

PSYCHOTERAPIA 1 (184) 2018

strony: 17–29

Joanna Mostowik¹, Katarzyna Cyranka²

**NEW TRENDS IN PSYCHOTHERAPY.
THE ROLE OF TIME PERSPECTIVE IN MENTAL HEALTH
AND PRACTICED THERAPEUTIC INTERVENTIONS.**

¹ Institute of Applied Psychology, Jagiellonian University, Krakow, Poland

² Department of Psychiatry, Jagiellonian University Medical College, Krakow, Poland

Summary

The concept of time in the psychotherapy process has an important role not only in organizational aspects, determining a framework related to the paradigm of treatment represented by a psychotherapist, and to the length of psychotherapy (therapeutic setting), but also in the way the patient perceives life events. Although the number of available publications with time perspective theory (P. Zimbardo, J. Boyd) in the clinical area is not exhaustive, the results of research clearly indicate its importance in the clinical picture among different diagnostic groups. The significance of the discussed theory in practical psychotherapy interventions is included into different working techniques with time metaphors and therapies like Time Perspective Therapy – TPT, Mindfulness Based Cognitive Psychotherapy - MBCT or Future Directed Therapy.

The purpose of the paper is to present an overview of the research including the role of time perspective in psychopathology, a description of the mentioned psychotherapeutic forms, and consideration of possibilities and limitations of including particular therapeutic interventions based on time concept into the psychotherapy process and creating new therapeutic directions.

time perspective, therapeutic interventions, psychotherapy

Introduction

The interest in the significance of time concept in the field of mental health is not a new phenomenon. It can be found among works of psychologists such as William James [1], Lawrence Frank [2] and Kurt Lewin [as cited in 3]. The concept of psychological time, that is time which is subjectively experienced, may be explained by different notions. The most common terms are temporal consciousness, temporal (time) horizon and temporal (time) perspective (orientation) [4]. This paper will focus mainly on the latter, as it is the most important among them.

Temporal consciousness is related to the manner in which an individual understands, conceptualizes and evaluates time. It means the awareness of time of different phenomena and events. This is the scientific and the common knowledge which a person has about time and their own locus in

time [5]. A temporal (time) horizon means the length and the range of the time perspective. Dependent on the person, temporal horizon categories such as past, present, and future may have different ranges – broader or narrower ones.

The temporal (time) perspective, also known as temporal (time) orientation, was introduced into psychology by L. Frank [as cited in 3] as “the whole subjective perception of one’s own future and past existing in a particular moment of time” [p. 43]. The time perspective indicates how individual temporal dimensions are experienced, assessed and evaluated by a person. It is one of the aspects of temporal consciousness and is defined by the degree in which a person focuses on the past, present, and future in their own thinking, feeling and acting. It also shows which dimension is the most important for a person and therefore provides most for life activity, planning, anticipating and pursuing their actions. As Paul Fraisse [as cited in 6] claimed about the time perspective, “our actions at any given moment do not depend only on the situation in which we find ourselves at that instant, but also on everything we have already experienced and on all our future expectations. Every one of our actions takes these into account, sometimes explicitly, always implicitly [...]. We might say that each of our actions takes place in a temporal perspective; it depends on our temporal horizon at the precise moment of its occurrence” [p. 50].

According to Phillip Zimbardo and John Boyd – the authors of the time perspective theory, it is considered a personal, often unconscious attitude that every person has towards time. It is a process whereby life experiences are assigned to time categories that help to give order, coherence, and meaning to these events. Time perspective relates to the characteristic way of understanding, reliving and experiencing time and has an influence on an individual’s life activity through a mechanism moderating the way in which they establish relations with their environment and perceive their own experiences. The authors mention five main time perspectives – past positive, past negative, hedonistic present, fatalistic present, and future [7]. Each of them relates to different emotions, hierarchies of values and needs, and ways of reacting to encountered situations [8]. The past negative perspective means returning to worrying memories from the past. People with a high level of this perspective rely on painful past events in their thinking, assessing and present reactions. They have tendencies to frequently repeat tragedies, traumas, and failures in their minds. The past positive perspective is associated with assessments and reactions to present events based on happy and pleasant experiences from the past. People who feel positive emotions towards past events have a lower level of uneasiness than people who focus on the past related to negative emotions. The present fatalistic perspective means a belief that everything happens as a result of external fate or religious predestination. People who have a high level of this perspective focus on “here and now” in the sense of hopelessness. The present hedonistic perspective indicates an ability to enjoy the present

moment, and a need of seeking stimulation. These people are more creative and happier than people focusing on the present in a fatalistic way. The future perspective means focusing on possible events. People oriented towards the future are less aggressive, depressive and anxious, more energetic and self-confident, show higher self-esteem, and they care about their health. They have a better control of their ego and impulses [6].

According to Zena Mello and Frank Worrel [9], the time perspective can be described not only in terms of temporal orientation (level of one's attention towards the past, present, and future) and attitude (positive or negative emotional direction towards the past, present, and future), but also in terms of relations (the degree to which a person perceives that the past, present, and future are related to one another), frequency (the degree to which a person reports thinking of particular temporal dimensions) and meaning (the way a person defines past, present, and future).

The role of psychological time in mental health

The work of Zimbardo and his coworkers has importantly contributed to popularization and growth of the research concerning time perspective in psychology [6, 7; 10–14]. However, different descriptions and studies concerning ways in which people with different mental disorders perceive and experience time were reported much earlier. Israeli [as cited in 15] asserts that the boundary between melancholics and schizophrenics could be described by their problem with conceptualization of future goals and predictable possibilities. Wallace [16] underlined the difficulties in thinking about the future among patients with schizophrenia. They write stories in which the time extent of the future is significantly shorter than among healthy people. Calabresi and Cohen [17] showed that patients being in psychiatric treatment in comparison to healthy people present a higher level of anxiety towards time passing, a higher dependence on objective time measure and feel discomfort thinking about the past and the future. In the second half of the twentieth century, Frederick Melges launched studies concerning relations between time and mental illness. The inspiration for these studies was the observation from his psychotherapeutic practice that the time issue was an often theme of therapeutic sessions [18]. Melges noticed that people with different mental disorders perceive time incorrectly. He indicated a mistake related to the speed of time passing – people who feel that time passes too fast do many tasks simultaneously and people who feel that time passes too slow are under the impression that they are stuck in the present and more often affected by depression. Melges [19] took the view that people suffering from depression were stuck in a “destructive wheel” or “never-ending spiral”.

Susan Nomen-Hoksema, the continuator of Melges's works, was interested in research concerning strong absorption by the past that is characteristic for depression. She characterized the way of thinking among people with depression as depressive ruminations associated with constant focusing on what was gone. An obsessive concentrating on the painful past makes thinking, planning and acceptance of the uncertain future difficult [20]. The present and future are a suffering without any chance for improvement among people with depression. People with PTSD perceive time similarly to people with depressive disorders. They are stuck in the negative past what reduces their ability to live in the present and a positive perception of the future [18; 14]. Among patients diagnosed with neurotic disorders and personality disorders, the intensity of neurotic symptoms and traits of anxiety correlates positively with the degree of concentration on the past negative and the present fatalistic and also with a lower level of perceived control in daily life. Moreover, the more a patient is focused on the past negative, present fatalistic and hedonistic, and the less on the future, the greater is the number of immature defence mechanisms and the lower the number of mature ones [21].

The research conducted by C. Oyanadel and G. Buela-Casal in Chile among patients treated for severe states in mental disorders provides material to compare the structure of time perspective between clinical and non-clinical groups. This research included patients with depression, bipolar affective disorder, schizophrenia and personality disorders. The results indicate a significantly higher level of the negative past and the fatalistic present and a less balanced time perspective in the clinical groups [22].

In groups of patients presenting mental disorders, different problems with time may be observed - problems with time period sequence, and the speed of time passing, or an intensified concentration on one particular temporal orientation. Patients with schizophrenia present confusing of the past, present, and future. In mania episodes, time passes too fast, in depression too slow. A deviation of time perspective towards the present is observed among patients with personality disorders, whereas among patients with anxiety disorders, the deviation is towards the future. Patients with anxiety and depressive disorders are absorbed by the future in a different way than healthy people who are oriented towards a goal [8]. Research indicates that our temporal orientation is related to experienced and anticipated emotional states – anxiety, anger, aggression [23], and illnesses – anxiety disorders, depression, mania, PTSD, addiction to alcohol, psychoactive substances, behavioral addictions, personality disorders, and schizophrenia [24]. A high level of the past negative and present fatalistic perspective is typical for emotional states such as anxiety, anger, and aggression [12; 24]. Depression and PTSD correlate negatively with orientation on the future. Depressive patients with suicidal thoughts reveal absorption by the negative past and a lack of hope for future. A positive orientation towards the future may be a protective factor against depression [25], also in addicted people [26].

The most common conclusion from available publications indicates that the past negative perspective and the present fatalistic perspective are important indicators of the psychological problems' intensity among psychiatric patients. Likewise, people able to concentrate on positive aspects of the past demonstrate a lower risk of personality problems. In this sense, the past positive perspective may be a protective factor. The intensity of absorption in the past negative may be an indicator of possible progress in psychotherapy [27].

Due to the mentioned reports, discussions about the possibility of developing a temporal perspective during treatment for different mental disorders and illnesses are present in the literature and research discourse [14; 28].

P. Zimbardo and J. Boyd's theory of time underlines an ideal Balanced Time Perspective – BTP, which is specific to a good mental health. The ideal, balanced time perspective means a balance between a strong past positive orientation, moderate present hedonistic and future orientations and, on the other side, weak past negative and present fatalistic orientations. It means an ability to use different temporal components depending on the situation, as well as current values and needs. Authors and researchers [24] emphasize the importance of BTP and indicate negative consequences of high rates of negative temporal orientations (Maladaptive Deviation from BTP — maladaptive DBTP) or an extreme concentration on emotionally positive temporal orientations, like the extreme concentration on the present hedonistic, which increases the possibility of taking risky behaviors [11, 13, 29]. Although future orientation has positive influences confirmed in the research [11, 30], it also may lead to increased stress, worries about future, and a lack of enjoyment of the present moment if it is in excess. Patients with anxiety and depressive disorders are absorbed by the future in a different way than healthy people who are oriented towards a goal [6].

Implications for psychotherapy

The results of research clearly show an important role of the time perspective conception in the clinical field and psychopathology description of different diagnostic groups. Therefore, practitioners may ask how research results can be used in the daily helping process in psychotherapy.

Each psychotherapy type leads the patient to a less painful, less hurtful and more positive view of his past and current situation, through developing different abilities to cope with everyday life, and to looking adequate towards the future. The optimal time perspective is a simple, metaphoric description of the ideal state towards which a patient or client should pursue with his psychotherapist during the treatment. This optimal state means a balance between a strong past positive orientation, moderate present hedonistic and future orientations and weak past negative and present fatalistic orientations. It is based on the symptoms reported by the patient undertaking the treatment.

In the scientific literature, there is a scarce of research exploring the possibility to modify the structure of the time perspective as a result of therapeutic interventions and treatment. If the structure of time perspective is a predictor of risky behaviors and mental disorders, it should change similarly to other indicators of recovery during psychotherapy. P. Zimbardo, R. Sword and R. Sword's research [14], conducted among war-veterans suffering from PTSD, and S. Davies and P. Filippopoulos's research, [28] conducted among people addicted to alcohol and other psychoactive substances, are examples that confirm the development of a more appropriate temporal orientation in the strict sense in psychotherapy. The first mentioned research shows a development of a more appropriate time structure, reduction of depression, anxiety and other clinical symptoms, as a result of narrative therapy based on Zimbardo and Boyd's conception. Research among addicted patients confirms that therapeutic interventions such as the 12 AA steps program, cognitive behavioral therapy (CBT) and *mindfulness* meditation resulted in a reduction of the past negative and present hedonistic perspectives and an increase of the future orientation, which is oriented towards a goal.

The results of studies conducted by J. Chodkiewicz and K. Nowakowska [31] among alcohol-addicted people in the out-patient detoxication treatment show a role of temporal orientation in the planned finishing of the therapy. An orientation towards the future turned out to be a factor contributing to correct, planned finishing of the therapy by addicted men.

Some of the researchers and practitioners go even further and point to the significance of using the discussed construct as a tool during psychotherapy process. Different techniques based on time metaphor and therapy forms such as Time Perspective Therapy — TPT, Mindfulness Based Cognitive Psychotherapy — MBCT or Future Directed Therapy are examples addressing the significance of the time conception in practical interventions of psychotherapy.

Time Perspective Therapy — TPT

Time Perspective Therapy — TPT constitutes another phase of the cognitive-behavioral model's development (CBT) and is a result of Richard Sword and Rosemary Sword's studies of war veterans suffering from PTSD, conducted in 2009-2011 [14]. The therapy is based on the assumption that people with PTSD, similarly to people with depression, are stuck in the painful, traumatic past.

The therapy's goal is to work out a balanced time perspective including the past, the present, and the future. It is a type of narrative therapy, which concentrates on refocusing the weight from the past to the present and towards the ability to perceive a valuable future, considering the emotional aspects of these dimensions. The authors underline that the therapy concentrates not only on the past and present of a patient's experiences and their influence on psychosocial functioning, but also on the future perspective. The therapy avoids multiple reminiscences of experienced trauma to minimize being stuck in the negative wheel of past events. Patients work on understanding particular time perspectives and their influence on the patients' perception of themselves and their abilities, acceptance of the traumatic act, acceptance that a person with PTSD has experienced psychological injury, not mental illness, learning calm techniques (breathing exercise, visualizations), strengthening positive elements in their history (positive past), strengthening the ability to healthily enjoy the present moment (hedonistic present), taking prosocial activities by people with PTSD and creating short- and long-term goals (optimistic future) [14].

Pilot studies conducted in 2009-2011 indicate that TPT may be valuable for the treatment of PTSD, anxiety states, depression, and cardiologic patients. A group of 30 patients was treated by TPT. Among 87% of them, PTSD and trauma symptoms stopped, and in 100% of the patients, the level of depression decreased. The patients were examined four times with one-year time interval – before, during and after therapy, by questionnaires measurements assessing the intensity of anxiety, trauma, and depression symptoms and time perspectives. A comparison of the TPT effectiveness to the effectiveness of Cognitive Behavioral Therapy — CBT and Prolonged Exposure Therapy — PE for PTSD treatment underlines the efficacy of CBT and TPT [14]. An advantage of TPT is its applicability in the treatment of PTSD and also the majority of disorders for which CBT is disqualified [32], excluding psychosis and organic disorders [33]. A detailed description of the model is available in Zimbardo, Sword and Sword's publication "A Therapist's Guide to The Time Cure: Overcoming PTSD with the New Psychology on Time Perspective Therapy. Time Perspective Therapy in Six Sessions".

Mindfulness Based Cognitive Psychotherapy — MBCT

Mindfulness Based Cognitive Psychotherapy — MBCT is a connection of cognitive-behavioral therapy, meditation and concentration on “here and now”, which is applied in recurrent depressive disorder [34] and anxiety states. Mindfulness means the mental ability to be in the present moment, to perceive internal and external experiences and other phenomena in a non-evaluating way [35]. MBCT therapy was designed by Z. Segal, M. Williams and J. Teasdale on the basis of J. Kabat-Zinn’s Mindfulness Based Stress Reduction program, which was originally assigned to people with chronic illnesses related to stress and a lack of adaptive strategies to cope with it [36]. The aim of the MBCT is to reduce consequences of depressive thinking which is responsible for recurrent episodes. The therapy involves teaching patient to observe and concentrate on their own thoughts without stopping and multiple reviewing, in order to wean patients from constant ruminating of painful events, which is typical for depression.

The results of a control research conducted among 145 patients after major depression episode confirmed the effectiveness of the mindfulness-based therapy for the risk of relapse and improvement of the quality of life [37]. Jacob Piet and Esben Hougaard’s meta-analysis [38], involving results from six scientific projects conducted in 2000-2010 on a group of 593 patients with recurrent depressive disorder in remission, shows that MBCT is effective in reducing the risk of illness relapse. Another analysis [39], based on results from thirty-nine studies (727 articles) conducted among 1140 participants of MBCT training because of anxiety disorders, depression, and other physical and mental medical states, provides that MBCT has moderate effects in reducing anxiety and mood symptoms. The effect was lasted in the follow-up studies verifying long-term effects (12 researches, average time of examination after therapy end – 12 weeks). There are also publications which indicate the usefulness of MBCT in the treatment of patients with anxiety disorders [40], bipolar affective disorder [41] and psychotic episodes [42-44]. Elements of mindfulness training are also present in M. Linehan’s Dialectical Behavioral Therapy, which is used for work with borderline personality disorder patients [45].

Future Directed Therapy — FDT

Future Directed Therapy — FDT is a new type of therapy dedicated to patients with clinical depression. The therapy is based on the assumption that a person's actions and experienced emotions are results of anticipated future events. Depression may develop when a person does not expect positive events in the future, whilst anxiety when a person expects too many negative events. Most people are unconscious of the influence of their expectations on their daily functioning. Patients suffering from depression are too much focused on what they do not want and what they are afraid of. They also have difficulties in developing a more advantageous future, setting goals, creating plans and solving problems.

Traditional types of cognitive-behavioral therapy in treating depression focus on work with a patient's negative thoughts and irrational beliefs. In FDT, there is no verification of rationality of the thoughts and views. It is assumed that every thought is in a sense rational if looking at it from an individual, subjective perspective. However, some people can have thought schemes which are not helpful for achieving the desired future. The therapist helps a patient to recognize the reported problem, change expectations based on the patient's wants, identify obstacles and create a realistic plan which allows gaining the goal. One of the aims of FDT is to activate brain parts that are responsible for optimism, and which are less active among people with depression.

Clinical studies using FDT are being conducted. To date, there are two articles published, which indicate that FDT may be an effective type of intervention for people with depression [46, 47]. The first study compares a group of patients with clinical depression treated in the psychiatric ward. One group, consisting of 16 people, was taking part twice a week during 10 weeks in a group therapy based on FDT. In the same time, another group, consisting of 17 people, was treated in a traditional cognitive group therapy. The results indicate that patients treated with FDT obtain a significant improvement in depression intensity measured by Quick Inventory of Depressive Symptomatology-Self-Report (QIDS-SR) [48], anxiety intensity measured by Beck Anxiety Inventory [49] and satisfaction in life measured by Quality of Life Enjoyment and Satisfaction Scale — short form [50]. Patients from the FDT group obtained a significantly better improvement in reduction of depression than patients from the control group. Other studies conducted in the same hospital, where patients treated with FDT and cognitive-behavioral interventions were compared, provide similar data. An improvement in the depression level (QIDS-SR), feeling of hopelessness (*Beck Hopelessness Scale*) [51] and expectancy of a more positive future were observed in both groups. However, a significantly higher improvement in assessment of life satisfaction was observed in the FDT group as compared to the CBT group.

Other therapeutic interventions involving time perspective

Among different interventions used by psychotherapists, there are some related to the meaning of time in a patient's life.

An example of an intervention using a time metaphor is working with patients on balancing their life line - strengthening a favourable emotional component and equalizing concentration on particular temporal orientations. In the training of therapeutic groups working on patients' life lines using the timeline, the willingness to omit a painful life history which is symbolized by the past and present is very often observed. The boundary between the past and the present is usually the beginning of the illness, a traumatic event, the moment of admission to hospital or a hospital stay. The willingness to omit a fragment of painful history, forgetting, defensive non-thinking and turning to the expected future (recovery or return to family home) is symbolically represented by an inclination to "run" through this moment of the time. In such a case, a time metaphor may be valuable to show the patient the necessity to balance his emotional attitude to particular time orientations by working out blocked material instead of escaping from the unbearable past and present.

Summary

Many scientific publications confirm the meaning of particular time perspectives and their structures in the mental health. A characteristic high level of the past negative perspective and the present fatalistic perspective are repeatedly observed among patients with different mental disorders. What differentiates clinic groups are the proportions of particular temporal orientation in the structure of the time perspective. In research, there is often a lack of reference to the population of healthy people, what would allow comparing structures of the time perspective in the clinic groups to structures in the non-clinic groups. In available literature, there is little research, the results of which would allow indicating a causal link and potential mediators and moderators related to diagnostic categories and subjective sense of time. The research indicating changes in time perspective is mostly related to creating new therapeutic directions. Studies on Time Perspective Therapy (TPT), Mindfulness Based Cognitive Psychotherapy (MBCT) and Future Directed Therapy (FDT) indicate the usefulness of time metaphor in the reduction of different clinic symptoms – anxiety, trauma, depression, the risk of depression recurrence and improvement in the quality of life.

However, in the literature, there is a missing of research studying the discussed conception of changes taking place during more traditional CBT or psychodynamic psychotherapy forms. It seems that to some extent every psychotherapy process leads on the emotional basis to a less painful, and worrying and a more positive view on the past and present situation through the development of different skills to

cope with the daily life, and also to an adequate look to the future. This means that it leads to a reorganization of the time perspective structure. The concept of optimal time perspective may be a metaphor illustrating desirable changes in psychotherapy, where particular categories represent the luggage of experiences with which a patient arrives for help.

From the research perspective, there would be a direct value from research on changes in time perspective during more traditional psychotherapy forms and research indicating factors that facilitate changes towards optimal, balanced time perspective.

From the practice perspective, the question about when and in which form the discussed time metaphor may be valuable in working with the patient, is left for individual reflection.

References

1. James W. The principles of psychology. New York: Henry Holt and Company; 1890, s. 605-642.
2. Lewin K. Time perspective and morale. W: Lewin G, red. Resolving social conflicts. New York: Harper; 1942, s. 103-124.
3. Zaleski Z. Psychologia zachowań celowych. Warszawa; Wyd. PWN, 1991, s. 43.
4. Kuleta M. Poczucie kontroli nad wydarzeniami i subiektywna perspektywa czasowa. Ich rola i znaczenie dla doświadczalnej satysfakcji z życia. Unpublished doctoral thesis. Kraków; Jagiellonian University: 2001.
5. Chłopecki J. Czas, świadomość, historia. Uwarunkowania potocznej świadomości czasu. Rzeszów; Wyd. WSP w Rzeszowie; 1986, p. 26.
6. Zimbardo P, Boyd J. Paradoks czasu. Warszawa: Wyd. Naukowe PWN; 2009, p. 49–140.
7. Zimbardo PG, Boyd J. Putting time in perspective: a valid, reliable individual-differences metric. *J. Personality and Social Psychology*. 1999; 77(6): 1271-1288.
8. Zawadzka B, Byrczek M. Kształtowanie perspektywy temporalnej jako aspekt adaptacji do choroby i leczenia. Analiza oparta na badaniach chorych leczonych narkozastępczo. *Psychiatr. Pol.* 2012; 5: 743–756.
9. Mello ZR, Worrell FC. The past, the present, and the future: A conceptual model of time perspective in adolescence. W: Stolarski M, Fieulaine N, van Beek W, red. Time perspective theory; review, research and application. Cham Heidelberg New York Dordrecht London: Springer International Publishing; 2015, p. 115–129.
10. Zimbardo PG, Keough KA, Boyd JN. Present time perspective as a predictor of risky driving. *Personality and Individual Differences*. 1997; 23(6): 1007–1023.
11. Keough KA, Zimbardo PG, Boyd JN. Who's smoking, drinking, and using drugs? Time perspective as a predictor of substance use. *Basic and Applied Social Psychology*. 1999; 21(2): 149–164.
12. Boniwell I, Zimbardo PG. Balancing time perspective in pursuit of optimal functioning. *Positive psychology in practice: promoting human flourishing in work, health, education, and everyday life*. Second Edition. Hoboken NJ: John Wiley & Sons; 2015, p. 223–236.
13. Boyd JN, Zimbardo PG. Time perspective, health and risk taking. W: Strahman A, Joireman J. red. understanding behavior in the context of time: theory, research and applications. Mahwah NJ: Erlbaum; 2005, p. 85–107.
14. Zimbardo P, Sword R, Sword R. Siła czasu. Warszawa: Wyd. Naukowe PWN; 2013.
15. Milby HB. Time perspective as related to trait and state anxiety. Doctoral thesis. Urbana-Champaign; University of Illinois: 1976.

16. Wallace M. Future time perspective in schizophrenia. *J. Abnormal and Social Psychology*. 1956; 52(2): 240–245.
17. Calabresi R, Cohen J. Personality and time attitudes. *J. Abnormal Psychology*. 1968; 73(5): 431–439.
18. Zimbardo P, Boyd J. *Paradoks czasu*. Warszawa: Wyd. Naukowe PWN; 2009, p. 171–185.
19. Melges FT. *Time and the inner future: a temporal approach do psychiatric disorders*. New York: John Wiley & Sons; 1982, p. 177.
20. Nolen-Hoeksema S. Responses to depression and their effects on the duration of the depressive episodes. *J. Abnormal Psychology*. 1991; 100: 569–582.
21. Mordawska J. *Psychologiczne uwarunkowania perspektywy czasowej wśród pacjentów z objawami nerwicy*. Unpublished master thesis. Kraków; Jagiellonian University; 2016.
22. Oyanadel C, Buela-Casal G. Time perception and psychopathology: influence of time perspective on quality of life of severe mental illness. *Actas españolas de psiquiatría*. 2014; 42(3): 99–107.
23. Stolarski M, Matthews G, Postek S, Zimbardo PG, Bitner J. How we feel is a matter of time: Relationships between time perspectives and mood. *J. of Happiness Studies*. 2014; 15(4): 809–827.
24. van Beek W, Berghuis H, Kerkhof A, Beekman A. Time perspective, personality and psychopathology: Zimbardo's time perspective inventory in psychiatry. *Time & society*. 2011; 20(3): 364–374.
25. Breier-Williford S, Bramlett RK. Time perspective of substance abuse patients: Comparison of the scales in Stanford time perspective inventory, Beck depression inventory, and Beck hopelessness scale. *Psychological Reports*. 1995; 77(3): 899–905.
26. Kleftras G, Georgiou C. Substance use: Depressive symptomatology, desire for control and time perspective. *Mental Health and Substance Use*. 2014; 7(3): 230–242.
27. Beiser M, Hyman I. Refugees' time perspective and mental health. *American J. of Psychiatry*. 1997; 154(7): 996–1002.
28. Davies S, Filippopoulos P. Changes in psychological time perspective during residential addiction treatment: a mixed-methods study. *J. of Groups in Addiction & Recovery*. 2015; 10(3): 249–270.
29. Fieulaine N, Martinez F. Time under control: Time perspective and desire for control in substance use. *Addictive Behaviors*. 2010; 35(8): 799–802.
30. Zhang JW, Ryan T, Howell RT. Do time perspective predict unique variance in life satisfaction beyond personal traits? *Personal and Individual Differences*. 2011; 50: 1261–1266.
31. Chodkiewicz J, Nowakowska K. Preferowana orientacja temporalna a przebieg leczenia odwykowego osób uzależnionych od alkoholu. *Psychiatr. Pol.* 2011; 2: 177–196.
32. Bryant RA, Harvey AG. *Acute stress disorder: A handbook of theory, assessment, and treatment*. Washington: American Psychological Association; 2000, p. 87–134.
33. Sword RM, Sword RK, Brunskill SR, Zimbardo PG. Time perspective therapy: A new time-based metaphor therapy for PTSD. *J. Loss and Trauma*. 2014; 19(3): 197–201.
34. Teasdale JD, Segal Z, Williams JMG. How does cognitive therapy prevent depressive relapse and why should attentional control (mindfulness) training help? *Behaviour Research and therapy*. 1995; 33(1): 25–39.
35. Williams M, Teasdale J, Segal Z, Kabat-Zinn J. *Świadoma drogą przez depresję. Wolność od chronicznego cierpienia*. Warszawa: Czarna Owca; 2009, s. 72–73.
36. Russell T. Body in mind training: mindful movement for severe and enduring mental illness. *British J. Wellbeing*. 2011; 2 (3): 13–16.
37. Teasdale J, Segal Z, Williams J, Ridgeway V i wsp. Prevention of relapse/recurrence in major depression by mindfulness-based cognitive therapy. *J. Consulting and Clinical Psychology*. 2000; 68: 615–623.
38. Piet J, Hougaard E. The effect of mindfulness-based cognitive therapy for prevention of relapse in recurrent major depressive disorder: A systematic review and meta-analysis. *Clinical Psychology Review*. 2011; 31: 1032–1040.

39. Hofmann SG, Alice T, Sawyer AT, Witt AA, Oh D. The Effect of Mindfulness-Based Therapy on Anxiety and Depression: A Meta-Analytic Review. *J. Consulting and Clinical Psychology*. 2010; 78(2): 169–183.
40. Evans S, Ferrando S, Findler M, Stowell C, Smart C, Haglin D. Mindfulness-based cognitive therapy for generalized anxiety disorder. *J. of anxiety disorders*. 2008; 22(4): 716–721.
41. Williams J, Alatiq Y, Crane C i wsp. Mindfulness-based cognitive therapy (MBCT) in bipolar disorder: preliminary evaluation of immediate effects on between-episode functioning. *J. of Affective Disorders*. 2008; 107(1): 275–279.
42. Chadwick P, Taylor K, Abba N. Mindfulness groups for people with psychosis. *Behavioural and Cognitive Psychotherapy*. 2005; 33(3): 351–359.
43. Davis L, Strasburger A, Brown L. Mindfulness: an intervention for anxiety schizophrenia. *J. of Psychosocial Nursing and Mental Health Services*. 2007; 45(11): 23–29.
44. Abba N, Chadwick P, Stevenson C. Responding mindfully to distressing psychosis: a grounded theory analysis. *Psychotherapy Research*. 2008; 18(1): 77–87.
45. Linehan MM, Schmidt H, Dimeff LA, Craft JC, Kanter J, Comtois KA. Dialectical behavior therapy for patients with borderline personality disorder and drug - dependence. *The American J. on addictions*. 1999; 8(4): 279–292.
46. Vilhauer JS, Young S, Kealoha Ch, Borrmann J, IsHak WW, Rapaport MH I wsp. treating major depression by creating positive expectations for the future: a pilot study for the effectiveness of Future-Directed Therapy (FDT) on symptom severity and quality of life. *CNS Neuroscience & Therapeutics*. 2011; 8(2): 102–109.
47. Vilhauer JS, Cortes J, Moali N, Chung S, Mirocha J, IsHak WW. Improving quality of life for patients with major depressive disorder by increasing hope and positive expectations with future directed therapy (FDT). *Innovations in Clinical Neuroscience*. 2013; 10(3): 12–22.
48. Rush AJ, Trivedi MH, Ibrahim HM i wsp. The 16-item Quick Inventory of Depressive Symptomatology (QIDS), clinician rating (QIDS-C), and self-report (QIDS-SR): A psychometric evaluation in patients with chronic major depression. *Biological Psychiatry*. 2003; 54: 573–583.
49. Beck AT. *Manual for the Beck anxiety inventory*. San Antonio: TX Psychological Corporation; 1990.
50. Endicott J, Nee J, Harrison W, Blumenthal R. Quality of life enjoyment and satisfaction questionnaire: A new measure. *Psychopharmacology Bulletin*. 1993; 29: 321–326.
51. Beck AT, Weissman A, Lester D, Trexler L. The measurement of pessimism: the Hopelessness scale. *J. of Consulting and Clinical Psychology*. 1974; 42(6): 861–865.

E-mail address: jbmostowik@gmail.com