Ekaterina Lytkina

ANOMIE AND ALIENATION IN THE POST-COMMUNIST AREA: A REAPPLICATION OF THE MIDDLETON SCALE IN RUSSIA AND KAZAKHSTAN

Ekaterina Lytkina[1]

ANOMIE AND ALIENATION IN THE POST-COMMUNIST AREA: A REAPPLICATION OF THE MIDDLETON SCALE IN RUSSIA AND KAZAKHSTAN[2]

Unlike commonly used, anomie and alienation not only have different theoretical backgrounds, but also different indicators and predictors. I examine the highly institutionalized alienation scale originally introduced by Middleton (1963), reapplied as a measurement of alienation (Seeman, 1991) and anomie (Huschka and Mau 2005, 2006) in a very relevant context for an anomic situation – the post-Communist countries Russia and Kazakhstan (round six of the World Values Surveys fielded the alienation question in just these two countries). Based on confirmatory factor analysis and multiple group comparisons, I find that the scale consists of two dimensions, which can be described as an anomie and alienation. The anomic dimension consists of indicators "normlessness" and "powerlessness," whereas the alienative one is comprised by "social isolation", "meaninglessness," and "job dissatisfaction." Though the structure proves to have full invariance in both countries, the predictors for anomie and alienation are different. For both countries, only income is an important predictor for anomie, and though to a lower degree, for alienation. In Kazakhstan, the level of urbanization also provides an impact on the level of anomie. Apart from income, in Russia alienation can be predicted by gender, and type of occupation (manual or intellectual), whereas in Kazakhstan it can be predicted by age.

Key words: anomie, alienation, Russia, Kazakhstan, measurement invariance.

JEL Classification: B 14, C38, C39, P20

[1] Junior Research Fellow at the Laboratory for Comparative Social Research (LCSR), National Research University Higher School of Economics, Russian Federation. E-mail: elytkina@hse.ru.

Introduction

Modern societies show a higher level of individualism and disintegration of individuals (Dragolov et al. 2013 p. 4). Isolated individuals often feel anxious about what is going in their society and consider themselves incapable of influencing societal processes (Srole 1956). People with these perceptions are more likely to show deviant behaviors, tend to distrust social institutes, and experience uncertainty and pessimism (Golovaha and Panina 2008, p. 5). These negative attitudes are addressed by two classical sociological concepts: individual anomie and alienation.

A large number of scales have been constructed to measure such attitudes in sociology and psychology, for instance Srole (1956), Dean (1961), Middleton (1963), McClosky and Schaar (1965), Olsen (1969), Furnham (1984), Travis (1993). New scales continue to appear, such as Tsahuridu (2011). Different indicators were developed within the scales, such as normlessness, meaninglessness, isolation, powerlessness, self-estrangement (Seeman 1959), cultural estrangement, and estrangement from work (Middleton 1963). Some authors concentrate on particular indicators (e.g. Dean 1961), whereas others aim to construct encompassing scales (e.g. McClosky and Schaar 1965, Olsen 1969). Needless to say, the various encompassing scales showed different success in producing coherence. For this reason, one might question whether anomie and alienation indeed represent just a single dimension.

This study addresses the question using a scale proposed by Middleton (1963) to study alienation. In interpreting this scale, the literature shows a large degree of incoherence: some authors, like Middleton himself, treat it as an alienation scale (Brannen & Peterson, 2009; Seeman, 1975), and whereas others interpret it as an anomie scale (Austin & Stack 1988, p. 358; Huschka & Mau 2006, p. 470). These authors provide neither theoretical reasons nor empirical evidence for why they interpret the instrument in this way or the other. Additionally, irrespective in which way the anomie or alienation instrument is interpreted, authors always presume unidimensionality.

This research shows that, in contrast to its treatment in the literature, the instrument is two-dimensional, not unidimensional. Moreover, the two dimensions are distinct in theoretically meaningful ways. One dimension plausibly represents Merton's (2006 [1968]: 245) concept of anomie, while the other dimension comes closer to Marx's (1844) or Travis's (1993) concept of alienation.

The concept of anomie is frequently used to examine post-communist transitions. Thus, anomie has been applied to Eastern Germany (Heinz, 1994), Hungary (Vingender, 2001), Ukraine (Golovaha & Panina, 2008), Russia (Pokrovski, 2000; Krivosheev, 2008), and Kazakhstan

(Buckley, 1997; Abbott & Wallace, 2012). Valuable as these studies are, they also suffer certain weaknesses. For one, there are few cross-country comparisons that would allow for conclusions about the generalizability of the instrument. Next, the concept of alienation is hardly addressed in a post-Soviet context.

Thus, it is valuable to study both anomie and alienation in two different post-communist countries– Russia and Kazakhstan. These are the only two post-communist societies in which the same scale was fielded in the same survey program, namely round six of the World Values Surveys. Russia and Kazakhstan share commonalities but are also distinct. As part of the post-Soviet space, both countries underwent a thorough social change and value breakdownAt the same time, the two countries differ greatly in social-economic characteristics, level of urbanization, structure of employment, level of education as well as in social inclusion and vertical mobility. This enables us to validate the Middleton scale in two rather different societies and analyse whether or not anomie and alienation can be considered a general phenomenon.

The remainder of this article is organized in six sections. First, I elucidate the context of the two societies under study. Second, I review anomie and alienation theories, discussing the indicators of these concepts previously used. Third, I formulate hypothesis on the dimensionality and predictors of the anomie/alienation instrument originated by Middleton. Forth, I introduce the data gatheredwithin the sixth round of the World Values Survey in 2011 in Russia and Kazakhstan and outline the methods used to analyse the data. After analysing the dimensionality of the scale applied and conducting invariance tests for the model introduced for both countries, I use background variables as predictors for the model to characterize the results in the different cultural contexts of the two countries.

1. Theoretical Outline

1.1. Research Context: Russia and Kazakhstan in Transformation

Russia and Kazakhstan are examples of different societies though they both represent post-Soviet countries. Russia scored on the Human Development Index (HDI)[3] at 0.775 in 2011, which was the 57th in the world, while Kazakhstan scored a significantly lower rate at 0.750, which placed it 87th out of 187 countries[4]. The countries have different levels of income[5] as well:

---

[3] A composite index measuring average achievement in three basic dimensions of human development—a long and healthy life, knowledge and a decent standard of living. For more details see: United Nations Development Programme. Human Development Reports. Technical note 1 Available at: http://hdr.undp.org/en [accessed: 28.09.2014].

[4] Human Development Index trends, 1980-2013 // United Nations Development Programme. Human Development Reports. Available at: http://hdr.undp.org/en/data [accessed: 28.09.2014].

[5] However, it is important to mark that the data for Kazakhstan can have a lower level of reliability than those for Russia which is due to the less openness of the society. Some of the problems of the statistical system of Kazakhstan are available here: Global

in Russia the Gross National Income (GNI) per capita, or gross national income, converted to U.S. dollars using the World Bank Atlas method, divided by the midyear population, in 2011 was equal to 10,820 compared to 8,190 in Kazakhstan[6]. Russia has a much higher level of income inequality, scoring at 42.3[7] on the Gini Index compared to 30.9[8] for Kazakhstan.

Kazakhstan shows a higher level of social exclusion than Russia. There is discrimination "on the basis of clan, ethnicity and class"[9] rather than gender or religion. The society has limited social mobility: "access to major economic and political positions takes place largely within a closed system".[10] Russia, in comparison, has "no indication of fundamental social exclusion on the basis of poverty, education or gender discrimination".[11] Access to knowledge is different in both countries: in Kazakhstan the expected years of schooling measured as "the total number of years of schooling a child of school-entrance age can expect to receive[12]" in 2011 was 14.9, and for Russia it was 14.0[13], whereas the mean years of schooling, or "which is the average number of years of education received in a life-time by people aged 25 years and older[14]" was 10.4 in Kazakhstan, and in Russia 11.7.[15] The Gender Inequality Index in Kazakhstan was 0.338 in 2010 whereas in Russia it was 0.327[16] and became equal at 0.312 in 2012 (51st out of 148).[17]

The two societies show a different level of urbanization: in Kazakhstan it is 58%,[18] and there are "considerable disparities… between the comparatively poor rural south and relatively well-off urban and rural areas in other regions".[19] In Russia, 72.8%[20] of the population are urban.

The rate of employment in 2009 in Kazakhstan[21] was higher than in Russia (See Table 1) and Kazakhstan has a significantly higher share of employees in the agrarian sector whereas more

---

Assessment Report on the Statistical System of Kazakhstan // UNECE and UNESCAP * February 2008. Available at: http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.57/2008/7.e.pdf [accessed: 28.09.2014].

[6] GNI per capita, Atlas method (current US$) // The World Bank. Available at: http://data.worldbank.org/indicator/NY.GNP.PCAP.CD [accessed: 28.09.2014].

[7] BTI 2012. Russia Country Report // Bertelsmann Stiftung. Available at: http://www.bti-project.org/reports/country-reports/pse/rus/2012/index.nc [accessed: 20.09.2014].

[8] BTI 2012. Kayakhstan Country Report // Bertelsmann Stiftung. Available at: http://www.bti-project.org/reports/country-reports/pse/kaz/2012/index.nc [accessed: 20.09.2014].

[9] Bertelsmann Stiftung, BTI 2012 — Kazakhstan Country Report. Gütersloh: Bertelsmann Stiftung, 2012. P. 16.

[10] Ibid, p. 16.

[11] Bertelsmann Stiftung, BTI 2012 — Russia Country Report. Gütersloh: Bertelsmann Stiftung, 2012. P. 12.

[12] Kazakhstan - Human Development Report 2013. Human Development Reports. Available at: http://hdr.undp.org/sites/default/files/Country-Profiles/KAZ.pdf [accessed: 20.09.2014]. P.1.

[13] Expected years of schooling (of children) (years) // United Nations Development Programme. Human Development Reports. Available at: http://hdr.undp.org/en/content/expected-years-schooling-children-years. [accessed: 28.09.2014].

[14] Kazakhstan - Human Development Report 2013. Human Development Reports. Available at: http://hdr.undp.org/sites/default/files/Country-Profiles/KAZ.pdf [accessed: 20.09.2014]. P.1.

[15] Mean years of schooling (of adults) (years) // United Nations Development Programme. Human Development Reports. Available at: http://hdr.undp.org/en/content/mean-years-schooling-adults-years [accessed: 28.09.2014].

[16] Gender Inequality Index // United Nations Development Programme. Human Development Reports. Available at: http://hdr.undp.org/en/content/gender-inequality-index [accessed: 28.09.2014].

[17] Kazakhstan - Human Development Report 2013. Human Development Reports. Available at: http://hdr.undp.org/sites/default/files/Country-Profiles/KAZ.pdf [accessed: 20.09.2014]. P.3.

[18] BTI 2012. Kayakhstan Country Report // Bertelsmann Stiftung. Available at: http://www.bti-project.org/reports/country-reports/pse/kaz/2012/index.nc [accessed: 20.09.2014].

[19] Bertelsmann Stiftung, BTI 2012 — Kazakhstan Country Report. Gütersloh: Bertelsmann Stiftung, 2012. P. 16.

[20] BTI 2012. Russia Country Report // Bertelsmann Stiftung. Available at: http://www.bti-project.org/reports/country-reports/pse/rus/2012/index.nc [accessed: 20.09.2014].

Russians work in industry and services. All these figures indicate consistently that the Kazakh economy is more traditional and the society less developed than the Russian one, although most of these differences are rather modest

Table 1. Employment in 2009, Percentage of Total Employment, Word Bank Indicators[22]

Employment in Sectors	Russia	Kazakhstan
Agriculture	10	29
Industry	28	19
Services	62	52
Employment to population ratio, 15 years and older	58	67

1.2. Theoretical Framework: Anomie and Alienation

Anomie is a concept introduced into sociology by Émile Durkheim. In his 1893 book "The Division of Labour", he described it as one of the abnormal types of the division of labour that emerges when labour division does not produce solidarity (Durkheim, 1996 [1893]). Durkheim also used the term anomie in his work "Suicide" in which he outlines how lacking normative regulation causes anomic suicide. Anomic suicides become more frequent when a society fails to limit people's endlessly growing desires. Durkheim believed that anomic suicides appear under both economic downturns and upturns because rapid social change of any kind can overwhelm people's levels of aspirations and coping capacity. He also wrote that anomic suicide is widely spread in the sphere of economy as well as in family life (Durkheim, 1912 [1897]).

Merton related anomie to the conflict between the culturally defined goals and the institutionalized means of their attainment. An anomic society sets goals without providing people with the means of reaching them (Merton, 2006, p. 284). In this view, goals like getting rich are mutual for all social classes but the lower classes lack the means to achieve them and thus experience higher social tension. In anomic situations, the only regulation of social behaviors derives from egoistic cost-benefit calculations and from the fear of being punished (Merton, 2006, p. 276).

---

[21] We choose this year for the reasons of comparability, as there is no statistics by the World Bank in 2010 and 2011 for Russia.
[22] Employment in agriculture (% of total employment) // The Word Bank. World Development Indicators. Available at: http://data.worldbank.org/indicator/SL.AGR.EMPL.ZS [accessed: 02.10.2014].
Employment in industry (% of total employment) // The Word Bank. World Development Indicators. Available at: http://data.worldbank.org/indicator/SL.IND.EMPL.ZS [accessed: 02.10.2014].
Employment in services (% of total employment) // The Word Bank. World Development Indicators. Available at: http://data.worldbank.org/indicator/SL.SRV.EMPL.ZS [accessed: 02.10.2014].
Employment to population ratio, 15+, total (%) (modeled ILO estimate) // The Word Bank. World Development Indicators. Available at: http://data.worldbank.org/indicator/SL.EMP.TOTL.SP.ZS [accessed: 02.10.2014].

He suggested five modes of of how individuals cope with anomic situations, based on acceptance, rejection or substitution of the old, accepted in the society and institutionalized means of their achievement to new ones: conformity, innovation, ritualism, retreatism, and rebellion. *Conformity* implies the acceptance of the prescribed goals and the institutionalized means for their attainment. Using uninstitutionalized, or deviant means to achieve the goals prescribed by culture is called *innovation*. *Ritualism* stands for the rejection or lowering of the goals accepted in society under continued acceptance of the means of achievement. *Retreatism* involves the rejection of both the means and the goals. *Rebellion* is the attempt to replace the conventional goals and means with completely new ones (Merton 2006: 256-277).

The concept of alienation was introduced by Karl Marx in 1814 in his Economic and Philosophic Manuscripts. He described four types of alienation: (1) alienation of workers from their "species essence": forced into meaningless routines, workers lose human dignity and are downgraded to the level of animals, (2) alienation between workers: by reducing work to a market commodity, the natural solidarity among workers is destroyed, (3) alienation of workers from the product: workers do not own what they themselves produce; (4) alienation from the act of production, as workers specialize on producing only bits and pieces of the product, they lose touch with the whole product (Marx, 1844). Alienation in Marx's terms is usually linked to the economic sphere, and particularly to self-estrangement and a lack of self-realization at work (Blauner, 1964; Hodson, 1996). Ollman defined alienation in the following way: "the intellectual construct in which Marx displays the devastating effect of capitalist production on human beings, on their physical and mental states and on the social processes of which they are a part" (Ollman, 1976).

Seeman was one of the first scholars to intermingle aspects of alienation and anomie. His purpose was to sum up "five basic ways in which the concept of alienation has been used […to] make the traditional interest in alienation more amenable to sharp empirical statement" (Seeman, 1959, p. 783-784). Indeed, Seeman proposed five meanings of alienation: powerlessness, meaninglessness, normlessness, isolation, and self-estrangement. In his operationalization, *powerlessness* stands for an "individual's sense of influence over socio-political events" (Seeman, 1959, p. 785); *meaninglessness* is given "when the individual is unclear what he ought to believe – when the individual's standards for clarity in decision-making are not met" (Seeman, 1959, p. 786); by *normlessness* he understands "the high expectancy that socially unapproved behaviours are required to achieve given goals" (Seeman, 1959, p. 788). Seeman's understanding of *isolation*, however, is different from that advocated by authors like Dean (1961) or Olsen (1969). Seeman follows the Merton's understanding of the idea of an inner rejection of "reigning goals and standards" (Seeman, 1959, p. 789). In so doing, Seeman actually imports another mode of adaptation to anomie, proposed by Merton, than "innovation" into his framework, but keeps

labeling it alienation. By *self-estrangement* Seeman means "the inability of the individual to find self-rewarding […] activities that engage him" (Seeman, 1959, p. 790).

At first, Seeman regarded only normlessness as an indication of anomie (Seeman, 1959, p. 787-788). This widely used indicator rests upon Durkheim's approach: an absence of norms and values weakenweakens a society's regulatory capacity, with the consequence that individuals are trapped in spirals of endlessly growing desires that eventually cannot be fulfilled (Durkheim, 1912, Seeman, 1959, 1982). Later however, Seeman also regarded meaninglessness as an indicator of anomie, following the logic of Parsons who considered anomie as resulting from uncertainty of expectations (Seeman, 1982, p. 122-123).

Middleton was the first author to operationalize the facets of alienation proposed by Seeman. He formulated six indicators of alienation: powerlessness, meaninglessness, normlessness, cultural estrangement, social estrangement, and estrangement from work. The formulations of powerlessness, meaninglessness, and normlessness are identical to those of Seeman. Middleton replaced "isolation" with "cultural estrangement," which he defined as a sense of non-identification with the mainstream culture (Middleton, 1963, p. 974). The indicator "social estrangement" was formulated to measure the "feeling of loneliness […] the subjective sense of social estrangement" (Middleton, 1963, p. 974). In addition, Middleton designed the indicator "estrangement from work" which is close to "self-estrangement" and describes the situation when a "man may become estranged from himself by failing to realize his own human capacities to the fullest" (Middleton, 1963, p. 974).

Five of the proposed indicators turned out to be highly correlated, while cultural estrangement was not closely related to the others (Middleton, 1963, p. 973–977). Some authors reapplied the scale. For example, Huschka and Mau (2005, p. 15) applied "powerlessness, meaninglessness, disorientation[23], normlessness, estrangement from work and social estrangement" as "dimensions of anomie". However, these authors did not justify their modifications of the original instrument. The item formulations are somewhat simplified compared to those intended by Middleton. The item formulations by Huschka and Mau were reapplied in the sixth round of the World Value Survey (2011) in Russia and Kazakhstan.

I consider that the Middleton instrument is two-dimensional, comprising anomie and alienation. I address two theoretically plausible measurements of anomie. The first model suggests, that normlessness is closely related to meaninglessness, as "lack of goal clarity" (Seeman, 1991, p. 328). Thus, unlike the suggestion of Merton, individuals may use socially unacceptable means also in a situation where aspirations are not defined. The second model, on the contrary, regards

---

[23] It seems that meaninglessness and disorientation stand for one indicator in their operationalization, though the authors don't give any explicit explanation.

normlessness as related to powerlessness and is close to the type "innovator" described by Merton: "In societies such as our own, then, the great cultural emphasis on pecuniary success for all and a social structure which unduly limits practical recourse to approved means for many set up a tension toward innovative practices which depart from institutional norms" (Merton, 1968, p. 203). In other words, when individuals are unable to influence their lives, the problems the society faces, they more readily break the rules in order to pursue the culturally ascribed goals.

1.3. Factors Influencing Anomie and Alienation

The literature proposes a wide range of correlates and predictors of anomie and alienation. Middleton found that, in the US, his instrument is strongly correlated with ethnicity and level of education. African Americans scored significantly higher on all items of the Middleton scale (Middleton, 1963, p. 975). Among both African-Americans and white Americans, people with higher education scored lower on the Middleton instrument (Middleton, 1963, p. 976). Srole (1965), who summarized indicators of powerlessness, meaninglessness, social pessimism (two indicators) and isolation[24] into another encompassing index, found a strong correlation between people'ssocioeconomic status and their scoring on his instrument (1965, p. 715-716). In further research, more significant negative correlates were found including age (Seeman, 1991, p. 315). For instance, Dean (1961, p. 757) combined indicators of powerlessness, normlessness, meaninglessness[25] and social isolation and found that rural background diminishes the scoring on his instrument. More recently, Legge, Davidov, and Schmidt (2008, p. 262-263) found for Germany that place of birth (East versus West Germany), and right-wing political orientation are connected with meaninglessness and that women tend to experience more meaninglessness than men.

Interestingly, a factor emphasized by both Marx (1844) and Durkheim (1996) has been largely neglected in studies of anomie and alienation: the type of work that a person performs. Both authors address the alienation of highly specialized workers who performing routinized tasks from their product, which is, in the interpretation of Besnard (1993, p. 163), a phenomenon different to anomie. Therefore, I assume that manual work is more specified than intellectual and

---

[24] One of the key problems with the existing indicators, is that "measures with similar content often go by different titles, and there is a tendency to adopt authors' labels uncritically" (Seeman, 1991, p. 293). So here we label the concepts according to a critical analysis published in: Lytkina E. Podhody k operationalisatsii ponyatia "anomiya" v empiricheskih issledovaniyah: analiticheskij obzor [Approaches Towards Operationalization of the Concept of Anomie in Empirical Studies: an Analytical Review] // Sotsiologiya: 4 M. Vol. 1 (38) 2014, pp. 165-199. Another interpretation of the indicators applied by Srole, can be found in: Legge S., Davidov E., Schmidt P. Social Structural Effects on the Level and Development of the Individual Experience of Anomie in the German Population // IJCV: Vol. 2 (2) 2008, p. 252.
[25] Though Dean himself addresses the indicator "I often wonder what the meaning of life really is" as "normlessness", we tend to call it "meaninglessness" in accordance with the conceptional framework by Seeman (1959) mentioned above.

may lead to a higher degree of alienation. This should not have a similar relation to anomie, if these are different phenomena.

1.4. Hypothesis

Based on the above review, I formulate the following hypotheses:

- The Middleton scale consists of two dimensions which express anomie and alienation.
- People with higher income are less alienated and less anomic.
- People who are more educated are less alienated and anomic.
- Older people are more anomic and alienated than younger people.
- Women are more anomic and alienated then men.
- People who are more involved in the manual work are more alienated.

2. Data and Methods

2.1. Data

The study uses data from the sixth round of the World Value Survey[26] gathered in 2011, where the Middleton instrument was applied in Russia and Kazakhstan. The Russian sample consists of 2500 respondents, while the Kazakh sample includes in Kazakhstan 1500 respondents.

Although there is huge literature on anomie and alienation, there is not a large amount of data available. Moreover, despite a considerable amount of research on post-communist countries, there are hardly any cross-country comparisons. Our analyses help to fill both gaps.

The Middleton instrument[27] consists of five items, each measured at Likert scale, where 1 stands for "totally agree" and 4 for "totally disagree":

- *To what extent do you agree with the statement: I don't have enough possibilities to make an influence on solving the problems we all face today;*
- *To what extent do you agree with the statement: I often feel lonely;*
- *To what extent do you agree with the statement: Life has become so difficult that I often don't have any idea what I should do;*
- *To what extent do you agree with the statement: In order to move forward people often have to break rules;*

---

[26] The representative sample for the whole countries was drawn from the entire population of 18 years and above, interviews were carried out in the form of face-to-face interviews. For more information, see: Fieldwork and Sampling // World Value Survey. Available at: http://www.worldvaluessurvey.org/WVSContents.jsp [accessed: 10.10.2014].

[27] The formulations were brought into the World Value Survey by Swader and Kosals, who implemented a simplified version of the scale applied by: Huschka D., Mau S. Social Anomie and Racial Segregation in South Africa // Social Indicators Research. 2006, Vol. 76, No. 3: 467-498.

- *To what extent do you agree with the statement: I don't like my job.*

In the order just mentioned, I interpret these items representing the concepts of: powerlessness, social isolation, meaninglessness, normlessness and job dissatisfaction[28].

In accordance with the previous literature, I predict anomie/alienation by the following indicators[29]: income (self-reported, by income group, where 1 stands for the group with the lowest and 10 with the highest income), gender (1 for men and 2 for women), age (measured in the years, self-reported), education (self-reported, from 1 "never studied" to 9 "higher education (MA)")[30], level of urbanization measured via the population size in the place where the interviewee lives (from 1 "less than 2000 people", to 9 "Moscow" for Russia, 8 "500 000 or more" for Kazakhstan), and kind of work the respondent performs (1 stands for "manual work" and 10 for "intellectual work").

2.2. Methods

The key research questions are the following: Is the Middleton scale one-dimensional? Does it have the same structure in Russia and Kazakhstan? Is there metric and scalar invariance in the two countries? Which of the before mentioned predictors of anomie/alienation perform better?

I first run Spearman correlations because each of the five items involves a four-point ordinal scale. Then I check for internal consistency using Cronbach's Alpha. In the third step, I employ a confirmatory factor analysis (Brown, 2006) with MPLUS 7 software to test the main hypothesis: the supposed two-dimensionality of the Middleton instrument. Confirmatory Factor Analysis "deals specifically with measurement models, that is, the relationships between observed measures or indicators… and latent variables or factors" (Brown, 2006, p. 1). It can be applied to check the reliability of an instrument (Brown, 2006, p. 2). I compare model fits, use modification indices to check for the possibility of an alternative underlying structure.

The data structure proves to be the same for both countries. As van de Schoot writes, "to be valid for such a comparison a questionnaire should measure identical constructs with the same structure across different groups" (van de Schoot, 2012, p. 1), so I perform multi-group comparisons to check for configural, metric and scalar invariance. Configural invariance "indicates that the same items load on the same latent variables across groups" (Davidov et al.

---

[28] The indicator "estrangement from work" in the original scale by Middleton had a different formulation: "I don't really enjoy most of the work that I do, but I feel that I must do it in order to have other things that I need and want" (Middleton 1963: 974). Therefore, we find that the latter formulation is rather different and this portrays a different social phenomenon.

[29] For the full list of indicators, coding and frequencies, see Appendix, Tables 6, 7.

[30] It was impossible to test hypotheses with such indicators as whether the interviewee is a migrant as there is almost no variance in Russia and Kazakhstan.

2012: 559), metric invariance shows "that the factor loadings of the indicators are equal […], it implies that the latent variable has equal scale intervals over countries […and] it allows a meaningful comparison of the relationship […] between the latent construct and other concepts across groups" (Davidov et al. 2012: 559–560). The highest level of invariance, the scalar invariance, "requires that the intercepts of each indicator are identical across groups" (Davidov, Dülmer, Schlüter, Schmidt, & Meuleman, 2012, p. 560) and enables me to compare means across groups. Besides, it "implies that all observed mean differences in the items must be conveyed through mean differences in the latent factor, instead of being a product of cross-country differences in item functioning" (Davidov et al., 2012, p. 560).

Finally, I apply structural equation models separately for Russia and Kazakhstan to sort out the most powerful predictors for anomie and alienation in both countries.

3. Findings

3.1. Bivariate Results

Table 2 shows the descriptive statistics for the main variables (for more details see appendix, Table 6).

Table 2. Descriptive Statistics of the Main Variables

Middleton Scale						
Variable name	Percentage of agreement (of substantive answers given)		Number of observations		Median	
	Ru	Kaz	Ru	Kaz	Ru	Kaz
I don't have enough possibilities to make an influence on solving the problems we all face today	-	-	2448	1456	2	2
Strongly agree	27,7	21,2	-	-	-	-
Agree	45,5	41,3	-	-	-	-
I often feel lonely	-	-	2431	1466	3	3
Strongly agree	9,2	7,3	-	-	-	-
Agree	21,7	18,1	-	-	-	-
Life has become so difficult that I often don't have any idea what I should do	-	-	2404	1463	3	3

Strongly agree	12,7	9,7	-	-	-	-
Agree	33,3	32,6	-	-	-	-
In order to move forward people often have to break rules	-	-	2307	1420	2	2
Strongly agree	18,5	18,6	-	-	-	-
Agree	54,4	51,2	-	-	-	-
I don't like my job	-	-	1885	1258	3	3
Strongly agree	9,5	10,0	-	-	-	-
Agree	25,9	26,4	-	-	-	-

Social-Demographic Variables					
Variable name	Number of observations		Mean*		Standard Deviation*
	Russia	Kazakhstan	Russia	Kazakhstan	Russia	Kazakhstan
Income	2425	1500	4,08	5,3	1.997	1,953
Gender	2500	1500	-	-	-	-
Age	2500	1500	44,7	40	17.281	15,350
Education	2488	1500	6,46	6,69	1.888	1,848
Level of urbanization	2500	1500	-	-	-	-
Type of work	2138	1500	4,2	5,4	4.116	3,025

*Mean and Standard Deviation is given to variables measured on an interval scale or a scale that can be treated as such

The level of agreement with alienative and anomic attitudes in Russia and Kazakhstan is similar, with a slightly higher overall level of powerlessness in Russia (variable: "I don't have enough possibilities to make an influence on solving the problems we all face today"). We also can see that the median values are the same.

The correlation analysis shows a significant connection between the indicators of (1) meaninglessness and social isolation, and (2) to a somewhat lesser extent between normlessness and meaninglessness, (3) powerlessness and normlessness, and (4) job dissatisfaction and meaninglessness (Table 3). The weakest correlations exist between normlessness and job dissatisfaction, and normlessness and social isolation. The pattern is similar for both countries.

Table 3. Summary of Correlations between the Items Comprising the Middleton Scale for the Russian and Kazakh Sample

N	Variables	I don't have enough possibilities to make an influence on solving the problems we all face today	I often feel lonely	Life has become so difficult that I often don't have any idea what I should do	In order to move forward people often have to break rules	I don't like my job
1	I don't have enough possibilities to make an influence on solving the problems we all face today	1	,17***	,28***	,24***	,10**
2	I often feel lonely	,15***	1	,40***	,10***	,16***
3	Life has become so difficult that I often don't have any idea what I should do	,25***	,44***	1	,27***	,23***
4	In order to move forward people often have to break rules	,23***	,13***	,26***	1	,02^{ns}
5	I don't like my job	,07**	,26***	,25***	,11***	1

Note. Intercorrelations for Russian participants (N=2500) are presented below the diagonal, and intercorrelations for the Kazakh participants (N=1500) are presented above the diagonal.

Cell entry is Spearman correlation coefficient. Signif. levels:***p< .001; ** p < .01; * p<.05

The correlation analysis provides a preliminary confirmation of our main hypothesis that we now have a reason to further examine them with the help of exploratory and confirmatory factor analyses.

3.2. Factor Analysis Results

Hushka and Mau (2006, p. 476) ran a factor analysis of the Middleton scale and conclude that all the items loaded on one factor which enabled them to construct an additive anomie index which they use for further research. However, the data provide a different result: the Cronbach's Alpha is low for the five items in both Russia (0.338) and Kazakhstan (0.479). Such weak reliability measures further nurture the suspicion that the Middleton instrument is not one-dimensional.

As stated above, theoretical considerations presuppose two possible models: normlessness connected with meaninglessness or normlessness connected with powerlessness. I compare the two models with a one-factor solution (for model comparisons see Appendix, Tables 8 & 9). The model fits of confirmatory factor analysis also made us decide in favour of the two-factor solution that leads us to conclude that there are two dimensions of the scale in both Russia and Kazakhstan. We see that the model where the factor of anomie is formed by "normlessness" and "powerlessness" turns out to be more reliable. That is the case for both countries (Appendix, Tables 8 & 9).

In summary, the best solution for both countries is this: the indicators normlessness and powerlessness form the first factor whereas the second one consists of meaninglessness, social isolation, and job dissatisfaction (Figure 1). In line with Merton's point of view, the first factor represents *anomie* because it implies a discrepancy between the accessibility of goals (where people have no resources to solve problems) and the means of their attainment (which makes them break the rules). By contrast, the second factor reflects alienation because it captures up attitudes of cognitive disorientation, loneliness and dissatisfaction with one' job, which make an individual driven apart from the society. We also see that the two factors are strongly correlated (Table 4), though more than half of the variance is different in both Russia and Kazakhstan. The modification indices suggested for the model are insignificant.

Figure 1. General Model of Confirmatory Factor Analysis for Russia and Kazakhstan with a Two-Factor Middleton Model[31]
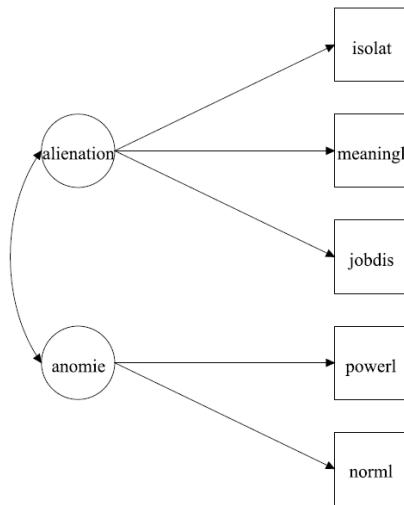

Table 4. Model Comparison for Confirmatory Factor Analysis in Russia and Kazakhstan with a Two-Factor Middleton Model

	Russia	Kazakhstan
Alienation (factor loadings)		
Isolation	.563 (.023)	.475 (.032)
Meaninglessness	.803 (.027)	.866 (.043)
Job dissatisfaction	.338 (.028)	.265 (.032)
Anomie (factor loadings)		
Powerlessness	.441 (.030)	.509 (.037)
Normlessness	.473 (.032)	.488 (.037)
Latent factor correlation (ANOMIE with ALIENATION)	.688 (.043)	.668 (.051)
Alienation (Residual Variances)		
Isolation	.683 (.026)	.774 (.030)
Meaninglessness	.355 (.044)	.251 (.074)
Job dissatisfaction	.886 (.019)	.930 (.017)
Anomie (factor loadings)		

---

[31] "Iso" stands for "social isolation", "meanl" – for "meaninglessness", "jobdis" for "job dissatisfaction", "pow" for "powerlessness", "norml" for "normlessness.

Powerlessness	.805 (.027)	.740 (.038)
Normlessness	.776 (.030)	.762 (.036)
Model fits		
	Chisq = 19.731, df = 4, p=0.0006, RMSEA = 0.04, CFI = 0.986, TLI = 0.964, SRMR = 0.017. The results where the variables were treated as categorical were identical	Chisq = 9.511, df = 4, p=0.0495, RMSEA = 0.03, CFI = 0.991, TLI = 0.978, SRMR = 0.016. The results where the variables were treated as categorical were identical

Note. Standardized coefficients given. Standard error is given in brackets. P-value <0.005.

We see that in both countries the structure of the factors is the same and that the factor loadings are similar. Job dissatisfaction is the least important of the variables. The alienative factor is chiefly determined in both countries by meaninglessness. The importance of normlessness and powerlessness for the anomic factor is similar, whereas the loading of normlessness is a slightly higher in Russia, and lower in Kazakhstan.

Multi-group comparisons showed that there is configural, metric and scalar invariance (Table 5).

Table 5. Configural Invariance for a One-Factor Middleton Scale for Russia and Kazakhstan

| Invairance	Configural	Metric	Scalar
Chi-Square	59.821	65.494	99.077
df	11	14	16
p	0.0000	0.0000	0.0000
RMSEA	0.047	0.043	0.051
Pclose RMSEA	0.631	0.855	0.412
CFI	0.972	0.970	0.952
TLI	0.948	0.957	0.939
SRMR	0.023	0.028	0.042

Thus, I conclude that anomie and alienation are comparable in the two countries. However, interesting would be to explore the influence of the cultural context in Russia and Kazakhstan. In the next step, I add socio-demographic covariates to the model.

3.3. MIMIC Models

The variables chosen as predictors for anomie and alienation were socio-demographical ones, which, as mentioned above, are different in both countries. For both countries for both anomie and alienation, income is the most important. Level of education turned out to be of no importance for the models in the two countries.

For Russia, type of work, income, and gender can predict alienation (Figure 2). There is also a very weak contribution of the explanatory variables age and level of education. Other indicators are insignificant (p-Value is more than 0.05). Women are more alienated then men. People with lower income, and manual workers are more alienated. Anomie can mostly be explained by income and to a very low extent by type of work and gender. The lower the income, the more anomic people are. White-collar workers tend to be less anomic than manual workers, and women tend to be more anomic.

Figure 2. Structural Equational Model for Russia[32]

---
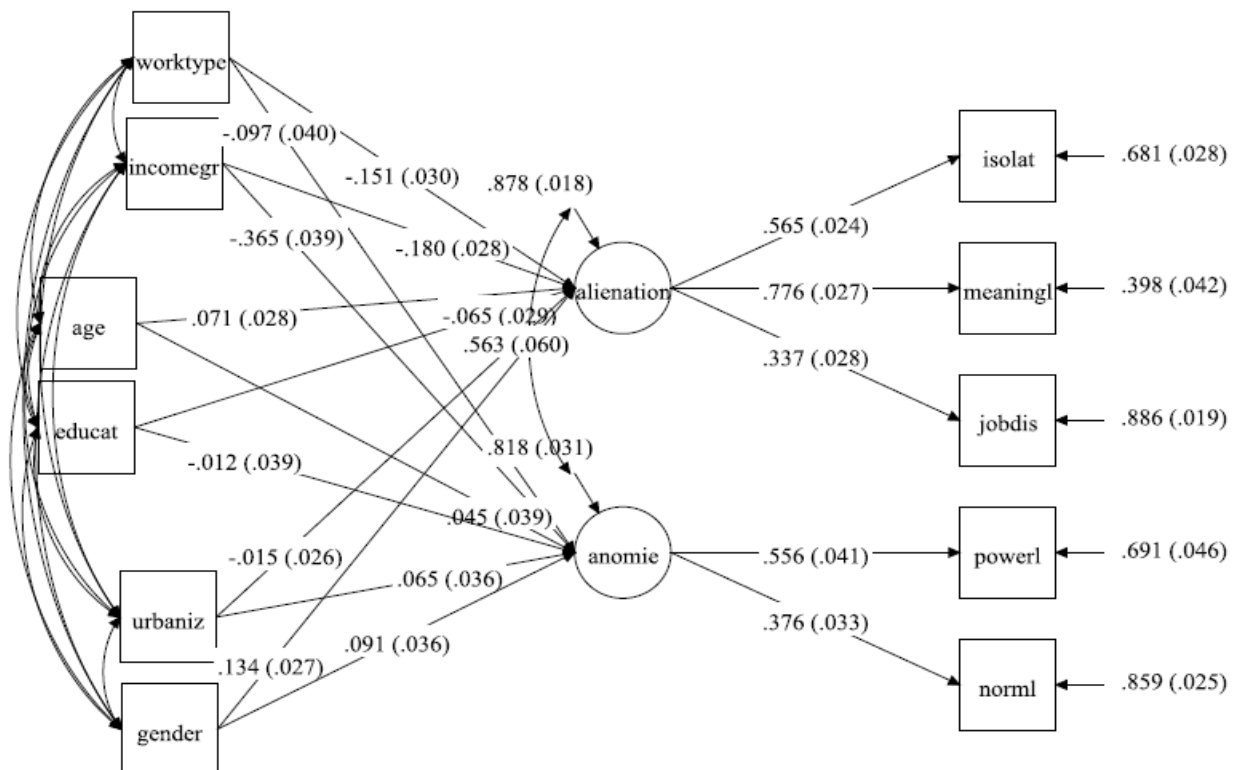
[32] The model fit for Russia: Chisq =141.892, df = 22, p=0.0000, RMSEA = 0.051, CFI = 0.900, TLI = 0.818, SRMR = 0.029. "Isolat" stands for "social isolation", "meaningl" – for "meaninglessness", "jobdis" for "job dissatisfaction", "powerl" for "powerlessness", "norml" for "normlessness", "worktype" for "type of occupation", "incomegr" for "income group", "age" for "age of respondent", "educat" for "education", "urbaniz" for the "number of citizens", "gender" for "gender of respondent". For more details on the applied variables, see Appendix 1.

In Kazakhstan, alienation can be predicted by income and age (Figure 3). Richer people are less alienated and older people are more alienated. Income is also the most important predictor of anomie. Other predictors are the size of residential place, standing for the level of urbanization, and age. Richer people are less anomic. Citizens of larger cities and older people are more anomic.

Figure 3. Structural Equational Model for Kazakhstan[33]
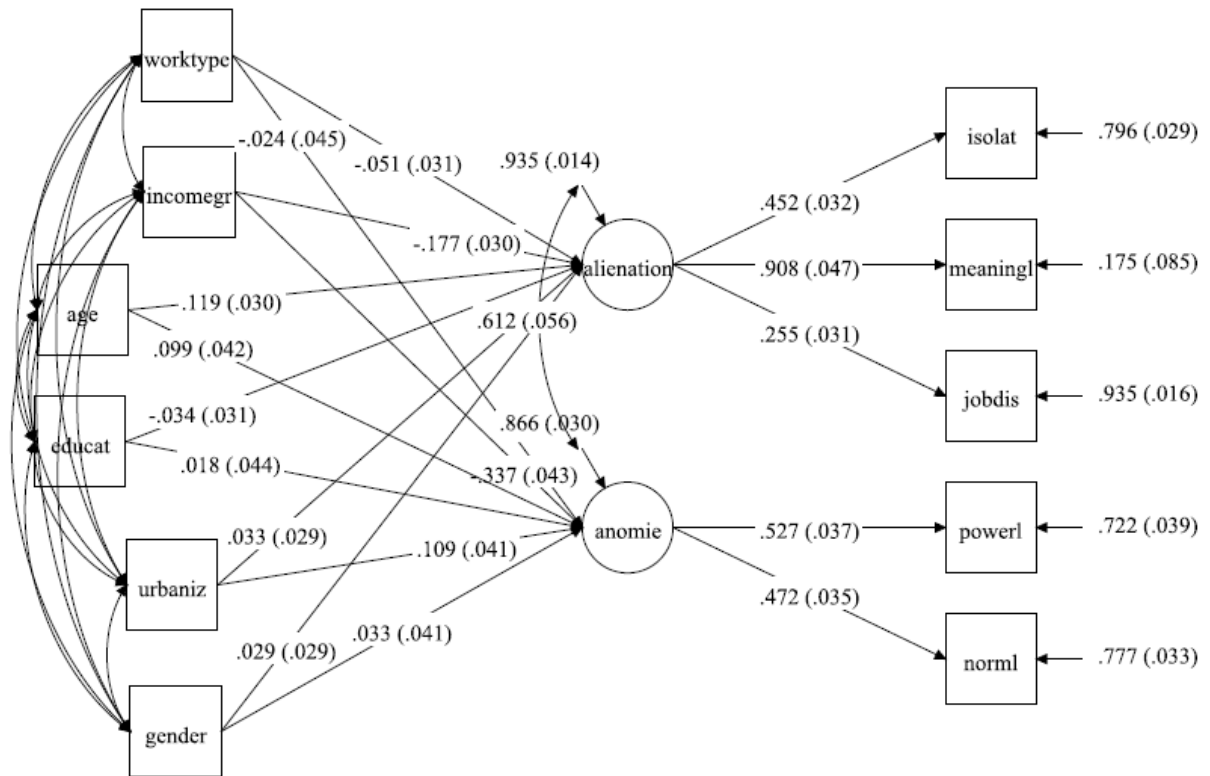
The predictive power of the socio-demographic variables for the explanation of alienation and anomie for both countries is not so high. The model fits are imperfect. However, the modification indices for Kazakhstan are low. Those for Russia are higher, but they do not reveal any particular structure explaining the residual intercepts. The highest show correlations between alienation and normlessness, alienation and powerlessness, and an influence of age on normlessness and powerlessness. Though adding a direct effect of age on normlessness and meaninglessness somewhat improves the model fit, the effect size is insignificant. In the analysis the maximum likelihood estimation (ML) estimator was used, changing the estimator to

---

[33] The model fit for Kazakhstan: Chisq = 102.727, df = 22, p=0.0000, RMSEA = 0.050, CFI = 0.901, TLI = 0.820, SRMR = 0.029. "Isolat" stands for "social isolation", "meaningl" – for "meaninglessness", "jobdis" for "job dissatisfaction", "powerl" for "powerlessness", "norml" for "normlessness", "worktype" for "type of occupation", "incomegr" for "income group", "age" for "age of respondent", "educat" for "education", "urbaniz" for the "number of citizens", "gender" for "gender of respondent". For more details on the applied variables, see Appendix 1.

maximum likelihood estimation with robust standard errors (MLR) did not show any improvement. Though the model fits could be better, some substantive conclusions can be made. Income is a universal predictor for anomie and alienation for Russia and Kazakhstan. It is more important for anomie than for alienation. To explain alienation, age was significant in both countries. In Russia for both anomie and alienation, gender was significant. In Kazakhstan, it did not play a role. For Kazakhstan, age was more important than for Russia, which might speak in favour of stronger traditional values in Kazakh society. For Kazakhstan, there was no effect of the type of work, which was a significant factor in Russia. For Kazakhstan, the size of residential place was important for anomie, whereas it was of no significance in Russia. The two latter findings can be explained by a higher level of urbanization, and development in the industry and service sectors in Russia. The lack of influence of education might be explained by the fact that there is no perceived social exclusion on this basis in both countries.

Conclusions and Discussion

This research re-examines one of a well-established scales used in sociology and social psychology with the help of contemporary research methods and techniques. In the 60s and 70s, when most of the anomie and alienation scales were constructed, accurate tests for multidimensionality or invariance were unavailable (except for correlation analysis and partial correlations). The validation of the Middleton scale enables us to draw several conclusions and to set several further research problems. First, we see that the scale is two-dimensional: the model is theoretically well grounded; it also gives a better model fit for a two-factor solution. The measurement it provides is stable and shows almost the same results for Russia and Kazakhstan. Thus, it measures general, not country-specific phenomena. Second, though individual anomie and alienation are closely connected, they are different phenomena. More than half of the variance of anomie and alienation is unique in both countries. We also see that job dissatisfaction does not provide us with an accurate measure for alienation. Third, the indicators forming the anomic factor for both countries are different from some of treatments in the literature. We see that normlessness is strongly connected with powerlessness, while meaninglessness is more connected with social isolation. This is relatively close to Merton's definition of anomie: the impossibility of changing the current situation can push people to act "innovatively": disregard social norms and use the easiest means for goal attainment. However, the very notion of powerlessness is itself rather broad and is comprised of different dimensions (Levenson, 1973). We also observe that the indicator "job dissatisfaction" does not fit the model

well, and it may be more plausible to substitute it in further research with a measurement of "self-estrangement" as initially proposed by Seeman.

Moreover, there is a very important limitation in the current research (as well as in the majority of the existing studies on anomie and alienation): the Middleton scale, which was originally constructed as an exploratory one, is restricted to the five items used in the survey. Therefore, it is impossible to test theoretical concepts more explicitly or to get more than a two-factor solution in a model or one factor standing for only one theoretical dimension. Further empirical research is needed implementing more items (at least two or three per one theoretical concept). It should be tested on more data whether anomie really can be measured by normlessness and powerlessness together.

To make further conclusions, data on more countries is required. This research shows that the predictors for anomie and alienation in Russia and Kazakhstan are similar to those found in Western European countries. However, more research is necessary in order to reveal more profound contextual differences. Thus, a cross-country research checking whether the origin and character of anomie is the same in Western European and post-Soviet countries is needed.

We also see that the explanatory variables for anomie and alienation are different for both countries. Only income can be viewed as a unique explanatory variable. For Russia, the type of occupation and gender were of significance, whereas they played no role in Kazakhstan. On the contrary, in Kazakhstan the role of age was important for both anomie and alienation. Therefore, anomie and alienation might be phenomena which are not well explained by structural variables and should be studied with the help of some individual-level variables, including values. A comparison of the influence of different socio-psychological characteristics between countries, in particular, cultural differences in values and in socialization practices, would be of great interest, as these could contribute to the observed differences in the influence of demographic variables on the anomic and alienative attitudes.

References

Abbott P., Wallace C. (2012). Satisfaction and societal quality in Kazakhstan In H. Selin, & G.Davey (Eds.), *Happiness across cultures: views of happiness and quality of life in non-western cultures* (pp. 107-120). Netherlands: Springer.

Austin R., & Stack S. (1988). Race, class, and opportunity: changing realities and perceptions. *The Sociological Quarterly, 29* (3), 357-369.

Besnard Ph. (1993). Anomie and fatalism in Durkheim's theory of regulation In S. Turner (Ed.), *Emile Durkheim. Sociologist and moralist* (pp. 163-186). London, New York: Routledge.

Brannen M., & Peterson M. (2009). Merging without alienating: interventions promoting cross-cultural organizational integration and their limitations. *Journal of International Business Studies, 40* (3), 468-489.

Brown T. (2006). *Confirmatory factor analysis for applied research*. New York: THE GUILFORD PRESS. 2006.

Buckley C. (1997). Suicide in post-Soviet Kazakhstan: Role stress, age, and gender. *Central Asian Survey*, 16 (1), 45-52. DOI: 10.1080/02634939708400968

Dean D. (1961). Alienation: its meaning and measurement. *American Sociological Review, 26* (5), 753-758.

Dragolov G., Ignácz, Z., Lorenz J., Delhey J., Boehnke K. Social Cohesion Radar Measuring Common Ground. An international Comparison of Social Cohesion Methods Report // Brettelmannsstiftung, 2013. Retrieved from http://www.gesellschaftlicher-zusammenhalt.de/.

Durkheim E. (1912 [1897]). *Suicide: a sociological essay*. Saint-Petersburg: N.P. Karbasnikow (in Russian).

Durkheim E. (1996 [1893]). *The division of labour in society*. Moscow: Kanon (in Russian).

Eldad Davidov, Hermann Dülmer, Elmar Schlüter, Peter Schmidt, & Bart Meuleman (2012). Using a multilevel structural equation modeling approach to explain cross-cultural measurement noninvariance. *Journal of Cross-Cultural Psychology*, 43 (4), 558–575. DOI: 10.1177/0022022112438397

Golovaha E., Panina N. (2008). Postsovetskaya anomiya: osobennosti vykhoda iz sostoyaniya anomicheskoy demoralizovannosti v Rossii i na Ukraine [Post-soviet anomie: aspects of the way out of the state of anomic demoralization in Russia and the Ukraine]. *Obshchestvennye nauki i sovremennost'*, 6, 5-10 (in Russian).

Heins M. (1994). *Transformationsprozesse in Ostdeutschland: norm-, anomie- und innovationstheoretische Aspekte*. Wiesbaden: DUV, Dt. Univ.-Verl.

Huschka D., & Mau S. (2006). Social anomie and racial segregation in South Africa. *Social Indicators Research, 76* (3), 467-498.

Huschka D., Mau S. (2005). Social anomie in South Africa. Aspects of quality of life. *Wissenschaftszentrum Berlin für Sozialforschung (WZB)*, Best.-Nr. P 2005-002, 1-28.

Krivosheev V. (2004). Osobennosti anomii v sovremennom rossiyskom obshchestve [Peculiarities of Anomie in the Contemporary Russian Society]. *Sotsiologicheskie issledovaniya*, 3, 93-97 (in Russian).

Legge S., Davidov E., Schmidt P. (2008). Social structural effects on the level and development of the individual experience of anomie in the German population. *International Journal of Conflict and Violence*, 2 (2), 248-267.

Levenson, H. (1973). Reliability and validity of the I, P, and C scales- A multidimensional view of Locus of Control. Paper presented at the American Psychological Association Convention: Montreal, Canada. Retrieved from http://files.eric.ed.gov/fulltext/ED087791.pdf

Marx, K. *Economic and philosophic manuscripts of 1844*. Retrieved from http://www.marxists.org/

McClosky H, Schaar J. (1965). Psychological dimensions of anomie. *American Sociological Review. 30* (1), 14-40.

Merton R. (1968) *Social theory and social structure*. New York: The Free Press.

Merton R (2006 [1968]). *Social theory and social structure*. M.: AST, Hranitel (in Russian).

Middleton R. (1963). Alienation, Race and Education. *American Sociological Review. 28* (6), 973-977.

Ollman, B. (1976). *Alienation: Marx's conception of man in capitalist society*. Cambridge U.P.; 2nd ed. Retrieved from http://www.nyu.edu/

Olsen M. (1969) Two Categories of Political Alienation. *Social Forces, 47* (3), pp. 288-299.

Pokrovski N. Universum Odinochestva [Universe of Loneliness]. M. Logos, 2008 (in Russian).

Rens van de Schoot, Peter Lugtig & Joop Hox (2012): A checklist for testing measurement invariance, *European Journal of Developmental Psychology, 1-7.* DOI:10.1080/17405629.2012.686740.

Robinson J. (1973). Alienation and anomia. In J. Robinson, Ph. Shaver (Eds.) *Measures of social psychological attitudes* (pp. 245-294). Ann Arbor, MI: Institute for Social Research.

Seeman M. (1975). Alienation studies. *Annual Review of Sociology*. 1, 91-123.

Seeman M. (1959). On the meaning of alienation. *American Sociological Review, 24* (6), 783-791.

Seeman, M. (1982). A Prolegomenon on empirical research regarding anomie. In S. Shoham (Ed.), *Anomie and alienation revisited* (pp. 121-138). Tel Aviv: Ramon Publishing Co.

Seeman M. (1991). Alienation and anomie. In J. Robinson, Ph. Shaver, W. Lawrence (Eds.), *Measures of personality and social psychological attitudes* (pp. 291-372). Academic Press.

Srole L. (1956). Social integration and certain corollaries: an exploratory study. *American Sociological Review. 21* (6), 709-716.

Travis R. (1993). The MOS alienation scale: An alternative to Srole's anomia scale. *Social Indicators Research, 28* (1), 71-91.

Tsahuridu E. (2011). An exploration of factors affecting work anomia. *Journal of Business Ethics,* 99, 297-305.

Vingender I. (2001). Anomiya i deviatsiya v vengerskom obshchestve [Anomie and Deviance in the Hungarian Society]. *Sotsiologicheskie issledovaniya,* 3, 84-89 (in Russian).

Appendix 1.

Table 6. Used Concepts and Corresponding Indicators.

N	Concept	Indicator	Measured / Recoded
1	Powerlessness	*To what extent do you agree with the statement: I don't have enough possibilities to make an influence on solving the problems we all face today; (reversed coded)*	1 stands for "totally disagree" and 4 for "totally agree"
2	Social isolation	*To what extend do you agree with the statement: I often feel lonely (reversed coded)*	1 stands for "totally disagree" and 4 for "totally agree"
3	Meaninglessness	*To what extend do you agree with the statement: Life has become so difficult that I often don't have any idea what I should do (reversed coded)*	1 stands for "totally disagree" and 4 for "totally agree"
4	Normlessness	*To what extend do you agree with the statement: In order to move forward people often have to break rules (reversed coded)*	1 stands for "totally disagree" and 4 for "totally agree"
5	Job dissatisfaction	*To what extend do you agree with the statement: I don't like my job (reversed coded)*	1 stands for "totally disagree" and 4 for "totally agree"
6	Income	On this card is an income scale on which 1 indicates the lowest income group and 10 the highest income group in your country. We would like to know in what group your household is. Please, specify the appropriate number, counting all wages, salaries, pensions and other incomes that come in.	1 stands for the group with the lowest and 10 with the highest income
7	Gender	Code respondent's sex by observation	0 Male, 1 Female

8	Age	This means you are _____ years old (write in age in two digits).	-
9	Education	What is the highest educational level that you have attained?	from 1 – "never studied" to 9 – "higher education (M.A.)"
10	Level of urbanization (different scale in Russia and in Kazakhstan)	Code size of town	from 1 – "less than 2000 people", 8 – "500 000 or more", with additional value ", 9 – "Moscow" for Russia
11	Type of work	Are the tasks you do at work mostly manual or mostly intellectual? If you do not work currently, characterize your major work in the past.	1 means "mostly manual tasks" and 10 means "mostly intellectual tasks"

Table 7. Frequencies of the Applied Variables

Frequencies of the Variable "*To what extent do you agree with the statement: I don't have enough possibilities to make an influence on solving the problems we all face today"* in Russia and Kazakhstan, Percentage of Valid Answers

I don't have enough possibilities to make an influence on solving the problems we all face today	Russia	Kazakhstan
\	27,4	20,6
Agree	44,4	40,1
Disagree	22,1	31,1
Strongly disagree	3,7	5,2
I don't know	2,4	2,9
Totally	100	100

Frequencies of the Variable "*To what extend do you agree with the statement: I often feel lonely*" in Russia and Kazakhstan, Percentage of Valid Answers

I often feel lonely	Russia	Kazakhstan
Strongly agree	9,2	7,1
Agree	21,7	17,7
Disagree	40,2	40,7
Strongly disagree	26	32,3
I don't know	2,8	2,3
Totally	100	100

Frequencies of the Variable "*To what extend do you agree with the statement: Life has become so difficult that I often don't have any idea what I should do*" in Russia and Kazakhstan, Percentage of Valid Answers

Life has become so difficult that I often don't have any idea what I should do	Russia	Kazakhstan
Strongly agree	12	9,5
Agree	32,4	31,8
Disagree	38,1	41,5
Strongly disagree	13,4	14,8
I don't know	4,1	2,5
Totally	100	100

Frequencies of the Variable "*To what extend do you agree with the statement: In order to move forward people often have to break rules*" in Russia and Kazakhstan, Percentage of Valid Answers

In order to move forward people often have to break rules	Russia	Kazakhstan
Strongly agree	16,3	17,6
Agree	50,4	48,5
Disagree	20,7	23,3

Strongly disagree	4,5	5,3
I don't know	8,1	5,3
Totally	100	100

Frequencies of the Variable "*To what extend do you agree with the statement: I don't like my job*" in Russia and Kazakhstan, Percentage of Valid Answers

I don't like my job	Russia	Kazakhstan
Strongly agree	6,7	8,4
Agree	19,6	22,3
Disagree	31,8	32,1
Strongly disagree	16,2	21,3
I don't know	25,7	16,1
Totally	100	100

Frequencies of the Variable "*Are the tasks you do at work mostly manual or mostly intellectual? If you do not work currently, characterize your major work in the past*" in Russia and Kazakhstan, Percentage of Valid Answers

Frequences, %	mostly manual tasks	2	3	4	5	6	7	8	9	mostly intellectual tasks
Russia	20,7	7,0	6,8	5,1	15	8,4	5,8	8,3	4,8	18
Kazakhstan	17,5	5,8	7,9	6,1	13,1	11,6	8,7	9,7	6,9	12,6

Frequencies of the Variable "*On this card is an income scale on which 1 indicates the lowest income group and 10 the highest income group in your country. We would like to know in what group your household is. Please, specify the appropriate number, counting all wages, salaries, pensions and other incomes that come in*" in Russia and Kazakhstan, Percentage of Valid Answers

Frequences,	Lowest	2	3	4	5	6	7	8	9	Highest

%	group									group
Russia	8,7	8,2	18,8	17,7	24,6	12,5	6,2	2,9	,3	,1
Kazakhstan	4,5	3,3	8,9	14	25,5	17,3	13,9	8	2,2	2,3

Frequencies of the Variable "*What is the highest educational level that you have attained? [NOTE: if respondent indicates to be a student, code highest level s/he expects to complete]*" in Russia and Kazakhstan, Percentage of Valid Answers

	Russia	Kazakhstan
No formal education	,1	,2
Incomplete primary school	,3	,4
Complete primary school	1,4	1,1
Incomplete secondary school: technical/vocational type	5	4,4
Complete secondary school: technical/vocational type	39,3	36,5
Incomplete secondary: university-preparatory type	7,9	3,7
Complete secondary: university-preparatory type	14,8	17,1
Some university-level education, without degree	5,3	6,5
University-level education, with degree	26	30,1

Frequencies of the Variable "*Code size of town*," in Russia and Kazakhstan, Percentage of Valid Answers

	Russia	Kazakhstan
Under 2,000	17,8	12,3
2,000 - 5,000	7,4	22,7
5 - 10,000	6,5	5,1
10 - 20,000	5,8	5,4
20 - 50,000	7,1	7,8
50 - 100,000	4,8	3,4

100 - 500,000	18,7	24,4
500,000 and more	23,4	18,9
Moscow (for Russia)	8,4	-

Frequencies of the Variable "*Gender of Respondent*" (Defined by the Interviewer) in Russia and Kazakhstan, Percentage of Valid Answers

|	Russia	Kazakhstan
Male	44,6	39,6
Female	55,4	60,4

Table 8. Model Fits of Confirmatory Factor Analysis for Russia for One and Two-Factor Solutions

Statistics	1 factor model	2 factors: N2= Meaninglessness + Normlessness	2 factors: N2= Powerlessness + Normlessness
Chi-Square	50.223	50.201	19.731
df	5	4	4
p	0.0000	0.0000	0.0006
RMSEA	0.060	0.068	0.040
Pclose RMSEA	0.119	0.033	0.809
CFI	0.958	0.957	0.986
TLI	0.917	0.894	0.964
SRMR	0.029	0.029	0.017

Table 9. Model Fits of Confirmatory Factor Analysis for Kazakhstan for One and Two-Factor Solutions

| Statistics	1 factor model	2 factor model (normlessness + meaninglessness)	2 factor model (normlessness + powerlessness)
Chi-Square	38.252	38.251	9.511
df	5	4	4
p	0.0000	0.0000	0.0495
RMSEA	0.067	0.076	0.030
Pclose RMSEA	0.070	0.022	0.889
CFI	0.947	0.945	0.991
TLI	0.894	0.863	0.978
SRMR	0.032	0.032	0.016

Figure 4. Model [34] of Confirmatory Factor Analysis for Russia with a Two-Factor Middleton Model (standardized coefficients)[35]

---
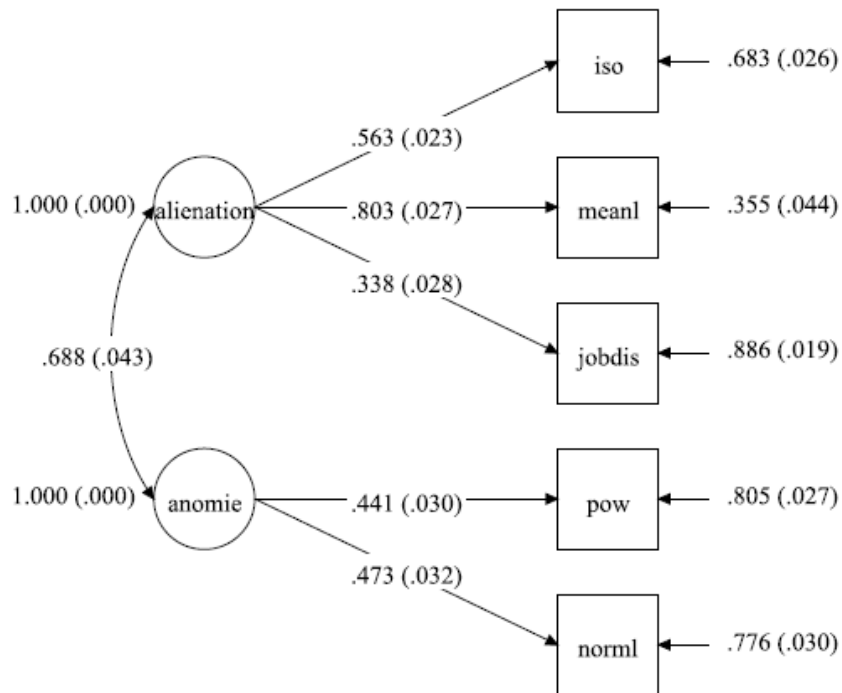
[34] The model fit for Russia: Chisq = 19.731, df = 4, p=0.0006, RMSEA = 0.04, CFI = 0.986, TLI = 0.964, SRMR = 0.017. The results where the variables were treated as categorical were identical.
[35] "Iso" stands for "social isolation", "meanl" – for "meaninglessness", "jobdis" for "job dissatisfaction", "pow" for "powerlessness", "norml" for "normlessness.

31

Figure 5. Results[36] of Confirmatory Factor Analysis for Kazakhstan with a Two-Factor Middleton Model (standardized coefficients)[37]
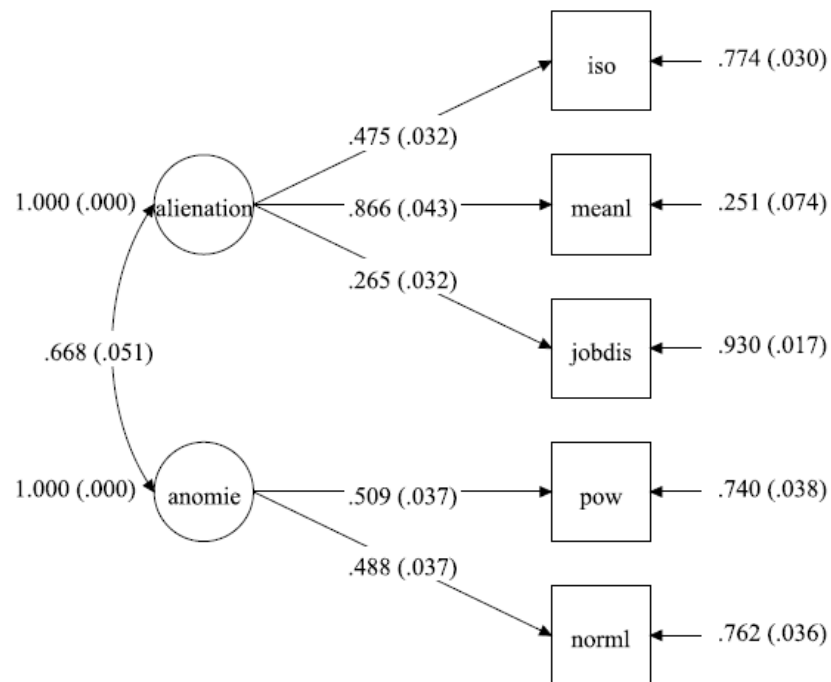
[36] For Kazakhstan: Chisq = 9.511, df = 4, p=0.0495, RMSEA = 0.03, CFI = 0.991, TLI = 0.978, SRMR = 0.016. The results where the variables were treated as categorical were identical.
[37] "Iso" stands for "social isolation", "meanl" – for "meaninglessness", "jobdis" for "job dissatisfaction", "pow" for "powerlessness", "norml" for "normlessness.

Ekaterina Lytkina

Laboratory for Comparative Social Research, National Research University Higher School of Economics, Russian Federation. E-mail: elytkina@hse.ru.