NATIONAL RESEARCH UNIVERSITY
HIGHER SCHOOL OF ECONOMICS

Konstantin G. Soldatnikov, Dmitry A. Leontiev

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Konstantin G. Soldatnikov[1], *Dmitry A. Leontiev*[2]

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This study focuses on the relationships between motivation (internal, external and other types of regulation) and the subject's experiences of different activities, like learning and leisure. We examine activity related experiences in light of the three-dimensional model of experiences that grew from Csíkszentmihalyi's flow theory. The model distinguishes three dimensions of experiences accompanying every activity – pleasure, meaning, and effort – the experience of void being defined as the absence of all three). We conducted a correlation study on a sample of students (N = 357) using the Activity-related Experiences Assessment (AREA) Scale (Leontiev, 2015) to measure experiences in learning and leisure; Universal Perceived Locus of Causality Scale (Ryan, Connell, 1989; Russian version by Sheldon, Suchkov, Osin, 2015). Strong correlations were observed between different types of motivation and experiences related to the same activity but not to different activities.

Key words: self-determination theory, experiences, motivation, intrinsic motivation, extrinsic motivation, pleasure, meaning, effort, void.

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[1] International Laboratory of Positive Psychology of Personality and Motivation, National Research University Higher School of Economics (psysold@mail.ru)

[2] International Laboratory of Positive Psychology of Personality and Motivation, National Research University Higher School of Economics (dmleont@gmail.com)

Theoretical background

The activity of learning can be analyzed in terms of motivation and experiences. Motivational studies show that autonomous forms of motivation have a positive effect on personnel engagement (Connell & Wellborn, 1990), on the quality of activity (Miserandino, 1996), and on academic successes (Grolnick & Ryan, 1987). Students who had autonomous motivation to do their homework, were less likely to drop out of school (Daoust, Vallerand, & Blais, 1988, Vallerand, 1991). Experience studies demonstrate that students most enjoyed the school subjects they chose and those providing a balance of challenges and skills (Mayers, 1977). But how do both these aspects of activity relate to each other?

In the present study we investigate the relationships between what the subject seeks in any activity (motivation) and the subject's experiences (pleasure, effort, meaning and void) in the given activity.

Self-determination theory

We can distinguish several aspects of motivation: its intensity (high or low), direction (work or relationships) and quality (intrinsic or extrinsic). The quality of motivation refers to the type of motivation that stands behind behavior (Vansteenkiste, Lens, & Deci, 2006). Specifically, it is defined in terms of a continuum of different types of motivation and motivational regulation.

At one pole of the continuum, *amotivation* refers to the lack of intentional regulation of one’s behavior. In other words, people see no reason why they do something.

At the opposite pole, *intrinsic motivation* refers to doing something because the activity itself is interesting or enjoyable. Intrinsic motivation is associated with a high level of autonomy and enjoyment (Ryan & Deci, 2000).

Extrinsic motivation is based on what a person can expect as a result of performing activities – a reward, promotion, permission to play computer

games.

Studies show that the distinction between intrinsic motivation and extrinsic motivation is complex (Ryan & Deci, 1989). Extrinsic motivation ranges from low to high levels of self-determination. This shift refers to the process of internalization (Ryan, Deci, & Grolnick, 1995).

Figure 1 The Self-Determination Continuum (after Ryan & Deci, 2000)

Behavior	Non-Self-Determined					Self-Determined
Motivation	Amotivation	Extrinsic				Intrinsic
Regulation	Non-regulat.	External	Introjected	Identified	Integrated	Intrinsic
Perceived locus of causality	Impersonal	External	Somewhat external	Somewhat internal	Internal	Internal
Regulatory processes	Nonintentional, non-valuing, incompetence, lack of control	Compliance, external rewards and punishments	Self-control, ego-involvement, internal rewards and punishments	Personal importance, conscious valuing	Congruence, awareness, synthesis with the self	Interest, enjoyment, satisfaction

Figure 1 shows the four regulation subtypes distinguished within extrinsic motivation: external, introjected, identified and integrated.

External regulation occurs when one feels compelled to do something, when behavior is driven by a fear of punishment or a promise of reward. This kind of motivation is completely devoid of self-determination. It is replaced by the control of external agents (such as parents, teachers, bosses), for example, "If I do not finish this report by the end of the week, my boss will give me the sack."

Introjected regulation is based on learned rules, requirements that force people to act this way rather than that. The subject acts this way, and not otherwise, in order to escape from feelings of guilt or shame or to experience self-respect. A student, for example, will not eat with his hands in the dining room, not because a controlling teacher is standing nearby, but because he or she has learned from the environment that this is not approved.

An example of introjected regulation: "Bright students do not cheat."

Identified regulation means that the subject sees his or her actions as important. That is, he or she acts this way not because he or she experiences external or internal pressure, as in the previous types of regulation, but because the activity or its result is valuable to him or her. In other words, we act because activity is important for us, even if we do not enjoy the process. The identified regulation can be illustrated by the following example: "I am ready to postpone a sleep-in order to complete my thesis".

Integrated regulation represents the last stage of internalization. This kind of regulation is the closest to intrinsic motivation; both these types together are sometimes labeled autonomous motivation. Nevertheless, it differs from the intrinsic motivation in that its origins are extrinsic.

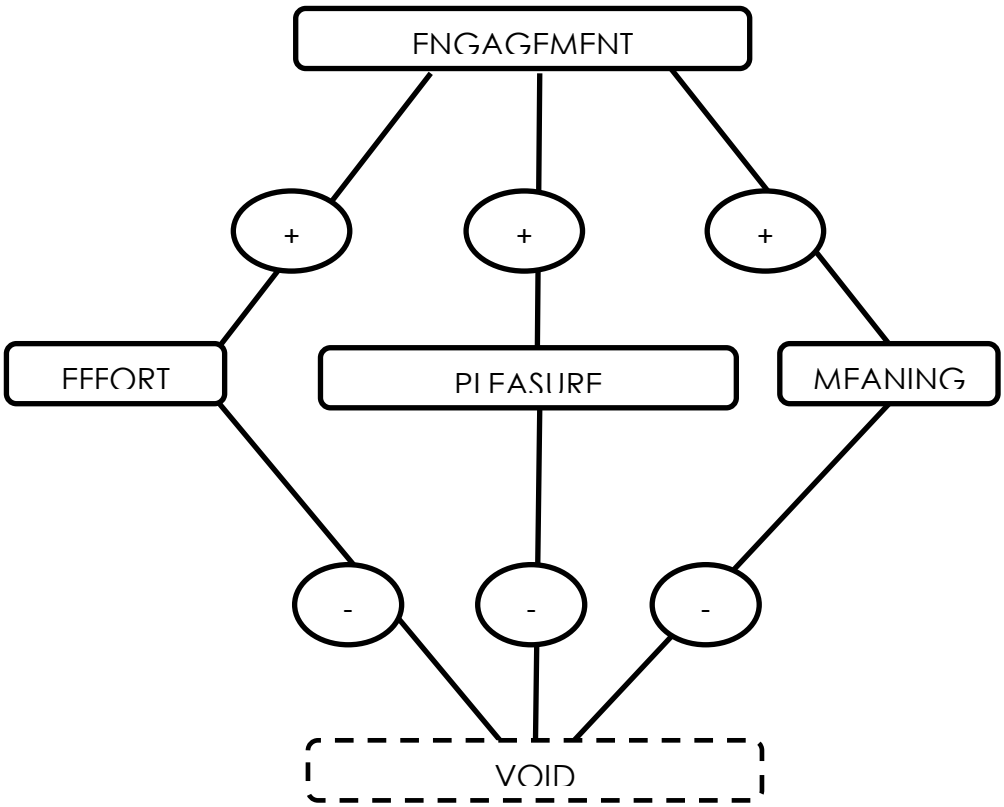
The model of experiences

Another target of our study is activity-related experiences. Csikszentmihalyi described in his theory of optimal experiences in which a person fully concentrated and engaged in an activity experiences flow (Csikszentmihalyi, 1988). He offers an interesting observation: a person experiences joy and satisfaction not when he is lying relaxed in front of the TV but rather when his or her mind is awakened and tense, and concentrated on a meaningful activity.

A three-dimensional model of optimality

Csikszentmihalyi defined flow as an optimal experience. Flow can be experienced not only in sports, music, games, professional activities but also in socially undesirable activities such as crime, which can hardly be called optimal (Volskounsky, Smyslova, 2003). As the research progressed, the question arose about the criteria for optimality. In order to clarify the criteria for optimality of flow and correlating it with other kinds of experiences, Leontiev (2015) proposed a three-dimensional model of activity-related experience, developed in 2006-2007 in discussions with Csikszentmihalyi and Nakamura.

Figure 2. The Three-dimensional model of activity-related experiences



The model offers three criteria for the evaluation of a special activity: the experiences of pleasure, meaning and effort (Leontiev, 2015).

The effort experience tells us about the efficacy and controllability of the activity; the pleasure experience about its immediate affective coloring; and the meaning experience about its relation to broader contexts. The lack of all the three components is manifested as an experience of void, which Csikszentmihalyi described as mental entropy. The combination of all three components constitutes an optimal experience of vital engagement (Nakamura, Csikszentmihalyi, 2003).

Based on the theories mentioned above, we investigate the relationships between the qualitative characteristics of activity-related experiences and the quality of activity-related motivation.

We hypothesized that the quality of motivation for a particular activity will have stronger correlations with the experiences of this activity, but not of other activities.

Method

Participants and procedure

A sample of 357 first-year students (16% male) of two major Moscow universities were involved in the study. The age of participants was 17-24 years (M = 18.35; SD = 1.00). The respondents who gave the same answer to all items and those who had more than three missing responses were excluded from the analysis. A paper-and-pencil form of the questionnaire was presented to the respondents during their classwork.

Instruments

Quality of motivation. We used Universal Perceived Locus of Causality Scale (Ryan, Connell, 1989; Russian version by Sheldon, Suchkov, Osin, 2015) to assess participant motivation. Participants were asked to agree or disagree with statements about the reasons why they attend classes at university. They rated their motivational reasons using a 5-point Likert scales ranging from 1 (strongly disagree) to 5 (strongly agree). Each statement was aimed to identify one type of regulation: amotivated (e.g., "honestly, I don't know why I attend classes"), extrinsic (e.g., "because classes at university help (or will help me in the future) to make money or get some other benefit"), introjected positive ("because I want to be proud of myself"), introjected negative ("because I would feel guilty if I did not attend classes"), identified ("because I really appreciate the studies at university"), or intrinsic ("because it is interesting to study at university").

Activity-related experiences. We used the Activity-related Experiences Assessment Scale (AREA; Leontiev, 2015) to process experiences in learning and leisure. Three 6-point Likert scales were used to measure each of the four experiences effort (e.g., "for doing this a lot of energy is needed"), meaning ("I know why I'm doing this"), pleasure ("this activity gives me pleasure"), and void ("I'm bored with this activity") experiences both of study and favorite leisure activities separately.

Results

Descriptive statistics. The means, standard deviations and Cronbach's alpha coefficients for the variables are presented in Table 1.

Table 1

Descriptive Statistics of Outcome Measures (N = 357)

	Female		Male		Total		
Variable	M	SD	M	SD	M	SD	Cronbach's Alpha
AE – pleasure (study)	3.54	0.91	3.42	1.03	3.52	0.93	0.85
AE – effort (study)	4.33	0.94	3.93	1.08	4.27	0.90	0.85
AE – meaning (study)	4.39	0.94	4.23	1.08	4.36	0.96	0.83
AE – void (study)	2.80	0.92	2.90	1.05	2.82	0.94	0.94
AE – pleasure (leisure)	5.55	0.59	5.52	0.53	5.54	0.58	0.92
AE – effort (leisure)	3.06	1.38	2.90	1.45	3.04	1.39	0.90
AE – meaning (leisure)	4.77	1.07	4.97	0.98	4.80	1.06	0.88
AE – void (leisure)	1.55	0.65	1.70	0.86	1.57	0.68	0.87
Amot	1.80	0.90	1.86	0.84	1.81	0.89	0.89
Extern	2.52	0.98	2.56	1.00	2.53	0.91	0.90
Intr (neg.)	2.92	1.08	2.48	1.08	2.85	1.09	0.91
Intr (pos.)	3.36	0.96	3.08	1.04	3.32	0.98	0.88
Identif	3.85	0.70	3.60	0.82	3.81	0.72	0.92
Intrin	3.59	0.79	3.33	0.81	3.55	0.80	0.90

Note.; AE – Activity-related Experiences;

Bivariate correlations. We performed a correlation analysis between different types of regulation variables and optimal experience variables.

Table 2

Pearson Correlations of Activity-related Experiences in Study and Quality of Motivation in Study

Variable	*r*					
	Amotiv.	Extern.	Intr(neg)	Intr(pos)	Identif	Intrin
AE – pleasure (study)	–.40**	–.18**	–.08	.26**	.50**	.69**
AE – meaning (study)	–.53**	–.20**	–.12*	.28**	.57**	.51**
AE – effort (study)	.01	.10*	.21**	.20**	.047	–.04
AE – void (study)	.47**	.30**	.18**	–.14**	–.51**	–.54**

*Note. *p < .05, **p < .01.*

Strong correlations were observed between different types of regulations and experiences related to the same (study) activity. The higher the quality of motivation, the more autonomous the locus of causality, and the higher its correlations with the experiences of pleasure and meaning The experience of void shows inverted dynamics.

Table 3

Pearson Correlations of Activity-related Experiences in Leisure and Quality of Motivation in Study

Variable	*r*					
	Amotiv.	Extern.	Intr(neg)	Intr(pos)	Identif	Intrin
AE – pleasure (leisure)	–.08	–.10*	–.17**	–.02	.09	.04
AE – meaning (leisure)	–.06	–.07	–.18**	–.05	.07	.05
AE – effort (leisure)	.09	.03	.05	.01	–.04	–.02
AE – void (leisure)	.17**	.26**	.24**	.05	–.10*	–.07

*Note. *p < .05, **p < .01.*

Weak or nonsignificant correlations were observed between experiences in leisure and the quality of motivation to study.

Discussion

If a student experiences void most of the time when learning, this experience will tend to extend to leisure activities as well. Analogous results were observed with effort: if a person experiences effort in one activity, most likely he or she will experience effort in the other.

The pleasure experience and the meaning experience in two different activities correlate more weakly, on the margin of a minimal traditionally acceptable level of statistical significance ($p < 0.05$).

A low quality of motivation exemplified in amotivation and external regulation do not bring pleasure associated with an activity, because we either do not understand why we are engaged in something, or are forced to do it. However, along with the internalization of motivation, what motivates us is becoming a part of our inner world, and the activity is becoming more personalized, valuable and enjoyable. As the value, interest and pleasure associated with the activity increase, intentional deliberation becomes smoother and less effortful. This is why the highest experience of effort is in the middle of the continuum, and the lowest around both poles. One effortless pole refers to passive letting go, and another one to creative thrust when everything is being successfully done, as if by itself.

The dynamics of the void experience are precisely the opposite of that of pleasure. *The less we know why we are doing something, the less we enjoy what we do, the more likely we are amotivated and experience void*.

The dynamics of meaning experience is similar to that of pleasure except that the highest value refers to integrated rather than intrinsic motivation. The experience of meaning emerges from relations to meaningful contexts, rather than immediate enjoyment. *The pleasure*

experience associated with intrinsic motivation was stronger than with other types of motivation. Being intrinsically motivated, the subject autonomously decides what to do, and is motivated by one's own interest in the activity.

Limitations

The main limitation of the study was its cross-sectional design that does not allow the identification of causal relationships between the experiences and motivation. The continuation of our study suggests a follow up study with part of our sample.

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Konstantin G. Soldatnikov

International Laboratory of Positive Psychology of Personality and Motivation, National Research University Higher School of Economics (psysold@mail.ru)

Dmitry A. Leontiev

International Laboratory of Positive Psychology of Personality and Motivation, National Research University Higher School of Economics (dmleont@gmail.com)

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