## PERSONAL AND SITUATIONAL FACTORS OF DECISION-MAKING UNDER TRUST-DISTRUST (THE PRISONER'S DILEMMA MODEL)

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#### Abstract

In a modern constantly changing world the problem of decision-making under trust-distrust is becoming more and more significant. Thus, it is important to study the factors that influence the decision-making process of interaction strategies choice. We tested the influence of situational factors (emotional state and time pressure) on the prisoner's dilemma model. 208 people (123 females and 85 males, the average age 22 y.o.) participated in our experiment. Our results demonstrate the influence of the following situational factors. Firstly, negative emotions increase the probability of choosing a competing strategy. Secondly, people tend to choose a competing strategy in a time pressure situation. The findings show that a personal trait such as emotional stability increases the probability of the cooperation strategy choice. The diametral picture: severity of such personal characteristics as impulsiveness, antagonism and procrastination increases the probability of choosing a competing strategy (with time pressure and negative emotions). Furthermore, with time pressure, Machiavellianism becomes significant for the cooperation strategy choice, and liking as a criterion of trust becomes significant for the competing strategy choice.

**Keywords:** decision-making, situational factors, personal predictors, cooperation strategy, competing strategy, prisoner's dilemma, time pressure, trust-distrust.

## Introduction

The study of the decision-making process, in the context of interpersonal interaction, is becoming increasingly popular in psychology. Specifically, the question of interaction strategies choice holds a special place in the study of decision-making. The choice of a certain interaction strategy such as cooperation and confrontation can be determined by a number of factors and conditions.

The modern world sets new parameters of interpersonal interaction, such as the level of trust and distrust (Kupreytchenko & Tabkharova, 2007). It is important to note that there are different approaches in determining trust or distrust. Some researchers underline that trust can appear in a situation of uncertainty (Baier, 1985; Hosmer, 1995; Govier, 1994). It is basic for the formation of trust or distrust levels.

The situation of solving dilemmas is one of the modeling situations for deciding on the interaction strategies choice. In experimental studies there is a difference between two-dimensional and multi-dimensional dilemmas. Two-dimensional dilemmas include the prisoner's dilemma when two participants choose one of the proposed outcomes. At the same time, the situation sets provocative conditions for outcome choosing, when the opponent relies on the trust of their partner (Axelrod & Hamilton, 1981). It is important to note that the dilemma's outcomes correspond to the interaction strategies: cooperation (an outcome, when winning is the same for both opponents, but not the maximum in game), competition (an outcome, when winning is only the maximum for one opponent) (Kollock, 1998). At the same time, in such dilemmas, the choice of a cooperation strategy is recognized as the optimal solution for both opponents. But as investigations show, the choice of a cooperation strategy is variable. Moreover, the individual behavior in similar dilemmas does not agree with the general model of rational behavior (Mason, Phillips, & Redington, 1991).

Behavior in a situation of choice can be described from the theory of prospects (by A. Kahneman). The theory includes three main elements. First, each person evaluates gains and losses in different ways under risky choices. As a rule, a person is inclined to avoid loss rather than to maximize benefit. Secondly, the value of the gain or loss may be perceived differently depending on the effect of the context. Thirdly, such a sensitive phenomenon as losses can determine further behavior under risk conditions. In other words, with more losses, subsequent losses do not seem so significant (Kahneman & Tversky, 1979).

The further behavior of opponents and choice outcome can be described in terms of trust/distrust. The authors suggest that if the trust level is high, then there is no point in antisocial behavior and choice of confrontation strategy (Kramer & Goldman, 1995; Yamagishi, 1986; De Cremer & van Knippenberg, 2005). Trust is one of the prerequisites of social stability as a form of social capital, which provides an opportunity for cooperation and collective action (Coleman, 1990).

Personal and situational factors in choosing a strategy. For a long time, many authors investigated questions about personal factors for strategies choice in situations of the prisoner's dilemma type (Kreps, Milgrom, Roberts, & Wilson, 1982; Hirshleifer & Rasmusen, 1989; Kahn & Murnighan, 1993; Boone, De Brabander, & van Witteloostuijn, 1999; Chen & Lee, 2003). It is important to focus on the following personal characteristics.

The factors for interaction strategies choice can be personal traits included in the "Big Five" model: extroversion, openness to experience, self-control, emotional instability and agreeableness (the five-factor personal questionnaire by R. McCray, P. Costa, adapted by A. B. Khromov).

As noted by T. V. Kornilova, the following personal factors can influence interaction strategies choice: vigilance, avoidance, procrastination and supervigilance (Kornilova, 2013). The author emphasized that these personal traits are included in the decision-making process under conditions of uncertainty. Procrastination is understood as defensive avoidance, which is characterized as ignoring possible complex and risky situations. Supervigilance is seen as impulsive decision-making of the proposed alternatives. In some cases it can be regarded as panic behavior. Vigilance is a personality trait that allows the most accurate and rational assessment of possible strategy choice consequences (Ibid.).

Recently special attention has been focused on such personal traits as Machiavellianism, narcissism and psychopathy. D. Paulhus, C. Williams, and J. McHoskey point out that these traits reveal the negative side of human behavior to others (Paulhus & Williams, 2002). It is important to note that Machiavellianism as a scientific category has recently become widely used and is characterized as an orientation toward selfish interests (Kornilova, 2015). At the same time, this personality trait appears in situations of risk and uncertainty. Psychopathy, in the context of research, is characterized by highly impulsive behavior and low levels of empathy (Lilienfeld & Andrews, 1996). Narcissism is characterized by achieving personal benefit and strengthening the position as a leader at the loss of interpersonal relations (Furnham, Richards, & Paulhus, 2013).

Situational factors may become the second component that determines human behavior. In the context of interpersonal interaction strategies choice, emotional state and time pressure play a special role (Thompson, Wang, & Gunia, 2010). Emotions are situational and can particularly influence behavior when choosing interaction strategies. J. Forgas noted that emotional attitudes also affect the choice of cooperation or competition strategies (Forgas & Cromer, 2004; Allred, Mallozzi, & Raia, 1997; Van Kleef De Dreu, Pietroni, & Manstead, 2006). Thus, in a number of investigations, it was proved that with negative emotions the choice of a competing strategy became the most common (Lerner, Li, Valdesolo, & Kassam, 2015; Chuang & Lin, 2007).

For the purposes of the current study, we considered time pressure as a situational factor in decision-making process. There are researches that considered the effects of limited time on decision-making. Authors mentioned that conditions of time pressure have negative consequences for the result. The negative influence of time scarcity on the decision-making process was also confirmed in the research of I. Payne, J. Bettman, and E. Johnson (1988). They underlined that the factor of time scarcity has a devastating influence on the quality of decisions, especially if a person makes a decision individually. A number of scholars considered time pressure with the effect of stress (Hammond, McClelland, & Mumpower, 1980). Some other researchers also assumed that limited time decreases mental resources and cognitive control (Mosterd & Rutte, 2000; Baumeister, Bratslavsky, Muraven, & Tice, 1998). Moreover, an inverse relationship between limited time and confidence in decision-making was defined in the research (Smith, Mitchell, & Beach, 1982). Taking into account the results of the above studies, it is important to consider the impact of emotional state and time pressure on strategies choice in situations following the prisoner's dilemma type.

Thus, at present the issue of choosing interaction strategies can be considered in the context of trust/distrust (using the prisoner's dilemma as an example). There are no complex model situational and personal predictors of strategies choice. In this way the main goal of our research is to study the personal and situational factors of interaction strategies choice.

## **Current study**

1. In accordance with the aim the following hypotheses are put forward:

- There are situational factors that influence the choice of interaction strategies:

   a. Positive emotions increase the probability of a decision in favor of a cooperation strategy.
  - b. Negative emotions increase the probability of a decision in favor of a competing strategy.
  - c. Time pressure increases the probability of a decision in favor of a competing strategy.
- 2. Personality factors such as extroversion, openness to experience, self-control, emotional stability, Machiavellianism and vigilance predict interaction strategies choice in a situation of trust/distrust:
  - a The probability of choosing a cooperation strategy is increased with pronounced extroversion, openness to experience, self-control, emotional stability and vigilance.
  - b The probability of choosing a competing strategy is increased with pronounced Machiavellianism.
- 3. Situational factors have a greater influence on interaction strategies choice than personal factors.

The object of the research is the personal and situational factors of interaction strategies choice.

An experimental study was conducted using the following methods:

- 1. A Five-Factor Personality Questionnaire adaptation by A.B. Khromov (scales: extroversion-introversion, agreeableness-antagonism, emotional instability-emotional stability; self-control-impulsivity, openness to experience-practicality; 2000).
- 2. Melbourne Decision-Making Questionnaire by T.V. Kornilova (scales: vigilance, avoidance, procrastination and supervigilance, 2013).
- 3. The Dark Triad Questionnaire (tested by T.V. Kornilova, S.A. Kornilov, M.A. Chumakova, M.S. Talmach) includes Machiavellianism, Narcissism and Psychopathy scales (2015; approbation of the Dark Dozen questionnaire by Paulhus D.L., Williams K.M.).
- 4. The method of assessment of trust-distrust of the person to other people by A.B. Kupreychenko (2008). The method allows determining the criteria of trust-distrust to other people. The method presents five symmetrical scales: reliability, knowledge, liking, unity, estimation, and disadvantages.
- 5. Scales of positive affect and negative affect (E.N. Osin) for the diagnosis of individual emotional state (2012; an adaptation of the PANAS method of Watson, Clark, & Tellegen, 1988). In this technique, a positive affect is seen as pleasant engagement, the absence of gloom and grief. Negative affect on the contrary is responsible for unpleasant involvement (anger, fear, irritability, etc.).

## **Participants**

The study involved 208 subjects, of whom 123 were females and 85 were males (students of a Russian university, Moscow). The average age of the subjects was 22 years (median 20 years, standard deviation 1 year).

## **Procedure**

By randomization all respondents were divided into four groups of 52 people: one control and three experimental groups to study the influence of situational factors, namely positive and negative affective factors and time pressure. In groups all participants were randomly divided into pairs. All participants did not know each other and were introduced only before the start of experiment.

Design of the experiment. It is important to note that the creation and control of interaction strategies choice in real situations is difficult from an experimental point of view. Therefore, it was decided to use modeling of situations. Situation modeling was based on a dilemma type, namely the prisoner's dilemma (one act situation). The structure of this task allows clear tracking of the choice.

Schematically, the task condition is presented in Table 1. All the participants received identical rules for the prisoner's dilemma game.

"Your partner and you were playing slot machines and both have won the sum of \$10,000. However, the owner of the game club considered that out of the two of you, you swindled, and that is why you won such a large sum. Instead of calling the police to examine the incident, he offered you the following: your partner and you would play again, in a pair this time, and this game would prove to the owner that you played fairly. You could either continue the game or stop it at any moment.

You need to make the following choice: if you choose a strategy to continue the game, and your partner – to stop, you earn \$10,000 and your partner earns only \$1,000 from the \$10,000, which you have won. But if your partner chooses a strategy to continue game, and you – to stop, he earns \$10,000 and you earn only \$1,000. If both of you choose a strategy to continue the game, both of you earn \$2,000 from the \$10,000 you have won. Lastly, both of you can stop the game, but then both of you earn \$6,000.

Note that during the game your partner and you are not allowed to communicate. What choice would you make?"

In this matrix, as in the classical game interpretation, the outcomes 6,000/6,000 and 2,000/2,000 correspond to the cooperative strategy, the outcomes 1,000/10,000 and 10,000/1,000 correspond to the strategy of confrontation.

The first and second experimental groups (positive and negative emotional state factors). In the first and second experimental groups the positive and negative

Table 1
Modified Prisoner's Dilemma

		The Second Opponent	
		Continue the Game	Stop the Game
The First Opponent	Continue the Game	2,000/2,000 cooperation	1,000/10,000 competition
	Stop the Game	1,000/10,000 competition	6,000/6,000 cooperation

emotional states were induced by watching a video, respectively. The emotional state was measured using the Scales of Positive and Negative Affect Questionnaire. After that each subject viewed a video with a corresponding valence. The video for the first experimental group was negative ("A cat with human hands"), the video for the second experimental group had a positive valence (a PIXAR's cartoon, Piper). Each video was connected precisely with the theme of trust/distrust. It should be noted that before the experiment each video was evaluated by experts (emotion researchers) as corresponding to positive or negative (Fedotova & Hachaturova, 2017).

The following instruction was given to the participants: "First you are going to have to fill out a questionnaire. Then a 5-minute video will be provided for viewing. After that, you will be offered a game in which you will need to choose one of four outcomes for your actions in the situation."

The third experimental group (the factor of time pressure). In the third experimental group the time pressure factor was considered as a situational factor when choosing interaction strategies in the context of trust-distrust. For each subject, the decision-making time in the prisoner's dilemma was limited. Before the experiment the participants were warned that they had a little more than one minute. This time was determined during the pilot experiment as the shortest time required to make a choice. The experimenter controlled the time limit.

*Variables.* Independent variables in the experiment: positive and negative effects (video); time pressure. The dependent variable has two levels: cooperation (an outcome, when winning is the same for both opponents but not the maximum in the game) and competition (an outcome, when winning is only the maximum for one opponent).

After being subjected to the experimental factors each participant had to fill out five questionnaires (Big Five, The Dark Triad, Melbourne Decision-Making Questionnaire, Questionnaire of Assessment of Trust-Distrust of the Person to Other People).

## Results and discussion

The results of situational factors influence on strategy choice

The strategies choice in control and experimental groups was considered. In the control group without impact, 42 subjects chose the strategy of cooperation, 10 people chose a competing strategy. In the first experimental group, after watching the negative video, a cooperation strategy was chosen by 26 people, competition was preferred by 26 people. In the second experimental group (the positive video) the results were as follows: cooperation was chosen by 44 people, competition was the choice of 8 people. In the third experimental group with time pressure cooperation was chosen by 34 people, competition was chosen by 18 people. The results of interaction strategies choice in all groups are presented in Table 2.

First of all, it is important to note that the viewing of the positive and negative videos really influenced the change in emotional state in the appropriate direction. The results of the questionnaire Scale of positive and negative emotions are presented in Table 3.

Thus, we can conclude that after viewing the video the emotional state really changed for both groups in the corresponding direction. It can be concluded that viewing the video influenced emotional states.

In the control group 42 of 52 subjects chose the strategy of cooperation. In comparison with the experimental group (viewing the negative video) the number of subjects who chose cooperation is much lower, 26 people (Table 2). A similar situation with the choice of the cooperation strategy in the experimental group with pressure time was 34 subjects. The largest number of subjects who chose confrontation is noted in the experimental group with the negative video (26 subjects). In comparison with the control group, this indicator is significantly higher (in the control group, only 10 people chose this strategy). The hypothesis about the influence of negative emotions and time pressure on choosing a competing strategy is confirmed (Table 4). Thus, the second hypothesis about the influence of situational factors was partially confirmed.

Table 2

Quantitative Indicators of Interaction Strategies Choice in the Control and

Experimental Groups

Groups	Independent variable	Interaction st	rategies choice
Groups	independent variable	Cooperation	Competition
Control group	Without influence	42	10
Experimental Group 1	Affective factor (negative)	26	26
Experimental Group 2	Affective factor (positive)	44	8
Experimental Group 3	Time pressure	34	18

Table 3

The Results of the Scale of Positive and Negative Emotions Before and After Affective Factors

(n = 104; mean value (standard deviation))

Emotional		impact ching video)		impact hing video)	p, Mann–
valiance	Scale of positive affect	Scale of negative affect	Scale of positive affect	Scale of negative affect	Whitney criterion
Positive affective factor (induction positive emotions)	25.3 (0.84)	17.4 (0.82)	28.1 (0.70)	15.5 (0.60)	< 0.01
Negative affective factor (induction negative emotions)	27.2 (0.50)	17.8 (0.90)	22.3 (0.70)	24.7 (0.65)	< 0.01
p, Mann–Whitney criterion	0.79	0.98	< 0.001	< 0.001	

## The results of strategy choice with personal predictors

Descriptive sampling statistics of personality questionnaires (Table 5). Factor analysis was carried out to reduce the number of personal variables (Table 6).

Table 4
Statistical Indicators of Strategies Choice in Experimental Groups
(Compared with the Control Group, Criterion  $\chi^2$ )

	Experimental group (- emotions)	Experimental group (+ emotions)	Experimental group (time pressure)
N	52	52	52
$\chi^2$	3.769	22.231	2.769
Asymptotic significance	.000	.055	.030

Table 5
Descriptive Sampling Statistics

Scales	Questionnaire	N	M	SEM	SD	D	Cronbach's
Extroversion		208	34.22	.519	7.486	56.035	.725
Agreeableness		208	38.91	.480	6.929	48.012	.876
Self-control	Big Five	208	37.83	.572	8.254	68.134	.870
Emotional stability	Digitie	208	36.34	.547	7.889	62.234	.90
Openness to experience		208	37.24	.701	10.104	102.084	.882
Narcissism		208	11.96	.231	3.332	11.104	.873
Psychopathy	Dark Triade	208	8.00	.193	2.789	7.778	.810
Machiavellianism		208	11.39	.220	3.174	10.076	.730
Vigilance	Melbourne	208	15.07	.150	2.157	4.652	.797
Avoidance	Decision-	208	11.58	.211	3.044	9.269	.893
Procrastination	Making	208	9.47	.176	2.533	6.415	.632
Hypervigilance	Questionnaire	208	9.51	.142	2.043	4.174	.760
Reliability		208	2.15	.074	1.068	1.141	.760
Unity	Questionnaire	208	1.28	.083	1.201	1.442	.650
Knowledge	of Trust-	208	1.00	.083	1.206	1.455	.690
Liking	Distrust of the Person to	208	1.68	.107	1.542	2.378	.730
Estimation	Other People	208	.93	.080	1.155	1.334	.810
Disadvantages		208	-1.57	.139	2.006	4.025	.876

Thus, the following significant factors were identified: emotionality — emotional stability, self-control — impulsiveness, agreeableness — antagonism (the Big Five model); Machiavellianism (the Dark Triad model); procrastination and hypervigilance; liking and estimation (criteria of trust-distrust). These personality dispositions were used for further analysis and were included in a generalized linear mixed model to predict the choice of interaction strategies.

The generalized linear mixed model for the choice of interaction strategies with situational factors and personal predictors

The results of the regression analysis (Table 7) allow us to conclude that situational factors have a greater influence on the interaction strategies choice in the context of a dilemma in comparison with personal factors.

Table 6
Factor Analysis

			Fac	tor anal	ysis		
	1	2	3	4	5	6	7
Openness to experience — closedness to experience	.013	.096	.026	.101	001	.119	148
Emotionality — emotional stability	025	.075	106	.192	.029	.485	.035
Self-control — impulsiveness	031	136	.020	039	.089	.405	.054
Agreeableness — antagonism	090	087	.061	.946	.204	042	203
Extraversion — introversion	.142	022	011	.119	.495	091	.047
Narcissism	.024	.071	141	090	370	144	020
Psychopathy	069	.213	010	.180	211	168	.075
Machiavellianism	.016	.995	.012	010	046	033	073
Vigilance	.048	028	.117	.008	318	069	.070
Avoidance	.033	047	002	059	.047	027	.291
Procrastination	058	.154	083	.072	388	034	.607
Hypervigilance	.092	057	.101	.008	.502	.111	.475
Reliability	.209	.061	.171	009	.011	.004	.055
Unity	.370	021	025	059	.057	055	004
Knowledge	.038	.015	.107	.026	.067	.094	.011
Liking	.588	067	.119	031	034	.008	013
Estimation	.177	051	.969	108	085	.014	088
Disadvantages	076	045	091	024	042	091	051

The Generalized Linear Mixed Model

Predictors	B [RMS; W]**	Ь	Exp (B)	B [RMS; W]	Д	Exp(B)	B [RMS; W]	Ь	Exp(B)	B [RMS; W]	Ь	Exp(B)
	Step 1*	*		Step 2	2		Step 2a	2a		Ste	Step 3	
I. Emotionality – emotional stability	-0.055 [0.025; 4.792]	.029	.029 0.946	-0.056 [0.028; 3.963]	.047	0.946	-0.056 [0.025; 4.945]	.026	0.945	-0.059 [0.028; 4.304]	.038	0.943
Self-control – impulsiveness	0.111 [0.024; 22.098]	000.	1.118	0.121	000.	1.128	0.111 [0.024; 21.751]	000.	1.118	0.122 [0.026; 22.006]	000.	1.130
Agreeableness — antagonism	0.050 [0.023; 4.862]	.057	1.051	0.057 [0.025; 5.307]	.021	1.059	0.052 [0.023; 5.309]	.021	1.053	0.061 [0.025; 6.067]	.014	1.063
Machiavellianism	$\begin{array}{c} -0.009 \\ [0.052; 0.031] \end{array}$	098.	0.991	0.016 [0.057; 0.083]	.773	1.016	-0.006 [0.053; 1.013]	.048	0.994	$\begin{array}{c} 0.022 \\ [0.057; 0.153] \end{array}$	969.	1.023
Procrastination	0.046 [0.066; 0.494]	.482	1.048	0.177 [0.078; 5.148]	.023	1.194	0.047 [0.066; 0.492]	.483	1.048	0.183 [0.079; 5.318]	.021	1.201
Hypervigilance	$-0.028\\ [0.084; 0.112]$	737	0.972	-0.073 [0.090; .649]	.420	0.930	-0.011 [0.084; 0.016]	006:	066.	-0.047 [0.091; 0.269]	.604	0.954
Liking	0.271 [0.113; 5.793]	.056	1.311	0.167 [0.122; 1.883]	.170	1.181	0.286 [0.114; 6.318]	.012	1.332	$\begin{array}{c} 0.185 \\ [0.123;  2.265] \end{array}$	.132	1.204
Estimation	.173 [.149; 1.341]	.247	1.188	0.249 [0.159; 2.452]	.117	1.283	$0.164\\ [0.149; 1.208]$	.272	1.179	0.239 [0.160; 2.218]	.136	1.270
Sampling effect×Dyad effect	0.000 [0.000; 0.306]	.580	1.000	0.000 [0.000; 2.195]	.138	1.000	0.000 [0.000; 2.124]	.145	1.000	0.000 [0.000; .647]	.421	1.000
Constant. Step 1	-4.15 [1.937; 4.595]	.032	0.016									

Table 7 (ending)

Predictors	B [RMS; W]**	Ъ	Exp (B)	B [RMS; W]	Ъ	P Exp(B)	B [RMS; W]	Ъ	P Exp(B)	B [RMS; W]	Ъ	Exp(B)
	Step 1*	*		Ste	Step 2		Stel	Step 2a		Step 3	3	
II. Situational factor (– emotions)				2.230 [0.491; 20.612] .000	000.	0.108						
Constant. Step 2				-4.59 [2.142; 4.603]	.032	.010						
III. Situational factor (time pressure)							1.06 [.773; 1.882]	.017	.346			
Constant. Step 2a							-4.49 [1.954; 5.294]	.021	.011			
IV. Situational factor (– emotions)										1.5 [0.874; 3.224]	.033	0.208
Situational factor (time pressure)										2.3 [0.496; 21.7]	000.	0.099
Constant. Step 3										-5.13 [2.162; 5.631]	.018	900.0

\* Step 1, the introduction of personal predictors and random factors (sampling effect + Dyad effect); Step 2 and Step 2a, the independent introduction of situational factors (negative emotions and time pressure); Step 3, the introduction of situational factors (negative emotions + time deficit toget-

 $<sup>^{**}</sup>$  –B, the choice of a cooperation strategy, +B, choice of a confrontation strategy.

The regression analysis determined that only Emotional stability has a significant coefficient for cooperation strategy choice under the joint influence of personal and situational factors. Results can be explained by the fact that emotional stability is characterized by impenetrability to external emotional fluctuations, therefore, it does not depend on external situational factors, especially negative emotions factors. Impulsiveness is a significant and stable personal disposition for the confrontation strategy in a dilemma context with negative emotions and time pressure and without situational factors.

With situational factors (negative emotions and time pressure) Antagonism becomes a significant personal trait for confrontation strategy choice (a low value on the Agreeableness scale). It can be explained that time pressure and negative emotions are the trigger for this personal trait. Antagonism describes the self-centered behavior of a person, and when situational factors appear, this trait works with great force.

It is important to note that with time pressure the personal trait of liking (the criterion of trust) becomes active for confrontation strategy choice. Thus, when there is a lack of time, a person focuses on external parameters of the opponent for further interpersonal interaction. Moreover, with time pressure such a trait as Machiavellianism becomes significant, but for the cooperation strategy choice. It is a polar personality trait. On the one hand, the trait has a selfish orientation and is a manipulation of others. On the other hand, Machiavellianism describes flexibility of behavior in interactions, which is especially pronounced in social dilemmas (Wilson, Near, & Miller, 1996; Bereczkei, Deak, Papp, Perlak, & Orsi, 2013; Mesko, Lang, Andrea, Szijarto, & Bereczkei, 2014).

It was revealed that with negative emotions personality traits (for example, procrastination) have become significant for confrontation strategy choice. In other words, it can be assumed that negative emotional factors activate this personality trait. Procrastination is viewed as a desire to be different from others and to be in conflict with others. Thus, when choosing a confrontation strategy, the fact that a person wants to confront the other and to be noticed is emphasized.

## Conclusion

According to the results obtained in the experimental study of the personal and situational factors for interaction strategies choice in situations of the prisoner's dilemma type, the following conclusions can be drawn:

- 1. Situational and personal factors are predictors of interpersonal interaction strategies choice in the situation of the prisoner's dilemma type. Time pressure and negative emotional state can be considered as significant predictors that increase the probability of confrontation strategy choice. Emotional stability and impulsiveness are significant personal factors in choosing cooperation or confrontation strategies, correspondingly.
- 2. Situational factors (time pressure and negative emotions) have a stronger influence on interpersonal interaction strategy choice in a situation of prisoner's dilemma than personal factors.

3. With the simultaneous influence of situational and personal factors the following regularities were found:

- a. Personality traits such as emotional stability and impulsivity are significant personal predictors of cooperation and confrontation strategies choice, respectively.
- b. Such personal traits as Antagonism (low values on the Agreeableness scale) become a significant predictor for confrontation strategy choice with the situational factors of time pressure and negative emotions.
- 4. At the same time the analysis of personal and situational factors actualizes personal premises connected with particular situational factors:
  - a. With time pressure both emotional stability and personality traits such as Machiavellianism appear to be the predictors of cooperation strategy choice. For confrontation strategy choice, in addition to personal dispositions such as impulsivity and antagonism, liking is the predictor of trust for the other as a criterion.
  - b. With negative emotions both procrastination and personal dispositions such as impulsivity and antagonism become the predictors of confrontation strategy choice.

## Limitations and prospects for future research

The present study had several limitations. First of all, special attention needs to be paid to experiment implementation, namely the induction of positive and negative emotions. Despite the fact that the video material that was shown to the subjects was already repeatedly used in our research, it is important to understand whether the video series (in particular, when negative emotions are induced) will have an incorrect effect on the subject.

In addition, another possible limitation is the realization of the prisoner's dilemma situation. Perhaps it would be useful to work with additional motivational elements for more successful modeling of situation.

As for the prospects for future research, special attention should be paid to the study of trust and distrust in situations of this type (such as the prisoners dilemma). This question can be considered from the point of view of not only a given initial level of trust, but also to study the forming of trust for each other in repeated interaction.

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# Личностные и ситуативные предпосылки принятия решения в условиях доверия-недоверия (модель «дилемма заключенного»)

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#### Резюме

Изучение процесса принятия решения приобретает в психологии все большую популярность и составляет содержание одной из значимых общепсихологических проблем. В последнее время исследователи особое внимание акцентируют на процессе выбора межличностных стратегий взаимодействия (сотрудничества или конфронтации) в условиях доверия или недоверия. При этом ряд авторов изучают личностные и ситуативные предпосылки, которые могут рассматриваться в качестве предиктора выбора той или иной стратегии. В данной статье автор описывает проведенный эксперимент (208 испытуемых, 123 женщины, 85 мужчин, средний возраст 22 года) на примере моделирования ситуации «дилемма заключенного», где участники под воздействием ситуативных факторов (индуцирование положительных или отрицательных эмоций и дефицит времени) выбирали исход, соответствующий определенной стратегии взаимодействия. Полученные результаты свидетельствуют о том, что негативное эмоциональное состояние и дефицит времени увеличивает вероятность выбора стратеги конфронтации. Также полученные результаты показывают, что эмоциональная стабильность увеличивает вероятность выбора стратегии сотрудничества. При этом выраженность таких личностных черт, как импульсивность, отделенность и прокрастинация, увеличивает вероятность выбора стратегии конфронтации (как при дефиците времени, так и при отрицательном эмоциональном состоянии). Более того, при дефиците времени для выбора стратегии сотрудничества значимым становится макиавеллизм, а для выбора стратегии конфронтации — приязнь к другому человеку как критерий доверия. Было подтверждено, что ситуативные предпосылки оказывают более сильное влияние на выбор стратегий взаимодействия, чем личностные предикторы.

**Ключевые слова:** принятие решений, ситуативные предпосылки, личностные предпосылки, стратегии взаимодействия, стратегия сотрудничества, стратегия конфронтации, «дилемма заключенного».

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