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**ЗНАЧЕНИЕ НАТУРАЛИСТИЧЕСКИХ ВЕРОВАНИЙ
ДЛЯ ПСИХОЛОГИЧЕСКОГО БЛАГОПОЛУЧИЯ АТЕИСТОВ**
**THE ROLE OF NATURALISTIC BELIEFS FOR THE ATHEISTS`
PSYCHOLOGICAL WELLNESS**

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Аннотация. Несмотря на рост интереса психологов к феномену современного атеизма, доступные эмпирические данные довольно скудны и слабо отражают различия между атеистами, придерживающимися различных взглядов. Настоящее исследование задействует эвдемонические (Шкалы психологического благополучия К. Рифф) и гедонистические (Шкала удовлетворенностью жизнью Э. Динера, ШПАНА) методики, а также Опросник смысла жизни М. Стегера для изучения различий между двумя группами лиц, определивших себя в качестве атеистов. В соответствии с гипотезой, испытуемые с натуралистическими взглядами, в соответствии с которыми мир представляет собой лишь каузально замкнутую природу, которая может быть изучена научно, показали более высокие результаты по интегральному психологическому благополучию, автономия, целям в жизни, и более низкие по поиску смысла. Контроль демографических переменных посредством дисперсионного анализа выявил, что именно натурализм, а не пол или страна проживания респондентов производит существенный вклад в различия показателей автономии и целей в жизни у респондентов в исследуемых группах. Полученные результаты можно объяснить важностью наличия четкой и связной системы взглядов, что значимо для психологического благополучия личности. Онтологический натурализм может быть задействован атеистами для этой цели.

Abstract. Although some psychological studies of atheism take place, the empirical evidence available is limited and does not reveal the distinctions between atheists with different beliefs. The present research used both eudaimonic (C. Ryff's SPWB) and hedonic (E. Diener's SWLS, PANAS) measurements, and also The Meaning in Life Questionnaire (MLQ) to examine the differences in the psychological wellness among two groups of self-proclaimed atheists through the contrast of means statistical method. According to the hypotheses, self-proclaimed atheists with naturalistic beliefs show higher mean rates of the PWB and its indexes. The members of the group with naturalistic beliefs, who consider that nothing beyond the causally closed physical world exists, have shown significantly higher means of the integral PWB, Autonomy, Purpose in Life, and lower for the Search for Meaning. When the demographical variables were controlled through ANOVA, only naturalistic views were related to the Autonomy and Purpose in Life scales significantly. The mechanisms of the psychological wellness include a confident and coherent system of views, and ontological naturalism may be utilized for this purpose.

Ключевые слова: атеизм, натурализм, психологическое благополучие, позитивный аффект, негативный аффект, смысл жизни.

Keywords: Atheism, Naturalism, PWB, SWLS, Positive Affect, Negative Affect, Meaning in Life.

Introduction

The recent studies show that religious people, on average, report higher rates of happiness and well-being, then secularists [Beit-Hallahmi, 2007; Koole et al., 2010; Tay L. et al, 2014], and even their tweets demonstrate the higher amount of positive emotions [Ritter, 2013]. However, most of these large-scale surveys of the internal differences between people with the secular views were ignored. The



majority of research programs provide only religious and non-religious differentiation in a sample. L. Galen stated in his paper on religious prosociality:

«Specifically, it is a common practice to compare high levels of religiosity with «low religiosity» (e.g., the absence of denominational membership, lack of church attendance, or the low importance of religion), which conflates indifferent or uncommitted believers with the completely nonreligious» [Galen, 2012, p. 876].

Dichotomous division allows scholars to comprehend the psychological characteristics of the religious people, who are under investigation, but not the same characteristics of secular respondents. According to the received opinions, the religious groups are not homogeneous, and there are developed research traditions of studying the different ways to be religious [Allport, Ross; 1967; Ryan, Rigby, King, 1993]. But the non-religious groups are even less homogeneous, than the religious ones; they consist of various people: religious people with uncertain beliefs («ietsists») and/or without belonging to the concrete religion or religious organization («unchurched»), and secularists: indifferent towards religion people («apatheists»), completely non-religious people with different views (confident and non-confident agnostics or atheists) etc. Despite that some psychological studies of atheism appear [Beit-Hallahmi, 2007; Hood, Hill, Spilka, 2009; Farias, 2013; Streib, Klein, 2013], the sum of data is not enough for the complete psychological understanding of this phenomenon being on the rise [Zuckerman, 2009; Zuckerman, 2011].

Although there has been relatively little research on it, there are some efforts to study the types of secularism and different views of it. T. Schnell offers an inventory for studying secularism – DoS (Dimensions of Secularity). This inventory contains frequent philosophical orientation for secularists: scientism, humanism and personal responsibility. The author also insists that other scholars may add other scales to this open, non-comprehensive inventory [Schnell, 2014]. The individual differences in these dimensions may relate to the differences in other psychological variables, such as the psychological wellness indexes.

The ontological naturalism also should be added as a possible philosophical orientation because of its popularity among secular people, especially atheists. The term «naturalism» does not get the clear and precise meaning in contemporary philosophy, and may be characterized as an attitude and explicit belief that «reality is exhausted by nature, containing nothing “supernatural”, and that the scientific method should be used to investigate all areas of reality, including the ‘human spirit’» [Papineau, 2009]. Influential atheistic thinkers insist that the ontological naturalism is the important part of the atheism: according to R. Dawkins, an atheist is the «philosophical naturalist», «who believes there is nothing beyond the natural, physical world... If there is something that appears to lie beyond the natural world as it is now imperfectly understood, we hope eventually to understand it and embrace it within the natural» [Dawkins, 2006, p. 14]. J. Huisman in the study of New Zealand atheists defines atheism as a «materialistic naturalism» [Huisman, 2011, p. 21-22]. I conceptualized the ontological naturalism as a belief, that there is nothing beyond the causally closed nature (so-called «causal closure thesis»), which can be studied by scientific method. Ontological naturalism is stronger than the solely denial of God; it offers the philosophical background for the atheistic claims [Fales, 2007].

The difference between naturalism and scientism is not clear enough. But the available definitions seem to suggest that although the meaning of these terms is similar, it is not equal. They are shedding the light on the different aspects of the common, but not always unique belief's complex. T. Schnell [Schnell, 2014], quoting

to M. Pigliucci [Pigliucci, 2013, p. 144], defines scientism as an «attitude that regards science as the ultimate standard and the arbiter of all interesting questions; or alternatively that seeks to expand the very definition and scope of science to encompass all aspects of human knowledge and understanding». Usually, naturalism has the implications that lead to the scientism, but the naturalist, who rejects science as a highest value and arbiter, is not logically impossible. Naturalist may appreciate the value of other aspects of life and culture. Hence, naturalism and scientism are related, but different views and philosophical orientations, and they can be studied independently.

The belief that the world is purely physical and causally closed makes religious beliefs impossible and provides more epistemic confidence than the ambiguous position. Belief certainty is a promising crucial factor of one's well-being, and may have the same effect despite the content (religious, atheistic or else) of beliefs. Recent studies uncover curvilinear positive relationships between strongly religious and strongly atheistic worldviews and different well-being variables. Certain people usually have greater well-being comparing to the uncertain, who feel doubts. Coherence of worldview also mediates the relationship between religiosity and well-being variables. Therefore, the mechanisms of well-being include a confident system of views rather than religious beliefs themselves, or the strong identification with the group with the shared worldview [Doane, Elliott, 2014]. M. Farias and colleagues offer the belief replacement hypothesis: some secularists use various types of naturalistic beliefs, e.g. belief in progress and science to cope with stressful and anxiety-provoking situations, like religious people use religious beliefs [Farias et al., 2013].

Question has been raised whether or not atheists with the definite naturalistic views actually show higher PWB and other indexes of the psychological wellness than their peers with the ambiguous or non-naturalistic views? The aim of the present study is to examine the empirical support for the hypothesis that naturalistic beliefs relate to the higher indexes of the psychological wellness.

Method

Hypotheses:

(1) Self-proclaimed atheists with naturalistic beliefs show higher mean rates of the PWB and its indexes, Life Satisfaction, Positive Affect and the Presence of the Meaning in Life. Negative Affect and Search for Meaning show higher mean rates in the non-naturalistic group.

(2) These differences relate to their naturalistic views, not to the demographical distinctions between the members of these groups.

Sample: The data was gathered in autumn, 2014. The participants were recruited from the various atheistic, secular and popular scientific groups in the Russian social network «VKontakte». They filled in an online questionnaire anonymously and voluntarily, after finishing some of their results were made available for them. Before filling the psychological tests they were asked to answer the questionnaire, which included the demographical questions such as gender, age, residence, education, occupation etc., and questions about their views, beliefs and religious activities. The few in number residents of the countries outside Russian Federation and Ukraine have been eliminated from the sample for the purpose of avoiding confusion.



Continuing the sentence «I consider myself as» participants might choose the answer «a believer», «an agnostic», «an atheist» or write down their own version. Only those participants, who identified themselves as atheists, were taken into consideration in this study. The sample consisted of 169 participants, age 17-40 ($M = 24.46$, $SD = 5.645$); 109 were male and 60 – female. 103 were the residents of Russian Federation and 66 – of Ukraine.

The criterion of the ontological naturalism has met when the clear consent with the truth of the statement «Do you think there is only the natural world, and nothing beyond this causally closed nature, which can be studied by scientific method, exists?» has been presented. Those who answered «I do not know» or «No, something else exists apart from the nature» were not classified as the naturalists.

The groups of naturalists consisted of 110 participants; 66 Russians and 44 Ukrainians; 74 male and 36 female; age: 17-40, $M = 24.68$, $SD = 5.632$. Non-naturalists shaped the group of 59 people; 37 Russians and 22 Ukrainians; 35 males and 24 females; age: 17-39, $M = 24.05$, $SD = 5.695$. Among non-naturalists the group of those, who had the ambiguous views (answered «Do not know»), consisted of 39 people, while there were 20 supernaturalists. The number of these participants was not enough for the independent analysis.

Measures: With the purpose of the comprehensive study I have utilized the inventories of both eudaimonic and hedonic traditions of understanding and studying happiness. The hedonic view defines happiness as a pursuit of pleasure and positive emotions, comfort, and enjoyment, whereas the eudaimonic view associates happiness with the pursuing meaningful goals, personal growth and breaking homeostasis, sometimes despite the objective misfortune. Each of these traditions shed light on the important and interconnected aspects of wellness; hence, none of them should be ignored by the researches [Biswas-Diener, Kashdan, King, 2009; Huta, Ryan, 2010; Henderson, Knight, 2012; Delle Fave, Massimini, Bassi, 2011]. The study of the perceived meaning in life is also important and relates to the topic of psychological wellness [Frankl, 1985; Baumeister et al, 2013].

The C. Ryff Scales of Psychological Well-Being (SPWB) is a theoretically grounded instrument that focuses on measuring multiple facets of PWB, such as Autonomy, Positive Relations with Others, Environmental Mastery, Personal Growth, Purpose in Life, Self-Acceptance. The integral index of PWB is a sum of these six scales. The utilized for the purposes of the current study long version of C. Ryff inventory consists of 84 questions. The Russian adaptation of the inventory – T.D. Shevelenkova and P.P. Fesenko [Shevelenkova, Fesenko, 2005]. Cronbach's $\alpha = 0.83-0.91$ on different scales.

Satisfaction with Life Scale (SWLS). It is a short 5-item instrument designed to measure global cognitive judgment of satisfaction with one's life, offered by E. Diener and colleagues [Diener et al., 1985]. The Russian adaptation – E.N. Osin and D.A. Leontev [Osin, Leontev, 2013]. Cronbach's $\alpha = 0.71-0.8$ on different samples.

The Positive and Negative Affect Schedule (PANAS) comprises two mood scales, one of them measures positive affect (PA) and the other measures negative affect (NA). Ten descriptors are used for each PA scale and NA to define their meanings. Participants in the PANAS are required to respond to a 20-item test using a 5-point scale that ranges from «very slightly» or «not at all» (1) to «extremely» (5) [Watson, Clark, Tellegen, 1988]. Russian adaptation – E.N. Osin [Osin, 2012]. Cronbach's α (PA) = 0.89, Cronbach's α (NA) = 0.86.



The Meaning in Life Questionnaire (MLQ) is a 10-item measure of the Presence and the Search for Meaning in Life [Steger et al., 2006]. The Russian adaptation is offered by E.N. Osin. Cronbach's α (Presence) = 0.928, Cronbach's α (Search) = 0.899.

Statistical methods: Contrast of means (T-test), the correlational analysis and ANOVA for the control of the demographical variables (gender and country). For ANOVA there was used the Levine's criterion for testing the null hypothesis stating that the error variance of the dependent variable is constant in all groups. The effects of gender and country in ANOVA were analyzed separately. IBM SPSS Statistics 21 has been used.

Results

Table 1 shows the higher means of the integral PWB and its indexes: Autonomy and Purpose in Life in the naturalistic group comparing to the non-naturalistic group. The group of non-naturalists shows higher Search for Meaning.

Table 1

**Psychological wellness indexes in Naturalistic and Non-naturalistic groups:
Means and Standard Deviations**

Variable	Naturalists		Non-naturalists		p
	M	SD	M	SD	
1. PWB	360.6	45.589	345.81	36.833	0.024
2. Positive Relations	56.05	10.665	55.48	8.057	0.705
3. Autonomy	63.46	8.871	60.12	7.835	0.013
4. Environmental Mastery	55.42	9.572	52.53	8.827	0.051
5. Personal Growth	67.35	7.138	65.95	6.471	0.197
6. Purpose in Life	62.33	10.204	58.63	9.093	0.017
7. Self-Acceptance	55.99	11.537	53.1	10.781	0.108
8. Satisfaction with Life	19.86	6.46	18.54	6.65	0.216
9. Positive Affect	33.51	7.603	31.59	6.995	0.102
10. Negative Affect	19.55	7.142	20.56	6.542	0.359
11. Presence of Meaning	24.94	7.673	22.78	7.887	0.09
12. Search for Meaning	20.1	7.443	23	7.681	0.02

The effect of the difference between groups according to ANOVA for the integral PWB: $F(1;165) = 3.833$, $p = 0.052$, $\eta^2 = 0.023$ when controlling the effect of gender, and $F(1;165) = 3.774$, $p = 0.054$, $\eta^2 = 0.022$ when controlling the effect of country. The effects of gender and country were insignificant (p was 0.413 for gender and 0.992 for country).

Positive Relations: $F(1;165) = 0.099$, $p = 0.753$, $\eta^2 = 0.001$, when controlling the effect of gender, and $F(1;165) = 0.065$, $p = 0.700$, $\eta^2 = 0.0$ when controlling the effect of country. The effects of gender and country were also insignificant (p was 0.989 for gender and 0.958 for country).

Autonomy: $F(1;165) = 3.893$, $p = 0.05$, $\eta^2 = 0.023$ when controlling the effect of gender, and $F(1;165) = 4.614$, $p = 0.033$, $\eta^2 = 0.027$ when controlling the effect of country. The effects of gender and country were insignificant (p was 0.958 for gender and 0.742 for country).

Environmental Mastery: $F(1;165) = 3.468$, $p = 0.064$, $\eta^2 = 0.021$ when controlling the effect of gender, and $F(1;165) = 3.228$, $p = 0.074$, $\eta^2 = 0.019$ when controlling the effect of country. The effects of gender and country were insignificant (p was 0.57 for gender and 0.858 for country).



Personal Growth: $F(1;165) = 1.233$, $p = 0.269$, $\eta^2 = 0.007$ when controlling the effect of gender, and $F(1;165) = 1.49$, $p = 0.224$, $\eta^2 = 0.009$ when controlling the effect of country. The effects of gender and country were insignificant (p was 0.357 for gender and 0.864 for country).

Purpose in Life: $F(1;165) = 4.936$, $p = 0.028$, $\eta^2 = 0.029$ when controlling the effect of gender, and $F(1;165) = 4.867$, $p = 0.029$, $\eta^2 = 0.029$ when controlling the effect of country. The effects of gender and country were insignificant (p was 0.512 for gender and 0.592 for country).

Self-Acceptance: $F(1;165) = 2.264$, $p = 0.134$, $\eta^2 = 0.014$ when controlling the effect of gender, and $F(1;165) = 1.867$, $p = 0.174$, $\eta^2 = 0.011$ when controlling the effect of country. The effects of gender and country were insignificant (p was 0.148 for gender and 0.501 for country).

Satisfaction with Life: $F(1;165) = 1.432$, $p = 0.233$, $\eta^2 = 0.009$ when controlling the effect of gender, and $F(1;165) = 1.499$, $p = 0.223$, $\eta^2 = 0.009$ when controlling the effect of country. The effects of gender and country were insignificant (p was 0.138 for gender and 0.935 for country).

Positive Affect: $F(1;165) = 1.456$, $p = 0.229$, $\eta^2 = 0.009$ when controlling the effect of gender, and $F(1;165) = 2.615$, $p = 0.108$, $\eta^2 = 0.01$ when controlling the effect of country. The effects of gender and country were insignificant (p was 0.07 for gender and 0.19 for country).

Negative Affect: $F(1;165) = 0.806$, $p = 0.371$, $\eta^2 = 0.005$ when controlling the effect of gender, and $F(1;165) = 0.599$, $p = 0.44$, $\eta^2 = 0.004$ when controlling the effect of country. The effects of gender and country were insignificant (p was 0.732 for gender and 0.929 for country).

Presence of Meaning: $F(1;165) = 3.203$, $p = 0.075$, $\eta^2 = 0.019$ when controlling the effect of gender, and $F(1;165) = 30.004$, $p = 0.085$, $\eta^2 = 0.018$ when controlling the effect of country. The effects of gender was insignificant ($p = 0.759$), but not the effect of country ($F(1;165) = 5,204$, $p = 0.024$).

Search for Meaning: $F(1;165) = 3.768$, $p = 0.054$, $\eta^2 = 0.022$ when controlling the effect of gender, and $F(1;165) = 7$, $p = 0.009$, $\eta^2 = 0.041$ when controlling the effect of country. The effects of gender was insignificant ($p = 0.759$), but not the effect of country ($F(1;165) = 5,173$, $p = 0.024$).

Russians show significantly higher Presence of Meaning, than Ukrainians. The difference in the Search for Meaning is insignificant (Table 2).

Table 2

**Presence of Meaning and Search for Meaning by Countries:
Means and Standard Deviations**

Country	Presence of Meaning			Search for Meaning		
	M	SD	p	M	SD	p
Ukraine	23.11	7.127	0.038	21	7.333	0.301
Russia	26.15	7.833		19.5	7.511	

Conclusions

In contrast to the studies of religiosity in its relation to the psychological wellness, very little is known about secularity and atheism. But people with such views do not form the homogeneous group; they differ in their beliefs and practices, and should be studied with the understanding and respect of their diversity.

Present study partly confirms the hypothesis about the substantial relation between the belief that the world is purely physical and causally closed and the

indicators of the psychological wellness. Naturalists tend to show higher amounts of some psychological wellness indexes, than the non-naturalists. The findings also reveal that, despite the initial hypothesis, the hedonic well-being indexes, like Satisfaction with Life, Positive and Negative Affects, do not differ, whereas some eudaimonic indexes show consistent differences. The integral PWB, Autonomy and Purpose in Life are significantly higher among the naturalistic self-proclaimed atheists, than among their not so confident peers, while the Search for Meaning is significantly lower. The control of the demographical variables of gender and country through ANOVA reveals that the effect of the Autonomy and Purpose in Life relates to the naturalistic views in particular. Probably, eudaimonic indexes are more specific, than hedonic ones. There was also the effect of the country the participants come from – Ukrainians tend to perceive their life as meaningful less, then Russians. This is the collateral result, and it is difficult to make conclusions about it, because the social, economic and political situation in Ukraine and Russia is unstable, and the trends are unclear.

Why might naturalism be associated with higher psychological wellness? According to the previous publications, strong secular beliefs are compatible with strong religious beliefs in helping people overcome their misfortune, e.g. aging problems [Weber et al., 2012]. The results of the present study should be interpreted from the standpoint of the findings and conclusions, mentioned in introduction. As long as the mechanisms of the psychological wellness include a confident and coherent system of views, ontological naturalism may be utilized for this purpose. This theoretical position may be important for atheists inasmuch it offers the philosophical framework for their views.

In sum, although the current research is consistent with the view that the confident and coherent atheistic worldview is positively related with the psychological wellness, it is also consistent with the view that the relationship between the beliefs certainty and coherence is curvilinear. The previous conclusion is that both extremely religious and extremely nonreligious individuals may be higher in some psychological wellness indexes.

Nevertheless, some limitations of the study should also be mentioned. The causal direction between the variables remains uncertain. Although it is plausible that the content of beliefs leads to the higher psychological wellness indexes, it is also possible that people with more fulfilled, autonomous and purposeful life focus on the content and coherence of their views more, and therefore hold more strict beliefs. The study also needs replication on the bigger samples in other countries. Russian Federation and Ukraine are the post-soviet countries, and in spite of the huge socio-political changes in Ukraine, this country is not similar to the Western countries yet.

Despite the limitations mentioned above, current research has begun to fill the gap in literature by providing the studies of the differences between the atheists' beliefs and their relationship with their psychological wellness.

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