Cognitive Component in the Structure of Students’ Legal Consciousness in the Analysis of Economic Offence Cases

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Abstract
Introduction. The cognitive component in the structure of students’ legal consciousness still remains an understudied area. It is unclear how students use the content of representations of economic offences in the analysis of potentially unlawful situations. This study aims to identify and examine the content of cognitive component elements in the structure of students’ legal consciousness in the process of solving economic offence cases (exemplified by corruption risk situations) – namely, representations of corruption, cognitive skills required to recognize it, and characteristics of the relationship between these elements.

Methods. The correlation and regression study involved 119 students of Moscow universities. The diagnosis of variables was performed using authors’ original diagnostic tools (the Open-Ended Questions and the Test of the Ability to Recognize Economic Offences).

Results. We observed significant correlations between the content of students’ representations of economic offences exemplified by corruption (‘knowledge’) and the level of the cognitive ability to identify essential characteristics of economic offences (‘characteristics’) (ρ = 0.438; p ≤ 0.01), as well as between the content of students’ representations of economic offences (‘knowledge’) and the cognitive ability to apply the rule of logical inference when recognizing economic offences in corruption risk situations (‘inference’) (ρ = 0.441; p ≤ 0.01). We found a significant impact of the ‘characteristics’ and ‘inference’ variables on the ‘knowledge’ variable (p < 0.05).

Discussion. For the first time it has been shown that cognitive component elements of legal consciousness related to representations of economic offences are coordinated with each other. To form complete and generalized representations of economic offences among students, it is necessary to develop their cognitive skills that may enable them to (a) analyze problem situations and identify essential characteristics of economic offences and (b) infer whether the situation can be classified as unlawful. The findings of this study may be used to develop training programs aimed at forming the cognitive component of students’ legal consciousness.

Keywords
legal consciousness, representations, cognitive skills, logical operations, naive conceptions, scientific concepts, economic offences, corruption, legal socialization, case method
Highlights
➢ Students’ representations of economic offences (exemplified by corruption) exhibit characteristics of naive conceptions and are incomplete, specific, intuitive, and unstructured.
➢ It is necessary to extend the structure of the cognitive component of students’ legal consciousness, which should include representations of legal offences, and also cognitive skills required to incorporate these representations into the process of recognizing unlawful situations.
➢ Completeness and generality of students’ representations of economic offences are significantly determined by the level of their cognitive skills – the ability to identify essential characteristics of economic offences and the ability to infer whether the situation is unlawful.

For citation

Introduction
The establishment of the rule of law in civil society is impossible without a high level of legal socialization and legal culture. Legal consciousness of citizens should be developed in the process of family upbringing and through appropriate educational programs (Fundamental Principles of State Policy..., 2011).

Legal consciousness is described as a complex psychological construct that includes a set of social attitudes to such objects and phenomena of the legal sphere as law, crimes and criminals, punishment, as well as law enforcement, judicial, and penitentiary systems (Gulevich, 2009). Some researchers distinguish the following elements in the construct of legal consciousness: (a) worldview (an individual’s system of beliefs about the world and one’s own place in it, basic life philosophy in the form of principles, ideals, and values), (b) perception (assessment and interpretation of ongoing legal events), and (c) decision (choice of a behavior model in the legal sphere) (Chua & Engel, 2019). Other researchers propose a two-component structure of legal consciousness, which includes (a) legal psychology (a combination of feelings, emotions, desires, expectations, and experiences in relation to legislative and law enforcement activities of social institutions) and (b) legal ideology (a system of legal ideas, theories, and approaches, according to which individuals recognize the existing law, assess legal reality, and express the desired law) (Bieliauskaite & Slapkauskas, 2015). As shown by the descriptions of the constructs, some components of legal consciousness are associated with emotional and motivational spheres of the human psyche, while others are related to its cognitive sphere. Some researchers add a third (behavioral) component of legal consciousness, which is understood as a process of translating legal norms into actual legal behavior guided by legal attitudes and motives (Orehkova, 2020). In other words, they address the need to study not only characteristics of motivational, emotional, and cognitive spheres of the human psyche, but also the algorithm for making decisions about legal behavior.

We agree with the authors who distinguish the following three components in the structure of legal consciousness: (a) cognitive (representations of each of the following legal spheres: law, crime and criminals, punishment, and law enforcement systems), (b) affective (emotional evaluation of legal phenomena in the indicated spheres), and (c) behavioral (intention to behave
in a certain way in legal situations associated with the four indicated legal spheres) (Gulevich, 2009). Therefore, in the context of this study representations of economic offences are regarded as an element of the cognitive component of legal consciousness related to economic offences.

In our study, we analyze economic offences using a case study of corrupt practices. The Criminal Code of the Russian Federation provides the following definition of corruption, “Corruption is (a) abuse of public office, giving or receiving bribes, abuse of powers, commercial graft, or other illegitimate use by an individual of his/her official status against interests of society and the State to receive private gain in the form of money, values, other property or services involving property, and other property rights for himself/herself or for third parties, or illegal provision of such a benefit to the specified individual by other individuals; (b) committing the above mentioned acts on behalf or for the benefit of a legal entity” (Criminal Code..., 2017; Federal Law..., 2008). This definition makes it possible to distinguish three essential characteristics of corruption: (a) the office holder, (b) abuse of authority, and (c) personal gain. “The content of this definition can serve as a basis for studying subjects’ representations of corruption and the ability to recognize situations of economic offences using corruption as an example” (Pogozhina & Pshenichnyuk, 2020, p. 31).

Up to this day, legal psychology has not paid sufficient attention to studying the cognitive component of legal consciousness related to representations of economic offences. It was identified that “structural and substantial components of public representations of corruption are formed at the level of everyday interaction and do not reflect macro psychological threats to society’s well-being” (Kitova, 2019, p. 157). Students fail to correctly identify legal characteristics of corruption (“What is corruption?”); their representations of corruption are incomplete, non-generalized, and depend on their specialization (Lukina & Larionova, 2017). Law students demonstrate higher level of knowledge and better ability to recognize corruption compared to students specializing in other fields (Becker, Hauser, & Kronthaler, 2013). It was established that to form the skill of recognizing corruption situations, students need to have the following two psychological conditions: (a) complete and generalized knowledge of corruption and (b) developed ability to perform the logical operation of ‘bringing under the concept’ (Pogozhina & Pshenichnyuk, 2020). At the same time, there are no studies that demonstrate how students use the content of representations of corruption in the analysis of corruption risk situations (i.e., based on which cognitive skills representational content is incorporated in the process of recognizing this type of situations). Therefore, it is still important to examine a relationship between students’ representations of corruption as an element of the cognitive component of legal consciousness and characteristics of incorporating this element into the process of recognizing this type of economic offences.

We proceed from the assumption that representations, as generalized sensory image that possesses the property of meaningfulness, are incorporated in the analysis of problem situations with a risk of committing economic offences using special cognitive skills (mental actions), aimed at identifying characteristics of the situation and categorizing it by type (Bogoyavlenskii & Menchinskaya, 1959; Gal’perin, 1966). The knowledge criterion is inextricably associated with cognitive actions (skills). Thus, to know is to be able to perform actions (in particular, cognitive ones) associated with this knowledge. Without such actions, an individual can neither acquire new knowledge, nor apply it to solving his/her problems (Talyzina, 2018). Therefore, in our opinion, the analysis of the cognitive component of legal consciousness should not be limited to studying the content of students’ representations of corruption. It is also necessary to analyze how these representations are incorporated into the problem situation. Consequently, the study
of the cognitive component of legal consciousness should analyze the relationship between at least two of its elements: representations of economic offences and the ability to use them in the analysis of corruption risk situations.

Some studies indicated that although the society provides an individual with a system of cultural legal meanings, the content of legal representations remains largely naive (Fein, 2017; Rifai, Pitriadin, & Triono, 2021). These naive (everyday) conceptions are relatively independent from the actual legal relations in the society and exert their influence on the behavior and decisions associated with the legal sphere (Moscovici, 1995).

The main parameters that distinguish naive conceptions from scientific concepts include (a) the level of generalization, (b) the method of knowledge acquisition, (c) the level of consciousness, and (d) the level of interconnectedness. Naive conceptions (prior knowledge) are specific, acquired during sensory and practical experience, poorly realized, and usually unstructured. Scientific concepts, on the other hand, are generalized, acquired during a purposefully organized training, conscious, and systematic (Vygotsky, 1999; Klopfer, Champagne, & Gunstone, 1983). The diagnosis of prior knowledge is a prerequisite for any effective training, as erroneous prior conceptions are persistent and obstruct the process of obtaining objectively correct knowledge (Lucariello & Naff, 2010). In addition, along with cognitive skills prior conceptions are significant predictors of effective complex problem solving (Süß & Kretzschmar, 2018).

Legal cynicism, with its inherently inaccurate knowledge of economic offences, carries high risks of making unlawful decisions in problem situations associated with potentially corrupt interactions (Ameri et al., 2019; Gifford & Reisig, 2019). One of the reasons for committing unethical acts, which include corruption practices, is lack of knowledge regarding ethical behavior (Ashari, Nanere, & Trebilcock, 2018; Kim & Loewenstein, 2020) and legal norms – in particular, lack of knowledge about the essence of corruption (Becker et al., 2013; Feldman, 2017; Hauser, 2019).

It was established that ethical decision-making is affected not by mere knowledge in the fields of morality, law, and ethical principles (Chen, Treviño, & Humphrey, 2020), but by complex constructs represented by mental models – complex forms of knowledge that reflect causal relationships between key characteristics of the problem (Bagdasarov et al., 2016). It was observed that there is a negative relationship among rational decision-making, which involves logical structures, delinquent and deviant behaviors (alcoholism and drug addiction) (Paternoster, Pogarsky, & Zimmerman, 2011; Pogarsky, Roche, & Pickett, 2018), and victimization and cybercrime (Louderback & Antonaccio, 2017). The overall level of students’ cognitive abilities was found to be an important factor determining dishonest behavior (Gerlach, Teodorescu, & Hertwig, 2019).

Therefore, to avoid the risk of making an unlawful decision, the system of the cognitive component of students’ legal consciousness should contain (a) normative representations (scientific concepts) of economic offences, in particular, corruption, and (b) cognitive skills that help an individual to recognize characteristics of this offence type in a problem situation. The results of review demonstrate that naive conceptions of economic offences are incomplete, non-generalized, intuitive, and poorly systematized, which can interfere not only with correct recognition of this type of offence, but also with the process of acquiring objectively correct knowledge in this area and formation of legal consciousness in general. In the literature there are no studies that describe the relationship between the content of students’ representations of corruption and the level of skills that incorporate these representations into the process of recognizing corruption risk situations. Therefore, we undertook this study to solve this scientific problem.
This study aims to identify and examine the content of cognitive component elements of students’ legal consciousness in the process of solving cases of economic offences (exemplified by corruption risk situations) – namely, representations of corruption and cognitive skills that help recognize it, and characteristics of the relationship between these elements.

Hypotheses. There is a significant relationship between the content of students’ representations of economic offences (exemplified by corruption) and the level of cognitive skills that help recognize this type of offences, including the ability to analyze problem situations and identify significant characteristics of corruption and the ability to infer whether the situation is corrupt (in a case study).

Methods

The sample comprised 119 students (83 females and 36 males; mean age = 30 ± 10.6 years) from different academic programs and modes of attendance, enrolled in the following Moscow universities: Lomonosov State Moscow University (Faculty of Psychology), Moscow Aviation Institute (Faculty of Aviation Engineering), and Plekhanov Russian University of Economics (Faculty of Business and Additional Education).

Diagnostic tools

The diagnosis of representations of economic offences (exemplified by corruption) was performed using the Open-Ended Questions (I. N. Pogozhina, D. V. Pshenichnyuk, & M. V. Sergeeva), which included the following three tasks: (a) to define corruption (“What is corruption?”), (b) to provide an example of corruption, and (c) to justify the provided example (“Why is it corruption?”) (Pogozhina & Pshenichnyuk, 2020).

To diagnose the level of cognitive skills that help determine (recognize) corruption risk situations, we used the case study method (Cronbach’s alpha = 0.889). The cases (developed by M. V. Sergeeva) required analysis and solution of three types of problem situation that suggested a possibility of corrupt interaction: (a) everyday situations (Kendall’s W = 0.621, p < 0.05), (b) excerpts from fiction (Kendall’s W = 0.674, p < 0.05), and (c) episodes from feature films (Kendall’s W = 0.837, p < 0.05). Test success was evaluated on the following two scales: (a) ability to identify the characteristics of corruption (‘characteristics’; Cronbach’s alpha = 0.918) and (b) ability to infer whether the situation was corrupt (‘inference’; Cronbach’s alpha = 0.687).

To assess the level of cognitive skills, which help recognize corruption, in the case study we used normative content of the corruption concept, which is formulated in the Criminal Code of the Russian Federation and includes the following three characteristics: (a) the holder of office, (b) abuse of his/her authority, and (c) his/her personal gain (Pogozhina & Pshenichnyuk, 2020).

Statistical methods of data analysis applied in this study included correlation analysis (Spearman’s ρ) and multiple regression analysis in SPSS 25.0 software.

Procedure

The study was carried out face to face; the respondents successively completed the diagnostic tasks. Access to any information sources was prohibited. We determined specific characteristics of representations of economic offences and the level of cognitive skills that help recognize this type of offences (exemplified by corruption risk situations). Next, we studied the relationship between the indicators of students’ representations of economic offences and the cognitive skills, which
help them to recognize such offences, using the following statistical procedures: (a) correlation analysis using Spearman’s \( \rho \) coefficient and (b) multiple regression analysis in SPSS 25.0 software.

**Results**

1. *Tables 1–3 show diagnostic results of respondents’ representations of economic offences (exemplified by corruption risk situations).*

   The majority of students (65.5 %) relied on all three characteristics of corruption (in accordance with the Criminal Code) only when they provided their examples. The task, where the students were the least likely to identify all three characteristics of corruption, was the definition (39.5 %) (Table 1).

<table>
<thead>
<tr>
<th>N of identified characteristics</th>
<th>Definition (&quot;What is corruption?&quot;)</th>
<th>Example (&quot;Provide an example of corruption&quot;)</th>
<th>Example justification (&quot;Why is it corruption?&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N of students % of students Accumulated %</td>
<td>N of students % of students Accumulated %</td>
<td>N of students % of students Accumulated %</td>
</tr>
<tr>
<td>0</td>
<td>9 7.6 7.6</td>
<td>5 4.2 4.2</td>
<td>9 7.6 7.6</td>
</tr>
<tr>
<td>1</td>
<td>9 7.6 15.1</td>
<td>12 10.1 14.3</td>
<td>18 15.1 22.7</td>
</tr>
<tr>
<td>2</td>
<td>54 45.4 60.5</td>
<td>24 20.2 34.5</td>
<td>35 29.4 52.1</td>
</tr>
<tr>
<td>3</td>
<td>47 39.5 100.0</td>
<td>78 65.5 100.0</td>
<td>57 47.9 100.0</td>
</tr>
<tr>
<td>Total</td>
<td>119 100.0</td>
<td>119 100.0</td>
<td>119 100.0</td>
</tr>
</tbody>
</table>

‘The holder of office’ was least frequently identified characteristic in the content of the corruption concept; less than half of respondents took it into account in their definitions and examples (42.9 % and 49.6 %, respectively) (Table 2). In definitions, the leading characteristic that students relied on in their answers was ‘personal gain’. Meanwhile, in the examples and their justifications ‘abuse of authority’ and ‘personal gain’ were most pronounced.
Table 2
Main characteristics of corruption (the Open-Ended Questions)

<table>
<thead>
<tr>
<th>Main characteristics of corruption</th>
<th>Definition</th>
<th>Example</th>
<th>Example justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>(&quot;What is corruption?&quot;)</td>
<td>N of students</td>
<td>% of students</td>
<td>Accumulated %</td>
</tr>
<tr>
<td>(&quot;Provide an example of corruption&quot;)</td>
<td>N of students</td>
<td>% of students</td>
<td>Accumulated %</td>
</tr>
<tr>
<td>(&quot;Why is it corruption?&quot;)</td>
<td>N of students</td>
<td>% of students</td>
<td>Accumulated %</td>
</tr>
<tr>
<td>Holder of office</td>
<td>51</td>
<td>42.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Abuse of authority</td>
<td>105</td>
<td>88.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Personal gain</td>
<td>107</td>
<td>89.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>119</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Only 24% of participants relied on all the three necessary and sufficient characteristics of corruption ('knowledge'), when they answered each question of the Open-Ended Questions (Table 3). We may assume that only these respondents are characterized by fully developed representations of this type of economic offence, which are complete and general.

Table 3
Descriptive statistics according to the diagnostic results

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>% of students</th>
<th>Min</th>
<th>% of students</th>
<th>Max</th>
<th>% of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>119</td>
<td>6.82</td>
<td>2.02</td>
<td>24</td>
<td>0</td>
<td>2</td>
<td>9</td>
<td>24</td>
</tr>
<tr>
<td>Characteristics (literature)</td>
<td>119</td>
<td>8.12</td>
<td>3.40</td>
<td>53</td>
<td>0</td>
<td>7</td>
<td>15</td>
<td>8</td>
</tr>
</tbody>
</table>
Table 3
Descriptive statistics according to the diagnostic results

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>% of students</th>
<th>Min</th>
<th>% of students</th>
<th>Max</th>
<th>% of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics (video)</td>
<td>119</td>
<td>16.79</td>
<td>4.93</td>
<td>64</td>
<td>0</td>
<td>1</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>Inference (10 everyday situations)</td>
<td>119</td>
<td>4.69</td>
<td>1.52</td>
<td>24</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Inference (literature)</td>
<td>119</td>
<td>2.71</td>
<td>1.40</td>
<td>27</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Inference (video)</td>
<td>119</td>
<td>5.94</td>
<td>1.75</td>
<td>24</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>7</td>
</tr>
</tbody>
</table>

2. Tables 3–4 show diagnostic results for the level of cognitive skills that help determine (recognize) economic offences (exemplified by corruption).

2.1. Ability to identify characteristics of corruption in case analysis (Tables 3–4).

The majority of students identified two main characteristics of corruption, when they justified their answers whether the behavior of protagonists of literary excerpts (for 52.9 % of respondents) and film episodes (for 64.7 % of respondents) was corrupt (Table 4).

In 5 literary excerpts, the maximum total score on the ‘characteristics’ scale was obtained by only 8 % of respondents; 5 % of students scored maximum in 10 film episodes (Table 3).

Table 4
Number of identified characteristics of corruption (Test of the Ability to Recognize Economic Offences)

<table>
<thead>
<tr>
<th>N of identified characteristics</th>
<th>Literary excerpts</th>
<th>Film episodes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N of students</td>
<td>% of students</td>
</tr>
<tr>
<td>0</td>
<td>8</td>
<td>6.7</td>
</tr>
<tr>
<td>1</td>
<td>38</td>
<td>31.9</td>
</tr>
<tr>
<td>2</td>
<td>63</td>
<td>52.9</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>8.4</td>
</tr>
<tr>
<td>Total</td>
<td>119</td>
<td>100.0</td>
</tr>
</tbody>
</table>
2.2. Ability to apply the rule of inference in the analysis of problem situations that contain a possibility of corrupt interaction (Table 3).
On the average, students (24 %) correctly recognized 4 or 5 everyday situations out of 10; only 1 % of students obtained the maximum score. Students (27 %) were correct about 3 situations out of 5 literary excerpts; 15 % of respondents demonstrated the maximum score. In the analysis of film episodes, the majority of study participants (24 %) made the right inference in 6 situations out of 10; only 7 % of surveyed students scored maximum.

3. Results of correlation analysis.
To test research hypotheses, we compared total scores of the respondents, obtained using both diagnostic tools (Table 5).

<table>
<thead>
<tr>
<th>Table 5</th>
<th>Descriptive statistics of the variables and correlations between them (N = 119)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>M</td>
</tr>
<tr>
<td>Knowledge</td>
<td>6.82</td>
</tr>
<tr>
<td>Characteristics</td>
<td>13.34</td>
</tr>
<tr>
<td>Inference</td>
<td>24.88</td>
</tr>
</tbody>
</table>

Note: ** the correlation (Spearman’s ρ) is significant at the 0.01 level (2-tailed).

We observed a significant relationship (p ≤ 0.01) between the content of representations of corruption and the level of cognitive skills (Table 5) – (a) ability to identify characteristics of corruption in case analysis (ρ = 0.438) and (b) ability to infer whether the situation is corrupt (ρ = 0.441).
Independent variables (ability to identify the main characteristics of economic offences and ability to make correct inference) significantly correlate with the dependent variable (knowledge/representations of corruption) (R = 0.530 at p < 0.05). A combined effect of ‘characteristics’ and ‘inference’ predictors explains 28.1 % of variance in the ‘knowledge’ variable (Table 6). Taken separately, each predictor exerts significant influence on the ‘knowledge’ variable; the contribution of ‘characteristics’ is greater (β = 0.323) than that of ‘inference’ (β = 0.307).
Table 6
Multiple regression analysis of representations of economic offences

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SH₂</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics</td>
<td>0.091</td>
<td>0.24</td>
<td>0.323</td>
<td>3.734</td>
<td>0.000</td>
</tr>
<tr>
<td>Inference</td>
<td>0.185</td>
<td>0.52</td>
<td>0.307</td>
<td>3.550</td>
<td>0.001</td>
</tr>
</tbody>
</table>

R = 0.530 R² = 0.281 F = 22.645 p = 0.000

Note: dependent variable – knowledge; predictors – characteristics, inference.

The relationship between the ‘characteristics’ and ‘knowledge’ variables tends to be linear, although the quadratic equation explains a higher percentage of variance (R² = 0.204) than linear one (R² = 0.203) (Table 7). The relationship between ‘inference’ and ‘knowledge’ variables is better described by a quadratic equation, which means that even students with the lowest level of representations (0–2 scores) can correctly recognize economic offences. As the level of the development of representations increases the number of correctly recognized situations increases as well.

Table 7
Estimation of the curvilinearity of the relationship between representations of economic offences and the ability to recognize them

<table>
<thead>
<tr>
<th>Variables</th>
<th>Equation</th>
<th>R²</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
<th>Const</th>
<th>b₁</th>
<th>b₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Linear</td>
<td>0.194</td>
<td>28.221</td>
<td>1</td>
<td>117</td>
<td>0.000</td>
<td>8.344</td>
<td>0.734</td>
<td></td>
</tr>
<tr>
<td>(dependent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inference</td>
<td>Quadratic</td>
<td>0.206</td>
<td>15.074</td>
<td>2</td>
<td>116</td>
<td>0.000</td>
<td>10.043</td>
<td>0.012</td>
<td>0.064</td>
</tr>
<tr>
<td>(Independent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7
Estimation of the curvilinearity of the relationship between representations of economic offences and the ability to recognize them

<table>
<thead>
<tr>
<th>Variables</th>
<th>Equation</th>
<th>$R^2$</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
<th>Const</th>
<th>b1</th>
<th>b2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge (dependent)</td>
<td>Linear</td>
<td>0.203</td>
<td>29.741</td>
<td>1</td>
<td>117</td>
<td>0.000</td>
<td>13.974</td>
<td>1.601</td>
<td></td>
</tr>
<tr>
<td>Characteristics (independent)</td>
<td>Quadratic</td>
<td>0.204</td>
<td>14.910</td>
<td>2</td>
<td>116</td>
<td>0.000</td>
<td>15.391</td>
<td>0.998</td>
<td>0.053</td>
</tr>
</tbody>
</table>

Discussion
The data obtained demonstrated that out of 119 respondents, only 29 students (24%) identified all three characteristics in their definitions of the studied concept, example, and its justifications (Table 3). This is in line with the general statement of the activity approach to education that to form any scientific concept, students need to develop a basic logical operation of defining the concept (‘bringing under the concept’) (Talyzina, 2018). It also confirms the results of the study in the field of students’ terminological competence, which states that the ability to verbatim reproduction of terms does not imply its accurate usage and correct understanding (Bordovskaya, Koshkina, Tikhomirova, & Bochkina, 2018). Since only 29 out of 119 students have developed this logical operation, the others had difficulties in providing an example of corruption and justifying it, even if they could reproduce the definition of corruption (similarly, schoolchildren from the study by N. F. Talyzina unmistakably reproduced the definition of ‘circumference’ but found it difficult to answer whether an ellipse was a circumference or not) (Talyzina, 2018).

The results obtained are also consistent with L. S. Vygotsky’s provisions on scientific and everyday concepts, as well as ‘naive theories’ in cognitive psychology. Our study participants did not identify all the three significant characteristics of corruption in the proposed tasks, as their intuitive and spontaneously formed knowledge was incomplete, unstructured, and did not possess the necessary level of generalization (Vygotsky, 1999). Moreover, our data do not contradict the theory of social representations by S. Moscovici and the concept of legal consciousness by O. A. Gulevich, according to which social representations of economic offences (in our case, representations of corruption) among students exist regardless of the actual legal relations in the society (we proceed from the assumption that our respondents do not engage in unlawful activities) and, therefore, do not contain all the essential characteristics of the concept of corruption (Gulevich, 2009; Moscovici, 1995).

The relationship between the content of students’ representations of economic offences (exemplified by corruption) and the level of cognitive skills that help recognize unlawful situations was
significant (p ≤ 0.01). Therefore, both proposed hypotheses were confirmed. Regression analysis showed that a set of predictors (the ability to identify main characteristics of corruption and the ability to make correct inference) made a significant contribution (p < 0.05) to the ‘knowledge’ variable (the level of representations of economic offences). The relationships observed in cognitive component elements of legal consciousness related to representations of economic offences confirm the results of studies, which demonstrate that knowledge and skills are qualitatively superior in those individuals, who have developed basic logical structures, in particular, the skill of ‘bringing under the concept’ (Pogozhina & Pshenichnyuk, 2020; Talyzina, 2018). Moreover, our results correlate with requirements for legal and anti-corruption educational programs. For example, in Australia law students are encouraged to develop specific logical skills (Burton, 2017). Thus, first year students are suggested to use a categorizing grid based on IRAC (Issue, Rule, Application, and Conclusion) in their analysis of problem situations (whether the case participant is guilty or not guilty). IRAC involves the following sequence of actions: (a) distinguishing the elements in a problem situation, (b) finding laws that correspond to these elements, (c) comparing the elements of the problem situation to the elements in the legislative acts, and (d) drawing conclusions (Burton, 2017). In our opinion, this sequence of actions is similar to the orienting basis for the logical operation of defining concepts (‘bringing under the concept’). Foreign educational programs in the field of corruption prevention focus on the development of anti-corruption attitude, which is based not only on affective reactions and intentions, but also on cognitive skills associated with recognizing corruption (Basabose, 2019).

Thus, we have established that cognitive skills that help recognize economic offences exert significant influence on the level of development of representations of corruption and should be included in the structure of the cognitive component as one of the elements of legal consciousness. Therefore, the programs of legal socialization for forming citizens’ legal consciousness related to economic offences should include a special section aimed at developing such skills. This will be the aim of our future research.

**Conclusion**

For the first time we described the relationship between the elements of the cognitive component of students’ legal consciousness related to representations of economic offences – students’ representations of corruption and cognitive skills that help incorporate these representations into the process of recognizing corruption risk situations.

The content of students’ representations of corruption correspond to the level of naive conceptions, which makes them incomplete, specific, intuitive, and unstructured.

We confirmed both hypotheses about the presence of a significant relationship between the content of students’ representations of corruption (as one of the types of economic offences) and the level of cognitive skills, including (a) the ability to analyze problem situations and identify essential characteristics of corruption and (b) the ability to infer whether the situation is corrupt. This significant relationship indicates that the structure of the cognitive component of legal consciousness, along with other elements, should also include the cognitive skills described above.

The results of regression analysis enabled us to draw the following conclusion: the development of the ability to identify main characteristics of economic offences and the ability to make correct inference when recognizing potentially unlawful situations leads to more complete and generalized representations of economic offences among students. These findings should be
taken into account when creating legal socialization programs, aimed at forming and developing the cognitive component of students’ legal consciousness.

Prospects for further research. As shown in the theoretical part of the study, legal consciousness is systemic. One of its components may play a pivotal role, while others are subordinated (Gulevich, 2009). Therefore, in addition to the cognitive component it is necessary to investigate other components, such as emotional and behavioral ones (in our opinion, the latter should be considered as ’motivational’) and determine which one plays the leading role in the system of legal consciousness. This can help develop programs for forming citizens’ legal consciousness based on its leading component.

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Received: April 19, 2021
Revision received: June 18, 2021
Accepted: June 21, 2021
Author Contributions

I. N. Pogozhina conducted scientific supervision, developed methodological concept of the study, designed the empirical study, developed diagnostic tools, performed critical analysis and revision of the manuscript.

M. V. Sergeeva wrote the literature overview, developed diagnostic tools, collected data, performed statistical processing of the results, and prepared the first version of the manuscript.

The authors declare no conflicts of interest.