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SOCIAL BELIEFS AND LEARNING MOTIVATION: ROLE OF ORGANIZATIONAL JUSTICE

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This study explored the relation between social beliefs, organizational justice evaluation, and learning motivation. Three hypotheses were tested. Hypothesis 1 suggested that justice evaluation is negatively related to amotivation and positively related to intrinsic learning motivation. According to Hypothesis 2, dangerous and jungle world beliefs are positively related to amotivation and negatively related to intrinsic learning motivation. Hypothesis 3 suggested that the relation between social beliefs and learning motivation is moderated by organizational justice evaluation. Participants were 895 first and fourth year students of four Russian universities. They completed the ‘Dangerous World Beliefs Scale’, ‘Jungle Word Beliefs Scale’, ‘Organizational Justice Scale’ and ‘Academic Motivation Scale’. The results supported Hypotheses 1 and 2, but not Hypothesis 3.

Key words: self-determination theory, learning motivation, organizational justice, dangerous world belief, jungle world belief

JEL Classification: Z
Motivation is one of the factors that influences the effectiveness of education, along with a person's skills and abilities. The stronger the motivation of students, the more efforts they make during their studies, the easier they learn new material, and the higher are their academic achievements. The key question to studying the motivation behind education is the question of its strengthening factors. What increase one's motivation to learn? What is the role of individual and situational variables in this case?

The link between the quality of education and professional work is considered in the self-determination theory (SDT) by Deci and Ryan. They believe that every human has three basic psychological needs: competence, relatedness and autonomy (Deci, Ryan, 2000; Gagné, Deci, 2005). Satisfaction of these needs influences working and learning motivation.

According to Deci and Ryan, all types of motivational regulation fall along a continuum as shown in Figure 1 (Gordeeva, Sichev, Osin; Deci, Ryan, 2000; Gagné et al., 2010; Gagné, Deci, 2005).

![Figure 1. Types of motivation in self-determination theory](image)

Amotivation is shown at the far left end of the continuum and it means that a person does not have any intention to perform the action.

It is followed by extrinsic motivation, when the accomplishment of the task is influenced by factors unrelated to the content of the action.

Deci and Ryan describe several levels of extrinsic motivation due to the role played by the external factors.

- On the level of external regulation, behaviour is regulated by promised rewards and threatened punishment, i.e. it is executed under the control of other people. This is the classic case of extrinsic motivation in which behaviour is controlled by specific external contingencies. In SDT, external regulation is considered controlling, and externally regulated behaviours are predicted to be
contingency dependent in that they show poor maintenance and transfer once contingencies are withdrawn.

- At the level of introjected regulation, behaviour is regulated by partly adopted social rules and demands. While with external regulation the control of behaviour comes from contingent consequences that are administered by others, with introjected regulation the contingent consequences are administered by the individuals to themselves. The prototypic examples are: contingent self-worth (pride) or threats of guilt and shame. Introjection represents a partial internalization in which regulations are in the person but have not really become part of the integrated set of motivations, cognitions, and affects that constitute the self.

- At the level of identified regulation, a person acquires external aims and values, accepts them and identifies with them. By identifying with a behaviour’s value, people more fully internalize its regulation; they have more fully accepted it as their own. The internalization would have been fuller than with introjection, and the behaviour would have become more a part of their identity.

- At the level of integrated regulation, a person not only identifies with important sides of his activity, but also includes it into his self-concept. Integration is the fullest, most complete form of internalization of extrinsic motivation.

The far right end of motivational continuum is formed by intrinsic motivation, which concerns active engagement with tasks that people find interesting and that, in turn, promote growth. In this case the subject works or studies because it brings him intrinsic reward.

According to the self-determination theory, intrinsic motivation causes the highest positive impact on a person's performance. Relations with one's peers which allow a person to satisfy basic needs (such as the style of family upbringing or education) can be considered one of the main strengthening factors. One of the parameters of peer relations is the observance of justice norms (Gulevich, 2011; Colquitt, 2001; Cropanzano et al., 2001).

- Distributive justice includes equity (it is regarded as fair if the one who achieves better results gets bigger rewards) and effort norms. However, studies of Russian samples showed that the distributive component also includes distribution norms based on skills and knowledge.

- Informational justice is determined by participant awareness of resource allocation. It includes five main principles: truthfulness, clarity, fullness, timeliness and individuation of explanations.
- Interpersonal justice regulates relationships between participants of interaction. It includes norms of courtesy and respect.

- Procedural justice deals with the process of gathering information and evaluations made by participants of the interaction. It is based on five norms: outcome control, process (ability to express one’s point of view), correctability (ability to appeal the decision), consistency (procedure can be applied in different situations for different participants) and bias suppression (absence of bias against certain employees/students in employer/teacher). Research shows that these norms form two components in the minds of employees of Russian companies: equality of rights (consistency and bias suppression) and ability to control (outcome control, process control and correctability) (Bezmenova, Gulevich, Spiridonov, 2009; Spiridonov, Gulevich, Bezmenova, 2010).

Organizational justice evaluation affects human motivation and behaviour. Justice norms stimulate constructive activity. For example, justice evaluation of the hiring interview influences selection procedure for candidates for a position in a company: the higher distributive, informational, and procedural justice is evaluated, the stronger the motivation of the candidates and their will to get the position are (Bell, Ryan, Wiechmann, 2006). The better students evaluate distributive, interpersonal, and procedural justice of the training program, the higher their learning motivation, evaluation of the program and personal achievements are (Liao, Tai, 2006). The better students evaluate informational and procedural justice of the feedback given during their studies, the more they want to improve their results (Roberson, Stewart, 2006). Thus, all of the above mentioned components of organisational justice have a positive impact.

We may assume that following the justice norms gives a person an opportunity to demonstrate his knowledge (need for competence), get positive feedback from others (need for relatedness) and achieve self-sufficiency (need for autonomy). Consequently, the justice evaluation is negatively related to amotivation (Hypothesis 1a) and positively related to intrinsic learning motivation (Hypothesis 1b).

However, many researchers concentrate on the contextual characteristics that allow for the genesis of inner motivation, and tend to underestimate the role of individual traits related to the perception of people and the world. Individual factors include any psychological characteristics of a person which influence the type and the level of motivation. Among them there are social beliefs – representations about behaviour towards others and of the appropriate reaction to their action. G. Duckitt proposed a model describing the main types, sources and consequences of social beliefs in the social world: belief in dangerous world and jungle world (Duckitt et al., 2002; Federico, Hunt,
Ergun, 2009; Jugert, Duckitt, 2009; Sibley, Wilson, Robertson, 2007; Van Hiel, Cornelis, Roets, 2007). Dangerous world beliefs hold the conviction that society is chaotic and unpredictable; humans attack others, and that the existing social order is on the verge of destruction. At the same time, people with jungle world beliefs hold the conviction that others are trying to “win against” them, so to achieve success and win the competition they have to use all the advantages provided by the situation, to tell lies and manipulate people. According to Duckitt’s model, social beliefs are mediators between personal traits and attitudes towards political events, legal procedures and social groups.

We assume that dangerous and jungle world beliefs hinder the satisfaction of human needs for competence, relatedness and autonomy. Being convinced of the aggressiveness, competitiveness and mendacity of people around him, a person loses confidence in their ability to demonstrate knowledge, to act of their own free will and to get support from other people. As a result, the dangerous and jungle world beliefs are positively related to amotivation (Hypothesis 2a) and negatively related to intrinsic learning motivation (Hypothesis 2b).

However some research shows that social beliefs interact with situation variables: they influence attitudes and behaviour only under situational threat (Schaller, Park, Mueller, 2003; Schaller, Park, Mueller, 2003). Thus, we may assume that the relation between social beliefs and learning motivation is moderated by organizational justice evaluation. The lower the organizational justice evaluation, the better dangerous and jungle world beliefs predict amotivation (Hypothesis 3a) and intrinsic motivation (Hypothesis 3b). These hypotheses were tested empirically.

**Sample.** Participants were 895 first- and fourth-year students of four Moscow universities (Higher School of Economics, Moscow Institute of Electronics and Mathematics, The Russian State University for the Humanities, Moscow State University of Psychology and Education), among them 54% women, age 16-30 (M=19, SD=1.64).

**Method.** The survey was conducted at the end of the first semester and the beginning of the second. By that time first-year students were passing their first exams, while the forth-year students were passing one of their last exam periods. Participants completed the questionnaires to measure organizational justice, social beliefs and learning motivation.

To measure organizational justice, we used an adapted Russian version of Colquitt’s Organizational Justice Scale (Gulevich, Spiridonov, Bezmenova, 2009). The version used in our study included 17 statements related to the five aspects of organizational justice ($\chi^2=11461.073$ df=136 CFI = 0.95 RMSEA=0.06 for that particular study):
• Distributive justice: “Your outcome reflects your performance” (equity), “Your outcome reflects the effort you have put into your work” (distribution according to amount of efforts), “Your outcome reflects your skills” (distribution according to skills), “Your outcome reflects your knowledge” (distribution according to knowledge) (α=.88).

• Procedural justice as ability to control: “You have been able to express your views and feelings during this procedure” (process control), “You have had influence over the outcome arrived at by this procedure” (outcome control), “You have been able to appeal the outcome arrived at by this procedure” (correction) (α=.60).

• Procedural justice as equality of rights: “This procedure has been applied consistently” (consistency), “This procedure has been free of bias” (bias suppression) (α=.63).

• Interpersonal justice: “He/she (a teacher) has treated you in a polite manner”, “He/she has refrained from improper remarks or comments” (courtesy), “He/she has treated you with dignity”, “He/she has treated you with respect” (respect) (α=.91).

• Informational justice: “He/she has explained the procedures thoroughly” (fullness of explanations), “His/her explanations regarding the procedures were reasonable” (clearness of explanations), “He/she has communicated details in a timely manner” (timeliness of explanations), “He/she has been candid in his/her communications with you” (truthfulness of explanations) (α=.90).

Participants recalled a difficult exam, which they had to pass in the last module/term and specified the level of agreement with each of the statements on a 5-point scale from 1 for “strongly disagree” to 5 for “strongly agree”. Our choice of exam or test resulted from several considerations. We needed to observe the formal procedure which: a) can be found in any university; b) is obligatory for all the students; c) influences the position of the student in the university; d) a student remembers for a long time. A difficult exam or a test was the only procedure satisfying these criteria.

To measure dangerous world belief we used the Russian version of Duckitt scale (Gulevich, Anikeenok, Bezmenova, 2014). It included 12 statements describing the state of the society ($\chi^2=388.445 \text{ df}=52 \text{ CF}I = 0.91 \text{ RMSEA}=0.06$ based on scale adaptation, $\alpha=.80$ in this particular study). For example, “There are many dangerous people in our society who will attack someone out of pure meanness, for no reason at all”, “It seems that every year there are fewer and fewer truly

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3 Due to the results of pilot analysis we excluded norm of individualization from the questionnaire.
respectable people, and more and more persons with no morals at all who threaten everyone else” (direct statement). “Every era has its problems, and a person’s chances of living a safe, untroubled life are better today then ever before”, “My knowledge and experiences tell me that the social world we live in is basically a safe, stable, and secure place” (conversed statement). In test results, processing reversed statements were reversed. Consequently, a high total score indicated that a person has a higher level of belief in dangerous world.

To measure jungle world belief we used the Russian version of the Duckitt scale (Gulevich, Anikeenok, Bezmenova, 2014). It included 12 statements reflecting one’s conviction of the necessity of power, deception, and merciless attitude towards people ($\chi^2=342.827 \text{ df}=52 \text{ CFI } = 0.95 \text{ RMSEA}=0.05$ based on scale adaptation, $\alpha=.81$ in this particular study). For example, “If it’s necessary to be cold blooded and vengeful to reach one’s goals, then one should do it”, “If you have power in a situation, you should use it however you can to get your way” (direct statement), “The best way to lead a group under one’s supervision is to show them kindness, consideration, and treat them as fellow workers, not as inferiors”, “It is better to be loved than to be feared” (conversed statement). In test results processing reversed statements were reversed. Consequently, a high total score indicated that a person has a higher level of belief in jungle world.

To study learning motivation we used a brief version of AMS-C (The Academic Motivation Scale) in Russian, which allowed measuring different types of learning motivation found in the self-determination theory\(^4\). The questionnaire included a number of reasons why people attend classes at a university. Those reasons were related to different types and levels of motivation: amotivation, extrinsic motivation, introjected motivation, identified motivation, and intrinsic motivation ($\chi^2=709.122 \text{ df}=210 \text{ CFI } = 0.91 \text{ RMSEA}=0.06$ based on the study). Participants evaluated each statement to show the reasons they go to the university and specified it on a 5-point scale from 1 (“Not at all”) to 5 (“Exactly”).

**Results**

Table 1 presents the means and the standard deviations of the belief in a dangerous and competitive world, the evaluation of justice for a difficult exam, and various levels of motivation. Preliminary correlation analysis indicates that individual and situational factors of motivation are related to each other. This primarily affects various components of justice and social beliefs. These results are quite interesting. At first glance, they indicate a general tendency to perceive the world in

\(^4\) Expanded version of the questionnaire can be found in the following work: Гордеева, Сычев, Осин, 2013.
either a positive or a negative light: people who do not believe in a dangerous and competitive world tend to give a high evaluation of an exam's justice. At the same time, further analysis has shown that various predictors have a different connection to learning motivation.

Table 1. Descriptive statistic and correlations of social beliefs, justice evaluation, and motivation scales)
<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Distributive justice</td>
<td>3.35</td>
<td>1.11</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>2. Procedural justice as ability to control</td>
<td>3.20</td>
<td>0.85</td>
<td>.321**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Procedural justice as equality of rights</td>
<td>3.73</td>
<td>1.14</td>
<td>.247**</td>
<td>.263**</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4. Interpersonal justice</td>
<td>4.09</td>
<td>0.88</td>
<td>.343**</td>
<td>.381**</td>
<td>.444**</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5. Informational justice</td>
<td>3.83</td>
<td>1.05</td>
<td>.350**</td>
<td>.371**</td>
<td>.395**</td>
<td>.648**</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6. Dangerous world beliefs</td>
<td>3.05</td>
<td>0.43</td>
<td>-.057</td>
<td>-.068*</td>
<td>-.124**</td>
<td>-.090**</td>
<td>-.086*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Jungle world beliefs</td>
<td>2.58</td>
<td>0.42</td>
<td>-.066*</td>
<td>-.164**</td>
<td>-.143**</td>
<td>-.116**</td>
<td>-.182**</td>
<td>.232**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Amotivation</td>
<td>2.03</td>
<td>1.02</td>
<td>-.135**</td>
<td>-.251**</td>
<td>-.204**</td>
<td>-.274**</td>
<td>-.276**</td>
<td>.131**</td>
<td>.292**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Extrinsic motivation</td>
<td>4.04</td>
<td>0.81</td>
<td>.034</td>
<td>.134**</td>
<td>.037</td>
<td>.162**</td>
<td>.137**</td>
<td>.116**</td>
<td>-.010</td>
<td>-.114**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Introjected motivation</td>
<td>2.85</td>
<td>1.21</td>
<td>.051</td>
<td>-.106**</td>
<td>-.028</td>
<td>-.046</td>
<td>-.042</td>
<td>.118**</td>
<td>.092**</td>
<td>.342**</td>
<td>.344**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Identified motivation</td>
<td>3.51</td>
<td>0.99</td>
<td>.064</td>
<td>.116**</td>
<td>.096**</td>
<td>.142**</td>
<td>.153**</td>
<td>.088**</td>
<td>-.129**</td>
<td>-.318**</td>
<td>.299**</td>
<td>.135**</td>
<td></td>
</tr>
<tr>
<td>12. Intrinsic motivation</td>
<td>3.65</td>
<td>0.68</td>
<td>.152**</td>
<td>.297**</td>
<td>.199**</td>
<td>.244**</td>
<td>.195**</td>
<td>-.103**</td>
<td>-.227**</td>
<td>-.573**</td>
<td>-.001</td>
<td>-.277**</td>
<td>.417**</td>
</tr>
</tbody>
</table>
In order to test Hypothesis 1 we conducted regression analysis where the predictors were five components of justice and the dependent variables were different levels of learning motivation (Table 2). Results showed that procedural justice as ability to control and rights equality, as well as interpersonal justice, predict both amotivation and intrinsic learning motivation; informational justice predicts only amotivation. The higher students evaluate the exam justice, the lower is the level of amotivation and the higher the level of intrinsic learning motivation. At the same time, none of the justice components predict external, introjected or identified motivation. These results partly confirm Hypothesis 1.

Table 2. Relation between exam justice and learning motivation

<table>
<thead>
<tr>
<th>Amotivation</th>
<th>β</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>22.035</td>
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</tr>
<tr>
<td>Distributive justice</td>
<td>.027</td>
<td>.773</td>
</tr>
<tr>
<td>Procedural justice as ability to control</td>
<td>-.168***</td>
<td>-4.659</td>
</tr>
<tr>
<td>Procedural justice as rights equality</td>
<td>-.081*</td>
<td>-2.233</td>
</tr>
<tr>
<td>Interpersonal justice</td>
<td>-.115**</td>
<td>-2.695</td>
</tr>
<tr>
<td>Informational justice</td>
<td>-.095*</td>
<td>-2.278</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intrinsinc motivation</th>
<th>β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>17.013</td>
<td></td>
</tr>
<tr>
<td>Distributive justice</td>
<td>.013</td>
<td>.356</td>
</tr>
<tr>
<td>Procedural justice as ability to control</td>
<td>.241***</td>
<td>6.695</td>
</tr>
<tr>
<td>Procedural justice as rights equality</td>
<td>.092*</td>
<td>2.545</td>
</tr>
<tr>
<td>Interpersonal justice</td>
<td>.108*</td>
<td>2.554</td>
</tr>
<tr>
<td>Informational justice</td>
<td>-.009</td>
<td>-.206</td>
</tr>
</tbody>
</table>

F=27.12*** R²=.11
F=30.94*** R²=.12

**p≤0.001  *p≤0.05  **p≤0.01
To test Hypothesis 2 we conducted a regression analysis, where predictors were dangerous and jungle world beliefs, and dependent variables were different levels of learning motivation (Table 3). Results showed that jungle world belief predicts both amotivation and intrinsic learning motivation, and dangerous world belief predicts only amotivation. The increase of dangerous and jungle world beliefs leads to the increase of amotivation and the decrease of learning motivation. At the same time, social beliefs do not predict external, introjected or identified motivation. These results partly confirm Hypothesis 2.

Table 3. Relation between belief in dangerous and jungle world and learning motivation

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amotivation</strong></td>
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</tr>
<tr>
<td>Constant</td>
<td>2.998</td>
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</tr>
<tr>
<td>Dangerous world belief</td>
<td>.082*</td>
<td>2.485</td>
</tr>
<tr>
<td>Jungle world belief</td>
<td>.275***</td>
<td>8.331</td>
</tr>
<tr>
<td><strong>Intrinsic motivation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>30,862</td>
<td></td>
</tr>
<tr>
<td>Dangerous world belief</td>
<td>-.062</td>
<td>-1.857</td>
</tr>
<tr>
<td>Jungle world belief</td>
<td>-.217***</td>
<td>-6.451</td>
</tr>
</tbody>
</table>

***p≤0.001 ** p≤0.01 *p≤0.05

To test Hypotheses 3 we applied a hierarchical regression analysis. Before conducting it, we calculated the multiplied values of various justice components and social beliefs. After that, four series of analyses were conducted.

In the first and second series of analyses, predictors were five components of justice, dangerous world belief and the product of these variables. Independent variables were amotivation and intrinsic learning motivation (Table 4). Results demonstrated that amotivation and intrinsic learning motivation are predicted by justice evaluation, dangerous world belief, and product of these variables. However, the product of justice evaluation and dangerous world belief enhances predictive power of Model 2 to a small degree (ΔF ≥.05). These results do not confirm Hypothesis 3a or 3b.
Table 4. Relation between evaluation of justice, belief in dangerous world and learning motivation

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amotivation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model 1</strong></td>
<td></td>
<td></td>
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<tr>
<td>Constant</td>
<td>8.212</td>
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</tr>
<tr>
<td>Dangerous world beliefs</td>
<td>.152***</td>
<td>4.607</td>
</tr>
<tr>
<td><strong>Model 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>12.947</td>
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</tr>
<tr>
<td>Dangerous world beliefs</td>
<td>.116***</td>
<td>3.679</td>
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<tr>
<td>Distributive justice</td>
<td>.028</td>
<td>.802</td>
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<tr>
<td>Procedural justice as ability to control</td>
<td>-.168***</td>
<td>-4.683</td>
</tr>
<tr>
<td>Procedural justice as rights equality</td>
<td>-.071*</td>
<td>-1.965</td>
</tr>
<tr>
<td>Interpersonal justice</td>
<td>-.113**</td>
<td>-2.676</td>
</tr>
<tr>
<td>Informational justice</td>
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<td>-2.132</td>
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<tr>
<td><strong>Model 3</strong></td>
<td></td>
<td></td>
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<tr>
<td>Constant</td>
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<tr>
<td>Procedural justice as rights equality</td>
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<td>Interpersonal justice</td>
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<td>Informational justice</td>
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<tr>
<td>Dangerous world beliefs * Distributive justice</td>
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<td>.140</td>
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<tr>
<td>Dangerous world beliefs * Procedural justice as ability to control</td>
<td>-.092*</td>
<td>-2.465</td>
</tr>
<tr>
<td>Dangerous world beliefs * Procedural justice as rights equality</td>
<td>-.018</td>
<td>-.487</td>
</tr>
<tr>
<td>Model 1</td>
<td>Model 2</td>
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<tr>
<td><strong>Constant</strong></td>
<td>31.438</td>
<td>13.897</td>
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<tr>
<td><strong>Dangerous world beliefs</strong></td>
<td>-.118***</td>
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<tr>
<td><strong>Distributive justice</strong></td>
<td>.340</td>
<td>.312</td>
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<tr>
<td><strong>Procedural justice as ability to control</strong></td>
<td>6.713</td>
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<tr>
<td><strong>Informational justice</strong></td>
<td>-.323</td>
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</tbody>
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**Intrinsic motivation**

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</tbody>
</table>
Dangerous world beliefs * Interpersonal justice | -.028 | -.671
---|---|---
Dangerous world beliefs * Informational justice | -.006 | -.140

***p≤0.001 ** p≤0.01 *p≤0.05

In the third and fourth series of analyses, predictors were five components of justice, the first scale of belief in jungle world and the product of these variables. Independent variables were amotivation and intrinsic learning motivation (Table 4). Results showed that amotivation and intrinsic learning motivation are predicted by organizational justice evaluation and jungle world belief, but not by the product of these variables. These results contradict the Hypotheses 3a and 3b.

**Discussion**

Motivation is one of the factors that influences the learning effectiveness. According to the self-determination theory, inner motivation plays the most important role in regulating a person's performance. Inner motivation is generated by the satisfaction of needs, such as autonomy, competence and establishing a connection to one's peers. In this study we have considered the individual and situational factors which weaken amotivation and strengthen inner motivation for education.

The results show that individual factors include social beliefs, namely the belief in a dangerous and competitive world. Our study shows that the stronger a person believes that the world is chaotic and unpredictable and that people around him are telling lies and manipulating him, the less he is interested in his studies and the less he enjoys performing educational tasks. From our point of view, this happens because the belief in dangerous and jungle world gives rise to specific expectations which affect the satisfaction of basic needs. A person who believes in dangerous and jungle world doubts that he can demonstrate competence, make close relationships with others, and act autonomously. Dissatisfaction of basic needs decreases one’s interest towards activity.

However, it should be noted that the belief in a competitive world plays a larger role than the belief in a dangerous world. This is perhaps caused by the fact that belief in a competitive world is directly tied to those personal characteristics that may manifest themselves in educational and professional relations: competitiveness, dishonesty, and vindictiveness. At the same time, dangerous world belief is rather linked to expectations of material and physical damages, which are unlikely in an educational situation.
One of the situational factors is the observance of justice norms in relation to students. Our study shows that the higher people evaluate informational, procedural and interpersonal justice, the lower their amotivation and the higher their intrinsic motivation. The evaluation of distributive justice is the one exception here, as it predicts neither amotivation, nor inner motivation. Apparently, the reason is that following justice norms gives an opportunity to demonstrate one’s knowledge (procedural justice as rights equality, informational justice), get a positive reaction from other people (interpersonal justice) and show one’s autonomy (procedural justice as ability to control). Thus, actions of a teacher contribute to the satisfaction of the three basic needs, and, consequently, enhance intrinsic motivation.

However, despite our expectation otherwise, the individual and situational factors interact poorly with each other. Probably, this fact could be explained by different mechanisms of influence of social beliefs and justice evaluation on learning motivation. The difficulties one may experience while attempting to satisfy the three basic needs can provoke negative emotions. But emotions generated by social beliefs and violation of justice norms are different: violation of social beliefs generates fear and violation of justice norms generates anger. For this reason they influence amotivation and intrinsic learning motivation independently. Nevertheless, further research is necessary to test this assumption.
References


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