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POVERTY AND PSYCHOLOGY

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POVERTY AND PSYCHOLOGY⁴

This paper presents a study on the association between dimensions of poverty (income, subjective socioeconomic status, deprivation, and socioeconomic status in childhood) and individual psychological characteristics. In this study, our goal was to determine: 1) the differences in individual psychological characteristics between poor and non-poor people; 2) the effect of each dimension, or indicator, of poverty on individual psychological characteristics (self-esteem, life satisfaction, trust, self-efficacy, self-control, dispositional greed, and individual values); and 3) the relationship between each indicator of poverty and each individual psychological characteristic. We collected data from 157 poor (those whose incomes fall below the poverty threshold) and 140 non-poor (those whose incomes exceed the poverty threshold) participants from Moscow and the greater Moscow region by administering questionnaires containing measures of individual psychological characteristics and poverty. We analyzed the data using multivariate analysis of covariance (MANCOVA), and part and partial correlation analysis. The results obtained revealed that poverty had significant multivariate effects on individual psychological characteristics (univariate effects were significant for self-esteem, life satisfaction, Self-Transcendence values, and trust); in addition, all indicators of poverty except income had significant multivariate effects on individual psychological characteristics. Furthermore, subjective socioeconomic status was positively associated with life satisfaction, self-esteem, self-transcendence values, and trust; deprivation was positively associated with greed and self-enhancement values, and negatively associated with life satisfaction and self-esteem; socioeconomic status in childhood was positively associated with greed, self-enhancement values, life satisfaction and self-efficacy.

Keywords: poverty, subjective socioeconomic status, relative deprivation, socioeconomic status in childhood, individual psychological characteristics

JEL Classification: Z.

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Introduction

The global economic crisis, natural disasters, high migration rates and unstable political situations in different parts of the world have caused a decrease in financial wealth among the global population and an increase in poverty incidence rates. According to statistics by the World Bank, 702.1 million people worldwide are living in extreme poverty [World Bank, 2015]. The latest Current Population Survey data show that the level of poverty in the United States is 14.8% [U.S. Census Bureau, 2015]. Recent data from Russia demonstrate similar results: 15% of Russians live below the poverty line. In addition, almost 50% of Russian citizens consider themselves poor [Russian Federal Service on State Statistics, 2014], even though their levels of income are higher than the official subsistence minimum. These statistics suggest that poverty may be more than just a financial issue and that other, more psychological factors, such as thoughts and feelings, may also be important aspects of the phenomenon of poverty. The central question in this paper is to what extent poverty is indeed related to differences in a range of psychological factors and, if so, which aspects of poverty may explain such relationships. We report on a survey study conducted among 157 poor and 140 non-poor people in the Moscow area to examine this question. However, before turning to the study it is first necessary to address different approaches to poverty.

Although poverty is unquestionably an important issue on a global level, there is no consensus among researchers and policy makers on the definition and measurement of poverty. When looking at current poverty thresholds in different countries, it becomes obvious that different people fall into the category of “poor” depending on how governments define poverty. For instance, being poor in Russia means having an income of less than \$150 (9662 rubles) a month, or \$5 a day, while being poor in the US means having an income of less than \$981 a month, or \$33 a day [U.S. Department of Health and Human Services, 2015]. At the same time, the international poverty threshold is equal to \$1.90 a day [World Bank, 2015]. For this reason, some researchers have argued that poverty should include other, less financial and more social and psychological dimensions, such as relative deprivation [Townsend, 1985], deprivation of capabilities [Sen, 1983; Sen, 1985], and social exclusion [Sen, 2000; Bradshaw & Finch, 2003].

In psychological research, poverty has also been defined and conceptualized in a variety of ways. For instance, poverty has been studied as a function of low income and inability to satisfy basic needs [Mani et al., 2013]; as a specific subculture with its own norms and values [Lewis, 1966]; as the subjective perception of one’s position in the society [e.g. Kraus et al., 2009, 2012, 2013]; and as a function of socioeconomic status in childhood [Griskevicius et al, 2013; Mittal & Griskevicius, 2014]. Although most researchers agree that there are substantial differences between poor and non-poor in terms of their individual psychological characteristics, most studies so far have focused on only one or just a few indicators of poverty (e.g. income and/or subjective

socioeconomic status). In addition, many studies have relied exclusively on student samples in data collection or on single-item measures of psychological characteristics. This means that the extent to which poverty is associated with a range of psychological characteristics is still unknown. The present study aims to address this lacuna by taking a more comprehensive view of the psychological characteristics of poverty. To be more specific, we assessed poverty as a function of low income, relative deprivation, subjective socioeconomic status, and socioeconomic status in childhood. Thus, we combined four approaches to the definition and measurement of poverty.

In order to identify key dimensions, or indicators, of poverty and choose an appropriate research design for our study, we reviewed four psychological approaches to the definition and measurement of poverty. The first approach is that of the “culture of poverty,” as introduced by Lewis (1966). Lewis conducted his study on a sample of poor Mexican immigrants in the United States, and found that features such as a tendency to “live for today,” chauvinism, matriarchal family structure and fatalism are typical of those living in poverty [Lewis, 1966]. In addition, poor individuals’ low involvement in civil society contributes to, and exacerbates, their marginal position. Lewis concluded that poverty can be viewed as a subculture with a specific pattern of beliefs, values, attitudes and behaviors common to all people living in the conditions of material disadvantage. In turn, these beliefs, values and attitudes form a basis for socialization, and therefore are transmitted from generation to generation, in practice leaving no chance for the poor to emerge from poverty. Although Lewis’ approach is now considered controversial [Carr, 2003; Coward et al., 1974], it was one of the first systematic investigations into the problem of poverty at the psychological level. It also emphasized the importance of taking into account objective indicators of poverty when studying its association with individual psychological characteristics.

According to the authors of a second, more recent approach [Mani et al., 2013], the scarcity of material resources causes a shift in attention towards simple and immediate solutions, which in turn contributes to a shortage of cognitive resources for solving more complicated, long-term tasks. As a result, those living in poverty are less successful when it comes to their studies or work, score lower on IQ tests, and are more prone to take irrational decisions (including financial decisions). According to Mani et al., such effects make it almost impossible for the poor to get out of poverty. The association between poverty (defined and operationalized as scarcity) and psychology (more specifically, features of decision-making) is that being poor makes people irrational, and this irrationality in turn keeps them poor. The idea of a vicious cycle corresponds to Lewis’ concept of a culture of poverty. Both approaches emphasize the irreversible nature of poverty, claiming that once individuals arrive at a condition of economic disadvantage, they will have little chance to escape it. In addition, just as with Lewis, Mani et al. focus on “objective” poverty, that is, the actual shortage of economic resources.

A third approach [Griskevicius et al., 2013; Mittal & Griskevicius, 2014] emphasizes the importance of childhood socioeconomic condition, taking a more evolutionary view of poverty. According to life history theory, during development individuals acquire one of two possible behavioral strategies – the so-called “slow” or “fast” strategies [Ellis et al., 2012]. At a psychological level, fast strategies are associated with searching for immediate benefits and not thinking about long-term consequences, while slow strategies enable focusing on long-term planning. The choice for a specific strategy depends on the conditions of socialization in childhood [Belsky et al., 1991], including socioeconomic condition in childhood [Griskevicius et al.]. Griskevicius et al. suggest that the conditions of material disadvantage in childhood contribute to the development and adoption of fast strategies. According to one study by Griskevicius et al., those with lower levels of socioeconomic status in childhood tended to be more impulsive in comparison with those who grew up in families with higher socioeconomic status. These findings open a new perspective on the problem of psychological aspects of poverty, and suggest that focusing on socioeconomic status in childhood as the most significant indicator of poverty would yield useful results.

A fourth approach, the social cognitive theory of social class [Kraus et al., 2012], emphasizes the importance of studying an individual’s subjective socioeconomic status vis-à-vis others [Kraus et al., 2009, 2012, 2013]. According to this view, an individual’s subjective perception of his or her socioeconomic status defines the differences in individual psychological characteristics. This theory is therefore focused on subjective poverty and its effects on individual psychological characteristics. In most studies conducted within this framework, researchers have found an association between subjective socioeconomic status and both individuals’ perceptions of their environment and their behavior in various life situations. Individuals with lower subjective socioeconomic status were found to have lower levels of control over their lives and to be more dependent on others. At the same time, Kraus et al. (2009) did not find the same relationships between objective indicators of socioeconomic status and individual psychological characteristics that were reported in other studies.

Our comparison of these four approaches can be used to classify the ways poverty has been conceptualized and measured within psychological research. In addition, it facilitates the identification of indicators of poverty that might be significant predictors of individual psychological characteristics and the choice of an appropriate research design in order to for measuring the association between poverty and the range of individual psychological characteristics we wish to study. The literature on the culture of poverty [Lewis, 1966] and on scarcity [Mani et al., 2013] suggests that it is important to take into account objective indicators of poverty and sample for a specific group of people who live in poverty (the “real” poor) in order to ensure future results

are reliable and compatible with the results of previous studies. The life history approach [Griskevicius et al., 2013; Mittal & Griskevicius, 2014] emphasizes the importance of measuring childhood socioeconomic status as one of the possible predictors of differences between poor and non-poor people. Finally, the social-cognitive theory of social class suggests that subjective socioeconomic status is the most important indicator of poverty, which does not necessarily correlate with objective indicators of poverty (e.g., income). Thus, in our study, we: 1) included all mentioned indicators of poverty, together with a wide range of individual psychological characteristics (self-esteem, life satisfaction, self-efficacy, self-control, individual values, self-efficacy, dispositional greed, and trust) and 2) included a subsample of people living in “objective” poverty (clients of social welfare centers).

Our research questions were:

1. Do individual psychological characteristics differ between the poor and non-poor?
2. What is the unique effect of each indicator of poverty (income, deprivation, childhood socioeconomic status, subjective socioeconomic status) on individual psychological characteristics?
3. What is the association between different indicators of poverty and individual psychological characteristics?

Method

Participants

The sample consisted of poor ($N=157$) and non-poor ($N=140$) people. Poor participants were recruited at social welfare centers and had income lower than 7500 rubles (the official subsistence minimum in Russia at the beginning of 2015, when the survey was administered). Participation was voluntary and incentivized by an award of 200 rubles. Non-poor participants were recruited using the snowball sampling technique. All non-poor participants had income substantially higher than 7500 rubles. Participation for non-poor individuals was voluntary and not paid. Samples differed by gender distribution (61.8% of participants in the poor sample were male, compared to 40.7% in the non-poor sample), age ($M=41.78$ and 34.89 , $SD=11.09$ and 13.16 , in the poor and non-poor samples respectively), and level of education (13.4% holding a university degree in the poor sample, compared to 81.4% in the non-poor sample).

*Measures*⁵

Background characteristics. Participants indicated age, gender, place of residence, and their highest level of completed education.

⁵ For measures that had not been translated into Russian before, we used the back translation method (Brislin, 1970) and committee approach (Van de Vijver & Tanzer, 1997).

Self-esteem. Self-esteem was measured using the Rosenberg Self-Esteem Scale [RSES; original version: Rosenberg, 1965; Russian adaptation: Lubovsky, 2006]. Sample item: “I feel I do not have much to be proud of” (1 = strongly disagree; 2 = somewhat disagree; 3 = somewhat agree; 4 = strongly agree).

Satisfaction with life. Satisfaction with life was measured using the Satisfaction with Life Scale [SWLS; original version: Diener et al, 1985; Russian adaptation: Osin & Leontiev, 2008]. Sample item: “The conditions of my life are excellent” (1 = strongly disagree; 2 = disagree; 3 = somewhat disagree; 4 = neither agree nor disagree; 5 = somewhat agree; 6 = agree; 7 = strongly agree).

Individual values. Individual values were measured using the 14-item version of the Portrait Value Questionnaire [PVQ-R; original version: Schwartz, 2012; Russian adaptation: Schwartz & Butenko, 2014]. Sample item: “It is important to him to be rich” (1 = not at all like me; 2 = not like me; 3 = a little like me; 4 = like me; 5 = very much like me”).

Self-efficacy. Self-efficacy was measured using the Generalized Self-Efficacy Scale [GSE; original version: Schwarzer & Jerusalem, 1995; Russian adaptation: Schwarzer, Jerusalem, & Romek, 1996]. Sample item: “If someone opposes me, I can find means and ways to get what I want” (1 = strongly disagree; 2 = somewhat disagree; 3 = somewhat agree; 4 = strongly agree).

Dispositional greed. Dispositional greed was measured using the Dispositional Greed Scale [Seuntjens et al., 2015]. Sample item: “One can never have too much money” (1 = strongly disagree; 2 = somewhat disagree; 3 = neither agree nor disagree; 4 = somewhat agree; 5 = strongly agree).

Self-control. Self-control was measured using the short 10-item version of the Self-Scoring Self-Control Scale [SSCS; Tangney, Baumeister, & Boone, 2004]. Sample item: “I have a hard time breaking bad habits” (1 = strongly disagree; 2 = somewhat disagree; 3 = somewhat agree; 4 = strongly agree).

Trust. Trust was measured using the General Trust Scale [Yamagishi, 1986]. Sample item: “Most people are basically honest” (1 = strongly disagree; 2 = somewhat disagree; 3 = neither agree nor disagree; 4 = somewhat agree; 5 = strongly agree).

Income. Income was measured by one single-choice question: “What was your income from all sources in the last month?” (1 = less than 2,500 rubles; 2 = 2,500 – 7,500 rubles; 3 = 7,501 – 15,000 rubles; 4 = 15,001 – 25,000 rubles; 5 = 25,001 – 40,000 rubles; 6 = 40,001 – 60,000 rubles; 7 = 60,001 – 80,000 rubles; 8 = 80,001 – 100,000 rubles; 9 = more than 100,000 rubles).

Deprivation. In order to measure levels of deprivation, we constructed a 9-item measure of deprivation. The participants had to indicate how often within the last 12 months they had to refuse any of the following: buying food, buying clothes, buying medicine, buying necessary things for

home (e.g. household appliances, electronic devices), entertainment (e.g. cinema, theater), inviting and/or visiting friends and relatives, going somewhere for vacations, education services, and healthcare services (1 = never; 2 = rarely; 3 = rather often; 4 = often; 5 = very often).

Socioeconomic status in childhood. Socioeconomic status in childhood was measured using three items constructed by Griskevicius et al. [Griskevicius et al., 2013]. Sample item: “My family usually had enough money when I was growing up” (1 = strongly disagree; 2 = somewhat disagree; 3 = neither agree nor disagree; 4 = somewhat agree; 5 = strongly agree).

Subjective socioeconomic status. Subjective socioeconomic status was measured using the MacArthur Subjective Social Status Scale [Goodman et al., 2001]. The respondents were asked to rank their perceived socioeconomic position compared to other members of the society on a ladder, with 1 representing the lowest position, and 10 the highest position, on the ladder.

Adaptation

Given that we sampled for a specific population (those living in poverty) in which individuals generally have lower levels of education and are not used to participating in surveys, we adapted the instrument for this sample in order to provide higher validity and reliability in our results. Cognitive interviews were conducted using a concurrent probing approach with both scripted and spontaneous probes [Van de Vijver, 2001; Van de Vijver & Tanzer, 1998; Willis, 2004]. The interviews included the following elements: 1) probes aimed at identifying unknown or hard-to-understand words; 2) probes aimed at estimating comprehension of the scale; 3) probes aimed at estimating possible areas of sensitivity related to the research topics among participants. The sample for cognitive interviews consisted of 10 people of different gender and age (5 males, 2 people under 25 years old, 2 people aged 25 – 50, and 1 person aged more than 50 years old). The results enabled us to conclude that most items, as well as response scales, would be understood and interpreted correctly. However, we identified two main issues that needed to be addressed, namely, high levels of social desirability, and phrasing of on a number of items that was too abstract and vague. In order to solve the problem of social desirability, we elaborated on item instructions where necessary. In order to solve the problem of abstract and vague phrasing, we rewrote instructions and changed the wording of items where necessary.

In order to check whether obtained scores across groups (poor and non-poor) could be compared, we conducted reliability analysis using Cronbach’s alpha [Cronbach, 1951] on both samples and tested construct invariance using Tucker’s congruence coefficient [Van de Vijver & Leung, 1997]. All measures employed in our study appeared to be reliable (all Cronbach’s alpha values were higher than .50) and equivalent across poor and non-poor samples (all Tucker’s Phi values were higher than .95).

Procedure

Data were collected in Moscow and the greater Moscow region. Participants were given a questionnaire and asked to read the instructions, which included information about the main topics discussed in the study, confidentiality policy, and how to contact the researchers supervising the project. The questionnaires were administered individually in the presence of one of the researchers and collected by the researchers upon completion.

Data analysis

We performed multivariate analysis of covariance (MANCOVA) and Pearson correlation (part and partial) analysis. The data were analyzed using SPSS Statistics 22.

Results

In order to determine whether individual psychological characteristics in groups of poor and non-poor people differ, we conducted a multivariate analysis of covariance (MANCOVA) with poverty as a predictor, income and education as covariates, and individual psychological characteristics (self-esteem, satisfaction with life, self-efficacy, individual values, dispositional greed, trust, and self-control) as dependent variables. The results revealed significant multivariate effects of poverty, Wilks's Lambda = .56, $F = 22.52$ (10, 286), $p < .001$, $\eta^2 = .44$, and education, Wilks's Lambda = .92, $F = 2.38$ (3, 281), $p = .01$, $\eta^2 = .08$. Follow-up ANCOVAs (the results are presented in Table 1) were significant for four out of ten individual psychological characteristics. Poor participants scored lower on self-esteem, life satisfaction, self-transcendence values and trust. The effects of education were significant for: openness to change values, $F = 12.31$ (1; 291), $p = .001$, $\eta^2 = .04$, self-transcendence values, $F = 9.81$ (1; 291), $p = .002$, $\eta^2 = .03$, and conservation values, $F = 4.87$ (1; 291), $p = .028$, $\eta^2 = .02$.

Table 1

The Effect of Poverty on Self-esteem, Life satisfaction, Individual values, Self-control, Self-efficacy, Dispositional Greed and Trust

	Poverty status		F (1, 296)	p	η^2
	Poor	Non-poor			
	M (SD)	M (SD)			
Self-esteem	2.54 (.41)	2.99 (.40)	4.60	.033	.016
Life satisfaction	3.06 (1.07)	4.19 (1.04)	4.90	.028	.016
Openness to Change	3.65 (.72)	4.21 (.43)	2.62	.107	.009
Self-Transcendence	3.69 (.70)	4.12 (.47)	10.53	.001	.035
Self-Enhancement	3.17 (.74)	3.31 (.64)	0.010	.920	.000
Conservation	3.51 (.78)	3.43 (.65)	0.026	.872	.000
Self-control	2.29 (.47)	2.58 (.42)	1.76	.185	.006
Self-efficacy	2.86 (.47)	2.93 (.35)	0.123	.726	.000
Dispositional greed	3.41 (.86)	3.29 (.78)	1.71	.192	.006
Trust	2.96 (.80)	3.44 (.72)	6.03	.015	.020

Note. The values of items printed in bold differ significantly between the poor and non-poor sample.

In order to examine the relationship between the indicators of poverty, we conducted correlation analysis (Table 2). The results showed that three of the indicators (income, deprivation, and subjective socioeconomic status) strongly and significantly correlated with one another. Socioeconomic status in childhood correlated with income and subjective socioeconomic status, but not with deprivation.

Table 2
Correlation Analysis between the Indicators of Poverty, N=297

	1	2	3	4
1.Income		-.66***	.72***	0.15*
2.Deprivation			-.66***	-.09
3.SSES				.19**
4.Childhood status				

*Note: * $p < .05$, ** $p < .01$, *** $p < .001$*

In order to determine the independent effect of each indicator of poverty on individual psychological characteristics, we conducted MANCOVA with poverty as a predictor, education, income and other indicators of poverty (deprivation, socioeconomic status in childhood, and subjective socioeconomic status) as covariates, and individual psychological characteristics as dependent variables. The results revealed significant multivariate effects of subjective socioeconomic status (Wilks's Lambda = .82, $F = 6.10$ (10, 281), $p < .001$, $\eta^2 = .18$), deprivation (Wilks's Lambda = .88, $F = 3.89$ (3, 281), $p = .007$, $\eta^2 = .12$), and childhood socioeconomic status (Wilks's Lambda = .90, $F = 3.17$ (3, 281), $p = .001$, $\eta^2 = .10$). The main multivariate effect of poverty was insignificant. Follow-up ANCOVAs showed that the effects of indicators of poverty were significant for different individual psychological characteristics. Specifically, the effects of subjective socioeconomic status were significant for: life satisfaction ($F = 46.42$ (1, 291), $p < .001$, $\eta^2 = .14$), self-esteem ($F = 10.82$ (1, 291), $p = .001$, $\eta^2 = .04$), self-control ($F = 11.40$ (1, 291), $p = .001$, $\eta^2 = .04$) and conservation values ($F = 5.72$ (1, 291), $p = .017$, $\eta^2 = .02$). The effects of deprivation were significant for: dispositional greed ($F = 16.81$ (1, 291), $p < .001$, $\eta^2 = .06$), self-control ($F = 12.74$ (1, 291), $p < .001$, $\eta^2 = .04$), Self-Enhancement values ($F = 8.99$ (1, 291), $p = .003$, $\eta^2 = .03$), life satisfaction ($F = 7.91$ (1, 291), $p = .005$, $\eta^2 = .03$), and conservation values ($F = 3.98$ (1, 291), $p = .047$, $\eta^2 = .01$). The effects of childhood socioeconomic status were significant for: self-enhancement values ($F = 10.11$ (1, 291), $p = .002$, $\eta^2 = .03$), life satisfaction ($F = 9.67$ (1, 291), $p = .002$, $\eta^2 = .03$), self-efficacy ($F = 8.08$ (1, 291), $p = .005$, $\eta^2 = .03$), greed ($F = 7.59$ (1, 291), $p = .006$, $\eta^2 = .03$) and openness to change values ($F = 4.69$ (1, 291), $p = .031$, $\eta^2 = .02$).

Partial correlation analysis between each indicator of poverty and individual psychological characteristics controlling for all other indicators of poverty confirmed this pattern of results. Subjective socioeconomic status positively correlated with self-esteem ($r = .20$; $p = .001$), life satisfaction ($r = .38$; $p < .001$), and self-control ($r = .20$; $p = .001$), and negatively correlated with

conservation values ($r = -.14$; $p = .019$). Deprivation positively correlated with dispositional greed ($r = .24$; $p < .001$) and self-enhancement values ($r = .17$; $p = .003$), and negatively correlated with life satisfaction ($r = -.17$; $p = .003$), self-control ($r = -.21$, $p < .001$) and self-esteem ($r = -.12$; $p = .04$). Childhood socioeconomic status positively correlated with openness to change values ($r = .12$; $p = .037$), self-enhancement values ($r = .19$; $p = .001$), self-efficacy ($r = .14$; $p = .004$), dispositional greed ($r = .17$; $p = .004$), and life satisfaction ($r = .17$; $p = .004$).

Discussion

This paper presents a study of the association between indicators of poverty (income, subjective socioeconomic status, deprivation, and socioeconomic status in childhood) and individual psychological characteristics. We have attempted to determine: 1) whether individual psychological characteristics in poor and non-poor people differ; 2) what the effect is of each indicator of poverty in our study on individual psychological characteristics (self-esteem, life satisfaction, trust, self-efficacy, self-control, dispositional greed, and individual values), and 3) what the relationship between each indicator of poverty studied and each psychological characteristic in our study is. Let us answer these questions in sequence.

1. Differences in individual psychological characteristics in the poor and non-poor

The results obtained demonstrated that poor and non-poor people differ in their individual psychological characteristics. We found that poor people had significantly lower scores on self-transcendence (benevolence and universalism) values, self-esteem, life satisfaction, and trust. These findings are in line with those of previous studies. For instance, research on intergroup relations shows that people with higher socioeconomic status have more positive attitudes towards outgroup members [Baker & Fishbein, 1998; Ohlander et al., 2005], and thus hold more self-transcendent values. Similarly, research on interrelations between socioeconomic status and environmental concerns has demonstrated that people with higher levels of education and income are more concerned with ecological problems [Van Liere & Dunlap, 1980; Dunlap et al., 2000], which can be also explained by their relatively higher levels of self-transcendence. Research on the association between socioeconomic status and stress showed that the poor systematically score high on tests of stress levels [Adler et al., 1994; Cohen, Doyle, & Baum, 2006; Evans & Schamberg, 2009] and perception of external threats [Kraus et al., 2011], which are predictors of life satisfaction and trust levels. Furthermore, individualistic attributions used to explain the causes of poverty and negative stereotypes about the poor [Bullock, 1999] lead to the inference that the poor are often excluded from the life of a society and experience a lack of social support [Böhnke, 2008]. Poverty is associated with high levels of social exclusion [Gordon et al., 2000; Hobcraft & Kieman, 2001]. Leary et al. (1995) demonstrated that perceived social exclusion is negatively associated with self-

esteem. In addition, a meta-analysis including 446 samples showed that there is a small yet significant relationship between socioeconomic status and self-esteem [Twenge & Campbell, 2002].

2. *The effects of indicators of poverty on individual psychological characteristics*

Although contemporary researchers agree that poverty comprises many dimensions [Bourguignon & Chakravarty, 2003; Alkire & Foster, 2011], poverty is often conceptualized mainly in terms of income or lack of material resources. Our results showed that the effects of other dimensions, or indicators of poverty, tend to be stronger than objective (i.e. defined in terms of income) poverty. These findings confirm that poverty should be seen as a multidimensional construct no longer focused solely on income, but including facets such as subjective perception of one's position compared to other members in society (subjective socioeconomic status), reported inability to satisfy one's needs (deprivation), and early life experiences of economic disadvantage (childhood socioeconomic status). In addition, the results we obtained revealed that the effect of each indicator of poverty except income (subjective socioeconomic status, deprivation and childhood socioeconomic status) holds even when controlling for education and all other indicators of poverty. Thus, we conclude that ignoring one of the mentioned dimensions of poverty might bias the results of the studies and decrease the predictive power of the construct of "poverty" as it appears in this study. Moreover, it might result in less informed and ineffective social policy strategies aimed at alleviating poverty.

3. *The association between indicators of poverty and individual psychological characteristics*

Further analysis showed that, although all indicators of poverty are significantly associated with each other, there is some specificity when it comes to their relationship with individual psychological characteristics. For instance, we found that all indicators of poverty except income were significantly associated with life satisfaction, while only childhood socioeconomic status was significantly associated with self-efficacy. Below we discuss the results we obtained for each indicator of poverty.

Subjective socioeconomic status

We found that subjective socioeconomic status was significantly associated with life satisfaction, self-esteem, self-control, and conservation values. Subjective socioeconomic status is formed in the process of social comparison with other members of society [Kraus et al., 2009, 2012]. Social comparison theory [Festinger, 1954] postulates that an individual compares his or herself to others and forms the idea of his or herself as a result of this social comparison. Thus, individuals may have higher or lower self-esteem, or be more or less satisfied with themselves and their lives, depending on how well other individuals around them are faring. Recent research has supported this idea. For instance, Boyce et al. (2010) found that the ranked position of an individual's income is a more accurate predictor of life satisfaction than is absolute income.

Likewise, Anderson et al. (2011) demonstrated that subjective sociometric status (i.e. the result of comparison with the individual's face-to-face groups) predicts subjective-well-being. Although our findings on the association between subjective socioeconomic status, self-control and conservation values require further investigation and explanation, they demonstrate the power of subjective socioeconomic status as a construct and confirm the importance which the social-cognitive theory of social class has assigned to it [Kraus et al., 2012].

Deprivation

Our results showed that deprivation was positively associated with greed and self-enhancement values, and negatively associated with life satisfaction, self-esteem and self-control. Thus, individuals who always “want more” and are never satisfied with what they have (greed; Seuntjens et al., 2015), and those who strive for power (including money) and achievement (“self-enhancement values”) experience higher levels of deprivation. They might have greater demands compared with those who score low on greed and self-enhancement and thus face more difficulty in satisfying their demands, irrespective of their actual income or economic conditions. Previous findings from research on materialism, with which both greed and self-enhancement are associated, showed that exposure to materialistic values and behaviors predicts relative deprivation [Schaefer et al., 2004]. Our results on the relationship between deprivation, life satisfaction and self-esteem find support in the literature on the effects of TV advertising on well-being, which suggest that relative deprivation primed via TV advertising results in lower levels of well-being [Richins, 1987; Sirgy et al., 2012]. As for the association between deprivation and self-control, our results showed that those who experience greater deprivation are less able to control themselves. These findings can be supported by the strength model of self-control [Baumeister, Vohs & Tice, 2008; Vohs et al., 2014], which states that exerting self-control causes impairments in subsequent self-control; the more one attempts to control oneself (or deprive oneself), the less self-control remains.

Childhood socioeconomic status

We found that childhood socioeconomic status was positively associated with dispositional greed, self-enhancement values, life satisfaction and self-efficacy. These results are confirmed by previous research, which provides evidence that childhood socioeconomic condition plays an important role in later life outcomes in the domains of health [Cohen et al., 2010], achievement [Duncan et al., 2010], regulation of emotions [Evans, Rosenbaum, 2008], and economic behavior [Griskevicius et al., 2013, Mittal & Griskevicius, 2014; Lea et al., 1995]. Positive association between childhood status and greed are consistent with the results obtained by Lea et al. (1995), who found that those whose parents were well off and thus who were used to a rather high standard of living in childhood were more likely to become more materialistically oriented later in life and have consumer debt. Our findings, however, are not in line with Krekels's (2015) results, who

found a negative relationship between childhood economic condition and greed, and suggested that childhood resource insecurity may lead to the development of adaptive greed. Moving further in our analysis, self-enhancement values are described as a type of motivation that helps an individual feel good about his or herself and maintain positive self-esteem [Beauregard & Dunning, 1998]. This motivation becomes particularly important when an individual's self-esteem is threatened or collapses. Thus, it is likely that those who grow up in disadvantaged conditions have experienced threats to their self-esteem and, as a result, acquire self-enhancement values that function as a self-esteem maintenance strategy. As regards the association between childhood socioeconomic status and life satisfaction, previous research has shown that childhood poverty predicts lower ability to regulate emotions [Evans & Rosenbaum, 2008]. Successful emotional regulation strategy is crucial for individual well-being [Gross & John, 2006]. Thus, it is possible that those with low childhood socioeconomic status may not be able to regulate their emotions and as a result have lower levels of life satisfaction in adulthood. It is possible that the positive association between childhood socioeconomic status and self-efficacy can be explained by the fact that those facing economic disadvantage in early life stages, and are unable to control the effects of this, acquire an external locus of control, or low self-efficacy.

Findings

1. Poverty had a significant multivariate effect on individual psychological characteristics. Univariate effects of poverty were significant for: self-esteem, life satisfaction, self-transcendence values, and trust.
2. Income did not have a significant multivariate effect on individual psychological characteristics, while other indicators of poverty (subjective socioeconomic status, deprivation, and socioeconomic status in childhood) did.
3. Subjective socioeconomic status was positively associated with life satisfaction, self-esteem, self-transcendence values and trust; deprivation was positively associated with greed and self-enhancement values, and negatively associated with life satisfaction and self-esteem; socioeconomic status in childhood was positively associated with greed, self-enhancement values, life satisfaction and self-efficacy.

Limitations and future directions for research

Firstly, the research design we used does not allow us to make conclusions about causality in the association between poverty and individual psychological characteristics. Although the approaches we reviewed and used as a theoretical framework for our study treat poverty as a predictor, other findings suggest that poverty, or low socioeconomic status, might be an outcome.

For instance, Moffitt et al. (2011), in a longitudinal study that followed a cohort of 1000 children from birth to the age of 32 years, found that childhood self-control predicts a wide range of outcomes, including physical health, substance dependence, criminal behavior and personal finances. At the same time, research within developmental and economic psychology, together with findings from behavioral economics, support the idea of the “vicious cycle of poverty,” which means that the condition of economic disadvantage includes a set of factors which are likely to perpetuate poverty once it is assumed. For instance, Brooks-Gunn and Duncan (1997, 2000) conclude that unfavourable family and neighbourhood economic conditions have negative effect on child cognitive and emotional development, which might prevent individuals from getting out of poverty in the future. Similarly, Haushofer and Fehr (2014) suggest that risk aversion and hyperbolic time-discounting associated with poverty further result in an inability to take risks that might be beneficial and to delay gratification when necessary. In order to identify causal relationships between poverty and individual psychological characteristics, further research employing experimental and/or longitudinal design is needed.

Secondly, the fact that we collected our sample in Moscow and the greater Moscow region makes it difficult to generalize our findings to other social contexts. Since poverty’s social nature makes it specific to time and place, the association between dimensions of poverty and individual psychological characteristics might vary across social and cultural contexts. For instance, subjective socioeconomic status, as a characteristic that is likely to develop in the process of social comparison, might reflect the level of social and economic inequality in a society. Thus, in societies which are relatively homogenous in terms of distribution of material resources (i.e. societies with low levels of economic inequality) the variance in socioeconomic status might be lower compared to Moscow, where people are exposed to both poverty and extreme wealth. Similarly, deprivation is likely to take different forms in societies with high levels of poverty compared to ones that are more affluent. For example, in poorer societies, being able to satisfy basic needs (i.e. food or shelter) might be considered enough and thus result in lower levels of deprivation, while in more affluent societies, not being able to buy a new car or go abroad for holidays might signal high levels of deprivation. At the same time, childhood socioeconomic status possibly depends on context (i.e. political regime, country-level poverty and inequality, social and political changes, etc.), as well. Considering that most of the participants in our study were born and grew up in the Soviet era, the results we obtained on the association between childhood socioeconomic status and individual psychological characteristics might be specific to the population under consideration. In order to qualify and extend the results we obtained, further research should aim to test the relationship between the indicators of poverty and the individual psychological characteristics used in our study in other social and cultural contexts.

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