

NATIONAL RESEARCH UNIVERSITY HIGHER SCHOOL OF ECONOMICS

Anna K. Fam, Dmitry A. Leontiev, Evgeny N. Osin

'FATEFUL' VS. 'EVERYDAY' CHOICES: QUALITATIVE DIFFERENCES IN CHOICE SITUATIONS AND THE DIMENSIONS OF CHOICEWORK

BASIC RESEARCH PROGRAM

WORKING PAPERS

SERIES: PSYCHOLOGY WP BRP 82/PSY/2017

'FATEFUL' VS. 'EVERYDAY' CHOICES: QUALITATIVE DIFFERENCES IN CHOICE SITUATIONS AND THE DIMENSIONS OF CHOICEWORK⁴

This study focuses on choicework in situations of different subjective importance. Psychology students (N=74) and internet sample respondents (N=1,833) were asked to recollect several choice situations of varying importance from their experience and to name, describe, and evaluate them using a number of self-report measures. Combining qualitative and quantitative data analysis, we devised a series of qualitative indicators of choicework (context and content of choice, emotional attitude to the choice process, satisfaction with choice, mindfulness, autonomy, difficulty, and significance) and compared the choice situations on these parameters. Significant and trivial choices differed on a number of variables (more significant situations were characterized by more complicated and conscious choicework). Choice situations with different thematic content also differed in their subjective importance and other parameters of choicework. The results imply the necessity to consider the scale of significance and the thematic content of situations used in choice studies.

JEL Classification: D91.

Keywords: choice, decision, choicework, subjective quality of choice, everyday choice, fateful choice.

¹ National Research University Higher School of Economics. International Laboratory of Positive Psychology of Personality and Motivation. Senior Research Fellow; E-mail: afam@hse.ru

² National Research University Higher School of Economics. International Laboratory of Positive Psychology of Personality and Motivation. Laboratory Head; E-mail: dleontiev@hse.ru

³ National Research University Higher School of Economics. International Laboratory of Positive Psychology of Personality and Motivation. Deputy Head; E-mail: eosin@hse.ru

⁴ The article was prepared within the framework of a subsidy granted to the HSE by the Government of the Russian Federation for the implementation of the Global Competitiveness Program.

The data for Study 2 were collected with support from Russian Foundation for Humanities, project # 12-36-01050 (2011-2013). The authors express their gratitude to Natalia Bolshakova for providing and securing the conditions that made Study 1 possible, to Moscow office of Psychologies magazine that provided their website for data collection (and personally to Internet-editor of Psychologies Svetlana Kiryenina). Also, the authors are grateful to Yulia Abramova, Vladislav Bobrov, Anna Gorbunova, Valeriy Gorlov, Vasiliy Kostenko, Anna Lebedeva, Anastasia Mospan, Zoya Perlova, Mariya Savina, and Arina Vyrva for their help in data collection and data processing and Elena Rasskazova for valuable discussion.

Introduction

The topic of choice is rare in research studies, where it is usually substituted by a more academically respectable concept of decision making. There are, however, some reasons for a conceptual difference between these two concepts (e.g. Keys and Schwartz, 2007; Schwartz, 2012; Iyengar, 2010).

Choice can be treated as a purely cognitive decision-making process resulting in a judgment (Simonson, 2007) only in its simplest forms. In many complicated cases of life choices an 'objectively best' or a 'true' decision does not exist, which makes rational optimization based on cognitive calculations impossible. In such situations, the process of choice does not end once a decision is made: subsequent actions may never happen or may even go counter to that decision. Unlike decision-making, choice is an existential act that resolves uncertainty in one's life rather than in one's mind. Recently, this old idea of existential philosophers has received some empirical support in psychological studies (Khan & Dhar, 2007; Maddi, 1998).

Choice is mental work (we label it choicework) requiring an expenditure of resources (Schwartz, 2004) which may even result in ego depletion (Baumeister, Bratslavsky, Muraven, & Tice, 1998). It is mediated by mental tools and strategies (Vygotsky, 1983), requires the taking of responsibility and voluntary self-investment and it can be trained (Leontiev, 2011, 2014). However, the same choices can be made either based on elaborate choicework, with full self-investment, or spontaneously, in a reduced and non-involved way. These two forms of choice are associated with different personality predictors and life outcomes (Fam & Leontiev, 2013).

It follows that choice should mainly be considered from the viewpoint of choicework structure (the way the choice is being made), rather than from the viewpoint of its content (what is being chosen and why) or of the resulting decision. This approach implies consideration of one's readiness to admit responsibility, uncertainty, and risk during the choice process. We see choicework as a process with a complex operational structure, which includes both external and internal criteria and can proceed at different levels of complexity and elaboration. In some cases choice has a sophisticated, branched, and deliberate character, being integrated with other parts of one's life and activities; in other cases it is reduced to automatic unconscious operations proceeding without regard to other aspects of one's life (see (Fam & Leontiev, 2013).

One of the implications of this model of choice is that choicework would proceed in different ways in the context of simple, non-significant everyday choices and in that of complicated existential choices that involve serious risks, personal responsibility, and result in long-term consequences. The two studies described below compare choicework in choice situations of different scales, using both qualitative and quantitative methods. We hypothesized that the level of the subjective importance of the choice may influence the parameters of choicework. In particular, we expected that in more significant situations choicework would be more complicated, controlled, and conscious, compared to less significant ones. These studies form part of a larger project aimed at investigating individual differences in and predictors of the parameters of choicework. The present paper focuses on the qualitative characteristics of choicework in situations of different scale.

Study 1

Method

This study establishes the qualitative indicators of choicework and compares its characteristics in situations of two levels of subjective importance.

The respondents were undergraduate psychology students (Moscow State University, N=74; 19 male, 55 female) who ranged in age from 17 to 25 years (Mean=18.7; S.D.=1.09) (one respondent did not specify their age).

Being aware that subjective importance is a continuous dimension of choice, but having no instruments for its 'objective' measurement, we decided to set two extreme poles of this dimension labeled as 'fateful' (F) and 'everyday' (E) choices. We asked the respondents to recollect two choice situations of different levels of subjective importance from their experience. For E situations the instruction was: 'Please remember an unimportant, ordinary situation of choice from your experience which did not have pronounced consequences for your life'. For E situations it was: 'Please remember a situation of choice from your experience which influenced many essential aspects of your life'. To control for the order effects, we randomly varied the sequence of instructions for the two choice situations. Forty respondents completed the task in the EE order and 34 in the EE order.

The data collection for each situation involved 3 steps:

1. First of all, the respondents were asked to **describe** and **name** the situation they recalled. In order to check whether *the type of instruction* influenced the content of responses, we randomly divided all respondents into two groups. One group (N=37) was given a 'flexible' (f)

instruction to describe the choice situations in their own words using a few sentences. The other group (N=37) was given a 'structured' (s) instruction which involved the completion of a structured questionnaire that contained questions tapping into the options the respondent had, the choice he/she made, the duration of the choice process, the arguments in favor of the preferred alternative, their thoughts during and after the choice, and a retrospective evaluation of the choice.

- 2. **Subjective quality of choice (SQC) technique** (Leontiev, Mandrikova, & Fam, 2007; Leontiev, Osin, & Fam, in preparation). SQC is a procedure that uses a semantic differential approach and involves the evaluation of the specific choice being made or made in the past on 22 bipolar scales referring to the process of choosing (*I was making this choice...*) and to its outcome (*The decision I made was...*). The answers are given on 7-point scales. A number of studies replicated 4 dimensions tapping into the subjective experience of choicework:
- 1) *Choice Mindfulness* (elaborated, proactive choicework vs. reactive surface choice with insufficient or no elaboration and argumentation).
- 2) *Emotional Unambiguity* (definitely positive emotions regarding the choice vs. ambivalent emotions including regrets and suffering).
 - 3) Choice Autonomy (autonomous vs. controlled/enforced choice).
- 4) *Choice Satisfaction* (approval and acceptance vs. doubts about the decision actually made).
- 3. **Choice Profile (CP) questionnaire** (see Appendix). The form was developed for this study and contained items regarding the emotional valence of each situation, its temporal localization, information sufficiency, and its influence on the respondents' lives at present.

The respondents proceeded with steps 1-3 for each situation, after which they completed a number of well-being and personality measures tapping into the predictors of choicework characteristics (these data are beyond the scope of the present paper).

Results

We started by investigating the effects of order and instruction type on the evaluation of the two situations (SQC and CP scales) using a 2x2x2 mixed ANOVA. There were no significant main effects of order or instruction type. The only significant 2-way interaction effect of choice

mindfulness with instruction type (F(1,67)=5.58, p=0.021, partial eta-squared=0.077) indicated that respondents working under the flexible instruction condition tended to evaluate their choices in F situations as more mindful and E choices as less mindful, compared to the respondents working under the structured instruction, suggesting that flexible instruction resulted in a better subjective immersion into the choice situation. Because this effect was weak, we analyzed the results obtained under both instructions as an aggregate sample.

We combined qualitative data analysis of free responses to open questions (naming and describing choice situations) with a quantitative analysis of the data provided by the SQC technique and the CP form.

Phenomenological indicators of choicework

Based on the pilot analysis of the situation descriptions obtained using both types of instructions, we specified a list of parameters of choice situations to be investigated using qualitative content analysis (Kvale, 1996; Kohlbacher, 2006), in line with the aims of the current study:

- 1. *Context and content of choice* (the description of the circumstances in which the situation emerged, alternatives, and the result of the choice).
- 2. *Mindfulness of choice* (the drawbacks and advantages of the options, i.e. the system of argumentation, the analysis of the consequences of choosing one or another alternative).
- 3. *Emotional attitude to choice process* (the quality and quantity of emotions accompanying the choice process).
- 4. Autonomy *of choice* (in particular, using internal vs. external criteria for resolving uncertainty).
- 5. Satisfaction with choice (emotions after the decision-making and a retrospective evaluation of the choice).
 - 6. *Difficulty of choice* (including the factors that influenced it).
 - 7. Significance of choice (including the life consequences of the decision made).

These parameters were more clearly and fully represented in the descriptions provided for F situations. In E situations free descriptions were more fragmentary and superficial, sometimes

clearly incomplete. Only the context and content of choices in E situations were generally described in more detail (though respondents tended to mention the options without articulating the result of their choices); the other parameters were reflected quite scantily. Descriptions of emotional attitude to E choices were mostly limited to pointing at the typicality of the situation, its small-scale meaning for one's life. The free descriptions of E choices were, on average, 82 characters longer than those for E situations (d=0.50, p<0.001 using Student t-test). This suggests that choicework in E situations was much more elaborate than in E situations.

The qualitative differences between the descriptions of F and E choice situations are described below. The results of quantitative analyses of the data of SQC technique and CP are presented in Table 1.

Table 1. Differences between fateful and everyday choices on SQC and CP indicators

Scale	N	Cronbach's α		Mean (S	t. Dev.)	Cohen's	ρ
	items	Fateful	Everyday	Fateful	Everyday	d	
		choice	choice	choice	choice		
SQC: Mindfulness	6	.82	.78	5.80 (1.10)	4.86 (1.33)	.78***	.38***
SQC: Unambiguity	5	.78	.82	3.97 (1.34)	4.20 (1.41)	.17 n.s.	09
SQC: Autonomy	6	.71	.79	5.37 (1.25)	5.65 (1.23)	.23 n.s.	11
SQC: Satisfaction	5	.79	.86	5.78 (1.13)	5.05 (1.23)	.62***	.30***
CP: Time	1	n/a	n/a	4.79 (0.75)	3.06 (1.33)	.86***	.66***
CP: Consequences	1	n/a	n/a	1.44 (0.65)	4.05 (1.20)	.86***	77***
CP: Emotions	1	n/a	n/a	1.63 (0.81)	2.85 (0.97)	.79***	57***

1. Context and content of choice

1.1. Types of situations (based on the free descriptions and the structured questionnaire). F-type choices mainly referred to: finding professional identity -62% (of those, 51% of respondents described the choice of university); setting priorities between work and study (in some cases the choice was between study and serving in the army or work vs. the army) -7%; health-related choices (considering cancelling trips because of health problems, considering surgery, etc.) -4%; choice in relationships (the challenge of treating a biological father as a father, considering ending a relationship with a significant other) -4%. In contrast, E-type choices mainly concerned: consumer behavior and choosing gifts for friends -27%; buying food and choosing dishes (in café, canteen) -15.5%; choosing a pastime or prioritizing between study and entertainment or self-concern (going to an exhibition or to a lecture; preparing for an exam or sleeping) -18%; choosing convenient routes (taking a bus or walking) -8.5%; choosing a proper time for doing something (planning a birthday greeting visit to one's grandmother on the

actual day or at the weekend) -4%. Other specific 'everyday' situations described included, for example, 'through which door to enter the train', 'whether to pick up a street puppy', 'choice between friends', or 'choosing a program at the university'. The evaluations of the significance of E situations and of their impact on the respondents' lives varied more broadly, compared to the F ones.

1.2. Estimated duration of choosing (based on both the structured questionnaire and the free descriptions): for the F situations the range was quite broad (from 'as quick as a thought' to 'two years'), while for the E ones the time needed for making a decision did not exceed a week.

In *F*, the choice was described as a successive, multi-stage process (including the length of the decision-making process, the circumstances that preceded the choice, and factors that influenced the choice). Respondents described the story of the way the choice options emerged ('Throughout my life I wanted to enter the university of fine arts, but one or two years before entering I changed my mind...', 'In the beginning of the 10th grade at school I decided pick my future profession (or at least its direction). There were a few options that attracted me... A little bit later I added the psychological faculty to the list; after weighing all the pros and cons, I decided to proceed this way. As a result, I had to change school'). They often reconstruct the whole context of events that happened in that period of time, representing the events as interconnected links. The temporal range of *F*-choices expanded not only due to the descriptions of the prehistory of the choice, but also due to future expectations ('rosy prospects are opening in front of me', 'my future depended on my choice', 'as it turned out... one year afterwards').

In *E*, on the contrary, the choices lacked a temporal dimension. The options were described in the story as appearing at the same time (e.g., 'whether to go to the seminar... *or* to the gym'). Present time orientation was dominant (e.g., 'I was wearing heels, so I chose to take a bus', 'every time my choice is different depending on my mood'), there was no evidence of a long-term time perspective. The additional information about the situation that gives an understanding of the whole context of the story was typically limited to one's behavior in similar situations ('as a rule', 'usually', etc.).

1.3. The temporal localization of choice (item from the CP form): a comparison of results in F and E showed that respondents refer to more distant past situations for F (most frequently: 'this year', 'more than a year ago'), while for E they picked more recent times ('today', 'this week', 'this month').

2. Mindfulness of the choicework

- 2.1. Arguments in favor of the chosen alternative (free descriptions): in F, they were specified in 51.3% of cases, and we classified the main dilemmas into the following groups:
- status quo vs. change (see Maddi, 1983) ('I took very heavily the necessity of choosing between university in my hometown, living close to family and friends, and moving to the other city. But I finally decided to overcome my fear, learning to be independent, I understood that I wouldn't have any other chance, and went to Moscow.') 37%;
- one's own wish vs. others' wishes (e.g., 'Dad wanted me to be a psychologist, but my dream was to become a lawyer') 21%;
- **choice between several diverse interests** ('I've been working in the modeling business since I was 14. I enjoyed my job. But I had a desire to study biology at the university as well. At that time, I believed that it was my way. But I was aware that if I went to the university I would have to reduce or even quit my job. After a period of painful doubts, I preferred biology.') 16%.

In *E*, the arguments were specified in 34% of protocols; because of the wider variety of responses and the limited sample size it was not possible to classify the general dilemmas. Some of the particular choices described by respondents concerned **physical and psychological comfort vs. punctuality**, **practicality vs. glamor**, **quality vs. price**; often situational factors (mood, fatigue) served as arguments.

2.2. Thoughts during choosing (free descriptions): in *F*, direct mentions of thoughts were found in 22% of protocols (e.g., 'I paused to think', 'because of heavy doubts...', 'after long reflection...', 'I have been weighing all the pros and cons for a long period of time'), whereas in *E* there were hardly any.

3. Emotional attitude to choosing

3.1. The amount of emotion during choosing (free descriptions and the item from the CP form): emotions were mentioned in 81% of free descriptions of the F-type choices and only in 42% of the E-type ones. A comparison of the data on the emotional valence of the situation by the CP form also revealed that the amount of emotion was significantly higher in the F than in the E situations.

- 3.2. Quality of emotions (free descriptions): both 'fateful' and 'everyday' choices were accompanied (although in different proportions) by doubt, heaviness, the painfulness of choosing, and confusion (47% in F and 36% in E), interest in one or more alternatives (33%; 7%), and confidence (10%; 7%). In addition, anxiety and fear were mentioned in F (10%); indifference (36%) and enjoyment were mentioned in E (14%).
- 3.3. Mindfulness of choice (the scale of the SQC technique): a comparison of values in both situations showed that 'fateful' choices were more elaborate than 'everyday' ones.
- 4. Strategies for choosing (free descriptions): an explicit description of the strategies for choosing and of the external and internal criteria were found in 30% of the F descriptions but only in 18% of those for E. In the latter case, the descriptions were more compact. External criteria used by respondents both in F and E included conforming to situational pressures, asking for help, and the consideration of others' opinions; internal criteria included risk-taking (though it did not mean the same in situations of different scale), contact with inner values (only in F), and consideration of one's actual physical and mental state (only in E).

In order to make better choices, individuals in *F* situations usually used several strategies in combination ('after long reflection, discussion with parents, school teachers and tutors, I chose the psychological department.').

The use of some individual strategies in F highlights the creative character of choicework, namely:

- **reduction of options** ('...but before the exams I understood that this program was only a way to moral satisfaction, and *made myself fail.*);
- 'freezing' the choice situation in order to postpone the critical moment of choosing ('That activity was extremely interesting and important for me, but the exercise seemed to be too hard because of my unhealthy heart. *To stay in class, I had to lie* that I had good health.');
- **continuation of choosing** after making a decision ('I've chosen psychology, though *I still doubt* whether I will succeed.');
- emergence of the third option beyond two initial ones; it could be an absolutely new one or a compromise between initial options ('I was attracted by a few options: the physics

faculty, faculty of fundamental medicine, and biology faculty... after weighing all pros and cons, I decided to enter the psychology faculty.);

- 'a choice without choice', without rejection of either option ('It was difficult for me to choose between my own wish and wish to conform to others' expectations, so I decided to *join two university programs in parallel*.'). Alternatively, all options remained available but were prioritized ('There were a few options, which still attract me a lot, but will remain one of my *hobbies*.').

Moreover, there were direct mentions of one's autonomous behavior in F ('after that, others acknowledged my *self-sufficiency*, 'I decided to be *independent*'). As the data shows, becoming more independent was perceived as the main result of choice by many respondents with a specific life outcome (changing a place of living, leaving home, etc.) being only its indirect implication – possibly, that was an age related phenomenon.

5. Satisfaction with choice

- 5.1. Retrospective evaluation of the decision (structured questionnaire and free descriptions): in general, the evaluation of the result of choice in F situations was more positive, compared to E. Positive evaluations of choices using the structured questionnaire were found in 84% of the answers for the F situations and only in 39.5% of those for the E situations. Evaluations were ambivalent or neutral for 10% of respondents in F and for 48.5% in E, and bad or unsuccessful for 6% of respondents in F and for 12% in E. Furthermore, satisfaction with the choice was spontaneously mentioned in 60% of the free descriptions in F and in 24.5% of the descriptions in E. An ambivalent attitude to the choice was found in 3% of free descriptions in F and in 8% descriptions in F according to the SQC technique, satisfaction with choice was significantly higher for F situations.
- 5.2. The amount of emotion after choosing (free descriptions): the amount of emotion, and the emotional intensity, was significantly higher in F than in E. There was no mention of feelings and attitude to choice in 67.5% of protocols in E and in 37% of protocols in E, the description of the outcome was often lacking.

6. Difficulty of choosing

- 6.1. Difficulty/complexity of choosing: this point was directly mentioned in 16% of the free descriptions given for F situations ('I took the necessity of making a choice... very heavily', 'it was an important and hard choice'), and only in 9% of those for E ones.
- 6.2. Factors that complicate the process of choosing (free descriptions): lack of information on some options ('I don't know what I would have chosen if I had known what I had to get through'), lack of time ('as I had no time for reflection...'), equal attractiveness of some alternatives ('I finished school with distinction and didn't have any idea on what I wanted, where to go and what to do... I wanted to study everything at the same time'), abundance of alternatives ('I went to the shop and there were a number of things which he might like an embarrassment of riches!').

7. Significance of choice

- 7.1. Uniqueness of the situation (free descriptions): in F, respondents usually depicted one-of-a-kind, unique events, which did not have any analogs in their previous life experience. At the same time, in E, there were descriptions of typical, repeated events (what was underlined by use of the words 'always', 'usually', 'generally', 'every time', 'for example', 'often', etc.): 'Particularly, such situations repeat from one year to the next... most times I am torn between two options, and, as a result, I have to choose. Let's take a look at any particular case', 'This is quite a trivial situation', 'I'm often faced with that', 'I suppose that, sooner or later, everyone faces such a situation', etc.
- 7.2. Importance of choice (free descriptions): in *F*, direct mentions of the great importance of the choice and its consequences occurred in the majority of protocols. Respondents often used superlatives ('The Most Important Choice', 'It really influenced many, many things in my life'). On the contrary, in *E*, devaluation of a chosen alternative (and of the situation of choice as a whole) often took place; respondents used to underline its 'formal' character ('I was deciding what to choose, but, in fact, I did not care', 'It led nowhere', 'My life didn't change afterwards').
- 7.3. Impact of choice on the present life (item of the CP form): as expected, consequences of 'fateful' choices were more important for the respondents than consequences of 'everyday' ones.

We found no significant differences between the F and E situations on the emotional unambiguity and autonomy dimensions of the SQC or questions 3 and 4 of the CP form.

Discussion

The above data are in line with the hypothesized differences in choicework associated with situations of different subjective importance. Although the findings may seem predictable, they reveal phenomenological aspects of choicework that cannot be reduced to feelings and are rarely described. To summarize, the systematic qualitative differences between 'everyday' and 'fateful' choice situations were as follows:

- 1. The greater qualitative variability of choice situations of *E*-type. It may be due to the subjective conception of an 'everyday choice' being less definite. Indeed, noticing unimportant choices in life and describing them is a challenge. It has been found in cross-cultural studies that choice is often a matter of cultural construction: some cultures encourage the construction of different situations (especially everyday ones) as choice situations, whereas others 'teach' seeing the same situations as non-choice ones (see Savani, Markus, Naidu, Kumar, & Berlia, 2010). Based on these findings, we can speak of a varied 'threshold of detection' for choice situations which is both culturally primed and individually specific, with 'everyday' choice situations being more dependent on this threshold, compared to those of 'fateful' choices.
- 2. A reduced choosing process in *everyday choices* (mentioned in the majority of protocols) can be explained by their stereotypical character and lack of relation to larger contexts. As described before, the estimated duration of 'fateful' choices varies widely. 'Fateful' choices involve the intensive use of internal and external resources, while non-significant 'everyday' choices, are less rooted in life contexts, hardly have any long-term consequences, and rarely involve third parties.
- 3. The emergence of ambivalent and even negative feelings in F can be explained by the greater significance and uncertainty associated with this kind of choice. Acceptance of any option necessarily implies a rejection of other ones (see, in particular, Kierkegaard, 2004; Schwartz, 2004). In such cases, satisfaction with the decision made may be quite high, not only because of the foreseen benefits, but also because of the moral and psychological gains and valuable life experience acquired in the course of long and hard choicework. Choicework in F might result not only in the preference of some option, but also in broadening the circle of motives and goals, and progressive personality transformations (see, in particular, Maddi, 1998;

Bergson, 2001; Kierkegaard, 2004). On the contrary, the easiness and 'formal' character of 'everyday' choices lead to experiencing both pleasure (enjoyment) and apathy (indifference). In both F and E at least every fourth respondent described feelings during the choice process instead of thoughts, while answering the corresponding question. These data support our understanding of choice as the process that cannot be fully reduced to a cognitive evaluation of options.

Study 2

Method

The aim of the second study was to replicate and extend the results of the first study using a larger and more heterogeneous online sample. We added a third level of subjective importance of choice situations in order to examine the differences in choicework across the three levels ('everyday' (E), 'fateful' (F), and 'medium' (M)). A large sample also allowed us to compare features of choicework in thematically different situations. We used only the 'flexible' instruction that encouraged the respondents (as we found in Study 1) to 'dip' into the situation better than a structured questionnaire would.

The respondents were visitors to a major Russian psychology website (N=1833; 149 male, 1684 female) who anonymously completed forms for our online study on a voluntary basis. No significant sex differences in choice characteristics were found and the data are presented using the whole sample. The respondents ranged widely in age (Mean=27.8; SD=8.27).

Respondents were asked in turn to describe and name three choice situations from their own experience ranging in importance (an 'everyday', 'fateful', and 'medium'). They were asked to evaluate each situation using the SQC technique and the CP form and to fill out several personality inventories (results of the latter exceed the scope of this paper). The Cronbach alpha internal consistency coefficients for the 4 SQC scales were in the 0.71–0.81 range.

Instructions for F and E were the same as in Study 1. The instructions for M were the following: 'Please remember any situation of choice from your experience, which was of medium importance for you – rather important, but not fateful'. To control for the sequence effects, the order of presentation of F and E situations for description varied randomly (the order

EFM was given to 884 respondents, and the order *FEM* to 949; the *M* situation was always presented last, as the definition of 'M' depended on that of *E* and *F*).

Results

We used Spearman correlations to investigate the associations between the 3 levels of subjective importance of the choice situations (ordinal scale) and the parameters of the CP and SQC questionnaires. Situations of higher subjective importance were more distant in time (ρ =0.47, p<0.001), but had stronger impact on present life (ρ =-0.56, p<0.001) and were experienced as involving more emotions (ρ =-0.53, p<0.001). The respondents indicated that in larger-scale choices they had less information (ρ =-0.21, p<0.001) and the choice criteria (ρ =0.13, p<0.001), and choice alternatives (ρ =0.08, p<0.001), were less clear to them. In terms of subjective quality of choicework, the process of making higher-level choices was experienced as less emotionally positive, more ambiguous and ambivalent (ρ =-0.31, p<0.001), more mindful (ρ =0.15, p<0.001), and less autonomous (ρ =-0.13, p<0.001). The decisions resulting from higher-level choices were also experienced as slightly less satisfying (ρ =-0.07, p<0.001). (We investigate the personality moderators of these associations in more detail in another publication.)

We also used the Student t-test for independent samples to investigate the order effects and found several significant (though weak) differences between the two groups. Respondents who worked with the *FEM* version of the questionnaire and rated the fateful choice first, estimated it as less mindful (Cohen's d=0.10, p=0.030), more autonomous (d=0.16, p<0.001), and more unambiguously positive (d=0.19, p<0.001) than those who worked with the *EFM* version. They also described fateful situations that were more distant in time (d=0.17, p<0.001) and evaluated them as less emotional (d=0.20, p<0.001) and less affecting the present life (d=0.11, p=0.006), compared to those who completed the *EFM* version. Similarly, those who completed the *FEM* version described *E* choices that were more distant in time (d=0.17, p<0.001), less mindful (d=0.18, p<0.001), more unambiguously positive (d=0.36, p<0.001), and more emotional (d=0.19, p<0.001), compared to the respondents from the other group. There were no differences in the evaluations of the *M* situations on any parameters. Because all of these order effects were quite weak (r<0.10), we deemed it possible to analyze the results of both groups in an aggregate sample.

We performed a qualitative analysis of verbal responses to open questions (naming and description of choice situations) and quantitative analysis of the data obtained using the SQC technique and the CP form.

Phenomenology of 'fateful', 'everyday', and 'medium' choice situations with different content

We used content analysis of free descriptions (Kohlbacher, 2006) to analyze the content of the choice situations of different scales.

First, we developed a draft categorical structure which was refined several times in group discussion by five independent experts with MA or PhD degrees in psychology during the pilot coding of the data. The final categorical structure included 14 major categories, some of which also included subcategories (there were 22 subcategories altogether). The five experts were asked to classify each individual description under one or more category (in this case, they were asked to specify the relative weight of each category using two grades: '2' for the main category and '1' for the additional one). Experts could also use the category 'Other' for situations that did not fit into any of the available categories, or 'Impossible to categorize' when the description was absent, not clear or specific enough, or referred to several situations at once. Empty cells left by experts were treated as missing data.

To combine the expert ratings we developed a macro using Microsoft Excel. The classification of an individual response by each expert was assigned a weight of 1, which could be distributed across different categories (proportional to the weights provided by the expert or in equal proportions when no weights were provided). Then the classifications of the same response by all experts were summed by categories and a dominant category was chosen (as the one with the largest weight). In the case of two or more modal categories (5% for situations E and E, and 9.4% for E0, a referee expert specializing in the psychology of choice made the final classification decision. The expert 'confidence coefficient' was calculated as a proportion of the weights of the dominant category in the sum of all expert weights. This procedure was performed independently at category and subcategory levels.

We used a modified (weighted) version of Krippendorff's alpha (Krippendorff, 1980) for nominal scales to estimate the concordance of expert evaluations (see Table 2). In general, values of this coefficient ranging from 0.8 to 1 are treated as evidence of a reliable classification. In most cases, except for the 'medium' choices, the alpha values were within this range or close to it. The concordance of expert evaluations was maximal for 'fateful' choices and minimal for

'medium' choices. The percentage of descriptions lacking sufficient information for coding was 10–12%.

Table 2. Indicators of coding reliability and data quality at the category and subcategory level

Situations of choice	Categories and	Krippen dorff's alpha	_	dence ngs	Percent of answers coded	Percent of answers in the 'Impossible	
	subcategories		Mean	SD	with confidence ≥.5, %	to code' category, %	
Everyday'	22 subcategories	.81	.85	.20	86.7	10.5	
Еνе	14 categories	.82	.87	.19	88.9	10.2	
Medium'	22 subcategories	.77	.80	.23	76.7	12.5	
Me	14 categories	.81	.84	.21	82.3	12.3	
'Fateful'	22 subcategories	.81	.85	.20	85.7	12.9	
Fa	14 categories	.84	.88	.19	89.0	12.5	

The distribution of choice situations across categories and subcategories (Table 3) was similar for all responses and for the subset of responses with expert confidence above 0.50. For each category and subcategory, we compared its empirical frequency distribution for E, M, and F situations with expected uniform distribution using a chi-square test.

As Table 3 shows, 'everyday' choice situations mainly included consumer choices (43.6%), choosing a pastime for a short period of time (13.6%), choosing a style of self-presentation (4.9%), and choosing means for doing something (3.6%). Choices of job (17.5%), of pastimes for longer periods (7.5%), of major purchases (6.1%), and of additional education courses (2.4%) referred mostly to the 'medium' level. 'Fateful' situations were mostly represented by choices in the domain of interpersonal (mostly close partner) relationships

(29.4%), main professional education (19.2%), choices of job (16.8%), residency (9.9%), and choices related to pregnancy vs. abortion (2.6%).

Table 3. Distribution of the choice content categories across three levels of choice importance

Categories and subcategories	N	'Everyday'	'Medium'	'Fateful'	$\chi^2 (df=2)$	
Compression	1023	(N=1833)	(N=1833)	(N=1833) 1.20	917.58***	
Consumer choice Shopping	532	43.64 25.26	12.82 5.56	.27	613.15***	
Choosing food	263	14.24	.22		502.47***	
Choosing flood Choosing gifts	63	2.40	1.04	.05	43.72***	
	165	1.53	6.06	.82	105.68***	
Big purchase Choosing the pastime	580	16.37	15.71	1.85	217.71***	
	384	13.58	8.24	.82	199.65***	
For a short period of time	196	2.78		1.04	109.39***	
For a long period of time	283		7.53 4.36	9.87	145.57***	
Chairming the description	283	.98	4.30	9.87	145.5/***	
Choice in the domain of relationships	893	6.33	15.66	29.41	288.40***	
Choosing a partner	137	1.25	1.85	4.96	54.01***	
Choosing the character of	576	2.89	7.64	21.06	309.11***	
relationship with a partner	370	2.69	7.04	21.00	309.11	
Choice in other relationships	180	1.96	5.62	2.78	39.04**	
domains						
Choice in work domain	694	5.67	17.51	16.75	120.89***	
Choosing a job/occupation	630	4.20	16.20	15.71	140.49***	
Decision on changing of workload	64	1.31	1.04	.76	2.63	
Choice in the domain of	581	2.73	9.33	19.53	249.52***	
education Choosing a specialty/place for						
getting education	514	2.24	6.76	19.20	300.96***	
Choice of additional education	67	.49	2.40	.38	43.30**	
Choosing the style of self-	127	4.86	1.80	.22	88.90***	
presentation				-		
Choosing means/operations	93	3.60	1.04	.05	78.58***	
Choosing the line of behavior	211	3.71	3.76	2.07	10.64**	
Choice whether to give birth to a child	61	.27	.44	2.56	54.90***	
Belief and/or ethical choice	50	.16	.55	1.36	19.95***	
Choosing for somebody else	34	.16	1.42	.33	26.80***	
Other	177	1.31	3.33	2.29	16.17***	
Impossible to code	692	10.20	12.27	12.49	5.03	

Notes: * p<.05; ** p<.01; *** p<.001

Rows for categories are shown in bold. The sum of percentages for subcategories may not exactly match the values for their parent category, because coding for categories and subcategories was performed separately.

 $[\]chi^2$ (df=2) – the chi-squared distribution with two degrees of freedom

Because the situations of different scales differed in their thematic content, it was difficult to isolate these two factors (significance and content of choice). To investigate the associations of the SQC and CP dimensions with thematic categorization of choice situations, we calculated standardized means (z-scores) on the SQC scales and CP items to form the 'profile of choice' (z-values of SQC scales and the CP items) for responses falling into each thematic category (Table 4). The significance of the deviation of each data point from the theoretical mean (0) for all situations and degrees of significance was estimated using a two-sided z test (those ordinal CP items which were not distributed normally were transformed using a Box-Cox transformation).

Table 4. Profiles of choices with different content

Categories and subcategories		Scales of the SQC technique				Items of the PC form			
		Emotional valence	Self-determ.	Satisfaction	Temporal localization	Influence on current life	Information sufficiency	Quantity of emotions	
Consumer choice	07*	.49***	.21***	.24***	63***	74***	.34***	65***	
Shopping	07	.49***	.24***	.27***	56***	84***	.36***	66***	
Choosing food	36***	.45***	.44***	.1	-1.33***	-1.06***	.47***	-1.17***	
Choosing gifts	.04	.54***	.06	.28*	55***	95***	0	46***	
Big purchase	.33***	.52***	18*	.38***	.24**	.14	.18*	.12	
Choosing a pastime	21***	.25***	02	.08	51***	53***	.22***	38***	
For a short period of time	33***	.21***	.05	05	75***	63***	.32***	53***	
For a long period of time	.02	.32***	18*	.34***	03	34***	.01	07	
Choosing a place for living	.15*	05	14*	.11	.51***	.69***	21***	.48***	
Choice in the domain of relationships	.01	54***	.14***	25***	.38***	.37***	1**	.56***	
Choosing a partner	17	47***	.11	45***	.34***	.54***	35***	.68***	
Choosing the character of relationship with a partner	.05	58***	.16***	18***	.42***	.47***	1*	.64***	
Choice in other relationships domains	.02	46***	.09	31***	.29***	08	.09	.19**	
Choice in work domain	.29***	.13***	04	.02	.24***	.4***	09*	.23***	
Choosing a job/occupation	.29***	12**	03	.02	.28***	.45***	1**	.25***	
Decision on changing of workload	.25	27*	17	.01	13	02	.05	.09	
Choice in the domain of education	04	.05	33***	06	.77***	.57***	31***	.2***	
Choosing a specialty/place for getting education	07	02	39***	09*	.84***	.66***	34***	.27***	
Choice of additional education	.12	.55***	.08	.21	.22	09	08	38**	
Choosing the self-presentation style	17	.54***	.12	.3***	68***	77***	.37***	54***	
Choosing means/operations	11	.21*	.18	.03	-1.04***	93***	.19	8***	
Choosing the line of behavior	06	3***	.05	27***	33***	13	02	03	
Choice whether to give birth to a child	.44**	47***	15	03	.95***	.77***	.03	.81***	
Belief and/or ethical choice	.23	12	.02	0	.35*	.22	.22	.27	
Choosing for somebody else	.55**	.19	18	.34	.44*	.26	0	.28	
Other	.23**	15*	11	.11	02	01	14	.09	
Impossible to code	13***	09*	1**	15***		.08*	19***	.06	
Notes: two-sided z test of random deviation from the mean, * p<.05; ** p<.01; *** p<.001.									

Notes: two-sided z test of random deviation from the mean, * p<.05; ** p<.01; *** p<.001.

Rows for categories are shown in bold.

Predictably, consumer choices emerged as the most autonomous, emotionally positive, and satisfying (except for trivial food choices). However, the choice of a big purchase was experienced as less autonomous but more mindful compared to everyday shopping. The choice of a self-presentation style also does not involve any negative emotions and leads to a feeling of satisfaction.

The choices of pastime were also experienced as purely positive. Choosing the way to pass a day (or a few days) is less mindful and brings less satisfaction than making a decision on how and where to spend a more prolonged period of time (e.g. a vacation).

The choices in the domain of relationships are emotionally difficult and not as autonomous. It is interesting that these choices, on average, are characterized by lower satisfaction with the resulting decision. The same profile emerged for choices whether to give birth to a child (in the case of unplanned pregnancy).

The choice of job is experienced as involving mindful deliberation and inner conflict.

The choice of basic education is characterized by less mindfulness, pleasure, selfdetermination, and satisfaction than the choice of additional education.

In terms of time, the situations of choice, whether to give birth to a child (0.95), the choice of professional education (0.84), and of the place of residence (0.51) were the most distant from the moment of the study, but were reported as significantly influencing the present lives of respondents and evoked the most intense emotions. Dilemmas in the domain of interpersonal relationships also aroused strong feelings.

The situations that were the closest to the moment of study, aroused relatively little emotion and were perceived to have little influence on one's life, were choices of food (-1.33) and consumer choices in general (except for big purchases), and choices of means or ways to do something (-1.04).

Compared to the other parameters of choice perception (variables of the CP form) presented in Table 3, the variance of responses to the question on information awareness was relatively small (-0.35–+0.47). The highest uncertainty was associated with situations of choosing a partner (-0.35), a profession (-0.34), a place of residence (-0.21), and in non-classified situations (-0.19). On the contrary, situations of choice of food (0.47) and consumer choice in general (0.34), self-presentation (0.37), and of a way to spend a short period of time (0.32) were experienced to involve sufficient information.

Discussion

Study 2 replicated and built on the results of Study 1. We found that choicework situations of different scales vary in nature and content, in line with our hypotheses. We also found that choicework in situations of varying scale and content is different on a number of characteristics.

The order effects we discovered suggest that the order of the situations has some importance. The first situation appears to set a temporal context (with *FEM*, both described situations are more distant; with *EFM*, both are less distant). Also, when a more 'complicated' *F-type* situation precedes the more 'simple' *E-type* situation, the former creates an unfavorable contrast background for the latter, so that the choicework in *E* is devaluated in comparison to the preceding *F-type* choice. It is also possible that the respondents in the *FEM*-group were initially less involved and chose a less critical 'fateful' situation, which could account for the differences in the evaluations.

The concordance of expert evaluations was maximal for 'fateful' choices whereas, probably, respondents gave more clear descriptions because of the subjective importance of the situations. It was minimal for 'medium' choices, as far as these situations were presented last and may reflect a respondent fatigue effect.

It is remarkable that choice in the domain of close relationships is perceived by respondents as the most emotionally difficult and conflicting. Probably, harmonious relationships involve no choice challenges and only become a matter of choice when problems arise either within the relationship (quarrels, unfaithfulness, discontent, etc.) or due to external obstacles (e.g., choice between maintaining a relationship with a partner and necessity to move to another city/country for a job). The outcome of such choices (unlike shopping or choosing a pastime) typically influences many other life domains (e.g., divorce may necessitate a forced change of residency and circle of contacts, quitting a job for searching for a better-paid one), because a person often has to sacrifice something (money, time, career development, relationships with other people, self-respect). As a result, the choices in these situations are generally mindful, although not quite autonomous (possibly, because they involve another person).

The differences in the profiles of choice of basic professional and additional education are of interest. The former are characterized by much less mindfulness, pleasure, autonomy, and satisfaction than the latter. A possible explanation is that in Russia, like many other countries,

the choice of a professional career (typically, the choice of university) is made in the absence of full information and awareness of one's own wishes and capacities, and under the strong influence (or even pressure) of other people's expectations (parents, teachers, etc.). The psychological readiness for making such a 'fateful' decision with serious consequences for one's future life is often lacking. Young people in Russia often have very limited time for making this choice (a socially desirable scenario is entrance to a university/college or getting a job immediately after finishing school; see, e.g., Leontiev & Shelobanova, 2001). The choice of additional education (postgraduate program, further education courses, second high education, etc.), on the contrary, is mostly made in adulthood, based on extended life experience and with a better awareness of one's needs and wishes. These choices are motivated more intrinsically and are made by individuals when they are more mature and psychologically skillful.

The situations in the 'Impossible to code' category had negative mean scores on all the four scales of the SQC technique. These are difficult, incomprehensible or ambiguous situations that tend to be described in a fuzzy way and evoke ambivalent feelings.

Situations of all categories did not differ much in the information availability. A small range between the maximal and minimal values of the scale may be explained by the general character of choice situations: perhaps, only those situations are experienced as choices where the result is not certain and/or it is not possible to consider all the potential consequences.

General discussion

The data of both studies described above are complementary. Both had similar design, but used different samples (psychology students in Study 1, volunteer psychology website visitors in Study 2). Respondents in both groups had high motivation for self-understanding and some experience of participation in psychological surveys.

Descriptions of 'everyday' and 'fateful' choices had many similarities in both studies. Choices of *E*-type were choosing gifts, shopping, choosing food, a short-term pastime, the manner of doing one or another activity; most situations of *F*-type referred to choices in the domains of higher education and close relationships.

Nevertheless, the results of the two studies differed. First, the overwhelming majority of respondents in Study 1 described choosing a career (university) as the *F-type* choice; there were almost no mentions of choosing a job and only few of choice in the domain of close

relationships. In contrast, in Study 2 the *F-type* choices were quite varied in content, covering the domains of job, career, education, and close relationships (e.g. whether to marry, to divorce, to change a partner, etc.); the choice of a place to study was mentioned by less than 20% of the respondents. Besides, in Study 2 there were descriptions of moral dilemmas (e.g., whether to give birth to a child in a case of an unplanned pregnancy).

In both studies, higher-scale ('fateful') choice situations were reported as more distant in time and more emotionally loaded, and the choice process as more mindful, compared to trivial choices. The weaker associations with choice – autonomy, unambiguity, and availability of information – were only revealed in Study 2, thanks to its larger sample. However, Study 1 respondents reported *F-type* choices as more satisfying, in contrast to Study 2 respondents who tended to see more important choices as less satisfying.

In our opinion, the differences described above can be explained, first of all, by the differences in age and social status of the respondents and differences in their life experience concerning a variety of challenging issues. In Study 1, the respondents were sophomore students (median age 19 years), whereas those in Study 2 were mostly working adults with university degrees (median age 28 years). Differences in the survey setting may also be important. Anonymity was provided in both cases, but in Study 1 it was not completely guaranteed by technical means. The online design of Study 2 could potentially encourage the respondents to be more open, whereas completing paper inventories in a room with the researcher present (Study 1) could prevent the respondents from describing morally challenging and critical situations from their private lives. It is also possible that the context of a university room in Study 1 could evoke memories of 'fateful' situations associated with this specific context.

That fact that all these differences in the results of both studies concern mainly 'fateful', rather than 'everyday' choices, supports our hypothesis about the qualitatively different character of choices of different scale. The *F-type* situation descriptions are more individualized, relate more to the biographical context, and evoke stronger feelings. In contrast, with 'everyday' choices, respondents are less likely to manifest social desirability, and these choices seem to be less sensitive to situational context.

Conclusion

Using an original approach, we specified a number of qualitative variables relevant to the description of choicework in situations of different scales: context and content of choice,

emotional attitude to the choice, satisfaction with the choice, its mindfulness, independence, difficulty, and significance. These variables are interdependent, representing different aspects of an integral process of choicework in uncertain life situations.

Based on these parameters, we made a phenomenological description of the situations of choices with different levels of subjective importance and compared their features. We found that significant and trivial choices have qualitative differences and are made in a different manner. In particular, they differ in duration, degree of independence, emotional and thematic content, strategies used, and many other characteristics. We also found that choice situations with different thematic content vary in their subjective importance and other qualitative parameters of choicework.

The results suggest that any discussion of choice necessarily requires specifying the scale of the choice situations and that the scientific findings obtained using everyday choice setting cannot be generalized to the larger-scale, subjectively important choices (and vice versa). A trivial choice task solved using rational or quasi-rational cognitive procedures presents a completely different psychological reality than an existential choice made in a situation with no clear alternatives and no criteria one could use to define whether a choice made is 'right' or 'wrong'. These findings indicate that subjective aspects of choices are an important field of positive psychology research.

References

- 1. Baumeister, R.F., Bratslavsky, E., Muraven, M., & Tice, D.M. (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*. 74(5), 1252–1265.
- 2. Bergson, H. (2001). Time and Free Will: An Essay on the Immediate Data of Consciousness. Mineola, NY: Dover Publications.
- 3. Fam, A. & Leontiev, D. (2013). Electoral Choice: Qualitative Dimensions and the Role of Personality. In: K.Larsen, G. Vazov, K. Krumov, J. Schneider (eds.). Advances in international psychology: Research approaches and personal dispositions, socialization processes and organizational behavior, P. 63–77.Kassel, Germany: Kassel University Press.
- 4. Iyengar, S. (2010). The Art of Choosing. NY: Twelve.

- 5. Keys, D.J. & Schwartz, B. (2007). "Leaky" rationality: how research on behavioral decision making challenges normative standards of rationality. *Perspectives on Psychological Science*, 2(2), 162-180.
- 6. Khan, U. & Dhar, R. (2007). Where There Is a Way, Is There a Will? The Effect of Future Choices on Self-control. *Journal of Experimental Psychology: General*, 136(2), 277–288.
- 7. Kierkegaard, S. (2004). Either/ Or. NY: Penguin.
- 8. Kohlbacher, F. (2006). The Use of Qualitative Content Analysis in Case Study Research. *Forum: Qualitative Social Research*, 7(1), Art. 21.
- 9. Krippendorf, K. (1980). Content Analysis: An Introduction to Its Methodology. Thousand Oaks, CA: Sage Publications.
- 10. Kvale, S. (1996). InterViews: An Introduction to Qualitative Research Interviewing. Thousand Oaks: Sage.
- 11. Leontiev, D. (2011, May-June). *Is there anything in choice beyond decision making? Toward the clarification of basic concepts.* Paper presented at the meeting of The International Conference on Behavioral Decision Making, Herzliya, Izrael.
- 12. Leontiev, D.A. (2014). Psikhologiya vybora. Chast I. Za predelami ratsionalnosti [Psychology of choice. Part I. Beyond the rationality]. *Psikhologicheskiy zhurnal*, *5*(35), 5–18.
- 13. Leontiev, D.A. & Shelobanova, E.V. (2001). Professionalnoe samoopredelenie kak postroenie obrazov vozmojnogo buduschego [Professional self-determination as building images of possible future]. *Voprosy psykhologii, 1, 57–65*.
- 14. Leontiev, D.A., Mandrikova, E.Y., & Fam, A.K. (2007). Razrabotka metodiki diagnostiki protsessualnoy storony vybora [Development of a method of assessment of processual aspects of choice]. *Psikhologicheskaya diagnostika*, 6, 4-25.
- 15. Leontiev, D.A., Osin, E.N., & Fam, A.K. (in preparation). Assessing the Subjective Quality of Choicework.
- 16. Maddi, S.R. (1983). Existential Analysis. In R. Harre, R. Lamb (Eds.) *The encyclopedic dictionary of psychology* (pp. 223-224). Oxford: Blackwell.
- 17. Maddi, S.R. (1998). Creating Meaning Through Making Decisions. In P.T.P. Wong & P.S. Fry (Eds.), *The Human Quest For Meaning. A Handbook of Psychological Research and Clinical Applications* (pp. 1–25). Mahwah, NJ: Lawrence Erlbaum Associates.
- 18. Savani, K., Markus, H.R., Naidu, N.V.R., Kumar, S., & Berlia, N. (2010). What counts as a choice? U.S. Americans are more likely than Indians to construe actions as choices. *Psychological Science*, *21*(3), 391–398.

- 19. Schwartz, B. (2012). Choice, Freedom, and Autonomy. In P.R. Shaver & M. Miculincer (Eds.), *Meaning, Mortality, and Choice: The Social Psychology of Existential Concerns* (pp. 271–287). Washington, DC: American Psychological Association.
- 20. Schwartz, B. (2004). The paradox of choice Why more is less. New York, NY: Harper Perennial.
- 21. Simonson, I. (2007). Decision Making. *Encyclopedia of Social Psychology*. SAGE Publications. 15 Oct. 2009.
- 22. Vygotsky, L.S. (1983). Istoriya razvitiya vysshikh psikhicheskikh funktsii [History of development of higher mental functions]. In *Sobranie Sochineniy* [Collected Works] (Vol. 3, pp. 5–328). Moscow: Pedagogika.

Appendix. Choice profile questionnaire

Please answer the following questions which concern your above-described situation of choice.

1. How long ago did the situation happen in your life?							
† (1) today	7	(4) this year					
7 (2) this week	7	(5) more tha	(5) more than a year ago				
7 (3) this month	(3) this month (6) years ago						
2. Do the consequences of this choice have an impact on your present life?							
† (1) have a very s	trong im	pact	↑ (4) have a slight impact				
† (2) have a rather	significa	ant impact	$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $				
7 (3) have a mode	rate impa	act	↑ (6) I don't know				
3. Were the alternatives of choice evident for you from the very beginning?							

7 (2) I don't know

7 (3) no

† (1) yes

4. Were the criteria f	or comparison o	f alternatives	evi	ident for you?	
† (1) yes	7 (2) I don't k	now	7	(3) no	
5. To what degree die	d you possess th	e information	ne	eeded for making a ch	oice?
Please estimate in pe	r cent (from 0 to	100%):			. %
6. Did the choice evo	oke many emotic	ons in you?			
(1) a vast number of	emotions				
(2) many emotions					
(3) not too many emo	otions				
(4) almost none					

Contact details and disclaimer:

Anna K. Fam

National Research University Higher School of Economics (Moscow, Russia). International Laboratory of Positive Psychology of Personality and Motivation. Senior Research Fellow E-mail: afam@hse.ru

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