



NATIONAL RESEARCH UNIVERSITY
HIGHER SCHOOL OF ECONOMICS

Dmitry D. Suchkov

**THE SELF-CONCORDANCE
MODEL: THE EFFECTS OF
AUTONOMY, EFFORT AND GOAL
PROGRESS ON SUBJECTIVE
WELL-BEING IN THE US AND
RUSSIA**

BASIC RESEARCH PROGRAM

WORKING PAPERS

SERIES: PSYCHOLOGY
WP BRP 64/PSY/2016

This Working Paper is an output of a research project implemented at the National Research University Higher School of Economics (HSE). Any opinions or claims contained in this Working Paper do not necessarily reflect the views of HSE

**THE SELF-CONCORDANCE MODEL: THE EFFECTS OF
AUTONOMY, EFFORT AND GOAL PROGRESS ON
SUBJECTIVE WELL-BEING IN THE US AND RUSSIA**

How one perceives one's own level of autonomy has important consequences for motivational features of goal pursuit and well-being during this process. We tested the hypothesis, inspired by Self-Determination Theory, and the Self-Concordance model, that pursuit of self-concordant goals, emanating from autonomous motivation results in an increase of well-being. This study employed a prospective design assessing several variables related to the goal: intended effort, actual effort, and progress in achieving. In accordance with the self-concordance model, these variables mediated the influence of the autonomy of the goal on well-being during the process of achievement. We replicated the model using SEM methodology, on both the US (N = 200) and the Russian (N = 410) samples. The additional modifications we made in the model kept the main logic of the previous research. Implications and future directions are discussed.

Keywords self-determination theory, self-concordance, motivation, goal pursuit, autonomous motivation, controlled motivation

JEL Classification: Z

¹ International Laboratory of Positive Psychology of Personality and Motivation, National Research University Higher School of Economics (dsuchkov@hse.ru)

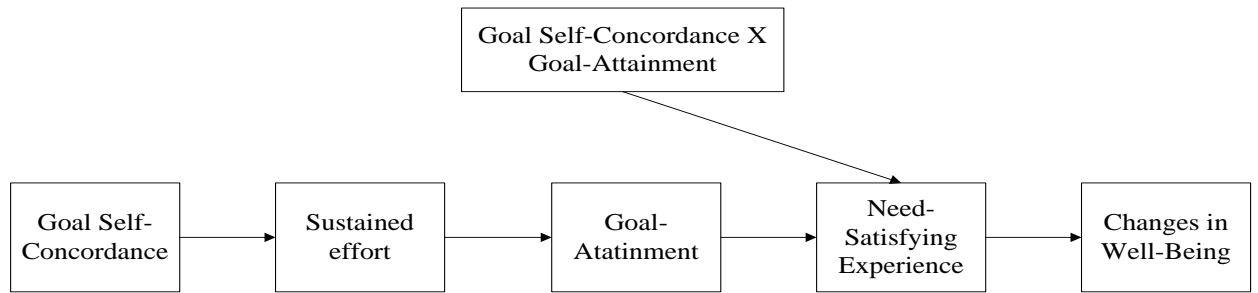
Theoretical background

The important role of autonomy in our behaviour has been repeatedly shown in Self-Determination Theory (SDT) research (Deci & Ryan, 2000; Ryan, Sheldon, Kasser, & Deci, 1996). Pursuing a self-generated goal is not the same as being pushed by external forces or circumstances in terms of successful performance, well-being outcomes, and later motivation. Nevertheless, Sheldon (2014) shows that even self-generated goals might be *out of touch* with our inner values and interests. Using Kahneman's concept of two systems (Kahneman, 2013), according to which self-integrated and non-integrated levels of personality are postulated, Sheldon and Elliot (1998) hypothesized that goals originating from the former level are said to be *self-concordant* and characterized by deep links with the core-self. Self-concordant goals represent people's real values and natural tendencies to grow and develop and are operationally defined by authors as "the rated extent to which people pursue their set of personal goals with feelings of intrinsic interest and identity congruence, rather than with feelings of introjected guilt and external compulsion" (Sheldon & Houser-Marko, 2001). The concepts of intrinsic and identified motivation were proposed by the authors of SDT (Deci, 1975; Deci & Ryan, 2000), in accordance to which the former are defined as "the doing of an activity for its inherent satisfactions rather than for some separable consequence", and the latter as "identification with the personal importance of a behaviour and thus acceptance of regulation as his or her own".

The goals which come from the surface level of personality containing internal sanctions and introjections poorly integrated with the self, are *non-concordant* or *controlled*. Such goals emanate from external forms of regulation in terms of motivational continuum of SDT (Deci & Ryan, 2000). Setting and pursuing such goals increases the risk of failure or missing the expected emotional benefits from possible success (Sheldon & Kasser, 1998).

The self-concordance model explains the mechanics of *conative* processes leading from goal adoption to goal attainment (Sheldon & Elliot, 1999). Two groups of factors may be distinguished in the model: those which promote goal-striving and attainment; and those which link goal attainment with changes in well-being. In relation to the first part, pursuing self-concordant goals engenders a sustained effort to achieve them and thus they are more likely to be attained. While controlled goals positively associate only with initial efforts, not with later real efforts (Sheldon & Elliot, 1998). In relation to the second part of the model, the links between goal attainment and changes in well-being are considered. Sheldon and Houser-Marko (2001) showed that successful attainment predicts better adjustment to the environment, increased satisfaction of basic needs, which leads to increased daily happiness. Figure 1 presents the entire model, which has been tested extensively in the previous research.

Figure 1. The Self-Concordance Model (after Sheldon, Elliot, 1999; Sheldon, 2002)



The self-concordance model highlights the role of autonomy in the conative cycle, showing why some goals do not make us happier and do not lead to personal development. First, the less controlled a goal is, the more sustained the effort a person will put into achieving it, and the more likely the goal will be attained. Second, attained self-concordant goals provide more basic need's fulfilment, which is a strong predictor of increased well-being, as SDT postulates.

In the current study, which included three measurements during the semester, we developed an extended version of self-concordance model, to which were added measures of mid-semester progress and mid-semester well-being, and a retrospective measure of the entire effort at the end of the semester. We suggest that these modifications bring more transparency to the structure and mechanics of the conative process. The hypothesized structure of extended model is depicted in Figure 2.

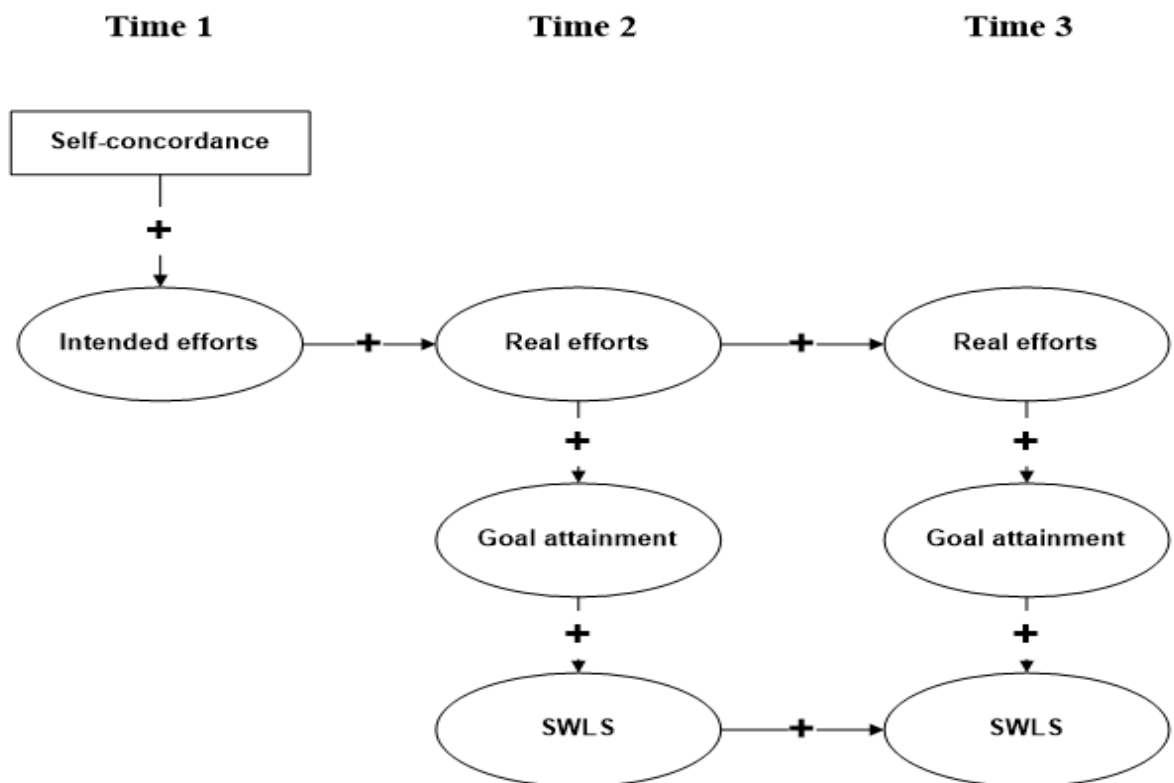


Figure 2. Extended self-concordance model.

Empirical study

We conducted a study to validate the model using a Russian sample, which has not been done before. Moreover, we extended the previous findings by enlarging the model, but saving the main links and the logic of the structure.

First, we replicated most steps of the initial research by Sheldon and Elliot (1998, 1999), evidenced the representativeness of model for Russian sample. In addition, we replicated it on a new US sample and showed the stability of the results on the combined sample. We checked the findings hypothesized in past research (Sheldon & Houser-Marko, 2001), in accordance to which success in the pursuit of personal goals increases participants' level of everyday happiness, and that effect is even more salient for self-concordant goals. Second, we kept the traditional design for this research line to attain better validity of our results, using the same experimental methodology and similar wording for assessing goal variables. Third, we used advanced statistical methodology, which is more in line with modern trends. Fourth, we enriched the picture, by replicating the very same pattern of the model on Time 2 and Time 3 periods, making the picture more symmetric and stable. Fifth, in our study participants were limited to generating goals only in domains linked to three basic psychological needs of autonomy, competence, and relatedness. Doing that we put the goal pursuit process into the context of basic need fulfilment implicitly modulating the lack of need-satisfying experience in our design procedure.

Method

Participants

Participants included two samples, one comprised by US university students from the University of Missouri (Sample 1), and another comparable Russian student sample from universities in Omsk and Tomsk (Sample 2). The resulting sample size and demographic data are shown in Table 1. The percentage of missing data due to attrition in combined sample by the end of the longitudinal period was 35%.

Table 1. The demographic composition of the samples.

| Sample | N | Gender (% Female) | Age, M (SD) |
|-----------|-----|-------------------|--------------|
| 1. US | 200 | 69.8 | 20.53 (4.73) |
| 2. Russia | 410 | 81.0 | 19.83 (3.52) |

Procedure

Participants took part in the semester-long study in exchange for extra course credit. No later than by the end of first two weeks of the semester participants from both samples completed the

questionnaire packet in which they were asked to generate and rate three personal goals that they would be pursuing during the semester. They also were asked to rate the degree of effort they expect to put into each goal, the probability of success, and expected changes in well-being reaped from the possible successful attainment. The questionnaire also included measures of their well-being. Twice during the semester (6 and 12 weeks after the first session) participants completed a questionnaire assessing the degree of attainment of each of their three goals, the degree of actual effort, and their current level of well-being. At Time 2 and Time 3 we used same measures of well-being as at Time 1. Participants were randomly assigned to set up their three goals in one specific domain of their lives. That domain could be related to one of three basic psychological needs postulated in SDT: autonomy, competence or relatedness.

Measures

Goal descriptions. Participants were asked to list three personal goals that they planning to pursue during the semester. The assessment of goal constructs was based on the personal project model (Little, 1993) and the personal striving construct (Emmons, 1986). The procedure stayed in line with the methodology used by the initial research of the self-concordance model. The assessment was carried out at the beginning of the semester, using the following steps.

First, the participants were invited to know more about the three spheres of autonomy, competence and relatedness, and related terminology. The instructions noted that every person has to deal with struggles in these areas and successfully solving problems in these areas is essential for a positive and healthy life.

Second, for training and a better understanding of the meaning of the concepts of autonomy, competence, and relatedness participants listed from three to five problems in each of these areas. Then they measured how pronounced the problems in each area of their lives were, and how much they want to solve them. A scale ranging from 1 (*not difficult problems / do not want to solve them at all*) to 5 (*difficult problems / want to solve them very much*) was used.

Third, after being shown the examples, participants were randomly assigned and asked to list three personal goals they plan to work on during the semester in one of three life domains: autonomy, competence or relatedness. Goals listed by the participants included “find new friends”, “get good grades”, “get financial independence”, “avoid control from others” and “keep myself in good shape”.

Goal self-concordance. At Time 1 we asked participants to rate their reasons for pursuing each goal. They rated motivation using a 5-point Likert scale from 1 (*not at all because of this reason*) to 5 (*completely because of this reason*) for assessing external, introjected, identified and

intrinsic reasons, which sampled a continuum of perceived locus of causality for behaviour (Ryan & Connell, 1989). The external reason was "You might strive for this goal because somebody else wants you to, or because the situation seems to compel it". The introjected reason was "You might strive for this goal because you would feel ashamed, guilty, or anxious if you didn't". The identified reason was "You might strive for this goal because you really believe that it's an important goal to have". The intrinsic reason was "You might strive for this goal because of the enjoyment or stimulation that goal provides you".

As in the past research (Sheldon & Elliot, 1999), for each participant a self-concordant variable was formed by summing the three identified and three intrinsic ratings (autonomous rating) and then subtracting the three introjected and the three external ratings (controlled rating). Table 2 provides an overview of means, standard deviations and Cronbach's α of these variables for our samples.

Table 2. Descriptive statistics of self-concordance variables.

| Sample | Autonomous ratings | Controlled ratings | Self-Concordance ratings |
|-----------|---|---|--|
| 1. US | M = 4.05; SD = .69; α = .78. | M = 2.55; SD = .89; α = .74. | M = 1.49; SD = 1.17; α = .67. |
| 2. Russia | M = 4.11; SD = .82; α = .83. | M = 2.06; SD = .92; α = .80. | M = 2.04; SD = 1.30; α = .70. |

Effort. At Time 1 participants were asked to rate effort they planned to put into their goals. The assessment was done by using one item: "How hard do you expect to try for each goal". This item was rated on a 1 (*not at all hard*) to 5 (*extremely hard*). The actual effort for each goal at Time 1 and Time 2 was assessed using two items: "I worked hard on this goal" and "I put a lot of effort into this goal". An intended effort variable at the start of the semester, end-of-semester and mid-semester effort variables were formed by averaging these six variables. Table 3 provides an overview of means, standard deviations and Cronbach's α of these variables for each sample and time period.

Table 3. Descriptive statistics of effort variables.

| Sample | Intended effort (Time 1) | Actual effort (Time 2) | Actual effort (Time 3) |
|-----------|--|---|---|
| 1. US | M = 3.83; SD = .75; $\alpha = .73$. | M = 3.24; SD = .72; $\alpha = .79$. | M = 3.31; SD = .75; $\alpha = .81$. |
| 2. Russia | M = 3.93; SD = .75; $\alpha = .72$. | M = 2.89; SD = 1.01; $\alpha = .87$. | M = 2.83; SD = 0.50; $\alpha = .86$. |

Goal progress. Goal progress was assessed at mid-semester period (Time 2) and at the end of the semester (Time 3) using two items for each of three goals “*I made good progress towards this goal*” and “*I have achieved, or nearly achieved this goal*”. All ratings were made on 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). End-of-semester and mid-semester attainment variables were formed by averaging these six variables. Table 4 provides an overview of means, standard deviations and Cronbach’s α of these variables for each sample and time period.

Table 4. Descriptive statistics of progress variables.

| Sample | Mid-semester attainment (Time 2) | Semester attainment (Time 3) |
|-----------|---|---|
| 1. US | M = 3.06; SD = .77; $\alpha = .71$. | M = 3.22; SD = .74; $\alpha = .77$. |
| 2. Russia | M = 2.80; SD = 1.01; $\alpha = .85$. | M = 3.09; SD = 0.92; $\alpha = .83$. |

Well-being. We used measures of positive mood, negative mood, and life satisfaction to assess participant’s well-being (Diener, 1984) at each of the three time periods of our study. Specifically, we used Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988), Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985), and their well-validated Russian analogs (Osin, 2012; Osin & Leontev, 2008). Table 5

provides an overview of means, standard deviations and Cronbach's α of these variables for each sample and time period.

Table 5. Descriptive statistics of Well-Being variables.

| | | N | Mean | St. dev. | N | Mean | St. dev. | N | Mean | St. dev. | α |
|-----------------|---|---------------|------|----------|---------------|------|----------|---------------|------|----------|------------|
| | | Time 1 | | | Time 2 | | | Time 3 | | | |
| SWLS | 1 | 20 | 3.55 | .72 | 15 | 3.55 | .61 | 15 | 3.62 | .74 | .83/.74/.8 |
| | 2 | 40 | 3.45 | .65 | 29 | 3.45 | .67 | 24 | 3.46 | .76 | .77/.79/.8 |
| Positive affect | 1 | 20 | 3.50 | .63 | 15 | 2.55 | .78 | 15 | 3.50 | .58 | .85/.87/.8 |
| | 2 | 41 | 3.60 | .71 | 29 | 2.35 | .73 | 24 | 3.49 | .72 | .79/.87/.8 |
| Negative affect | 1 | 20 | 2.33 | .68 | 15 | 7.66 | 3.42 | 15 | 2.48 | .80 | .81/.86/.8 |
| | 2 | 41 | 2.20 | .78 | 29 | 8.40 | 2.91 | 24 | 2.41 | .836 | .85/.89/.8 |

1 – US; 2 – Russia.

Translation strategy

In all cases where the instruments had no existing Russian version, the translation of the items was performed as follows. A Russian-speaking expert in the field of positive psychology and personality psychology prepared an initial translation, which was reviewed independently by five experts. One “referee” expert integrated all the comments, after which the resulting Russian version was back-translated and reviewed by an English-speaking expert in the same field. All the discrepancies were discussed by the expert team and corrected.

Data analysis strategy

The analysis involved several stages. At the first stage, we focused on the “inception-to-attainment process”, which refers to the first part of self-concordance model. We performed correlation analysis using SPSS version 22 to replicate the findings of Sheldon and Elliot (1998) showing associations between autonomy, contortedness and goal attainment during the semester. Next, in order to test mid-term effort as a mediator of the link between self-concordance and attainment, we used Mplus 7 software (Byrne, 2011) to conduct a path analysis. At the second stage, we focused on the second part of self-concordance model: “attainment-to-well-being”. In line with the logic of (Sheldon & Elliot, 1999), we performed correlational analysis to look for associations of well-being measures with mid-semester and end-of-semester progress variables. We proceeded by using path analysis to model the combination of these associations. At the third stage, we combined the findings of stages one and two and developed a full SEM model, joining both parts of the model together. All the models were tested in the US and Russian samples independently, as well as in the combined sample. In all analyses, we used a Full-Information

Maximum Likelihood (FIML) approach (MLR estimator in Mplus) to deal with the missing data (Byrne, 2011).

Because a longitudinal study usually involves the attrition of some respondents over the period of observation, and the statistical procedures we used were dependent on sample size, we decided to merge the Russian and US samples. This was because, first, we found that the correlation patterns in two cultures were generally similar. Second, as part of this project, we conducted tests of measurement invariance. Despite the fact that we were unable to confirm the scalar invariance of the measures, metric invariance was achieved in most cases. In order to reduce the bias associated with non-invariant intercepts, we standardized the scores within groups before combining the samples.

Results

The inception-to-attainment process

We performed correlation analysis with the autonomous and controlled facets of self-concordance, effort variables, attainment variables, and intended effort variables separately in both the Russian and US samples. Autonomy and controlledness were significantly correlated in the Russian sample, $r = -.11$, $p < .05$, whereas in US sample they were not, $r = -.07$. Autonomy was associated with mid-semester and end-of-semester attainment in the Russian sample, $r = .13$, $p < .05$; $r = .17$, $p < .01$, whereas in the US sample these findings were not replicated ($r = -0.1$; $r = .07$, n.s.). Intended effort was positively associated with autonomy in both US and Russian samples, $p = .47$, $p < .001$; $p = .33$, $p < .001$; whereas the respective association for controlledness was only reached significance level in the US sample, $p = .15$, $p < .05$.

We conducted mediation analysis (by testing indirect effect in the Mplus path analysis framework) in the combined sample with semester attainment as the dependent variable, self-concordance (autonomy, and controlledness) as independent variables, and mid-semester effort as the mediator of these associations.

Path analysis showed that autonomy had a direct effect on actual efforts at Time 2 ($\beta = .12$, $p < .05$), which, in turn, was a significant predictor of end-of-semester attainment in the combined sample ($\beta = .50$, $p < .001$). The mediational hypothesis was supported by the significant indirect effect of autonomy at Time 1 on goal attainment at Time 3 ($r = .06$, $p < .05$). The path between controlledness and mid-semester efforts, as well as the indirect effect of controlledness on end-of-semester attainment, were non-significant (Figure 3).

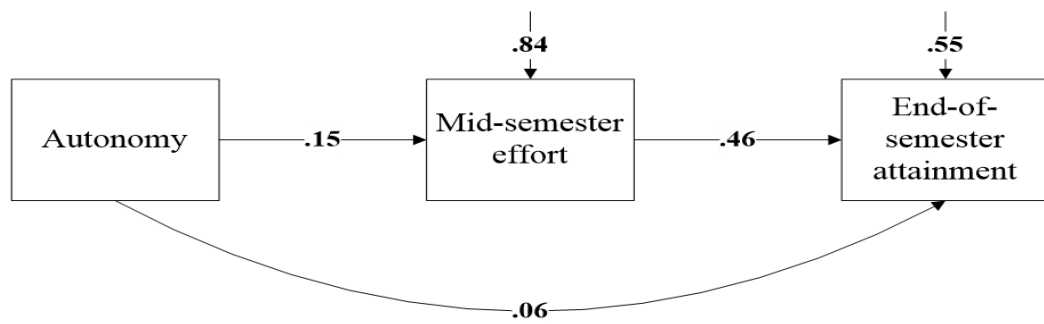


Figure 3. The mediational model for the autonomy to attainment effect (replicated by Sheldon and Elliot's (1998) regression model).

Note: All paths are significant on the level $p < .05$.

The attainment-to-well-being process

Correlation analysis was conducted to find out the associations of mid- and end-of-semester attainment variables with well-being variables for our samples.

Table 6. Correlations between attainment and well-being measures in samples US (above the diagonal) and Russia (below diagonal).

| | SWLS (Time 2) | SWLS (Time 3) | PA (Time 2) | PA (Time 3) | NA (Time 2) | NA (Time 3) | Mid-semester Attainment (Time 2) | Semester Attainment (Time 3) |
|----------------------------------|---------------|---------------|-------------|-------------|-------------|-------------|----------------------------------|------------------------------|
| SWLS (Time 2) | -- | .719** | .429** | .332** | -.458** | -.441** | .208* | .278** |
| SWLS (Time 3) | .508** | -- | .192* | .396** | -.367** | -.527** | .146 | .310** |
| PA (Time 2) | .449** | .214** | -- | .491** | -.135 | -.016 | .296** | .118 |
| PA (Time 3) | .218** | .521** | .370** | -- | .004 | -.225** | .129 | .132 |
| NA (Time 2) | -.369** | -.254** | -.402** | -.231** | -- | .574** | -.126 | -.173* |
| NA (Time 3) | -.254** | -.494** | -.263** | -.499** | .570** | -- | .073 | -.175* |
| Mid-semester Attainment (Time 2) | .205** | .133 | .242** | .145* | -.115 | -.088 | -- | .386** |
| Semester Attainment (Time 3) | .137* | .198** | .155* | .261** | -.030 | -.164* | .502** | -- |

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

The SWLS and PANAS scores demonstrated moderate correlations in both measurements and both samples. Mid-semester goal attainment shown positive significant associations with both SWLS and PA, and non-significant negative associations with the NA scale in both US and Russian samples. The association between mid-semester attainment and SWLS measure at Time 3 was not significant for either sample. The correlations of positive affects at both Time 2 and Time 3 with mid-semester attainment were only significant in the Russian sample. The same pattern was replicated for Time 3 attainment and well-being outcomes with only minor differences.

Extending the self-concordance model

Having obtained sufficient evidence for the associations for the two separate parts of the self-concordance model in our samples, we conducted structural equation modeling to develop the entire model. The SEM methodology allowed us to test the effects of additional moderating variables.

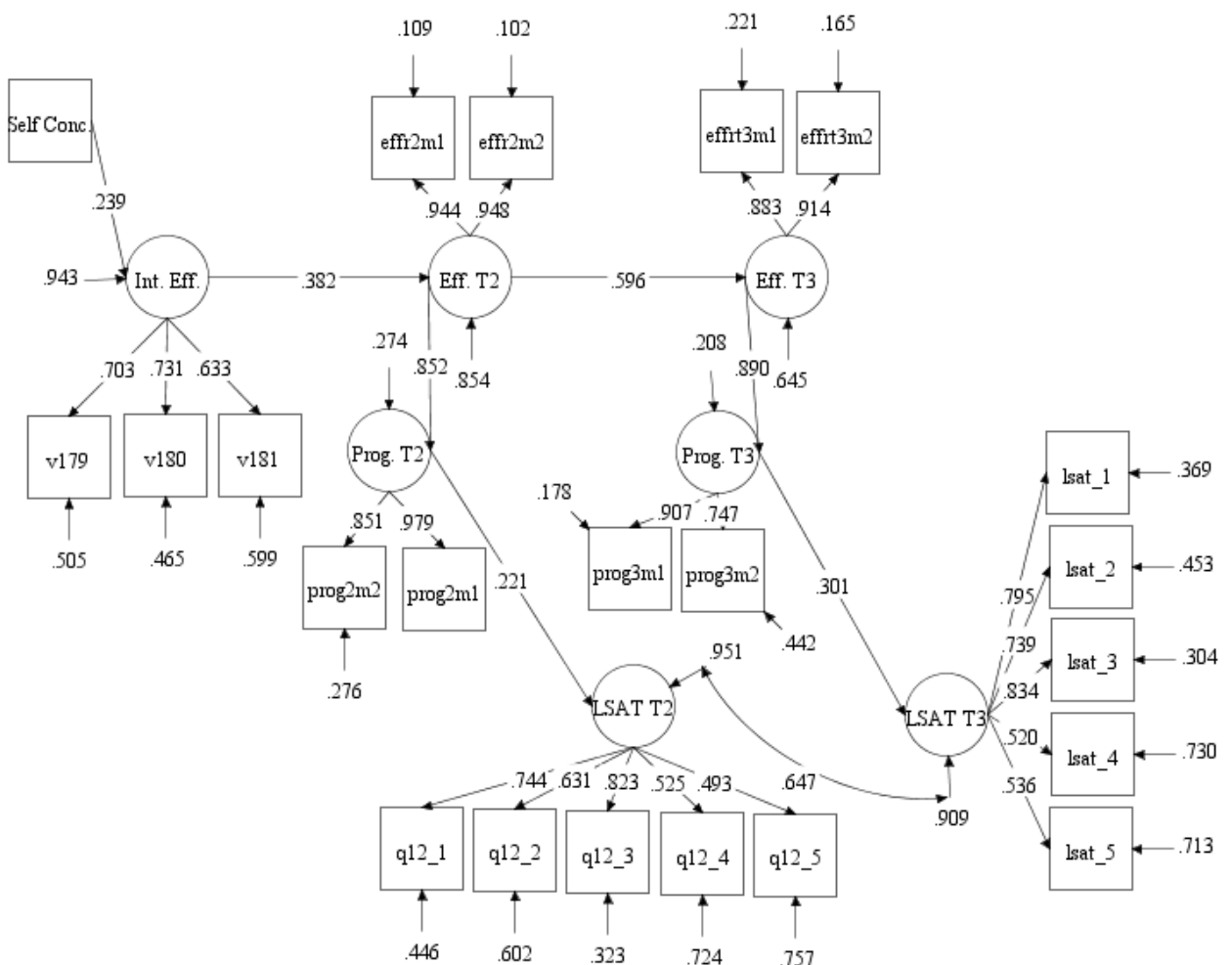


Figure 4. Extended self-concordance model. Merged sample (N=581).

Note: All paths are significant on the level $p < .05$

Using SEM methodology, we combined the “inception-to-attainment” and the “attainment-to-well-being” portions of the model into one model shown in the Figure 4.

We obtained satisfactory fit indices both in the US (CFI = 0.850; $df = 202$; $\chi^2 = 417.851$; $p < 0.001$; RMSEA (90% CI) = 0.074 (0.064; 0.084), and in the Russian (CFI = 0.943; $df = 202$; $\chi^2 = 326.288$; $p < 0.001$; RMSEA (90% CI) = 0.040 (0.032; 0.048)), as well as in the combined sample (CFI = 0.918; $df = 202$; $\chi^2 = 483.262$; $p < 0.001$; RMSEA (90% CI) = 0.049 (0.043; 0.055).

We also tested the same model with the autonomous and controlled facets of self-concordance independently. We found the same pattern for the autonomous facet of self-concordance. With the controlledness facet, the link from controlledness to intended effort was not significant in any sample.

Discussion

In accordance with the SWB literature (Osin, 2012; Diener, Suh, Lucas, & Smith, 1999; Watson et al., 1988) the positive affect measure, the negative affect measure, and the life satisfaction measure demonstrated moderated associations across all three measurements (at the beginning of semester, mid-semester, and at the end of the semester). For this reason, we decided to add the link between Time 2 life satisfaction and Time 3 life satisfaction in our model.

Our study has mostly replicated the findings of Sheldon and Elliot (1998, 1999) and Sheldon and Houser-Marko (2001) in the self-concordance model. Autonomy and controlledness associations with intended efforts were replicated, supporting the hypothesis that both internal and external motivations lead to a high level of initial efforts. However, only autonomously regulated individuals were able to maintain a high level of effort over time. This conclusion was supported by correlation analysis and mediational analysis, in accordance with which controlledness did not associate with mid-semester and end-of-semester attainments. While autonomy had both direct and indirect effects on attainment. Direct effect, as hypothesized, was mediated by a sustained level of effort.

The second part of the model, which relates to well-being outcomes was also replicated. Associations between goal attainment and an increase in well-being outcomes were shown. However, there are some differences with previous research. The assessment of basic needs satisfaction experience during the process of goal pursuit was omitted in our design. This point was postulated as an important piece of “attainment-to-well-being” process (Sheldon & Houser-Marko, 2001). However, our study had a modification, which partially compensated for this. In

current longitudinal study participants were limited to set their goals only in the areas related to three basic psychological needs of autonomy, competence and relatedness, postulated in SDT. This umbrella theoretical framework combines our research with the research of Sheldon and Houser-Marko (2001). Assuming that attaining the goals in these areas automatically leads to satisfying the appropriate needs, we suggest that basic needs satisfaction is implicitly present in our design.

Using SEM methodology we successfully merged both parts of the model. The final models' fit indices are in favour of the adequacy of the structure and receive additional support for the universality of results for different cultural contexts (Russia and the USA). The model has not been replicated using a Russian sample before, and our findings shine a light on the cultural invariance of the self-concordance model.

In our extensions of the model we put additional well-being variables at the first and second stages of the study, showing that not only does the successful attainment of concordant goals promote enhanced well-being, but even intermediate progress in attainment is linked to higher levels of happiness.

Limitations

One of the limitations of our research was that we failed to find a satisfactory pattern for the subjective well-being outcome, as used in the previous research by summing SWLS and PA variables and then subtracting from them NA variable. This single well-being outcome reflects only a cognitional portion of subjective well-being concept. However, in accordance with contemporary data, we rejected the usability of the combined measure, due to low correlations between the components of positive and negative affect (Diener & Emmons, 1984). Moreover, this was supported by low fit indices of the models including the combined SWB measure (CFI less than .80).

Conclusion

Future research is needed to examine more factors, which promotes SWB during the process of goal pursuit. Nevertheless, we showed that autonomy motivation and goal self-concordance, as shown in previous studies, have an independent influence on that process. Our study gives the additional support for the self-concordance model, using the different cultural sample, and putting additional variables in the structure, increasing its validity and stability.

Acknowledgments

We would like to thank our colleagues from the International Laboratory of Positive Psychology of Personality and Motivation, who helped to collect the data and provided insight and expertise which greatly assisted the research, although they may not agree with all of the interpretations/conclusions of this paper.

We thank Evgeny N. Osin for assistance with statistical guidance, and for comments that greatly improved the manuscript, Elena I. Rasskazova for help with planning the experiment and preparing the data, and Kennon M. Sheldon for help in the designing of the research and collecting the data.

- Byrne, B. M. (2011). *Structural Equation Modeling with Mplus: Basic Concepts, Applications, and Programming* (1 edition). New York: Routledge.
- Deci, E. L. (1975). *Intrinsic Motivation*. Boston, MA: Springer US. Извлечено от <http://link.springer.com/10.1007/978-1-4613-4446-9>
- Deci, E. L., & Ryan, R. M. (2000). The «What» and «Why» of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227–268.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542–575. <https://doi.org/10.1037/0033-2909.95.3.542>
- Diener, E., & Emmons, R. A. (1984). The independence of positive and negative affect. *Journal of Personality and Social Psychology*, 47(5), 1105–1117. <https://doi.org/10.1037/0022-3514.47.5.1105>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276–302. <https://doi.org/10.1037/0033-2909.125.2.276>
- Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology*, 51(5), 1058–1068. <https://doi.org/10.1037/0022-3514.51.5.1058>
- Kahneman, D. (2013). *Thinking, Fast and Slow* (Reprint edition). Farrar, Straus and Giroux.
- Little, B. R. (1993). Personal Projects and the Distributed Self: Aspects of a Conative Psychology. B J. Suls (Ред.), *Psychological Perspectives on the Self, Volume 4: the Self in Social Perspective* (с. 157–181). New York: Psychology Press.
- Osin, E.N. (2012). Measuring Positive and Negative Affect: Development of a Russian-language Analogue of PANAS. Psychology. *The Journal of the Higher School of Economics*. 9(4), 91-110.
- Osin, E.N., & Leontiev D.A. (2008). The Approbation of Russian-language Analogues of Two Scales of Express-Assessment of SWB. *Materials of III Russian sociological congress*.
- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: examining reasons for acting in two domains. *Journal of personality and social psychology*, 57(5), 749.
- Ryan, R. M., Sheldon, K. M., Kasser, T., & Deci, E. L. (1996). All goals are not created equal: An organismic perspective on the nature of goals and their regulation. B P. M. Gollwitzer

- & J. A. Bargh (Ред.), *The psychology of action: Linking cognition and motivation to behavior* (cc. 7–26). New York, NY, US: Guilford Press.
- Sheldon, K. M., & Elliot, A. J. (1998). Not all Personal Goals are Personal: Comparing Autonomous and Controlled Reasons for Goals as Predictors of Effort and Attainment. *Personality and Social Psychology Bulletin*, 24(5), 546–557.
<https://doi.org/10.1177/0146167298245010>
- Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, 76(3), 482–497. <https://doi.org/10.1037/0022-3514.76.3.482>
- Sheldon, K. M., & Houser-Marko, L. (2001). Self-concordance, goal attainment, and the pursuit of happiness: Can there be an upward spiral? *Journal of Personality and Social Psychology*, 80(1), 152–165. <https://doi.org/10.1037//0022-3514.80.1.152>
- Sheldon, K. M., & Kasser, T. (1998). Pursuing Personal Goals: Skills Enable Progress, but Not all Progress is Beneficial. *Personality and Social Psychology Bulletin*, 24(12), 1319–1331. <https://doi.org/10.1177/01461672982412006>
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, (6), 1063.

Dmitry D. Suchkov

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

Any opinions or claims in this Working Paper do not necessarily reflect the views of HSE

© Suchkov, 2016