Relationship between time perspective and sense of coherence in subjects of doing

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Abstract. The paper describes the study of relationship between Time Perspective (TP) and Sense of Coherence (SOC) in individuals as subjects of doing. Features of representation of Balanced Time Perspective (BTP) in individuals with different major activities were delineated. Bilateral connections-relations between time perspectives and of Sense of Coherence components were found.

***Keywords**: Time Perspective, Balanced Time Perspective, Sense of Coherence, subject of doing*

Introduction. Time plays an important role in human's life. That is why studies of ″human and time″ issue are of special urgency. Three main branches of time studies are classified: psychophysiological, psychological, and personal [5]. The psychophysiological ones include process-dynamic psychic peculiarities and time perception peculiarities. Psychological level defines psychological time as psychological fact, internal experience of human consciousness. One of important definitions of psychological level of studies is the definition of ″Time Perspective″, which, according to K. Lewin (Lewin, 1951) represents "the totality of the individual's views of his psychological future and his psychological past existing at a given time...″ [13 Cited 11, p. 75].

Our study is based on the concept of Time Perspective by Ph. Zimbardo (Zimbardo, Boyd, 1999), in accordance with which, Time Perspective of an individual is the main aspect of psychological time construction, whereby the continual flows of personal and social experience are assigned to temporal categories, or time frames of past, present, and future, that help to give order, coherence and meaning to those events [13].

Besides, Ph. Zimbardo classified a Balanced Time Perspective (orientation) as an idealized mental framework that allows individuals to flexibly switch temporal frames among past, future and present depending on situational demands, resource assessments, or personal and social appraisals [13]. A balanced Time Perspective has been proposed (Boniwell & Zimbardo, 2004; Boyd & Zimbardo, 2005) as a more positive alternative to living life as a slave to any particular temporal bias [14].

Balanced Time Perspective was studied by such scientists as A.C. Bohart, I. Boniwell, M.B. Boyd-Wilson, M. Csíkszentmihályi, E. Diener, K. Enrich, E. Kahana, E. Kazakina, C.J. Lennings, G. Litvinovic, H. Rappaport, J.M. Sandy, E.L. Shostrom, Z. Zaleski, P.G. Zimbardo, A.M. Yaeger, T.A. Wills, A. Wilson and others.

Problem statement. Previous studies delineated the relation between Time Perspectives with such concepts as: academic achievement (Zimbardo & Boyd, 1999; Peetsma, 2000); risky activities and thrill seeking (Boniwell & Zimbardo, 2004); subjective wellbeing (Diener, 1997, 2000; Keough, et al., 1999; Zaleski et al. 2001; Zhang & Howell, 2011; Zimbardo & Boyd's, 1999, 2003, 2004; Desmyter & Raedt, 2012); meaningfulness of life, resiliency and satisfaction with life (Sircova, 2008); well-being and social goals (Atance & O'Neill, 2001; Coudin & Lima, 2011; Sailer et al. 2014), sensation of happiness (Csíkszentmihályi, 1992; Kammann & Flett, 1983; Drake et al., 2008); optimism (Lennings, 2000) etc.

In our study, we consider the relations between Time Perspective and the construct – Sense of Coherence as determinant of human somatic and psychic health.

Sense of Coherence originates from salutogenic concept, and according to A. Antonovsky (Antonovsky, 1979) is connected with individual peculiarities and oriented at cognition of the way, method and resources enabling to successfully overcome daily stress and difficult stress situations [9]. While developing salutogenic paradigm, A. Antonovsky has arrived to the conclusion that the most important issues for one's health are the ways one thinks and the ways these thoughts are reflected in actions and/or physiological changes [9].

Nevertheless, it should be kept in mind that a person can not be viewed outside his/her environment in general and social environment in particular. Thus, any human activity is performed within the system of objective-subjective relationships, social relations and interrelations, creating an individual as a socialized personality, a subject and an object of historical process [3].

In accordance with K.A. Abulkhanova (Abulkhanova, 1980; 1997; 2005), no activity is performed on its own, but instead, a personality becomes an actor, gaining special properties. Functioning of a personality as an actor includes natural, psychic, personal conditions and ways, on the one hand, and social conditions and requirements to the activity, on the other hand, and, finally, activity organization methods by a human himself/herself as occupation, profession, which includes identification of his/her own place in them, as well as determination of their place, value, and role in life in general [1].

Study objective. Thus, the goal of our study was establishment of relationship between Time Perspective and Sense of Coherence of individuals as subjects of doing.

Setting. 205 individuals aged from 18 to 80 years old participated in the study. All study participants were divided into 4 groups depending on their major activity. Thus, group I included students, whose major activity was studying; group II included students of correspondence institutions whose major activity was studying and work; group III included employed people whose major activity was work, and group IV included retired individuals.

The following study methods were selected to use: ″Zimbardo Time Perspective Inventory (ZTPI)″ (adapted by A. Sircova, Ye.T. Sokolova, O.V. Mitina) and the ″Sense of Coherence by A. Antonovsky (SOC)″ scale (adapted by N.M. Dimshyts).

Mathematical model was formulated by multiple linear regression method based on the obtained results of statistical processing of data collected using ″Zimbardo Time Perspective Inventory (ZTPI)″ and ″Sense of Coherence (SOC)″ questionnaires. Geometrically, multiple linear regression equation was interpreted using polycyclic multigraphs.

Results and their discussion. Results of data statistical processing have allowed to identify minor dispersion of standard deviation. It has been confirmed that our results are close to the normal distribution.

As a result of multiple regression analysis and structural analysis of polycyclic multigraphs, we have identified the connections-relations between ″Zimbardo Time Perspective Inventory (ZTPI)″ elements and ″Sense of Coherence by A. Antonovsky (SOC)″ concepts in group I (Fig. 1.1.), group II (Fig. 1.2.), group III (Fig. 1.3.), and group IV (Fig. 1.4.).

As we can see, 12 statistically relevant (P=0.1) bilateral connections-relations were identified in group I between ″Zimbardo Time Perspective Inventory (ZTPI)″ and ″Sense of Coherence by A. Antonovsky (SOC)″ scale components; 4 of them between elements within the methods, and 8 – between components of the two questionnaires (Fig. 1.1.). Negative bilateral connections-relations between ″Past-Negative″ and ″Meaningfulness″, ″Past-Negative″ and ″Manageability″, ″Future″ and ″Comprehensibility″, and positive bilateral connection-relation between ″Future″ and ″Manageability″ are of special interest.

Thus, the more pronounced in individuals of group I, whose major activity is studying, are such qualities as ability to overcome stress situations, recognition of their ability to manage the course of events, emotional sensation of richness of life and willingness to meet the challenges of life, the less pronounced is their negative attitude to the events in past, oppression and anxiety. The more individuals of group I try to find some order and sense in uncertain situations, the less they are future-oriented and less prone to planning and balancing the benefits of momentary pleasures and the price which has to be paid for them. And, vice versa, the more individuals of group I are prone to view their own resources as sufficient to meet the demands imposed by stimuli, and believe in their ability to keep their heads above water, the more they are future-oriented, tend to plan their lives, and to meet deadlines. It is also worth mentioning that Balanced Time Perspective profile was identified only in 4 % of individuals of group I.

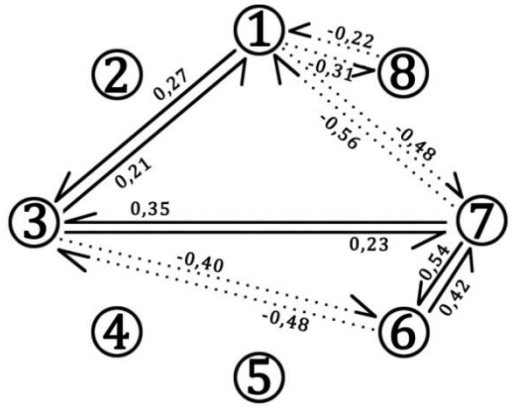
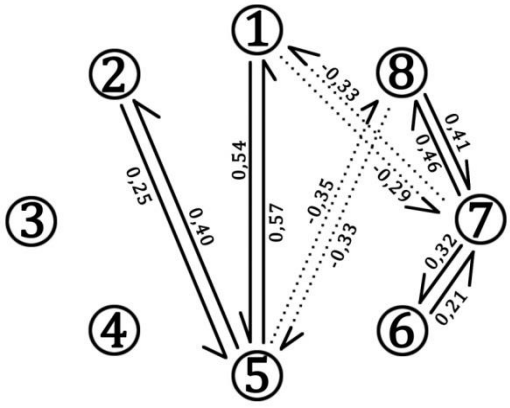


Fig. 1.1.



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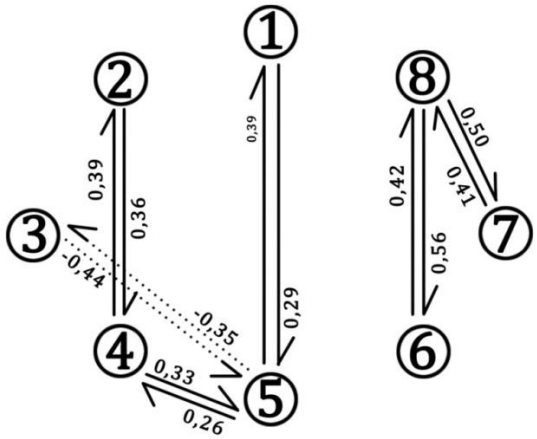

Fig. 1.3.

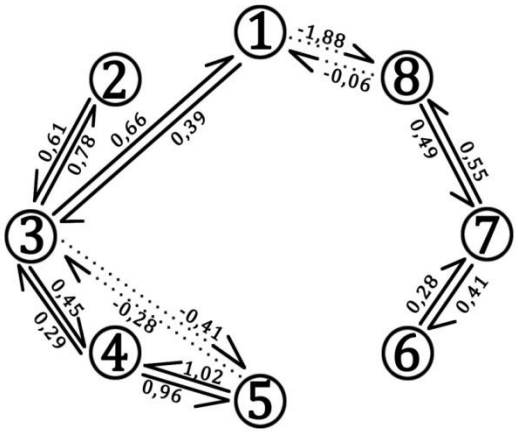

Fig. 1.4.

Key: P=0.1; 1– ″Past-Negative″, 2 – ″Present-Hedonistic″, 3 – ″Future″, 4 – ″Past-Positive″, 5 – ″Present Fatalistic″, 6 – ″Comprehensibility″, 7 – ″Manageability″, 8 – ″Meaningfulness″; solid line – positive bilateral relation; dotted line – negative bilateral relation.

Fig. 1. Results of data analysis using multiple linear regression method, shown in the form of polycyclic multigraph in individuals of group I (Fig. 1.1.), group II (Fig. 1.2.), group III (Fig. 1.3.), and group IV (Fig. 1.4.)

12 statistically relevant (P=0.1) bilateral connections-relations were shown in group II (Fig. 1.2.), 8 between components within the questionnaires and 4 between components of two questionnaires. As to components of the two methods, negative bilateral connections-relations were found between ″Past Negative″ and ″Manageability″; ″Present-Fatalistic″ and ″Meaningfulness″. Thus, the higher value in life is taken by fate and the absence of trust in self-efficacy is presented in individuals of group II, whose major activities are studying and work, the less intense is their wish to be involved in activities and to meet challenges. At the same time, individuals of group II, as well as individuals of group I, have shown that the higher their personal and social competence is manifested (as the ability to overcome stress situations and recognition of their ability to manage the course of events), the less they feel aversion and disagreeable emotions regarding the past events. It is also worth mentioning that Balanced Time Perspective profile was identified in 8 % of individuals of group II.

12 statistically relevant (P=0.1) bilateral connections-relations were shown in group III (Fig. 1.3) between ″Zimbardo Time Perspective Inventory (ZTPI)″ components and ″Sense of Coherence (SOC)″ components. It has to be mentioned that all bilateral connections-relations in these subjects were identified between parameters within the questionnaire. Balanced Time Perspective profile was found only in 3 % of individuals of group III.

16 statistically relevant (P=0.1) positive bilateral connections-relations between ″Zimbardo Time Perspective Inventory (ZTPI)″ components and ″Sense of Coherence (SOC)″ components were shown in elderly individuals (Fig. 1.4.). Negative bilateral connection-relation between components of both scales, in particular, ″Past-Negative″ and ″Meaningfulness″, is of special interest. Thus, the more negative attitude to past (i.e. the past is viewed as disagreeable and excites disgust) is found in elderly individuals, the less intense is their emotional perception of the meaning of life and the fact that arising challenges and demands are worth struggle, and vice versa. It is also worth mentioning that Balanced Time Perspective orientation is absent in individuals of group IV.

Thus, it can be concluded that obtained results confirm the results of previous studies (Foret et al., 2004; Drake et al., 2008; Boniwell et al. 2010), showing that Past-Negative Time Perspective is indicative of adverse effects on life diversity and richness. Therefore, we have identified that relations between the component ″Past-Negative″ and different components of Sense of Coherence questionnaire are seen in group I, group II, and group IV subjects. This fact confirms a hypothesis suggested in previous studies (Drake et al., 2008; Baumeister, Catanese & Vohs, 2001; Sailer et al., 2014), stating that the effect of Past-Negative Time Perspective on psychological wellbeing is more potent than that of Past-Positive Time Perspective, as negative events exert higher effects than positive ones [15].

Relation between ″Future″ time perspective and ″Manageability″ was found in individuals of group I. It is worth mentioning that, in many studies, ″Future″ time perspective is viewed as the most positive one according to its contribution into behavior favorable for human health. ″Future″ time perspective, according to I. Boniwell (2010), is related more with eudemonical well-being than hedonistic one [10 Cited 12; 13]. Nevertheless, excessive concentration on future goals may pose a threat for an individual's ability to enjoy the current moment [14 Cited 12; 13].

We have also carried out correlation analysis of results obtained using ″Zimbardo Time Perspective Inventory (ZTPI)″ and ″Sense of Coherence by A. Antonovsky (SOC) ″ questionnaires using the Ordinary Least Squares (OLS). Correlation analysis of the data for individuals of group I has identified 5 statistically relevant (P=0.05) correlation relationships, including correlation relationships between components of both questionnaires (R^2) for the following methods: ″Past-Negative″ and ″Manageability″ − (0.30), ″Past-Negative″ and ″Meaningfulness″ − (0.14), ″Future″ and ″Comprehensibility″ − (0.14).

Correlation analysis of the data for individuals of group II has revealed 11 statistically relevant (P=0.05) correlation relationships, including correlation relationships between components of both questionnaires (R^2): ″Past-Negative″ and ″Comprehensibility″ − (0.10), ″Past-Negative″ and ″Manageability″ − (0.18), ″Future″ and ″Manageability″ − (0.21), ″Future″ and ″Meaningfulness″ − (0.21), ″Present-Fatalistic″ and ″Manageability″ − (0.09), ″Present-Fatalistic″ and ″Meaningfulness″ − (0.15).

Correlation analysis of the data for individuals of group III has found 9 statistically relevant (P=0.05) correlation relationships, including correlation relationships between components of both questionnaires (R^2): ″Past-Negative″ and ″Manageability″ − (0.07), ″Present-Fatalistic″ and ″Manageability″ − (0.14), ″Present-Fatalistic″ and ″Meaningfulness″ − (0.11).

Correlation analysis of the data for individuals of group IV has revealed 13 statistically relevant (P=0.05) correlation relationships. It is worth mentioning that all correlation relationships were identified within the components of one questionnaire; no correlation relationships between the parameters of both questionnaires have been shown.

Thereby, we can see differences in bilateral connections-relations and correlation relationships represented in different groups of individuals. Since the correlation analysis is focused on linear relationships, we can assume that these differences could be connected with nonlinearity of bilateral connections-relations that were found between the components of two questionnaires.

Conclusions. Thus, we have carried out the study of relationship between Time Perspective and Sense of Coherence in people as subjects of doing. Bilateral oriented connections-relations between Time Perspectives and components of Sense of Coherence have been identified in subjects with such major activity as studying, studying and work, and in elderly retired individuals. However, there is the absence of oriented connections-relations in subjects with such major activity as work. Moreover, differences in bilateral connections-relations and correlation relationships were shown. It was found out that Balanced Time Perspective is almost not represented in all groups of individuals and it is not identified among retired elderly individuals at all.

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