

Indefiniteness Effect on Meaning Regulation in the Young Female Students Trained in Psychology

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Abstract. Life-purpose orientations and self-reflection are important factors in personal meaning regulation. Anyone living in the transitive society of today does not exercise full control over his or her life activity due to various factors of indefiniteness. The coronavirus (COVID-19) pandemic, starting at the beginning of 2020, swept the world and is now considered to be a global indefiniteness factor. Life indefiniteness that grew with the pandemic is a supplementary stress factor, the one that can be treated as either distress or eustress. This article is aimed at showing the results of an empirical study of differences in the life-purpose orientations and self-reflection in young unmarried females being trained in psychology in the city of Rostov-on-Don in March 2017 (n=53) and in October 2020 (n=43), that is prior to and during the pandemic, which may be considered as different indefiniteness effects in life. D.A. Leontyev's "life-purpose orientations" test and I.A. Stetsenko's self-reflection questionnaire were implied in the study. Growth of all mean indicators in both tests during the pandemic against the same indicators prior to the pandemic, was revealed. Differences in all parameters are statistically veracious, which was stated by the Mann-Whitney test. The empirical study established that the pandemic may be viewed in respect of the examined acmeologically homogenous category as eustress, i.e. an overcomable indefiniteness factor. The above eustress resulted in a positive reconstruction of meaning regulation processes and in psychological adaptation, which lead to the growth of the level of life orientation meaningfulness and self-reflection among the respondents.

1 Introduction

Meaning regulation is the highest level of control over human life and activities from the perspective of the modern activity and meaning view of personal development modeling. In the multilevel processes of formation, development and transformation of the

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meaning sphere, the central position belongs to the processes of genesis of the personal meaning system in the angst-ridden and inter-acting individual [1]. From among the human sciences, the category of meaning is viewed as an interdisciplinary construct possessing philosophical, psychological and linguistic attributes [2]. Meaning approaches enable to expand the tools of investigating the value-and-motivation personal spheres with the aim of studying the peculiarities of its acmeological development under the conditions of multicriteriality and indefiniteness in the rapidly changing life of the modern world [3]. The personal meaning system accumulates in itself and streams into the processes of interaction in the inner and outer world: the existing experience, the needs, the motives, the subjective relationships, the self-reflection direction, the means of interpersonal interactions, the present and future life goals [4]. Personal meanings that are relevant under the current life conditions, reflect the direction and the time perspective in personality development in the process of various interactions in the society. In terms of meaning psychology, this is most amply reflected through life-purpose orientations [5]. Besides, the level of organization of meaning regulation reflects the human capacity for self-reflection, which shows both the inner analysis activity and the evaluation of processes within the inner world [6].

In theoretical and empirical studies of the multilevel processes of meaning regulation, in terms of life-purpose orientation and reflection too, one must take into account various indefiniteness effects [7]. Accounting for the action of in-definiteness (during the recent decades) has become a new methodological principle of scientific activities [8] taking place in the interdisciplinary studies of transitivity in the society of today [9].

A systemic view of the problems associated with indefiniteness demands due account for the objective grounds for indefiniteness perceived as some entity that cannot be changed by man and that grows alongside the increase of complexity of the cognizable reality, as well as the subjective grounds for indefiniteness perceived as a psycho-socio-cultural phenomenon expressed through the loss of identity, moral stature, capability of interpersonal understanding [10]. In the objective sphere the indefiniteness effects might show themselves gnoseologically as an impact upon the means of learning in the post-non-classical scientific rationality, and ontologically as a reflection of the character of existence of the individual and the society within the reality that is permanently growing more complex. In the subjective sphere these might be existentially manifested as an absence or lack of those meanings filling the human life, as well as phenomenologically the same might show as interconnections within the inner mental world limiting personality transcending through evident phenomena towards combining one's own existence and consciousness within a true life value [11].

The COVID-19 infection outbreak of the beginning of 2020 is qualified as a globe-spanning pandemic. In regard to indefiniteness, this can be referred to the category of the global effects of indefiniteness upon the world community [12]. This new pandemic brought changes and limitations into many aspects of life of modern man; and a thorough investigation of the said has just been started. In regard to the studies of human behavior under the indefiniteness effect, of special relevance is a study of the peculiarities of meaning regulation under various indefiniteness effects. The aim of the investigation presented in this article is empirical revelation of the peculiarities of life-purpose orientations and self-reflection in acmeologically homogenous samples under the conditions prior to and during the coronavirus (COVID-19) infection pandemic as various effects of life conditions indefiniteness.

2 Materials and methods

To reveal the way in which indefiniteness effects, under different conditions, meaning regulation of the angst-ridden person, we undertook an empirical investigation of the

indicators of life-purpose orientations and self-reflection. The effect of the COVID-19 pandemic was taken by us as the indefiniteness factor effecting the above indicators. Testing was carried out twice: first in March 2017, that is prior to the pandemic, and then in October 2020 during the pandemic (yet before vaccination). In both cases tested were unmarried girls trained in psychology – 1st and 2nd year internal students of universities of Rostov-on-Don. Both in 2017 and in 2020, a similar set of psychodiagnostic tests was applied, and those were D.A. Leontyev’s “life-purpose orientations” test and I.A. Stetsenko’s self-reflection questionnaire.

In his “life-purpose orientations” test D.A. Leontyev adapted J. Crumhaugh & L. Maholick’s “life goal” test [13]. This contains pairs of contrary statements reflecting the idea of the factors of meaning of life. The respondent, while answering each question, chooses out of the two statements (e.g. “I usually: feel bored – am full of life and enthusiasm”) the one that better corresponds to reality, and marks it at a 7-point scale in accordance with the degree of approximation to this or that pole [5]. The “life meaning” indicator was calculated with regard to all the 20 test questions. The “life goals” scale characterizes presence or absence, in the respondent’s life, of the future goals that give life its sense, direction and time perspective. The “life processes” scale witnesses whether the respondent perceives the life process as interesting, emotionally charged and meaningful. The “life effectiveness” test reflects respondent’s evaluation of the past life journey, the meaning of the degree in which this life section was productive and meaningful. The “locus of control – I” scale shows how far the respondent perceives him/herself as a master of his own life. The “locus of control – life” scale shows the respondent’s perception of controllability of life. The first three factors make life-purpose orientations: life goals (looking into the future), life intension (reliance on the present), and satisfaction with self-actualization (acceptance of the past). The last two factors characterize the inner locus of control of the respondent as a general worldview conviction that control is possible, and one’s own capacity for such control.

I.A. Stetsenko’s self-reflection questionnaire is aimed at the establishment of the indicator of personal reflection by way of studying the activity of self-analysis and the respondent’s self-esteem. This enables to get an insight into the person’s preferences in respect of one’s own “I” [6]. Answering 60 questions, the respondent chooses how amply his/her judgements of his own self correspond to the statements presented in the questions. The general “self-reflection level” indicator is calculated by the total of the points of all the questions contained in the questionnaire.

Mathematical treatment of the obtained empirical data included definition of average values of the studied indicators prior to and during the pandemic, as well as the procedure of assessing the statistical significance of the revealed differences.

3 Results

Both samples coincide in the basic acmeological indicators (gender, age, educational background, professional direction, marital status, place of residence) and are close in their volumes. Our empirical study of the peculiarities of meaning regulation under various indefiniteness conditions resulted in mean test values that show differences (see Table 1). To establish whether the revealed differences are statistically valid, calculated were Mann-Whitney empirical coefficients U_{emp} [14].

Table 1. Mean values of life-purpose orientations, self-reflection and Mann-Whitney empirical coefficients U_{emp} of the value of their differences (provided $U_{cr}=915$ for the statistically significant level $p \leq 0.05$) in the unmarried girls trained in psychology in Rostov-on-Don prior to and during the COVID-19 pandemic

Indicator	Prior to the COVID-19 pandemic	During the COVID-19 pandemic	Mann-Whitney empirical coefficient U_{emp}
Testing time	March 2017	October 2020	
Number of the testees (n)	53	43	
Mean age, years	18.6	18.8	
“Life meaning” general index	100	113.4	666.5
“Life goal” scale	30	34.4	907
“Life processes” scale	28	32.5	717
“Life effectiveness” scale	24.8	26.8	868.5
“Locus of control – I” scale	20.5	23	737.5
“Locus of control – life” scale	31.3	34.1	807
Level of self-reflection	377.6	399	732.5

Since the key feature of our investigation is to determine the peculiarities of meaning regulation under different effects of indefiniteness, we shall now consider the change in the revealed psychodiagnostic indicators. According to Table 1, through all the indicators the empirically defined Mann-Whitney coefficients U_{emp} are characterized by values smaller than the critical indicator $U_{cr}=915$ for the statistical significance level $p \leq 0.05$ [14]. This means that the shifts between all mean test values prior to and during the pandemic are statistically valid.

The results of the undertaken empirical study show that the pandemic caused at its start the growth of all the indicators of D.A. Leontyev’s “life-purpose orientations” test: the “life meaning” general; indicator, three life-purpose orientations “Life goal”, “Life processes”, «Life effectiveness», two loci: “Locus of control – I” and “Locus of control – life”, as well as “Level of self-reflection” according to I.A. Stetsenko’s self-reflection questionnaire against to the pre-pandemic period.

4 Discussion

This study aimed to reveal the life-purpose orientations and self-reflection among the unmarried female students trained in psychology. The obtained empirical data show mean values of the tests in the investigated respondent category and define differences between these. Our testing was carried out in one city in March 2017 and October 2020, and it embraced acmeologically alike samples. From the standpoint of studying the indefiniteness effect upon the meaning regulation of the angst-ridden person, this is a psychological study in the given area prior to and during the coronavirus infection pandemic.

All the indicators defined in the course of the study have statistically significant differences prior to and during the pandemic. Of interest is the fact that the mean values of life-purpose orientations and self-reflection, measured prior to the pandemic, appeared to be lower than during the pandemic. The pandemic may thus be viewed as an additional factor that had never been there before and that enhances the indefiniteness of the modern life. In other words, in case of a pan-demic higher measured indicators of meaning regulation speak for a transition of the respondents’ meaning sphere into the state of a severer state and higher mobilization. We suppose that such are the ways of operation of the self-

regulating mechanisms of choice and initiation of the relevant personal meanings required to overcome the accrued resistance of life indefiniteness in the world, which was all brought to life by the coronavirus infection pandemic. Under the pandemic, this accrued indefiniteness acts as an additional stress factor that can be taken in different ways: either as eustress or distress. In our case, the respondents perceived the pandemic enhancement of life indefiniteness as eustress, which causes psychological adaptation as a constructive mobilization of the meaning sphere aimed at overcoming the worsened life conditions. This means that the young female students trained in psychology and participating in our study perceive the action of the pandemic as an overcomable indefiniteness factor. This factor raised the level of self-reflection, meaning of life, perception of the past, present and future, as well as the loci of life control and inner world control. Our supposition is proven by the fact that other scholars also note predisposition towards overcoming the pandemic effects [15, 16].

5 Conclusions

As we assume, the valuable aspect of our research is a study of the peculiarities of meaning regulation based upon a most acmeologically homogeneous sample and with the same set of psychological tests. A psychological survey with the application of D.A. Leontyev's "life-purpose orientations" test and I.A. Stetsenko's self-reflection questionnaire was carried out among unmarried young females of virtually the same age trained in psychology in the same city. The empirical study may be viewed as a single-factor experiment where the scaleable factor was the varying level of the indefiniteness effect upon the studied life-purpose orientations and self-reflection of the respondents. Indefiniteness variance is considered by us as a state in March 2017, i.e. prior to the coronavirus spread, and in October 2020, i.e. during the COVID-19 pandemic.

The materials obtained due to our empirical study may be used to generate and specify conceptual models for overcoming indefinite and crisis situations by various groups of people. The study should be expanded in order to reveal the effect of such a global indefiniteness factor as a pandemic upon various gender, age, occupational, communal, geographic categories of respondents. Besides, vital is a definition of borders of constructive responses on a pandemic expressed as eustress, raising the mobilization resources of meaning regulation, and revelation of the areas of the distress impact negatively effecting the organization of meaning activity under a pandemic. This will enable to develop task-oriented methods for psychological aid delivered to the revealed groups exposed to the distress effect of coronavirus infection. At the same time, important also is a grounded increase of the set of the applied psychodiagnostic tests permitting to expand the studied spheres of meaning regulation in the angst-ridden individual.

The article was supported by the Russian Foundation for Basic Research RFBR (Project No. 18-29-22004 (2018) «Psychological and genetic studies of users' behavior predictors that determine the perception of Internet content of various informational orientation»).

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