

## МЕТОДЫ И МЕТОДОЛОГИЯ

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### **IMPLICIT FACTORS AND VOTING BEHAVIOUR INCONSISTENCY: FROM THEORETICAL CONCEPT TO EMPIRICAL PHENOMENON**

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## IMPLICIT FACTORS AND VOTING BEHAVIOUR INCONSISTENCY: FROM THEORETICAL CONCEPT TO EMPIRICAL PHENOMENON

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**Abstract.** Several recent elections and referendums were marked by a dramatic failure in pre-election prediction based on large-scale surveys among voters. As a reaction to public anger and discontent among politicians alternative strategies (prediction markets, Implicit Association Test (IAT), expectation-based forecast, etc.) are being developed. The industry of election polling has also made progress: a number of studies have shown that a relatively low accuracy of forecasts was caused by inconsistencies in sample design and implementation. The present article considers another factor behind election forecast errors: insufficiency of data about the declared intentions needed to make an accurate prediction. For this purpose, the author introduces a tool called GATA (Graphic Association Test of Attitude) measuring implicit attitudes/intentions and proposes to add a “stream” of implicit effects to the usual Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB). According to the findings, implicit factors are an actual and clearly detected phenomenon; inconsistency in explicit and implicit attitudes/intentions is typical of many voters.

## ИМПЛИЦИТНЫЕ ФАКТОРЫ И НЕСОГЛАСОВАННОСТЬ ЭЛЕКТОРАЛЬНОГО ПОВЕДЕНИЯ: ОТ ТЕОРЕТИЧЕСКОЙ КОНЦЕПЦИИ К ЭМПИРИЧЕСКОМУ ЯВЛЕНИЮ

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**Аннотация.** Несколько последних выборов и референдумов ознаменовались драматическими провалами предвыборных прогнозов, основанных на массовых опросах избирателей. В ответ на недовольство общественности и политиков развиваются альтернативные подходы, такие как рынки прогнозирования, имплицитный тест отношения (ИАТ), прогнозы на основе ожиданий и т. д.. Индустрия избирательных опросов также не стоит на месте: было проведено ряд исследований, показавших, что несовершенства проектирования и реализации выборки выступили основной причиной относительно низкой точности прогнозов. В настоящей статье рассматривается другой фактор прогнозных ошибок — недостаточность данных о декларируемых намерениях для построения достоверного прогноза. Для этого автор вводит инструмент графического ассоциативного теста отношения (ГАТО), измеряющий имплицитные установки/намерения, и предлагает дополнить типичную модель теории обдуманного поведения (ТОД/ТЗП) «поток»

The present article aims to present this phenomenon. This will be followed by another article (Implicit Factors and Voting Behavior Inconsistency: From an Attitude to Behavior) in the next issue of the *Monitoring of Public Opinion: Economic and Social Changes* (2020, no. 5) which will highlight behavioral effects of inconsistencies and the results of a combined use of implicit and explicit factors in the election forecast model.

**Keywords:** electoral behavior, electoral forecast, prediction of behavior, GATA, electoral polls, consistent attitude, behavior factors

имплицитных эффектов. Основные выводы исследования доказывают, что имплицитные факторы — реальный, надежно выявляемый феномен, а несогласованность эксплицитных и имплицитных установок/намерений характерна для многих избирателей.

Описание основных черт этого явления составляет суть настоящей статьи. В следующей статье (Имплицитные факторы и несогласованность электорального поведения: от установки к поведению // *Мониторинг общественного мнения: экономические и социальные перемены*. 2020. № 5) будут рассмотрены поведенческие эффекты несогласованности и результаты совместного использования как имплицитных, так и эксплицитных факторов в модели электорального прогнозирования.

**Ключевые слова:** электоральное поведение, электоральные прогнозы, прогнозирование поведения, факторы поведения, согласованность отношения, ГАТО, электоральные опросы

## 1. Introduction

Political planning and electoral forecasting based on voters' "intentions-based" surveys remain the key method adopted by the main political strategists and pollsters and are supported by electoral participants all around the world. According to the approach that dominates in both academia and industry, the anticipated electoral results and their drivers are assessed on the basis of voters' self-reported intentions to participate in the voting procedure and to vote for a specific candidate or party. Technically, the current mainstream paradigm is based on the explicit declarations of voters about their future behavior, or, more precisely, on two types of variables extracted from their statements constituting the so-called "likelihood to vote — vote intention" model. Although there can be various forecasting strategies using different weighting and correction procedures applied to survey responses, explicitly declared intentions are the core for almost any calculations [Perry, 1960, 1962, 1973, 1979; Erikson, Panagopoulos, Wlezien, 2004; Vermunt, Magidson, 2005]<sup>1</sup>.

<sup>1</sup> Newport F. (2008) Who are Likely Voters and When Do they Matter. *Gallup*. July 28<sup>th</sup>. URL: <http://www.gallup.com/poll/109135/who-likely-voters-when-they-matte.aspx> (accessed: 09.08.2020).

Unfortunately, despite the impressive progress in the pollster industry during the 20<sup>th</sup> century, its current state can be characterized as rather problematic. Recent events give a lot of examples of nation-wide forecasts fail to correctly predict the election outcomes<sup>2</sup>. The incomplete list of such failures includes:

- 2014 parliamentary elections in Moldova;
- 2015 parliamentary elections in the UK;
- 2015 Knesset elections in Israel;
- 2015 Referendum in Greece;
- 2015 presidential elections in Poland;
- 2015 presidential elections in Belarus;
- 2016 Brexit Referendum in the UK;
- 2016 presidential elections in the USA;
- 2017 parliamentary elections in the UK.

These cases of inaccuracy of electoral forecasts are important not only on their own but as a symptom of an insufficient understanding of voters' decision-making process and its factors<sup>3</sup>. If a single model of voters does not reflect their actual behavior, it means not only the inaccuracy of the forecast but also the misleading of the political strategy and the electoral campaign, resulting, quite probably, in serious political consequences.

Unsurprisingly, the last decades have brought to life a wide array of alternative models that deliberately evade the pure measurement of intentions. Some of them acquired a reputation as well-founded and quite effective: questioning on expectations [Rothschild, Wolfers, 2012; Graefe, 2014; Ganser, Riordan, 2015], prediction markets [Kou, Sobel, 2004; Arrow et al., 2008; Leigh, Wolfers, 2006; Murr, 2015], economic models [Lewis-Beck, Stegmaier, 2007; Anson, Hellwig, 2015] and social media content analysis [Tumasjan et al., 2010; Gayo-Avello, 2013; Celli et al., 2016]. Studies showed that predictions based on these methods are more accurate compared to those of intention-based surveys [Kou, Sobel, 2004; Metaxas, Mustafaraj, Gayo-Avello, 2011; Rothschild, Wolfers, 2012; Atanasov et al., 2015; Graefe, 2017].

However, these approaches hardly can substitute more widespread intention-based survey methods in the near future. Each of these methods has significant limitations. Some of them are tuned for binary choice situations (prediction markets, expectations, and economic models), some determine winners rather than the actual number of votes (prediction markets and expectations polls), other depend on specific infrastructure (political betting systems), or have manipulation risks (social media content analysis). Most important, these methods do not provide opportunity to gather important additional information on voters' preferences, expectations, attitudes, and behaviors, all of which are crucial for both forecasting and planning political campaigns.

Thus, the surveys remain the main source of information in electoral studies, and this can explain why remarkable failures of the key pollsters during some of the recent

<sup>2</sup> See, for example: Mercer A., Deane C., McGeeney K. (2016) Why 2016 Election Polls Missed their Mark? *Pew Research Center*. November 9<sup>th</sup>. URL: <https://www.pewresearch.org/fact-tank/2016/11/09/why-2016-election-polls-missed-their-mark/> (accessed: 17.08.2020); Whiteley P. (2016) Four Reasons Why the Polls Got the U. S. Election Result so Wrong. *Newsweek (US Edition)*. 2016. November 14<sup>th</sup>. URL: <https://www.newsweek.com/polls-2016-us-elections-trump-potus-hillary-clinton-520291> (accessed: 17.08.2020).

<sup>3</sup> Latest overview of corresponding approaches see, in particular: [Lau, Kleiner, Ditonto, 2018].

elections are taken so seriously by the industry and political actors. In some cases, failures to correctly predict the winner of the election led to industry-level investigations. The reports by the Market Research Society and the British Polling Council in the UK and AAPOR in the USA are probably the most prominent examples [Sturgis et al., 2016; Kennedy et al., 2017]. These reports cover a wide range of possible sources of errors including sampling issues, late swing effects, deliberate misreporting, etc. It is worth noting, however, that generally, they do not address the problem of the validity of the intentions-based approach itself<sup>4</sup>.

The proposed perspective looks quite biased. Most pollsters would definitely agree that voters' behavior can and often is determined by factors which are poorly recognized even by the actors and/or are misreported by them. These methodical problems are well-known and usually are referred to as "lack of introspection" and "deliberate misreporting". The current state of affairs is generally taken as an objective limitation of the methodology which, as for now, deemed as unavailable for improvement within mass surveys. This was clearly demonstrated by a study by Rogers and Aida [Rogers, Aida, 2012] who directly compared the data on voters' "intentions to vote" reported in a poll with the actual turnout among the surveyed voters. Studying only the voters for whom they have data on their presence on the voting station, e. g. having the "sample" equal to the "universe", Rogers and Aida eliminated any possible effect of "sampling error". Thus, any mismatch of declarative intention and actual behavior, revealed by them, should be regarded as definitely generated by validity problems. In particular, they demonstrated a dramatic difference between the declared intentions and actual behavior: 13% of those who declare they are "Almost certain" they would vote, have not in fact voted, whereas 55% of those who answered "No", actually came to the polling station. Moreover, the authors found that actual behavior can be relatively reliably predicted by the previous voting experience. As respondents perfectly know whether they voted in the recent election or not, they could effortlessly make an accurate forecast for the next one. But they do not.

In this context, one of the most promising attempts to improve the existing model is to introduce methods which can measure not only voters' explicit attitudes and/or intentions but also the implicit ones. Explicit attitudes are attitudes that are at the conscious level, are deliberately formed and are easy to self-report. On the other hand, implicit attitudes are attitudes that are at the unconscious level, are involuntarily formed and are typically unknown to us. There were several important attempts to use implicit measures as predicting factors of voters' behavior. For example, Greenwald et al. (2009) used the Implicit Association Test (IAT) and the Affect Misattribution Procedure to predict the individual choice between John McCain and Barack Obama during presidential elections on the basis of implicit racial attitudes and independently from explicit intentions. The study by Italian researchers was even more comprehensive. They used the IAT on a large sample ( $N=1377$ ) to predict actual voters and their choice during the 2006 Italian National Elections [Roccatò, Zogmaister, 2010]. They found the IAT-based prediction to be more accurate than the prediction based on explicit intentions (the prediction error was 1.1 vs 3.9). Interestingly, explicit and

<sup>4</sup> See for details: [Chernozub, 2017, 2018b].

implicit measures were only marginally correlated thus indicating that they reflect different aspects of voting behavior [ibidem; see also Choma, Hafer, 2009]. The implicit measures not only provide additional information on actual preferences and intentions but also partially solves the problem of “undecided”, i. e. people who report they did not make their choice yet [Arcuri et al., 2008].

The introduction of the IAT caused quite an intensive discussion concerning the relative superiority of explicit or implicit drivers and better predictors of electoral behavior [Greenwald, Poehlman et al., 2009], which perfectly fits into long-term debates of the “dominant” or “true” attitude. According to Devine, the dominant factor of individual behavior is cultural stereotypes prevailing in the individual’s group [Devine, 1989; Devine et al., 1991; Devine, Monteith, 1999]. The variety of real forms of behavior is generated by a personal tendency to follow or oppose to these stereotypes. In contrast to Devine’s dissociation model, MODE (motivation and opportunity as determinants of the attitude-behavior relationship) consider implicit motives as a fundamental factor to control openly-expressed beliefs [Fazio et al., 1995; Dunton, Fazio, 1997]. Therefore, implicit attitudes are considered as valuable predictors for behavior that are difficult to control (spontaneous reactions) or provides little motivation to control. Explicit attitudes should better predict behavior, which is under volitional control [Dovidio et al., 1996]. Finally, the findings of some latest studies show that these explicit and implicit drivers are not necessarily consistent [Choma, Hafer, 2009; Roccato, Zogmaister, 2010].

The study proposes an integrated approach where explicit and implicit factors act simultaneously. They have their own sources of origin and affect behavior in an interactive way; no one should be omitted from analysis. Therefore, we assume explicit and implicit components of an attitude may be consistent (both positive or both negative) or inconsistent (explicit — positive, implicit — negative and vice versa), this way constituting a specific status of the attitude affecting the behavior. Trying to maintain a manageable scale of the problematic field to study, we focused the attention on the single case of inconsistent intentions where the explicit and implicit ones are contradictory. This approach is rather unusual for modern practice; however, as the obtained results show, it leads to some improvement of forecasting models, and, what is more important, a range of meaningful insights concerning voters, their preferences and electoral behavior drivers. In the practical perspective, focusing on inconsistent voters promises a valuable return in both spheres: political planning and electoral forecasting. If one assumes that the preferences and intentions of this group are unstable, the separation of this fraction in the general group of supporters:

- reduces the possibility of misleading in the sphere of expected electoral results;
- reduces uncontrollable distortion this group introduces in political planning.

The remainder of this paper is structured as follows. Section 2 is devoted to the model of inconsistency, the main hypothesis, variables, and data. Section 3 provides a general overview of the inconsistency of the attitude and intentions as an empirical phenomenon, based on the data obtained by the author. Section 4 makes a bridge from the inconsistency of attitude and intentions to the inconsistency of behavior. Section 5 provides an example of the application of the proposed model to electoral forecasting and Section 6 summarizes the main findings and sets up some ideas for practical applications and further studies.

## 2. Explicit/implicit inconsistency as a concept

### 2.1. Theoretical background and the general model

Fundamentally, the proposed concept of the inconsistency as a specific status of attitude is based on the expectancy-based model of attitude [Feather, 1979, 1982; Fishbein, 1963, 1967], supported by the classical structural theory of attitude [Rosenberg, 1956, Rosenberg et al., 1960; Festinger, 1957; Kelman, 1958; Festinger, Carlsmith, 1959; Katz, 1960; Kiesler, Collins, Miller, 1969; Himmelfarb, Eagly, 1974; O'Keefe, 1990; Smith, 2003]. According to this generally-accepted approach, the attitude is considered as a predisposition to behave towards a certain object in a favorable or unfavorable manner and depends on the anticipated value of the outcome of endeavoring action. Being the fundamental factors for a behavior, attitudes have as their own basis a set of beliefs which includes both salient and non-salient beliefs. These attitudes are converted into intention, which, being affected by additional factors of perceived norms and perceived behavioral control, finally are implemented in the behavior [Fishbein, Ajzen, 2011].

According to general behavioral science, a person can hold both implicit and explicit attitudes at the same time. An implicit attitude exists as an unrecognized prejudicial attitude, while an explicit one is under conscious control. An implicit attitude is assumed as affecting intentions to behave "automatically". In contrast to it, an explicit attitude requires cognitive effort to be activated. Being retrieved to the cognitive sphere, an implicit attitude becomes an explicit attitude and conscious control can override its initial effect on behavioral intention [Wilson, Lindsey, Schooner, 2000]. Researchers pay a lot of attention to assess which attitude, explicit or implicit, is a "true" and better predictor of behavior.

From this perspective, electoral behavior looks ambivalent. It is obviously willful and should fit perfectly into an expectancy-based model, controlled by explicit factors. At the same time, voting as a specific case of behavior provides very little motivation to control as long as the ballot is secret and voter commands of a vanishingly small portion of the voting result. Therefore, the general assumption for this study accepts simultaneous influence of implicit and explicit attitudes on the voter's behavior. The framework of the structural theory of attitude and the consistency theory of both components [Rosenberg, 1956, 1960] leads us to the assumption that these components normally should be in compliance to enforce the implementation of intention. In contrary, if implicit and explicit attitudes contradict each other, the probability of the intentions' escalation into the real behavior is decreased.

To structure these assumptions, the author created a conceptual model based on the adaptation of the general TRA/TBP<sup>5</sup> model, enriched with a clear chain of implicit effects (represented in italics).

**A set of beliefs** is the basic set of drivers affecting the formation of attitudes. Fishbein and Ajzen [Fishbein, Ajzen, 2011: 96] designated this set as "beliefs"; in this paper, the author will adhere to this term, making a reservation that this set of factors can have and most probably has a non-conscious, or "intuitive", or "affective" fraction.

TRA/TBP factors are perceived norms and perceived behavioral control factors.

<sup>5</sup> Theory of reasoned Action/Theory of Planned Behavior [Fishbein, Ajzen, 2011].

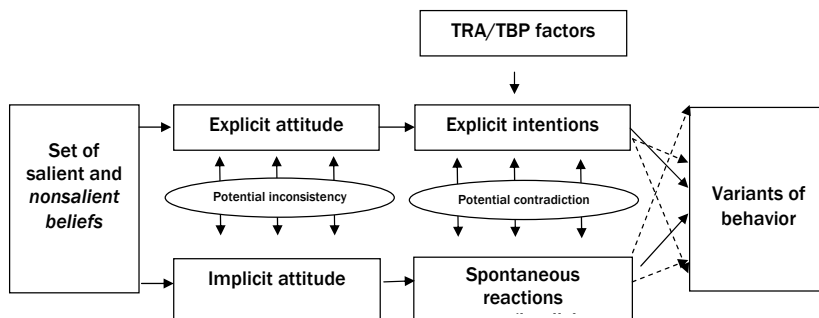


Figure 1. Double-stream model of behavior

**An explicit attitude** is a conscious attitude, which could be correctly formulated and expressed by the individual.

**Explicit intentions** are conscious intentions, which could be correctly reported to others.

**An implicit attitude** is an unconscious attitude; the individual could be unaware of its presence, nature, and valence. According to [Wilson, Lindsey, Schooner, 2000], an implicit attitude activates automatically and may be or may be not overridden by conscious (explicit) factors.

**Spontaneous reactions** are unconscious drivers to act, “automatically” generated by the implicit attitude; they are sometimes referred to as “**implicit intentions**” despite of the fact that they, being unconscious, are certainly not “true” intentions.

**A behavior** is the real act, which represents the final result of the interaction of explicit intentions and unconscious impulses.

Thus, the ultimate goal of the current study is to prove or reject the assumption that the inconsistency of explicit and implicit attitudes and intentions is (a) accessible for empirical identification, (b) affects the electoral behavior and (c) being taking into account can improve forecast accuracy and, consequently, political planning.

The tasks of the research are set as follows:

1. To detect the implicit attitudes/intentions to vote based on the empirical data of mass polls and to test whether these implicit factors are not artifacts of the measurement procedure but are logically generated by the “set of beliefs” as their supposed drivers.

2. To identify the voters with inconsistent intentions.

3. To understand whether their peculiarities are a significant factor of electoral behavior.

4. To evaluate whether taking inconsistent intentions into consideration improves electoral forecasting accuracy.

This article is the first of two articles and covers first and the second tasks.

## 2.2. General goal, Hypothesis and a theoretical contribution

The goal of the study is to test whether implicit factors affect voting behavior, and whether incorporating them into forecasting models improves their accuracy. Therefore, there are three general hypotheses to test.



H<sub>0</sub>1: There is no specific (having an independent origin and certain effects) implicit attitude towards candidates. In particular: H<sub>0</sub>1.1 Explicit and implicit attitudes always are the same towards each candidate, and/or H<sub>0</sub>1.2 An implicit attitude always has the same level and structure of associations with the basic set of beliefs as a variable of the explicit attitude.

H<sub>0</sub>2: There is no phenomenon of “inconsistent intentions” as a specific factor of electoral behavior. In particular: H<sub>0</sub>2.1 The share of “inconsistent voters” is a constant for every candidate’s electorate, and/or H<sub>0</sub>2.2 There are no significant differences between the “consistent”, “non-contradictory” and “inconsistent” groups<sup>6</sup> of voters in behavior corresponding to choosing electoral options, and/or H<sub>0</sub>2.3 The share of “inconsistent voters” does not correlate with the error of explicit intentions-based forecast.

H<sub>0</sub>3: Taking into consideration an implicit attitude/intention does not improve forecast accuracy; the error level is the same for explicit-based, implicit-based and combined explicit/implicit-based forecasts.

This article covers H<sub>0</sub>1. Successful rejecting of H<sub>0</sub>1.1 and H<sub>0</sub>1.2 will result in an acceptance of the enriched TRA/TBP model, as a model, applicable towards electoral behaviour despite the fact the last one typically is considering as a “reasoned” and “planned” action. That could be counted as a kind of theoretical impact of this paper.

### 2.3. Principal variables

General variables were set up as follows.

A set of beliefs (SB) is a variety of variables traditionally used to investigate the drivers of political and electoral preferences. In this study, the author used the typical ANES<sup>7</sup> sets of “approval”, “trust”, “partisanship”, “political interest” along with special sets of “ideologically biased” declarations. In order to decrease measurement error, all of these variables used a 4-step scale, e. g.: “Totally agree/mainly agree/mainly disagree/totally disagree”. The formulation of ANES-based variables had a common double-end form, for example: “Do you mainly approve or disapprove the activities of President V. Putin at his office”? The formulations for “ideologically biased” declarations are represented in the text. These variables are used as independent in relation to the “Explicit attitude” (EA) and “Implicit attitude” (IA).

*Explicit attitude (EA, EAt).* According to the expectancy-based model of attitude, EA is measured as respondents’ self-reported estimation of the correspondence or non-correspondence of the candidate to their personal interests. Q: “To what degree does the victory of this candidate match your interests”? A: “Totally matches/mainly matches/mainly mismatches/totally mismatches”. EAt is the same variable but measured using the feeling thermometer technique with an 8-point scale.

*Implicit attitude (IA)* is measured with a specially invented technique of the Graphic Association Test of Attitude (GATA). See Section 3.1 for details. It is used as a dependent variable in relation to SB and as a factor variable to construct variables of “Consistency groups” (CGs).

<sup>6</sup> Description of “Consistency groups” (CGs) see in Section 2.3.

<sup>7</sup> American National Electoral Survey. URL: <https://electionstudies.org/> (accessed: 18.08.2020).

*Explicit intention (VI)* is measured as the traditional “vote intention” variable. Q: “For whom from this list will you vote, if any”? A: A list of candidates, including “for no one”, “will not vote in this election at all”. It is used as a factor variable to construct variables of “Consistency groups” (CGs).

*Implicit intention (II)* is assumed to be a form of an “automatically activated” implicit attitude [Fishbein, Ajzen, 2011], so it is, in fact, just a correct name for it. It is used as a factor variable to construct variables of “Consistency groups” (CGs).

“Consistency groups” (CGs) are derived from crossing EA and IA and splitting all the respondents into 6 groups, regarding a single candidate. (1) EA positive and IA positive, (2) EA positive and IA neutral, (3) EA positive and IA negative, (4) EA negative and IA positive, (5) EA negative and IA neutral, (6) EA negative and IA negative. The positive pole of the EA and IA scales is a pole of respective explicit/implicit acceptance of the candidate, negative one — a pole of correspondent rejection.

*Actual voting results (VRs)*. The actual number of voters participating in particular elections and their electoral choices are based on official results published by the Central Election Commission of the Russian Federation (CEC RF). It may be referred to as counts of votes or in percent to total votes balloted. In the study, this variable represents an act of actual behavior at an aggregated level.

#### 2.4. Data

The research is based on the data obtained during several nation-wide and regional election polls conducted within the 2016—2018 Russian’s electoral cycle by VCIOM (one of the largest Russian pollsters).

Study 1. A nation-wide panel-based poll conducted during the 2016 Parliamentary election. The study used CAPI<sup>8</sup>, a multistage sampling of households, with a randomization procedure within households,  $N = 2304$ . The sample standard error is 2.25%. The sample represents the set of national voters’ corps. Fieldwork was held in August and September and ended a week before the Voting day.

Study 2. Governor elections in one of the regions held in 2018. The study used CAPI, a multistage sampling of households, a randomization procedure within households,  $N = 1604$ . The sample represents the set of regional voters’ corps. The sample standard error is 3.25%. Fieldwork was held from 3<sup>rd</sup> to 7<sup>th</sup> September and ended two days before the Voting day.

Study 3. Inter-election survey for the 2018 presidential elections. The study used CAPI, a multistage sampling of households, with a randomization within households,  $N = 1606$ . The sample standard error is 3.4%. The sample represents the set of national voters’ corps. Fieldwork was held in March 2017, a year before the voting day.

Study 4. A nation-wide poll during the 2018 presidential elections. The study used CAPI, a multistage sampling of households, a randomization procedure within households,  $N = 1629$ . The sample represents the set of national voters’ corps. The sample standard error is 3.4%. Fieldwork was held from 10<sup>th</sup> to 11<sup>th</sup> of March 10—11, a week before the voting day.

<sup>8</sup> Computer-assisted personal interview.

Study 5. A set of four separate polls at the governors' elections in four Russian regions in 2017. Every study used CAPI, a multistage sampling of households, and randomization procedure within households,  $N = 600—606$  (2407 in total). The samples represent each of regional voters' corps. The sample standard error is up to 4.0%. Fieldwork was held in September 2017 and ended two days before the Voting day.

Based on the raw data of these surveys, the author selected single candidates as observations for further analysis. The item for analysis was a person or party that acquired an actual electoral result no less than 5%. Thus, for the selected observations, the standard error of the 5% subsample is no more than 1.1%.

Due to the specifications of the questionnaire design, the data of both presidential election surveys are usable for assessing the structure of intentions and inconsistent intentions for Putin's electorate, but not for other candidates. Meanwhile, these data look meaningful as they present observations of the studied subject divided by one year.

Therefore, for the analysis of "inconsistent intentions", the author uses nine cases (Table 1). In the regional elections of 2018, the incumbent was presented by the United Russia member and pretenders — by representatives of other main national parties. Further, they will be referred to by their party affiliation.

*Table 1. Availability of data on inconsistency effects across the studies, number of cases*

Candidate/Party	Study 1	Study 2	Study 3	Study 4
United Russia	*	*	NA	NA
Communist Party of the Russian Federation (CPRF)	*	*	DF	DF
Liberal-Democratic Party of Russia (LDPR)	*	*	DF	DF
Fair Russia	*	*	NA	NA
V. Putin	NA	NA	*	*
TOTAL	4	3	1	1

DF — data format incomparable to the main bulk of data.

For the analysis of the effect of inconsistent attitudes and intentions on the forecast accuracy, 10 cases are available (Table 2).

*Table 2. Availability of data on the effect of inconsistency on prediction accuracy, number of cases*

	Study 1	Study 2	Study 3	Study 4
United Russia	*	DF	NA	NA
Communist Party of the Russian Federation (CPRF)	*	DF	*	*
Liberal-Democratic Party of Russia (LDPR)	*	DF	*	*
Fair Russia	*	DF	NA	NA
V. Putin	NA	DF	*	*
TOTAL	4	0	3	3

DF — data format incomparable to the main bulk of data.

Study 5 incorporates a comparison of implicit attitude data as per the methodology of the Graphic Associative Test of Attitude (GATA, see Section 3.1 for details) vs explicit attitude data as per the “feeling thermometer” technique. These data have been used exclusively to prove the orthogonality of measurement of explicit and implicit attitudes and preliminarily assess the scale of their mismatch.

### 3. Inconsistency as an empirical phenomenon

The inconsistency of attitudes and intentions is a quite common natural phenomenon organically grounded in the voter’s personality. To analyze the inconsistency of explicit/implicit factors, one has to start with identifying both of them. Revealing an explicit attitude and intentions does not pose a problem, but the implicit ones are less accessible for identification.

#### 3.1. Revealing the implicit attitudes

To detect voters’ implicit components of actual intentions, it is necessary to measure implicit attitudes, which, according to the theory of reasoned action and the theory of planned behavior, are a direct prerequisite for actual intention [Fishbein, Ajzen, 2011]. Taking into account the practical limitations of the poll methodology, a new Graphic Associative Test of Attitude (GATA) was developed [Chernozub, 2018a]. This is a modified Etkind’s Colors Test (ECT) [Etkind, 1987], which, in turn, is a development of the Lüscher color test [Lüscher, 1990]. Initially, ECT was developed for inquiring persons with cognitive dysfunctions who could not understand well the verbal constructs of a questionnaire. Respondents associate simple concepts like relatives, mates, friends with colors of the Lüscher “small” set. Then respondents prioritize colors as pleasing or unpleasing. Thus, an individual preference-rejection scale is developed to measure the participants’ implicit attitude towards the tested concepts.

In politics, colors and color schemes are often meaningful symbols and used for political identification. For this reason, the stimulus set of the original ECT was substituted with 8 graphic shapes of the Markert Test [Markert, 1980]. The shapes of the test have no political connotations and thus can be used to differentiate between electoral alternatives. Figure 2 depicts examples of the stimulus set used in GATA.



Figure 2. Examples of K. Markert’s Test stimuli used in the current study to measure voters’ implicit attitudes

The pilot studies showed that direct association with preference/non-preference almost exclusively refers to three extremum points at every end of the scale. Consequently, for further analysis, three less favorable graphic shapes are considered as an indicator for a negative attitude, three most favorable as a positive attitude, and those in the middle of the individual scale as a neutral attitude.

### 3.2. Inconsistency of the explicit/implicit attitude: some empirical evidence

Although the fact of the non-correspondence of explicit and implicit attitudes is widely recognized [Kiesler, Collins, Miller, 1969; Himmelfarb, Eagly, 1974; O’Keefe, 1990], it is necessary to test the proposed hypothesis  $H_0$ 1.1 “explicit and implicit attitudes are the same towards every single candidate” since the author used a newly introduced and limitedly validated GATA technique.

To understand whether both forms of an attitude are the same entity or not, the author measured the attitude of voters towards several incumbents and pretenders in various 2017 governors’ elections in Russia. The explicit attitude was measured with the “feeling thermometer” technique [Wilcox, Sigelman, Cook, 1989; Jacoby, 1994; Alwin, 1997; LaCour, Green, 2014; Lupton, Jacoby, 2016], the implicit attitude — with GATA [Chernozub, 2018a]. Some typical results are presented in Figures 3—4, where IA matches vs EAT, basing on the data of Study 5.

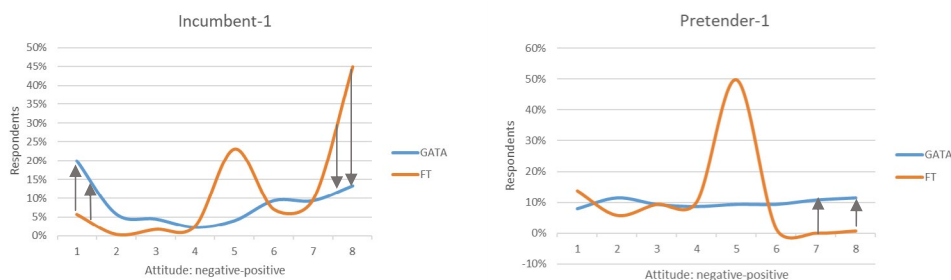


Figure 3. Mismatch of explicit and implicit attitudes towards the incumbent vs pretender: Governor election, 2017, European part of Russia

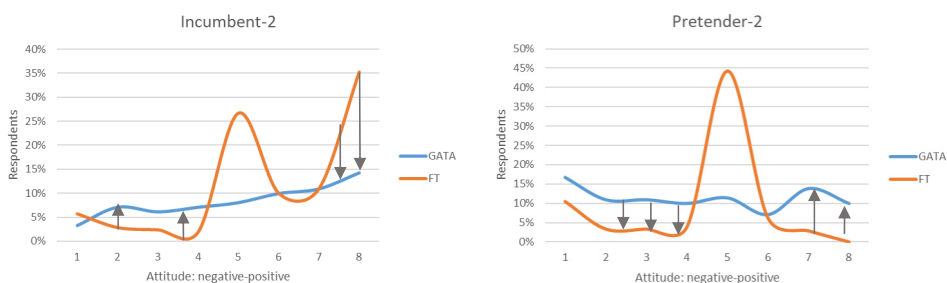


Figure 4. Mismatch of explicit and implicit attitudes towards the incumbent vs pretender: Governor election, 2017, Eastern Siberia

The data presented above show quite a standard picture which reflects peculiarities common for all of the studied cases (4 incumbents, 8 pretenders):

1. For the incumbent, explicit attitudes are shifted towards the positive end of the scale (arrows down), while implicit attitudes — towards the negative end (arrows up).

2. For the pretender, implicit attitudes are demonstrated by circa 30% of respondents shifted towards the positive end of the scale, while the explicit attitude of the very same sample shows almost nothing of the sort.

3. Distribution on the explicit scale is dramatically shifted towards the center, which can represent respondents' intention to hide in a shade of neutral values or their lack of introspection.

In general, the study confirms that the incongruity of explicit and implicit attitudes to the same candidate is not an unusual state for voters' attitude. Therefore,  $H_0 1.1$  "explicit and implicit attitudes are always the same towards every single candidate" is to be rejected.

Nevertheless, these data seem to be not enough to accept "inconsistency" detected by the applied instruments as a real-life phenomenon. To test it, let us suppose that if the IA and EA will differ by their sets of independent variables of the SB, then it could be an indicator of separate sources of their origin, which is a quite solid proof for considering their "visual" discrepancy not a simple artifact of measurement.

### 3.3. Natural origin of inconsistency

The starting hypothesis for assessing whether the measured differences represent natural orthogonality was  $H_0 1.2$  "the implicit attitude has the same level and structure of associations with the basic 'set of beliefs' as a variable of the explicit attitude". To test it, the author checked the association of IA and EA with the set of other common ANES-origin variables of Studies 1 and 4. The significance of 0.05 for Chi-square statistics was set as a threshold for the proved association. The aggregated results are presented in Table 3.

Table 3. *Mismatch of the structure of associations for the explicit and implicit components*

Studies 1 and 4 in sum	Politics and social	Economy issues	Demography	Total
Only the explicit component has an association	20	1	6	27
Both have an association	40	5	2	47
Only the implicit component has an association	5	0	0	5
Both have no association	16	1	3	20
TOTAL	82	7	11	99

According to the data above, 47 out of 99 typical ANES-style variables have an association with both variables representing implicit and explicit attitudes. 27 variables have an association with the explicit and have not with implicit ones. 5 more have an association with implicit and have not with explicit variables. It is not surprising that explicit attitudes are deeply rooted in the massive of variables, measured with a conscious-addressing questionnaire, being tied with totally 74 variables. The implicit attitude is associated with the bulk of traditional "cognitive" variables in a relatively poor way with 52 associations. Thus, 32 (27 + 5) variables represent a domain, where

associations are mutually exclusive. Therefore, almost every third of considered association is generated by the forces, acting separately for implicit and explicit attitudes.

The kind of these forces could be assessed with the data structured in Table 3.3.2, where the volumes of Sommers's D for associations are presented. Only the cases are presented where D statistic is 0.05+ higher for the implicit/explicit variable as dependent vs as independent and the significance of statistic is 0.05 or better. The higher part of the table represents variables which are factors for the implicit attitude, lower — for the explicit attitude, the central part — for both. The priority of variables is set up by the difference between Sommers D values for implicit and explicit variables. Blank cells represent the insufficiency of the statistic of the respective association.

The composition of associations revealed by this form of analysis slightly differs from that of Chi-square due to a different input set of variables (only ranked variables may be used for Sommers D) and the natural peculiarities of calculations. All data are from Study 5, dependent variables are IA and EA towards the party of “United Russia” which is referred to here as “UR”. “Ideologically biased” questions (in commas) started with “Do you agree, or disagree...”.

*Table 4. Sets of predicting factors for implicit and explicit components of attitudes*

<b>Variable to cross</b>	<b>Implicit as dependent Sommers D</b>	<b>Explicit as dependent Sommers D</b>
Do you approve the activity of the Prime Minister	.346	
“UR is able to arrange the country’s development”	.325	
“UR is a party of real deeds”	.306	
Do you approve the activity of the State Duma (parliament)	.260	
“UR fights for common people”	.251	
“Most of UR party’s members are of great moral standards”	.236	
“Real party’s activists took part in UR’s primaries”	.137	
Do you approve the reunification of Crimea with the RF	.077	
Do you pay attention to political parties’ positions towards the Crimea reunification issue	.074	
Do you think Western sanctions were imposed because of Crimea	-.046	
Do you approve the activity of President V. Putin (3 <sup>rd</sup> wave)	.426	.203
I have been aboard within three years	.043	-.052
Do you trust the Minister of Defense S. Shoigu	.132	.103
Do you think the reunification of Crimea brings more advantages or disadvantages	.128	.107
“Change of the state power should be done only via lawful means”	.111	.100
Do you trust the Minister of Foreign Affairs S. Lavrov	.059	.052
Do you trust President V. Putin	.226	.231
The head of the state should stay at power as long as possible	.203	.204

Variable to cross	Implicit as dependent Sommers D	Explicit as dependent Sommers D
Most of UR's members are row people	.183	.215
Do you approve the activity of President V. Putin (2 <sup>nd</sup> wave)	.173	.205
Do you approve the activity of President V. Putin (1 <sup>st</sup> wave)	.149	.260
I have discussed political issues in social media		-.117
I have discussed political issues via Internet forums		-.117
I have read news on the Internet		-.092
I have commented news on the Internet		-.097
I have read news of culture and arts		-.047
In general, do you feel yourself securely or not		.090
I support enforcement of current national law		.148

The data shown in Table 4 support the conclusion of independent sources for implicit and explicit attitudes. Not only the sets of independent variables differ for IA and EA, but also the variables that constitute these sets differ qualitatively.

Most of the variables representing the pool of beliefs affecting the implicit attitude are indicators of “true” beliefs and predispositions: “UR is able to arrange the country’s development”, “UR is a party of real deeds”, etc. Next to this core, one could see two remarkable variables of approving the activity of the Prime Minister (Party’s official leader) and the activity of the State Duma (where United Russia has had a dominant majority for many years). Surprisingly, this dependency is not detectable for the explicit attitude. Crimea affairs are presented well in the set of implicit drivers, but it is a temporary factor and most probably points to the general assumption that a stimulus first affects the unconscious sphere and then is (or is not) introspected by a person.

In contrast to implicit, explicit attitude factors are almost totally presented by self-reports of behavioral patterns: “I have discussed political issues in social media”, “I have read news of culture and arts”, etc.

The main part of common factors is variables of approving/trusting the officials: “Do you approve the activity of President V. Putin”, “Do you trust the Minister of Foreign Affairs S. Lavrov” and so on. This massive is diluted with several indicators of predispositions, as “The head of the state should stay at power as long as possible” and behavioral self-reporting ones: “I have been aboard within three years”. However, these variables look untypical for a “common set”.

Perhaps, one could assume these variables of assessment represent the true nature of this intermediate sector where both implicit and explicit attitudes are commonly affected by the same factors. If so, one comes to a scheme where beliefs and predispositions primarily affect implicit attitudes, assessments — both types, and behavioral patterns — mainly explicit ones. Certainly, the final assay will take more studies and more proofs to be adopted or rejected. However, this scheme looks logical, well fits in the general theoretical model [Fishbein, Ajzen, 2011] and provides a conclusion which is not universal, but reliable within its bounds: there are cases where implicit and



explicit attitudes mismatch and are driven by incongruent sets of factors. Therefore, H01.2 “an implicit attitude always has the same level and structure of associations with the basic ‘set of beliefs’ as an explicit attitude” should be rejected.

### 3.4. Inconsistency of intentions

As will be seen, data on intentions accurately reproduce the logic of the data described above for attitudes. Tables 5—7, based on the data of Studies 1 and 4, refer to the crossing of VI which represents explicit intention and EI that is supposed to be equal to EA [Wilson, Lindsey, Schooner, 2000]. In this way, consistency groups were created, as described in details in Section 2.3.

Hereafter, UR refers to “United Russia”, CP — to “Communist Party of the Russian Federation”, FR — to “Fair Russia”, LD — to “Liberal-Democratic Party of Russia” or to individual candidates with the respective affiliation. “P” represents V. Putin. Two-digit numbers refer to the year of national elections (Studies 1 and 4) and “g” marks the Governor election of 2018 (Study 2).

Table 5. **Structure of consistency of candidates’ supporters, State Duma election, 2016, % of the voters**

Consistency status	UR 16	CP16	FR 16	LD 16
1. Explicit positive, Implicit positive	28%	9%	6%	6%
2. Explicit positive, Implicit neutral	13%	5%	4%	4%
3. Explicit positive, Implicit negative	6%	2%	1%	2%
4. Explicit negative, Implicit positive	16%	20%	30%	24%
5. Explicit negative, Implicit neutral	20%	32%	34%	30%
6. Explicit negative, Implicit negative	17%	32%	26%	33%

Table 6. **Structure of consistency of the candidates’ supporters, Governor elections, 2018, % of all the voters**

Consistency status	UR 18g	CP18g	LD 18g
1. Explicit positive, Implicit positive	36%	3%	4%
2. Explicit positive, Implicit neutral	7%	2%	2%
3. Explicit positive, Implicit negative	8%	2%	1%
4. Explicit negative, Implicit positive	28%	39%	40%
5. Explicit negative, Implicit neutral	9%	25%	22%
6. Explicit negative, Implicit negative	13%	29%	22%

**Table 7. Structure of consistency of the candidates' supporters, President elections, 2018, % of all the voters**

Consistency status	P18	CP18	LD18
1. Explicit positive, Implicit positive	69%	13%	12%
2. Explicit positive, Implicit neutral	6%	2%	2%
3. Explicit positive, Implicit negative	7%	2%	5%
4. Explicit negative, Implicit positive	7%	34%	33%
5. Explicit negative, Implicit neutral	9%	15%	13%
6. Explicit negative, Implicit negative	5%	35%	34%

Descriptive statistics are in Table 8. The same in aggregated form and recounted to VI as 100% are in Table 9.

**Table 8. Descriptive statistics of the structure of consistency of the candidates' supporters, % of all the voters**

Consistency status	Median	Mean	St. deviation	Min	Max
1. Explicit positive, Implicit positive	11%	19%	0.21	3.2%	69.4%
2. Explicit positive, Implicit neutral	4%	4%	0.04	1.6%	13.3%
3. Explicit positive, Implicit negative	2%	4%	0.03	1.1%	7.7%
4. Explicit negative, Implicit positive	29%	27%	0.10	7.4%	39.8%
5. Explicit negative, Implicit neutral	21%	21%	0.09	9.0%	33.7%
6. Explicit negative, Implicit negative	28%	25%	0.10	4.9%	34.6%

**Table 9. Descriptive statistics of the structure of consistency of the candidates' supporters for the aggregated group, recounted to VI as 100%**

Supporter's grouping options	Median	Mean	St. deviation	Min	Max
VI (Positive explicit total: 1 + 2 + 3)	100%	100%	0.00	100%	100%
Non-contradictory intentions (1 + 2)	82.9%	84.5%	0.07	73%	92%
Consistent intentions (1)	61.5%	58.5%	0.11	49%	84%
Inconsistent intentions (3)	17.1%	15.5%	0.07	8%	27%

The Tables 6—7 show that the inconsistent state of intentions to vote is quite a routine for all the considered samples of voters. As per Tables 8, an average candidate has 2% (median) — 4% (mean) and up to almost 8% out of all the voters' corps as an "inconsistent" fraction of the electorate. Expressed as a share of their "formal"

electorate, measured with VI (Table 9), this group accounts for 17 % (median) — 15 % (mean) and periodically grows up to 27 % (mean).

The same is valid also to inconsistent intention to not vote, represented in Tables 5—7 by the status group 4. “Explicit negative, Implicit positive”. From 7 % (P18) to 40 % (LD18g) of the total number of voters declare they will not intend to vote for the candidate, despite the fact they have quite a positive implicit attitude to one.

Thus, the inconsistency of both attitudes and intentions is a norm for some fractions of the studied electorate of every candidate.

This way,  $H_0 2.1$  “The share of ‘inconsistent voters’ is a constant for every candidate’s electorate” has to be discarded.

#### 4. Interim conclusions

Aggregating all the data presented in the article, one has to accept several conclusions.

1. Implicit components of an attitude are an empirical phenomenon.
2. Implicit and explicit components most probably have the separate origin and definitely are under guidance by the distinctive sets of the factors.
3. Implicit and explicit drivers exist simultaneously, and divergent attitudes/intentions status of a single person is a quite common arrangement.

In the theoretical aspect, these findings support the initial concept of the independent nature of implicit and explicit factors of electoral attitudes, intentions, and (probably) behavior. These components may match but may mismatch each other. If so, one has to adopt the “enriched” model of the TRA/TBP scheme as per Section 2.1.

If we accepted the “enriched” model of the TRA/TBP, the next question is quite obvious. Does the implicit “stream” and in particular — via the inconsistent status of explicit/implicit factors affect behavior? That is still unclear. That is why we are going to examine it in the next article.

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