

## **Need for cognition and attitudes toward immigrants among russian students**

*Sergei A. Shchebetenko*  
*Perm State University*

**Abstract:** The author examined how need for cognition may contribute to the attitudes toward immigrants among Russian students. It was shown that although need for cognition may not correlate with attitude toward immigrants directly it might either interact with other factors or influence several relations of attitudes. Specifically, low need for cognition may facilitate the application of immigrants' ethnicity as a cue for the attitudes toward immigrants. On the contrary, those participants having high need for cognition probably may not use immigrants ethnicity as a cue for attitudes. Additionally, need for cognition might make attitudes toward immigrants more positive among Russian women comparing with Russian men. Furthermore, a positive correlation between perceived stereotypicality and attitude toward immigrants was eliminated among low need for cognition participants. Moreover, this correlation has become even negative among low need for cognition males. The results of the study are discussed.

**Keywords:** attitudes toward immigrants, need for cognition, students, Russia

## **Potreba po spoznavi in stališča do priseljencev med Rusi**

*Sergei A. Shchebetenko*  
*Perm State University*

**Povzetek:** Avtor je raziskoval vpliv potrebe po spoznavi na stališča do priseljencev med Ruskimi študenti. Ugotovil je, da čeprav lahko potreba po spoznavi neposredno ne korelira s stališči do priseljencev, lahko bodisi vstopa v interakcijo z drugimi dejavniki ali pa vpliva na več stališčnih odnosov. Predvsem lahko nizka potreba po spoznavi spodbuja uporabo narodnosti priseljencev, kot znaka za stališče do njih. Nasprotno pa tisti udeleženci, ki so imeli visoko potrebo po spoznavi, verjetno ne bodo uporabili narodnosti priseljencev kot znak za stališča. Obenem potreba po spoznavi spodbuja pozitivnejša stališča do priseljencev pri Rusinjah v primerjavi z Rusi. Nadalje je bila pozitivna korelacija med zaznano stereotipnostjo in stališčem do priseljencev odstranjena med udeleženci z nizko potrebo po spoznavi. Ta korelacija je bila celo negativna med moškimi udeleženci z nizko potrebo po spoznavi. V zaključku avtor razpravlja o rezultatih raziskave.

**Ključne besede:** stališča do priseljencev, potreba po spoznavi, študenti, Rusija

## **Introduction**

Immigrants are one of major sources of maintaining the population in Russian Federation nowadays. Thus, according to Federal State Statistic Service of Russian Federation (2010), in 2009, the immigration growth in Russia compensated for the numerical loss of population and exceeded them by 1,4% which led even to the growth of Russian population for the first time throughout last 18 years.

Although the rates of immigration growth are far from those observed in the 1990's, immigration to Russia still remains at a relatively high level, primarily at the expense of citizens of the former Soviet republics who have decided to immigrate to Russia (Federal State Statistic Service of Russian Federation, 2010).

Stable and substantial inflow of immigrants against the background of natural population decrease in most regions of Russia leads to an increase in interethnic tensions. Vivid examples of this are such landmark events as the conflict in Kondopoga (BBC, 2006) or nationalistic riots in Moscow in December 2010 (Time, 2010).

Against this background, not only sociological statements and analyses of the situation play an important role, but also a research of psychological mechanisms of perception of immigrants by Russians is needed. Such a research would contribute to the identification of mechanisms underlying ethnic tensions among Russians and help to reduce them. In such a way, the study presented in this article concerns the contribution of several sociopsychological factors to the attitudes towards immigrants among Russians.

## **Theoretical Background**

Over the last several decades, the need for cognition (NC) has become one of the most investigated phenomena in several areas of social cognition including attitudes, persuasion, and stereotype research. The term of NC was used by John Cacioppo and Richard Petty (Cacioppo & Petty, 1982) to refer to individual differences in tendency to enjoy and be involved into a task solving that requires substantial cognitive efforts. In a recent review Petty, Briñol, Loersch, and McCaslin (2009) have stated that to date there are about 1,000 publications have either cited the original article on NC (Cacioppo & Petty, 1982) or the short version of the Need for Cognition Scale (Cacioppo, Petty, & Kao, 1984). Additionally, NC has been examined in well over 150 empirical investigations (Tormala & DeSensi, 2009).

Initially, NC has been considered as a differential application to the dual-process models of judgment including Elaboration Likelihood Model proposed by Petty and Cacioppo (1986). However, in the long run NC has been given a status of an independent construct engaged in a wide variety of psychological problems.

Thus, it has been repeatedly shown NC to be involved in attitudes formation. For instance, it predicts the reliance on effortful versus low-effort processing of social information (e.g., Cacioppo, Petty, & Morris, 1983; Tormala & DeSensi, 2008). Individuals high in NC tend to engage in metacognition (i.e., thinking about their own thoughts; Petty, Briñol, Tormala, & Wegener, 2007) in comparison to those low in NC. Moreover, NC moderates some attitudinal effects like mere thought effect (Smith, Haugtvedt, & Petty, 1994), sleeper effect (Priester, Wegener, Petty, & Fabrigar, 1999), or primacy and recency effects (Briñol & Petty, 2005). There is a strong evidence that NC plays a substantial role in decision making process influencing false memories production (Graham, 2007), halo effect (Perlini & Hansen, 2001), or subtle versus blatant priming (Petty, DeMarree, Briñol, Horcajo, & Strathman, 2008). Last but not least, NC has been shown to affect even the behavioral constructs like effectiveness of interpersonal relations. Particularly, Shestowsky and Horowitz (2004) revealed that people who were high in NC took a more involved role in small-group settings speaking longer than those low in NC.

NC is of special interest in context of intergroup perception. Thus, there is a strong evidence that NC is involved in stereotype utilization. Particularly, individuals low in NC are more likely to rely on stereotypes alone in judging other people (Carter, Hall, Carney, & Rosip, 2006; Schaller, Boyd, Yohannes, & O'Brien, 1995) than those who are high in NC.

## **Present research**

The primary goal of the current research was to investigate the contribution of NC to attitudes toward immigrants to Russia. There is a huge body of results concerning attitude toward immigrants to date (e.g., Dambrun, Taylor, McDonald, Crush, & Méot, 2006; Vaughan & Thompson, 1961). Some of them demonstrate that attitudes toward immigrants are affected by personality traits like authoritarianism, neuroticism or locus of control (Kornienko, Shchebetenko, & Baleva, 2007; Maio, Esses, & Bell, 1994; Shchebetenko, 2010; Siegman, 1961).

Specifically, there are some empirical results supporting the idea that the degree of NC can predict if one either relies or doesn't rely on stereotypes in judging immigrants. At least, considerable research has suggested that low-NC individuals are more likely to rely on stereotypes in judging other people (Carter et al., 2006) than are high-NC individuals. Still, there is no evidence of is this is the case in relation to Russians judging immigrants.

Additionally, previous research has revealed that attitudes toward an outgroup could be depended on stereotypicality of outgroup image invented (e.g., Burriss & Rempel, 2004). Therefore, we have manipulated the degree of immigrant's stereotypicality as well.

## Method

### Participants and design.

128 participants were recruited at economical and philosophical-sociological faculties of Perm State University. The average age was 20.0 (SD = 1.74). Of the 128 participants 49 (38%) were males.

### Procedure

Participants were told that they will participate in two different studies. First, they completed several questionnaires including Russian version of 18-item Need for Cognition Scale (NCS; Cacioppo et al., 1984)<sup>1</sup>. The scale contains items such as “The notion of thinking abstractly is appealing to me”, and “Thinking is not my idea of fun” (reversed). All items were completed on a five-point scale anchored at (1) completely disagree and (5) completely agree. After that, participants read an autobiographical text written ostensibly by a 25-years old man describing himself as either Georgian or Uzbek immigrant in Russia. “The immigrant” has written about his habits, lifestyle, interests, values, etc. The texts were invented on the basis of descriptions of traits typical to Georgians and Uzbeks. These descriptions were obtained from an independent sample of participants (n = 30). They were told to list habits, lifestyle artifacts, interests, values, etc., Uzbeks and Georgians they believed to have. The qualities indicated the most were selected to prepare the stimuli. Additionally, they were asked to list habits, lifestyle artifacts, interests, values, etc they believed are typical for Russians. All the participants of this sample identified themselves as “Russians”.

### Dependent variable.

The attitude toward immigrants (ATI) was measured by the Scale of Immigrants’ Perception (Shchebetenko et al., 2006) consisted of five self-report items. The items are as follows: “I like the narrator”, “I share many values with the narrator”, or “The narrator repulses me” (reversed item). The scale uses a 7-point Likert-type response format anchored from -3 = very strong disagree to +3 = very strong agree. The internal consistency (Cronbach’s  $\alpha$ ) was .75, and the means of the scale’s items were distributed normally,  $z = .059$ ,  $p > .90$ .

---

<sup>1</sup> During this series participants also completed Eysenck Personality Questionnaire which results are out of our consideration in this article.

## **Independent variables.**

### **Need for Cognition.**

As far as I know there had been no Russian version of Need for Cognition Scale (Petty et al., 1984) so far. Therefore, first, I needed to develop such a version. The translation of the scale on Russian language was prepared by the author. Reversed translation was prepared by a Russian translator, speaking English fluently. The final version of 18-items scale was derived as a result of discussion among the author and the translator. The inter-item reliability of the scale was high,  $\alpha = .84$ . The scale did not correlate with any of subscales of the Eysenck Personality Questionnaire (EPQ-R; Eysenck & Eysenck, 1994), including social desirability subscale, all  $r_s < .18$ , all  $p_s > .05$ . Thus we can predict a sufficient degree of reliability and divergent validity of the scale.

### **Stereotypicity**

In this point, the procedure was substantially as that used by Burris and Rempel (2004). In both stereotypic and counterstereotypic conditions, the immigrant first stated that "I am an Uzbek (Georgian). I was born in Uzbekistan (Georgia) and stay in Perm for a year". The respective self-descriptions subsequently diverged: The stereotypic immigrant described himself sticking to those stereotypic descriptions of given ethnicity obtained from Russian sample during the pretest (see the section "Procedure" for more details). The counterstereotypic immigrant described himself according to auto-stereotypes (i.e. Russian stereotype) obtained from the same sample during the pretest. Both texts were equal in terms of text size and stylistics.

Perceived stereotypicity. In addition, we measured the perceived stereotypicity (PC) of immigrant's image. Participants thus answered four questions relating to the degree to which "the immigrant" is "a typical one". The items were as follows: "The narrator behaves exactly in the way that most his countrymen usually behave", "The narrator is a typical representative of his nation", or "I see people of this nation in a different way" (reversed). The internal consistency of the scale was high,  $\alpha = .83$ , and the means of the scale's items were distributed normally,  $z = .778$ ,  $p > .55$ .

## **Results**

Given that the means of NCS items were distributed normally,  $z = .687$ ,  $p = .734$ , we could extract three subgroups by the degree of NC using ranking procedure. These three subgroups (high, middle, and low levels of NC) differed between themselves extremely significantly,  $F(2, 119) = 259.34$ ,  $p < .0001$ . Thus, our manipulation of the need for cognition levels was quite sufficient.

## Correlations of NC with ATI

NC did not correlate neither with ATI,  $r(128) = .073$ ,  $p = .413$ , nor with PS,  $r(128) = -.056$ ,  $p = .528$ . At the same time, ATI and PS correlated significantly,  $r(128) = .187$ ,  $p = .034$ , thus attitude toward an immigrant was higher when he was considered by participants as “a typical one”.

Two-way ANOVA 2 (stereotype vs. counterstereotype image)  $\times$  2 (NC; high, low<sup>2</sup>) was insignificant,  $F(1, 80) = .54$ ,  $p = .463$ . On the other hand, although interaction between immigrant’s ethnicity and levels of NC was insignificant,  $F(1, 82) = .69$ ,  $p = .407$ , the post hoc LSD test has shown a significant effect of ethnicity among low-NC individuals,  $F(1, 82) = 4.54$ ,  $p = .036$ . They evaluated the Georgian “immigrant” much higher than the Uzbek. The ethnicity had no effect among high-NC participants,  $F < 1$ .

It was found as well that NC may interact with sex relating to attitudes toward immigrants,  $F(1, 82) = 6.70$ ,  $p = .011$ . In so doing, sex differences among those high in NC were found,  $F(1, 82) = 4.04$ ,  $p = .048$ , showing that high-NC women evaluated immigrants much higher than high-NC men. Moreover, differences between high-NC and low-NC women were also found,  $F(1, 122) = 5.70$ ,  $p = .019$ , showing that the more NC women have, the more positive attitude toward immigrants they assume. At the same time, among males there was a reversed but insignificant tendency,  $p = .138$ : the more NC men have, the more negative attitude they assume. This interaction was not specified neither by the immigrant’s ethnicity,  $F < 1$ , nor by immigrant’s stereotypicality,  $F(1, 76) = 1.58$ ,  $p = .213$ .

## NC, stereotypicality, and ATI.

Previous studies suggest that lower NC predicts more reliance on stereotypes when judging other people (Carter et al., 2006; Schaller et al., 1995). To test this prediction, we first studied if NC relates to the assessment of immigrants’ stereotypicality measured as PS. NC does not correlate with PS at all,  $r(128) = -.056$ ,  $p = .528$ . Moreover, analysis of covariance (ANCOVA) has revealed that the main effect of stereotypicality on PS ( $F(1, 123) = 39.90$ ,  $p < .0001$ ) was not specified by NC included as a continuous predictor,  $F(1, 122) = 40.84$ ,  $p < .0001$ . These results suggest that NC is to hardly influence the assessment of immigrant’s stereotypicality.

Next, recall that ATI correlated significantly with PS. However, we have found that this correlation was eliminated completely among those participants who were low in NC,  $r(42) = -.005$ ,  $p = .974$ . At the same time, it was either positive among high-NC individuals or positive and significant among middle-NC individuals,  $r(44) = .159$ ,  $p = .301$ , and  $r(42) = .430$ ,  $p = .004$ , respectively. Furthermore, the correlation between ATI and PS became approximately negative among low-NC men,

<sup>2</sup> The group of middle-NC participants ( $n=44$ ) was excluded from this type of analyses.

$r(16) = -.430, p = .097$ , but kept in tendency positive among low-NC women,  $r(26) = .226, p = .268$ .

## **Discussion**

The fact that low-NC individuals assessed Georgian immigrant higher than Uzbek could be determined by initially more positive attitudes among Russians toward Georgians compared with Uzbeks (note that the data were gathered in the late 2007, i.e. before Caucasian conflict of 2008). This preattitude could be due to the relative cultural (including religious) closeness between Georgians and Russians. The discrepancy between high- and low-NC individuals is due to more readiness among the latter group to rely on stereotypes than among the former. Similarly, Zhang and Buda (1999) have shown that the low-NC customers may evaluate negatively a marketing message source which looks like a “non-expert”. Additionally, NC correlates negatively with the need for structure, a well-known factor of the bias toward social heuristics (Cacioppo & Petty, 1982). The fact that the ethnicity effect did not emerge among high-NC individuals could be caused by the assumption that the preference of more culturally close to Russians Georgians in comparison with more culturally distant from Russians Uzbeks could be observed in the case of more superficial heuristic social perception that takes place among low-NC individuals. In other words, low-NC individuals can use immigrants’ ethnicity as a cue more readily than those of high NC.

There are not so many examples of sex differences in NC in recent literature. However, all of them are quite consistent. Thus, Tormala and Petty (2001) have revealed that participants’ sex interacts with NC on the amount of information recall; high NC women recalled more information than those of low NC. This correlation, however, was insignificant among men. In addition, Fu, Morris, Lee, Chao, Chiu, and Hong (2007) have shown that among Hong Kong Chinese participants only high NC females tend to seek the relevant information. These findings lend support to the notion that NC may evoke somewhat more cognitive activity among women than among men. Our effect of NC among females could be explained by this assumption as well. Therefore, this tendency results in increasing evaluations of immigrants among high-NC women. Even more interestingly, we have found the condition when ATI may correlate negatively with immigrant’s stereotypicality; this is low-NC men. This must be a group of extreme risk in light of immigrants’ perception by Russians.

## **Limitations and Suggestions for Future Research**

The present study included participants who were undergraduates of humanitarian faculties of a university in a Russian city located far from state boundary.

Due to the provincial status of Perm University, most students who were engaged in the study grew up in Perm region and live there during all their lives. Therefore, future studies could include samples different from that we have used in this study. For instance, one may study samples of different ages, socioeconomic status and so forth, statistically controlling participants' involvement with communication with immigrants.

Additionally, the sample size in this study was relatively small, which also limits the validity of the results. Thus, some results were obtained using truncated samples which further reduces the validity of the results. Future studies should use samples of bigger size. This will also allow to administer statistics more versatile in its predictions such as structural equation modelling or robust statistics.

However, the consistency of our results with those obtained previously by other scholars involved in need for cognition research makes our results being quite valid. In spite of aforementioned restrictions, this study poses a problem of substantial relevance for contemporary Russian society which needs a comprehensive research in the near future.

## References

- Briñol, P., & Petty, R. E. (2005). Individual differences in persuasion. In D. Albarracín, B. T. Johnson, & M. P. Zanna (Eds.), *The handbook of attitudes and attitude change* (pp. 575–616). Hilldale, NJ: Erlbaum.
- Burris, C. T., & Rempel, J. K. (2004). "It's the end of the world as we know it": Threat and the spatial-symbolic self. *Journal of Personality and Social Psychology, 86*, 19–42.
- Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology, 42*, 116–131.
- Cacioppo, J. T., Petty, R. E., & Kao, C. F. (1984). The efficient assessment of "need for cognition." *Journal of Personality Assessment, 48*, 306–307.
- Cacioppo, J. T., Petty, R. E., & Morris, K. (1983). Effects of need for cognition on message evaluation, argument recall, and persuasion. *Journal of Personality and Social Psychology, 45*, 805–818.
- Carter, J. D., Hall, J. A., Carney, D. R., & Rosip, J. C. (2006). Individual differences in the acceptance of stereotyping. *Journal of Research in Personality, 40*, 1103–1118.
- Dambrun, M., Taylor, D. M., McDonald, D. A., Crush, J., & Méot, A. (2006). The relative deprivation-gratification continuum and the attitudes of South Africans toward immigrants: A test of the V-Curve Hypothesis. *Journal of Personality and Social Psychology, 91*, 1032–1044.
- Eysenck H. J., & Eysenck S. B. G. (1994). *Manual of the Eysenck Personality Questionnaire (EPQ-R Adult) comprising the EPQ-Revised (EPQ-R) & EPQ-R Short Scale*. San Diego, Ca: EdITS.



- Federal State Statistic Service of Russian Federation. Retrieved from: [www.gks.ru; http://www.gks.ru/bgd/regl/b10\\_01/IssWWW.exe/Stg/d12/4-0.htm](http://www.gks.ru/http://www.gks.ru/bgd/regl/b10_01/IssWWW.exe/Stg/d12/4-0.htm)
- Fu, J. H., Morris, M. W., Lee, S., Chao, M., Chiu, C., & Hong, Y. (2007). Epistemic motives and cultural conformity: Need for closure, culture, and context as determinants of conflict judgments. *Journal of Personality and Social Psychology, 92*, 191–207.
- Graham, L. M. (2007). Need for cognition and false memory in the Deese-Roediger-McDermott paradigm. *Personality and Individual Differences, 42*, 409–418.
- Kornienko, D. S., Shchebetenko, S. A., & Baleva, M. V. (2007). Sex differences, stereotype, and locus of control in immigrants' image perception. *Perm State Pedagogical University Bulletin: Differential Psychology, 2*, 48–63.
- Maio, G. R., Esses, V. M., & Bell, D. W. (1994). The formation of attitudes toward new immigrant groups. *Journal of Applied Social Psychology, 24*, 1762–1776.
- Perlini, A. H., & Hansen, S. D. (2001). Moderating effects of need for cognition on attractiveness stereotyping. *Social Behavior and Personality, 29*, 313–321.
- Petty, R. E., Briñol, P., Loersch, C., McCaslin, M. J. (2009). The need for cognition. In M.R. Leary & R.H. Hoyle (Eds.), *Handbook of individual differences in social behavior* (pp. 318–329). New York: Guilford Press.
- Petty, R. E., Briñol, P., Tormala, Z. L., & Wegener, D. T. (2007). The role of metacognition in social judgment. In A.W. Kruglanski & E.T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (2<sup>nd</sup> ed., pp. 254–284). New York: Guilford Press.
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer-Verlag.
- Petty, R. E., DeMarree, K. G., Briñol, P., Horcajo, J., & Strathman, A. J. (2008). Need for cognition can magnify or attenuate priming effects in social judgment. *Personality and Social Psychology Bulletin, 34*, 900–912.
- Priester, J., Wegener, D., Petty, R. E., & Fabrigar, L. (1999). Examining the psychological processes underlying the sleeper effect: The elaboration likelihood model explanation. *Media Psychology, 1*, 27–48.
- Shuster, S. (2010, December 23). Racist violence threatens Russia's World Cup plans. *Time*. Retrieved from
- Russian town hit by race violence. (2006, September 4). *BBC News*. Retrieved from: ]
- Schaller, M., Boyd, C., Yohannes, J., & O'Brien, M. (1995). The prejudiced personality revisited: Personal need for structure and formation of erroneous group stereotypes. *Journal of Personality and Social Psychology, 68*, 544–555.
- Shchebetenko, S. A. (in press). Perceiving immigrants: Effects of cognitive load, stereotypicality, and personality traits. *Psychological Journal, 31*.
- Shestowsky, D., & Horowitz, L. M. (2004). How the Need for Cognition Scale predicts behavior in mock jury deliberations. *Law and Human Behavior, 28*, 305–337.
- Siegmán, A. W. (1961). A cross-cultural investigation of the relationship between ethnic prejudice, authoritarian ideology, and personality. *Journal of Abnormal and Social Psychology, 63*, 654–655.
- Smith, S. M., Haugtvedt, C. P., & Petty, R. E. (1994). Need for cognition and the effects of repeated expression on attitude accessibility and extremity. *Advances in Consumer Research, 21*, 234–237.

- Tormala, Z. L., & DeSensi, V. L. (2008). The perceived informational basis of attitudes: Implications for subjective ambivalence. *Personality and Social Psychology Bulletin*, *34*, 275–287.
- Tormala, Z. L., & DeSensi, V. L. (2009). The effects of minority/majority source status on attitude certainty: A matching perspective. *Personality and Social Psychology Bulletin*, *35*, 114–125.
- Tormala, Z. L., & Petty, R. E. (2001). On-line versus memory-based processing: The role of “Need to Evaluate” in person perception. *Personality and Social Psychology Bulletin*, *27*, 1599–1612.
- Vaughan, G. M., & Thompson, R. H. T. (1961). New Zealand children’s attitudes towards Maoris. *Journal of Abnormal and Social Psychology*, *62*, 701–704.
- Zhang, Y., & Buda, R. (1999). Moderating effects of need for cognition on responses to positively versus negatively framed advertising messages. *Journal of Advertising*, *28*, 1–15.