a group contrasted against other nations, especially long-established capitalist democracies (such as Germany). The contrast is especially relevant in the context of IAT (see section 3). As already mentioned, our method merely captures a snapshot of the transformation process.

Figure 8: Motives for violence regressed on Eastern European transformation; CFI=0.955/RMSEA=0.079/SRMR=0.035

Note: y-standardized regression coefficients because the independent variable is a dummy variable. MLR estimation tested (robust standard errors), scaling correction factor = 1.1.

The results shown in Figure 8 affirm the inferences drawn from the factor analysis, support a key hypothesis and open up an unexpected line of inquiry. First, the opposite effects on the two motive structures mean that the measuring in-
instrument may on no account be treated and interpreted as a one-dimensional construct across the contexts. Second, in line with our specific assumption on the differing extent of approval of violence in Germany and in the transition societies, the context of Eastern Europe fosters the formation of an instrumental/utilitarian violence motivation among adolescents (β=.28***). This result is consistent with the expectedly higher prevalence of that motive in the Eastern European context as implied by IAT. But we also found an unexpected negative effect of the transformation on the hedonistic motive structure (β= -.13***), telling us that the hedonistic motive is on a lower level in the transitional societies, which requires further explanation.

IAT offers no clear explanation for this. From this perspective it would be just as conceivable that an egotistical and hedonistic variant of approval of violence would actually, alongside the key dimension of the instrumental/utilitarian motive, also be more prevalent in the transitional societies because the moral influence of extra-economic institutions loses its practical relevance for individuals.

To validate our findings, we further tested the “Eastern effect” (Figure 11) with the regional dummies (see Appendix 4). First, all city dummies have a significant positive effect on the instrumental/utilitarian motive, bolstering our IAT-led hypothesis. Second, the negative Eastern effect on the hedonistic motive is mainly driven by Ljubljana and Volgograd. In Krakow, both, the instrumental motive and the hedonistic motive are more prevalent than in Hamburg. This, alongside the fact that Slovenia, which, following our indicators for institutional anomie, was half-way between Germany and the other Eastern countries, makes the second strongest contribution to the Eastern effect, indicating that there is no single explanation for the variance of violence motivation between the countries, but that the mechanisms involved are more complex.

In the next step, to further explain this “Eastern effect,” we must leave the narrow path of IAT with respect to the available data. Based on our data, we cannot go down the line of establishing the assumed linkage between the two motives and economic dominance or disintegrative individualism, as indicated by IAT. Doing so would empirically shed light upon the question whether the instrumental/utilitarian motive is a more prominent consequence of economically informed value orientations among adolescents than the hedonistic motive, and whether this could explain away the greater levels of the instrumental/utilitarian motive in the transitional societies.

Based on the available data, we alternatively analyzed the possibility that the “Eastern effect” could be explained with reference to different levels of deprivation in Eastern Europe and Germany,14 with deprivation being another prominent explanans for deviance and violence (Bermburg 2002; Savolainen 2000; Chamblin and Cochran 1995; Merton 1938). The analysis indicates that this is not the case (Appendix 5: Models 1 and 2).

In the next step we tried to get closer to the mechanisms that lead to the “Eastern effect” by additionally taking into account effects of socialization such as child-rearing practices in the family, current parental norm orientations, current family climate, and exposure to delinquent peer groups (see Appendix 5: Models 3, 4, 5, 6, and 7).

Close consideration of the respective effects of the different covariates on the two motives, net the “Eastern effect” (Appendix 5), hints at an interesting pattern. First, similar to the “Eastern effect,” deprivation tends to have a negative effect on the hedonistic motive, while it tends to have a slightly positive or no effect on the instrumental/utilitarian motive. Second, early child-rearing practices in the family (experience of parental violence during childhood before the age of twelve, positive parental attention in childhood) tend to have stronger explanatory power for the hedonistic motive for violence than for the instrumental/utilitarian motive (see Appendix 5: Model 7). Third, the current family climate (within the last twelve months) and parental

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14 The coefficient of deprivation regressed on transformation is highly significant (0.72***), indicating that in our data, deprivation is more prevalent among the adolescent respondents from Eastern Europe than among those from Germany.
norm orientations seem to have a stronger influence on the emergence of the instrumental/utilitarian violence motivation of adolescents than on their hedonistic motivation (see Appendix 5: Model 7). Fourth, exposure to delinquent peer groups yields similarly strong effects on both motives for violence, though a little stronger on the hedonistic motive (see Appendix 5: Model 7).

The “Eastern effect” on the two motives keeps changing slightly when taking into account the above-mentioned covariates step by step and thereby bolsters the possibility of a more complex mechanism that fosters youth motivations for violence. Overall, the “Eastern effect” on the hedonistic motive tends to get stronger, whereas the effect on the instrumental/utilitarian motive tends to get weaker, especially after taking into account the current norm orientations against violence of the parents and the current family climate in terms of inconsistent prohibitions (see Appendix 5: Models 4 to 6). This means that the present traits of the parental home seem to play a role with regard to the “Eastern effect” on the instrumental/utilitarian motive. The results hint at the possibility of a mediating function of the family in the relationship between Eastern European transformation and instrumental/utilitarian motivation for violence, since the direct effect of transformation on the instrumental/utilitarian motive clearly shrinks after taking into account the above-mentioned current aspects of the family. At the same time, current parental normative rejection of violence and inconsistent family climate are significantly related to transformation ($\beta=-0.27^{**}$ and $\beta=0.29^{**}$ respectively). A city-specific validation of this effect confirms our assumptions without exception. After taking into account the current aspects of the family, the Eastern city effects on the instrumental/utilitarian motive shrink in all city-specific analyses. At the same time, the possible mediators for this Eastern effect on the instrumental/utilitarian motive are significantly correlated with the respective city dummies as expected, with one single non-significant exception in Krakow (see Appendix 6). The strong Eastern effect in Ljubljana, which, following our IAT-led rationale in combination with the results regarding the indicators for institutional anomie, should be the weakest, might be explained by the mediating function of the current family. One of the possible mediators in the Eastern effect on the instrumental/utilitarian motive, inconsistent prohibitions, is significantly more prevalent in Ljubljana than in Hamburg or any of the other cities. This could be one explanation for the strong Eastern effect in Ljubljana.

Our results suggest that further research taking into account indirect effects via socialization provided by non-economic institutions (e.g., child-rearing practices in the family) is likely to be worthwhile.

It remains the case that the overall “Eastern effect” on the two motives for violence of the adolescent respondents turns out to be considerably stable, independent from deprivation, early child-rearing practices in the family, current norm orientations against violence of the parents, the current family climate, exposure to delinquent peer groups, age, and education. The instrumental/utilitarian motive for violence among the adolescent respondents is more prevalent in the transition societies, whereas the hedonistic motive is more prevalent among the German respondents.

Using our data we were only able to scrape the surface of the background reasons behind differences in motives for violence. Alongside a detailed exploration of the mechanisms, as mentioned above, we think that further empirical assessments with regard to a validation of the opposite effects of the Eastern European context on the two different motives for violence in an adult sample could be worthwhile. This would shed light on the question, whether the “Eastern effect” in our data is due to the specific lifeworlds of adolescents (e.g., hallmarking by specific youth cultures or influences of socialization), or whether it is indeed a more general societal phenomenon in the transitional nations.

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15 The Eastern effect was additionally controlled for age and education, but these are not shown in the table.
6. Summary and Outlook

Using micro- and macro-level data we were able to bolster our assumption that the economy would be more dominant and omnipresent in the transitional societies than in Germany. In line with IAT, we found indications of an imbalance between the political system and the economy in the transformation societies. This was corroborated by a country comparison of subjective assessment of personal financial situation and of the relationship between social spending and GDP. Taken together these elements suggest greater commodification of labor in the transformation countries. At the same time we found evidence that the relevance and credibility of the political system and democratic institutions were reduced for the populations in the transitional societies. The cultural base of institutional anomie was also more widely visible there: the indicators implied stronger money fetish, disintegrative individualism, and erosion of solidarity in the transitional nations.

Overall, the results of the cross-national comparisons of selected indicators for institutional structure and cultural orientations are consistent with expected differences as implied by IAT, applied to the Eastern European context of transformation.

From there, we followed an IAT-led argumentation expecting a distinct instrumental/utilitarian dimension underlying the motives for violence among youths, as well as a greater prominence of this motive among the adolescents in the transitional nations.

On the one hand, the findings are consistent with the expected dimensionality and variation across nations. Even though, due to a lack of sufficient data, specific assumed linkages as implied by IAT (e.g. between economic dominance or disintegrative individualism and violence motivation) could not be established, the results with regard to a specific instrumental/utilitarian motive for violence being more prevalent in the transitional societies, alongside the results about institutional structure and cultural orientations as described above, point to the utility of applying insights from IAT to understanding the dynamics of violence within the Eastern European context of transformation. In order to discover more about the validity of the underlying theoretical mechanisms we believe deeper studies into the country-specific connections between micro-level indicators of economic dominance and adolescent approval of violence to be necessary. The limited nature of our data precluded expanding our investigation in such a way.

On the other hand, the results suggest that alongside the instrumental/utilitarian motive there is a specific hedonistic motivation for violence underlying the measurement in a cross-nationally comparable manner, which in turn is more prevalent among the German youths. The reasoning of IAT seems to be coherent with respect to the instrumental/utilitarian motive in our data, but the hedonistic facet of the discovered “Eastern effect” cannot be clearly interpreted in the scope of IAT. Due to the aforementioned lack of sufficient data to establish linkages between disintegrative individualism and the two distinct motives for violence, we established alternative approaches to the mechanisms that might explain the “Eastern effect,” based on the available data. Findings show that the “Eastern effect” cannot be explained away by any of the considered covariates: deprivation, early child rearing practices in the family, current norm orientations of the parents, the current family climate, exposure to delinquent peer groups, age, and education.

Overall, the results of those additional analyses suggest that the mechanisms that lead to this stable “Eastern effect” are rather complex. Our additional findings hint at the possibility that the family might play a mediating role with regard to the “Eastern effect” on the instrumental/utilitarian motive for violence. The results suggest that, alongside more detailed empirical assessments, further theorizing along these lines is likely to be worthwhile. Even within the scope of IAT, the precise mechanisms could be more fully theorized. For example, to what extent does economic dominance affect motives for youth violence indirectly via the socialization provided by non-economic institutions (e.g., child-rearing practices in the family, current educational practices and norm-orientation of the parents) rather than directly via cultural orientations (e.g., values of disintegrative...
individualism? For adults this specific indirect mechanism might be less relevant in terms of a conceivably stronger direct influence of general cultural orientations on their motives for violence, since they are usually by then rather independent from their parental home. Further theoretical and empirical assessments along these lines seem worthwhile to us.

References


Groß and Haußmann: Eastern European Transformation and Youth Attitudes


Appendix

1. Items

Item 1: If you are going to have fun there just has to be a bit of violence involved.
Item 4: You have to resort to violence because it’s the only way to get noticed.
Item 5: If somebody attacks me then I hit back.
Item 7: The strongest must win, otherwise there is no progress.
Item 8: If I have to show what I’m capable of then I use violence.
Item 9: Without violence everything would be much more boring.
Item 10: If someone provokes me I quickly turn to violence.
Item 12: The young use violence to sort things out, adults just talk.
Item 13: It is perfectly normal for men to want to prove themselves by fighting with others.
Item 14: An eye for an eye, a tooth for a tooth, that’s how life is.

2. Explorative Factor Solutions

Table A2–1: Item and scale values for the approval of violence scale for Ljubljana

<table>
<thead>
<tr>
<th>Items</th>
<th>M</th>
<th>SD</th>
<th>FL</th>
<th>r_s</th>
<th>NL</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you are going to have fun there just has to be a bit of violence</td>
<td>15.6</td>
<td>25.42</td>
<td>.81</td>
<td>.58</td>
<td>-.13</td>
</tr>
<tr>
<td>involved (item 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You have to resort to violence because it’s the only way to get</td>
<td>9.5</td>
<td>20.69</td>
<td>.74</td>
<td>.54</td>
<td>.01</td>
</tr>
<tr>
<td>noticed (item 4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The strongest must win, otherwise there is no progress (item 7)</td>
<td>26.5</td>
<td>29.35</td>
<td>.60</td>
<td>.47</td>
<td>-.06</td>
</tr>
<tr>
<td>If I have to show what I’m capable of then I use violence (item 8)</td>
<td>13.7</td>
<td>23.70</td>
<td>.79</td>
<td>.67</td>
<td>.12</td>
</tr>
<tr>
<td>Without violence everything would be much more boring (item 9)</td>
<td>15.7</td>
<td>26.16</td>
<td>.68</td>
<td>.61</td>
<td>.05</td>
</tr>
<tr>
<td>If someone provokes me I quickly turn to violence (item 10)</td>
<td>30.5</td>
<td>29.79</td>
<td>.55</td>
<td>.50</td>
<td>.18</td>
</tr>
<tr>
<td>Motive/Factor 1</td>
<td>18.5</td>
<td>18.39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The young use violence to sort things out, adults just talk (item</td>
<td>36.7</td>
<td>32.21</td>
<td>.74</td>
<td>.45</td>
<td>-.09</td>
</tr>
<tr>
<td>12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is perfectly normal for men to want to prove themselves by</td>
<td>46.0</td>
<td>32.69</td>
<td>.86</td>
<td>.48</td>
<td>.05</td>
</tr>
<tr>
<td>fighting with others (item 13)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>An eye for an eye, a tooth for a tooth, that’s how life is (item</td>
<td>40.7</td>
<td>33.91</td>
<td>.63</td>
<td>.42</td>
<td>.14</td>
</tr>
<tr>
<td>14)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motive/Factor 2</td>
<td>41.1</td>
<td>25.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall scale (without Item 10)</td>
<td>26.1</td>
<td>18.06</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Abbreviations: FL = factor loading; r_s = selectivity coefficient of items; α = reliability of subscale/overall scale; AL = ancillary loading.

Table A2–2: Item and scale values for the approval of violence scale for Volgograd

<table>
<thead>
<tr>
<th>Items</th>
<th>M</th>
<th>SD</th>
<th>FL</th>
<th>r_s</th>
<th>NL</th>
</tr>
</thead>
<tbody>
<tr>
<td>If somebody attacks me then I hit back</td>
<td>75.7</td>
<td>25.27</td>
<td>.65</td>
<td>.30</td>
<td>-.05</td>
</tr>
<tr>
<td>(Item 5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The strongest must win, otherwise there is no progress (Item 7)</td>
<td>36.6</td>
<td>33.12</td>
<td>.55</td>
<td>.46</td>
<td>-.05</td>
</tr>
<tr>
<td>If I have to show what I’m capable of then I use violence (Item 8)</td>
<td>38.2</td>
<td>32.29</td>
<td>.65</td>
<td>.48</td>
<td>0.25</td>
</tr>
<tr>
<td>The young use violence to sort things out, adults just talk (item</td>
<td>31.0</td>
<td>33.27</td>
<td>.46</td>
<td>.44</td>
<td>-.08</td>
</tr>
<tr>
<td>12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is perfectly normal for men to want to prove themselves by</td>
<td>46.6</td>
<td>32.57</td>
<td>.68</td>
<td>.52</td>
<td>-.21</td>
</tr>
<tr>
<td>fighting with others (item 13)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>An eye for an eye, a tooth for a tooth, that’s how life is (item</td>
<td>50.2</td>
<td>33.17</td>
<td>.66</td>
<td>.48</td>
<td>-.31</td>
</tr>
<tr>
<td>14)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motive/Factor 1</td>
<td>46.4</td>
<td>20.40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall scale (without Item 10)</td>
<td>12.5</td>
<td>23.97</td>
<td>.78</td>
<td>.53</td>
<td>-.05</td>
</tr>
</tbody>
</table>

Abbreviations: FL = factor loading; r_s = selectivity coefficient of items; α = reliability of sub scale/overall scale; AL = ancillary loading.
3. Confirmatory City-specific Structural Comparison of Measuring Instrument

Figure A3–1: Model 1, one-factor solution (Hamburg, Plzen, Kraków)

- If you are going to have fun there just has to be a bit of violence involved (Item 1)
- You have to resort to violence because it’s the only way to get noticed (Item 4)
- Without violence everything would be much more boring (Item 9)
- If someone provokes me I quickly turn to violence (Item 10)
- The strongest must win, otherwise there is no progress (Item 7)
- If I have to show what I’m capable of then I use violence (Item 8)
- The young use violence to sort things out, adults just talk (Item 12)
- It is perfectly normal for men to want to prove themselves by fighting with others (Item 13)
- An eye for an eye, a tooth for a tooth, that’s how life is (Item 14)

Figure A3–2: Model 2, two-factor solution in Volgograd

- If you are going to have fun there just has to be a bit of violence involved (Item 1)
- You have to resort to violence because it’s the only way to get noticed (Item 4)
- Without violence everything would be much more boring (Item 9)
- If somebody attacks me then I hit back (Item 5)
- The strongest must win, otherwise there is no progress (Item 7)
- If I have to show what I’m capable of then I use violence (Item 8)
- The young use violence to sort things out, adults just talk (Item 12)
- It is perfectly normal for men to want to prove themselves by fighting with others (Item 13)
- An eye for an eye, a tooth for a tooth, that’s how life is (Item 14)
Figure A3–3: Model 3, two-factor solution in Ljubljana

If you are going to have fun there just has to be a bit of violence involved (Item 1)
You have to resort to violence because it's the only way to get noticed (Item 4)
Without violence everything would be much more boring (Item 3)
If someone provokes me I quickly turn to violence (Item 10)
The strongest must win, otherwise there is no progress (Item 7)
If I have to show what I’m capable of then I use violence (Item 8)
The young use violence to sort things out, adults just talk (Item 12)
It is perfectly normal for men to want to prove themselves by fighting with others (Item 13)
An eye for an eye, a tooth for a tooth, that’s how life is (Item 14)

Motive 1
(Ljubljana)

Motive 2
(Ljubljana)

Table A3-1:

<table>
<thead>
<tr>
<th>City</th>
<th>Model 1 (CFI/BIC/RMSEA/SRMR)</th>
<th>Model 2 (CFI/BIC/RMSEA/SRMR)</th>
<th>Model 3 (CFI/BIC/RMSEA/SRMR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ljubljana</td>
<td>0.922/148557.623/0.081/0.045</td>
<td>0.917/150362.216/0.072/0.045</td>
<td>0.972/148355.172/0.050/0.027</td>
</tr>
<tr>
<td>Hamburg</td>
<td>0.961/268568.942/0.074/0.029</td>
<td>0.969/269904.571/0.064/0.026</td>
<td>0.979/268354.011/0.055/0.021</td>
</tr>
<tr>
<td>Volgograd</td>
<td>0.877/142770.904/0.093/0.051</td>
<td>0.943/142683.467/0.061/0.035</td>
<td>0.911/142664.131/0.080/0.045</td>
</tr>
<tr>
<td>Kraków</td>
<td>0.973/110625.281/0.062/0.024</td>
<td>0.972/112033.420/0.060/0.028</td>
<td>0.982/110585.667/0.052/0.021</td>
</tr>
<tr>
<td>Plzen</td>
<td>0.970/100398.485/0.063/0.029</td>
<td>0.974/102049.988/0.057/0.028</td>
<td>0.975/100380.746/0.058/0.026</td>
</tr>
</tbody>
</table>

Model 1: one-factor model without Item 5 (9 Items); Model 2: two-factor-model as found in Volgograd (without Item 10); Model 3: two-factor-model as found in Ljubljana (without Item 5). No error correlations permitted between indicator variables; BIC (Bayesian Information Criterion, lower values indicate a better fit) comparisons permitted between Model 1 and Model 3 (same covariance matrix).

4. Validation of the Eastern Effect with Regional Dummies

Table A4–1: Motivation for violence regressed on the specific city dummies, reference category Hamburg

<table>
<thead>
<tr>
<th>City</th>
<th>Instrumental/utilitarian motivation for violence</th>
<th>Hedonistic motivation for violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ljubljana</td>
<td>0.317***</td>
<td>-0.323***</td>
</tr>
<tr>
<td>Volgograd</td>
<td>0.406***</td>
<td>-0.423***</td>
</tr>
<tr>
<td>Plzen</td>
<td>0.264***</td>
<td>n.s.</td>
</tr>
<tr>
<td>Kraków</td>
<td>0.106**</td>
<td>0.226***</td>
</tr>
</tbody>
</table>
Table A5-1: Multivariate linear regressions to approach the mechanisms that lead to the Eastern effect

<table>
<thead>
<tr>
<th>Covariat</th>
<th>Model 1 (I/H)</th>
<th>Model 2 (I/H)</th>
<th>Model 3 (I/H)</th>
<th>Model 4 (I/H)</th>
<th>Model 5 (I/H)</th>
<th>Model 6 (I/H)</th>
<th>Model 7 (I/H)</th>
</tr>
</thead>
<tbody>
<tr>
<td>transformation</td>
<td>0.278***/</td>
<td>0.266***/</td>
<td>0.273***/</td>
<td>0.266***/</td>
<td>0.208***/</td>
<td>0.152***/</td>
<td>0.227***/</td>
</tr>
<tr>
<td>deprivation</td>
<td>-0.132***</td>
<td>-0.136***</td>
<td>-0.127***</td>
<td>-0.134***</td>
<td>-0.191**</td>
<td>-0.213***</td>
<td>-0.200***</td>
</tr>
<tr>
<td>eltpos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>deprivation</td>
<td>0.12***/</td>
<td>0.038 (n.s.)</td>
<td>0.06/*</td>
<td>0.056*</td>
<td>0.012 (n.s.)</td>
<td>0.013 (n.s.)</td>
<td>0.009 (n.s.)</td>
</tr>
<tr>
<td>eltgw</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>deprivation</td>
<td>0.06/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eltgew</td>
<td>-0.194***/</td>
<td>-0.251***</td>
<td>-0.158***</td>
<td>-0.198***</td>
<td>-0.120***</td>
<td>-0.162***</td>
<td>-0.065***</td>
</tr>
<tr>
<td>delisubk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>deprivation</td>
<td>0.116***/</td>
<td>0.182***</td>
<td>0.096***</td>
<td>0.168***</td>
<td>0.039/</td>
<td>0.142***</td>
<td>-0.031 (n.s.)</td>
</tr>
<tr>
<td>normelt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>deprivation</td>
<td>0.162***</td>
<td>0.182***</td>
<td>0.096***</td>
<td>0.168***</td>
<td>0.039/</td>
<td>0.142***</td>
<td>-0.031 (n.s.)</td>
</tr>
<tr>
<td>inkons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>deprivation</td>
<td>0.162***</td>
<td>0.182***</td>
<td>0.096***</td>
<td>0.168***</td>
<td>0.039/</td>
<td>0.142***</td>
<td>-0.031 (n.s.)</td>
</tr>
<tr>
<td>delisubk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.530***/</td>
</tr>
<tr>
<td>deprivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.596***/</td>
</tr>
<tr>
<td>R² (I/H)</td>
<td>0.018/</td>
<td>0.019/</td>
<td>0.059/</td>
<td>0.070/</td>
<td>0.128/</td>
<td>0.161/</td>
<td>0.404/</td>
</tr>
<tr>
<td></td>
<td>0.004</td>
<td>0.004</td>
<td>0.065</td>
<td>0.096</td>
<td>0.147</td>
<td>0.152</td>
<td>0.454</td>
</tr>
<tr>
<td>CFI</td>
<td>0.955</td>
<td>0.954</td>
<td>0.958</td>
<td>0.955</td>
<td>0.958</td>
<td>0.955</td>
<td>0.952</td>
</tr>
<tr>
<td>χ² (df)</td>
<td>721.123 (12)</td>
<td>749.283 (16)</td>
<td>2002.991 (82)</td>
<td>2863.162 (139)</td>
<td>2854.425 (170)</td>
<td>3130.279 (204)</td>
<td>2789.964 (265)</td>
</tr>
<tr>
<td>RMSEA (p.close)</td>
<td>0.079</td>
<td>0.070</td>
<td>0.051</td>
<td>0.047</td>
<td>0.043</td>
<td>0.042</td>
<td>0.040</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.135)</td>
<td>(0.999)</td>
<td>(1.000)</td>
<td>(1.000)</td>
<td>(1.000)</td>
</tr>
<tr>
<td>SRMR</td>
<td>0.035</td>
<td>0.032</td>
<td>0.026</td>
<td>0.027</td>
<td>0.026</td>
<td>0.026</td>
<td>0.027</td>
</tr>
</tbody>
</table>

**I** = instrumental/utilitarian motive for violence  
**H** = hedonic motive for violence  
**eltpos** = positive parental attention (childhood)  
**eltgew** = experience of parental violence (childhood)  
**delisubk** = delinquent, violent peer group

**Model 1 (I/H)**  
**Model 2 (I/H)**  
**Model 3 (I/H)**  
**Model 4 (I/H)**  
**Model 5 (I/H)**  
**Model 6 (I/H)**  
**Model 7 (I/H)**

**Operationalization:**  
**eltpos:** Respondents were asked: “Please think of the time when you were a kid. We mean the time before you turned 12. How often did your parents behave toward you in the way it is described below?” Respondents could answer from 1 “never” to 4 “often.” The eltpos index was calculated by the mean of the following items (if latent, modelled accordingly): 1. “they praised me when I did something especially well”; 2. “they threw with things at me”; 3. “they gripped me hard or pushed me”; 4. “they hit me with an object.”  
**eltgew:** Respondents were asked: “Imagine, during school break, you got into a fight with someone from your class. You get very angry and hit him in the face with your fist. He falls to the ground, his pants get ripped and his nose starts bleeding. You did not get hurt. If you did something like that: How bad would the following persons think that is? Respondents could answer from 1 “not bad at all” to 5 “very bad.” The eltgew index takes into account the answers for father and mother (mean of the two items; if latent, modelled accordingly).  
**delisubk:** The respondents were asked to evaluate the following statements about their group of friends using a four-point scale (1 for “completely untrue” to 4 for “completely true”). The delisubk index was calculated by the mean of the following items (if latent, modelled accordingly): 1. “We fight with other groups”; 2. “When we get together many people are scared of us”; 3. “To have fun we sometimes do things that are forbidden.” **deprivation:** We constructed deprivation as a dummy variable where value 1 comprises adolescents whose parents are affected by unemployment and/or receive welfare benefits.
6. Effects of the Regional Dummies on the Possibly Mediating Variables

Table A6-1:

<table>
<thead>
<tr>
<th>City</th>
<th>Current parental normative rejection of violence</th>
<th>Current family climate: inconsistent prohibitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ljubljana</td>
<td>-0.106**</td>
<td>0.538***</td>
</tr>
<tr>
<td>Volgograd</td>
<td>-0.444***</td>
<td>0.380***</td>
</tr>
<tr>
<td>Plzen</td>
<td>-0.703***</td>
<td>0.222***</td>
</tr>
<tr>
<td>Kraków</td>
<td>-0.102**</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

Possible mediators in the relationship between transformation and instrumental/utilitarian motivation for violence regressed on the specific city dummies, reference category Hamburg.