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## Depression in the light of the Transactional Analysis theory – social media Big Data analysis

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### Summary

The analysis of epidemiological studies shows an increase in the number of people suffering from depression. One should also take into account those on the brink of depression and those who, for various reasons, will never be diagnosed but are ill. Depression has a detrimental effect on patients' quality of life and poses a threat to one's health. Additionally, it is a serious social issue that is linked with psychological consequences for a given patient's environment and growing costs of depression treatment. The description of depression is complex and regards psycho-social factors. There are many models of depression and ways of dealing with it. The growth of knowledge about depression might contribute to early diagnosing and, in particular situations, it might prevent the illness. The model of depression presented in the theory of transactional analysis is useful in describing and understanding issues concerning depression. The specific language of transactional analysis is useful in the educational process, it also allows for analysing the phenomenon by identifying particular behaviour and utterances. This language can be used for the analysis of social media which have been reflecting real-life problems for some time.

**Keywords:** depression, transactional analysis, Big Data, social media.

## What is depression, the scale of this phenomenon and its consequences

The word depression is often used in colloquial language to describe the weather or one's mood, we talk about a depressive climate or month. What is more, "the term depression is used in our everyday language to name many ex-

periences, beginning with a barely noticeable and transitory lowered mood and finishing with exceptionally deep disorders, posing even a threat to human life. Used to describe one's mood, the term signifies a transitory state of dysphoria, which can last a few moments, hours or even days" (Hammen, p. 13). Colloquial understanding of depression is usually linked with noticeable symptoms of deterioration of one's well-being. However, as far as its diagnosing is concerned, it is far more complicated as "DSM-5 comprises eight different depression disorders, every single of them with its own diagnostic criteria.

One can start with a bigger depressive disorder which begins with a single episode, but 50% of patients suffer from the recurrence of its symptoms within a year, and 85% of them shall experience its recurrence within their lifespan. A bigger depressive disorder usually lasts about 6 months and 20% of episodes progress to a chronic state. Women are more frequently touched with depressive disorders" (Heitzman J., p. ix). The aforesaid depressive disorders are as follows: "A disorganising mood regulation disorder, a bigger depressive disorder (including an episode of a bigger depressive disorder), a persistent depressive disorder (dysthymia), a pre-menstrual dysphoric disorder, a depressive disorder triggered by a given substance or medicine, a depressive disorder resulting from one's general medical condition, another particular depressive disorder and an undetermined depressive disorder [...] The common feature of all those disorders is the presence of sadness, the feeling of emptiness or irritation, accompanied by somatic and cognitive changes seriously affecting one's ability to function. The differences among them concern their duration, the moment of occurrence or alleged aetiology (Heitzman, 2017, p. 1). Each depression type has its key symptoms, depression touching children is classified separately, so are bipolar disorders. The accuracy of diagnosing sometimes arouses controversy, for example, while determining whether mood disorders that accompany mourning shall be treated as depression or only as a temporarily lowered mood. The disorganising mood regulation disorder regards children under 12, bigger depressive disorders are characterized by "separate episodes lasting at least 2 weeks (though the majority of episodes lasts much longer), resulting in marked changes in the area of affection, cognition and neurovegetative functions and separated by remission periods." The persistent depressive disorder is diagnosed if mood disorders last 2 years for adults and 1 year for children. A behaviour disorder that "begins at a certain moment after ovulation, is subject to remission within a few days after menstruation and has a substantial influence on one's functioning" is called the pre-menstrual dysphoric disorder" (Heitzman, 2017, p. 2). Each depressive disorder has its diagnostic criteria, asking in detail if e.g. an outburst of anger occurs at least three times a week or if changes in one's weight exceed 5% per month (Gałecki, Święcicki, 2015, pp. 89–109). It is worth remembering that depression is a condition causing immense suffering not only to a given patient but also to their closest surrounding. Diagnosed and treated, it still is a serious problem. We should

also remember about people suffering from depression and not seeking any specialist help.

Depression is a strong mood disorder, frequently making normal functioning impossible. This state is mainly characterized by smaller activity and lower energy, a worsened mood and loss of interests. "Currently, the issue of depression in society has become very well-known. According to the document of the World Health Organisation (Mental Health Action Plan 2013–2020), depression constitutes 4.3% of global illnesses and is one of the biggest single causes of disability in the world, especially frequently affecting women" (Health Policy Programme, p. 2). Depression is a systemic disease. Its occurrence and lack of proper treatment lead to a higher risk of somatic illnesses whereas somatic illnesses, especially chronic ones, increase the risk of depression. Apart from the aforesaid disorders, depression is linked with intentional self-destructive activities. This problem is particularly noticeable among teenagers and most frequently concerns patients of psychiatric wards. "In 2005, in Poland, self-mutilation among patients of psychiatric wards, aged 13-19, equalled 27%, and in two subsequent years it increased up to 47% [1]. In such a hermetic environment as a psychiatric hospital, self-aggression is often taken over from other patients and based on the modeling mechanism, or undertaken in order to obtain bigger acceptance from the group. Due to that fact and many other self-amplifying factors (such as: losing one's sense of life, lack of understanding, emotional difficulties and numerous regulatory functions of self-mutilation), a growing phenomenon of self-mutilation among teenagers constitutes a phenomenon that is very difficult to control and treat" (Radziwiłłowicz, Lewandowska, p. 284). The biggest self-destruction act is suicide. In Poland the number of suicidal acts among teenagers is particularly high. "A growing number of suicide acts among teenagers (especially those aged 15–19) – over the last 25 years – is a very worrying phenomenon. The 90s of the last century witnessed a surge of suicidal acts, i.e. from 10% at the beginning of the decade up to 16% in 2000. This high percentage is still maintained and despite a significant decrease in the general number of deaths among young people, in 2017 suicide attempts were the cause of almost 20% of deaths among teenagers" (www.politykazdrowotna.com, access on 25.10.2019). "Depressive cases constitute the group of the highest risk of suicide, among diseases conditioned by psychological factors. It is assumed that 65% of suicide cases are linked with mental disorders (depression, schizophrenia, addictions). The risk of suicide in case of depression increases to the indicator which equals 30%" (Michalska-Leśniewicz, Gruszczyński, p. 101).

Depression is becoming a serious social issue. The World Health Organisation currently estimates that it is the second most frequent reason of health loss, disability or suicide (Depression and Other Common Mental Disorders. Global Health Estimates, WHO 2017). As it has already been mentioned, depressive disorders often remain undiagnosed, which might lead to somatic illnesses that sec-

ondarily intensify depression symptoms. "People suffering from depression are exposed to a 40–60% higher risk of premature death linked with physical health issues, which often remain undiagnosed or untreated (including: tumours, cardiovascular diseases, diabetes, HIV, infections) (Health Policy Programme - *Program polityki zdrowotnej*, p. 12). It means, among others, that depression and diseases related to it are not only oppressive for patients but also very costly for society. The approved programme contains the activities such as: developing recommendations regarding prevention, early diagnosis and depression treatment, education, education concerning depression prevention and depression prevention in groups at risk.

The issue of depression attracts scientists' attention. From the point of view of depression prevention, it is important to determine factors favouring depression. In the years 2009–2014, only in Polish literature one could find 1067 articles devoted to the issue of depression (Jasik et al., p. 300), the research described in these articles involved 3607 people. The conclusions from this set of surveys show a very strong influence of psycho-social factors, namely caring for a chronically ill person, being a chronically ill person, experience of trauma, hormonal issues or old age (Jasik et al., p. 314). Apart from psycho-social factors, one can find a multitude of psychological features such as "perfectionism, reserve, inclination towards apprehensiveness and mood swings [...] high need for achievements, difficulty in relaxing, tendency for pessimism [...] dependence on support, care, concern and acceptance of others, fear of change [...] difficulty in expressing negative emotions such as anger, hostility" (Michalska-Leśniewicz, Gruszczyński, p. 95). Depression will also go along with beliefs and expectations such as: inadequate sense of control over one's life, lack of sense of life, low expectations towards efficiency of one's own actions or learned passivity (Michalska-Leśniewicz, Gruszczyński, p. 97). Family life, a possibility of obtaining support from one's environment or the way one deals with problems also play an important role. Against the background of many different strategies, the best solution seems to be methodical problem solution, problem confrontation, positive redefinition, decreasing distance to others and sense of humour (Michalska--Leśniewicz, Gruszczyński, pp. 100–101).

Many examples of environmental and psychosocial factors conditioning the occurrence and course of depression let us assume that preventive activities should be undertaken. The next part of the article describes the preventive function of Transactional Analysis and examples of its use.

## **Depression in the theory of Transactional Analysis**

Transactional Analysis (henceforth TA) is a psychotherapeutic theory which proves useful in many situations, beginning with education, counselling, and fin-

ishing with psychotherapeutic work in difficult situations. The script analysis and working on Self states proves useful in working with terminally ill people (Shirai, 2006). Similarly, working on traumatic experiences (Stuthridge, 2006) one can notice how relations between Self states influence one's state of mental health. Personality adaptations described in the theory of TA work relatively well in clinical situations (Stewart, Joines, 2016; Wilson, 2006). From the point of view of this paper, it is interesting to see how TA can be used to improve communication with patients (Booth, 2007) or to promote health, where in contact with patients "TA is one of the most efficient psychological theories that lets us explain the mechanism of stress and helps in the process of problem solving in interpersonal relations" (Murakami et al., 2006).

The theory and the specific language of TA function well in describing difficult life situations, when some defence mechanisms can be omitted or the pace of a clarification process can be increased. The specific TA constructs such as life situations, game analysis or life script are effective in explaining life problems, among all, in describing depression (Steiner, 2009). Mark Widdowson (2015, pp. 42–55), who developed the most complex theoretical description of depression from the point of view of TA, emphasises that every depression model is reductive as none of them can reflect the complexity of human nature. Nevertheless, he proposes to use that model as practically applicable. In Widdowson's view, in order to describe current reality in a better way, it is necessary to redefine some classical TA concepts. "The author has found that the word 'games' has particularly problematic associations for people, as it will often be interpreted as meaning 'conscious manipulation', which misses the subtlety of the concept of a 'game'. Similarly, 'racket' does not have any current cultural meaning (certainly within the UK). The concept of 'authentic feeling' conveys the implicit message that some feelings are 'inauthentic', which does not match with a client's subjective experience. Within this manual, 'authentic emotion' will be referred to as 'primary emotion' and 'racket feeling' will be referred to as 'secondary emotion'. The racket system has fairly recently been renamed as the script system (Erskine, 2010) in order to convey the sense that it illustrates the life script in action. The author of this manual believes that renaming the racket (script) system to 'associative network' (or, for ease of use in sessions, 'emotional circuit') more accurately conveys the nature of what it is and how it functions. It is believed that this will also make the concept more accessible and understandable to other mental health professionals" (Widdowson, 2015, p. 42).

Coming back to depression, the life position 'I am not OK, you are OK' is primarily linked with it. Widdowson writes that "Berne drew on Melanie Klein's theory of the depressive position in the development of the theory of life positions, and linked the depressive position with the 'I'm not OK – you're OK' life position. Therefore, the individual has a pervasive sense that she is 'not OK' and is inferior to others, who are considered to be 'OK'. A strong sense of being 'not

OK' will lead the person to conclude that she is somehow inherently 'bad'" (Widdowson, 2015, p. 43).

Depressive life position might be linked with positive views on others while hiding opinions on oneself. The next indicator of depression is deprivation of cognition signs. A depressive individual has a strong inner prohibition on looking for and experiencing positive signs of cognition. "The depressed person is seen as living in an interpersonal world where positive strokes are either not forthcoming due to limited or unsatisfactory relationships and/or the positive strokes are discounted by the individual, maintaining that person's low self-esteem and sense of worthlessness. Patterns of negative stroking are internalised into the individual's Parent ego state, resulting in the negative strokes being internally replayed through the internal ego state dialogue as self-criticism and reinforcing the sense of the self as being inherently 'bad'. In addition to the negative, critical strokes, there is an absence of positive, nurturing strokes, which leads to an undeveloped internal Nurturing Parent" (Widdowson, 2015, p. 43).

Such a state makes it impossible to develop the Nurturing Parent ego state and leads to a life scenario that can be called "life without love with a central feeling of not being loved." Thus, in case of depression we find a huge difference between the expression "Nobody loves me" being flirtatious or a signal drawing others' attention and a strong inner feeling of being unworthy of love, which makes it impossible to fight for others' attention.

Script injunctions organise our life around strong inner beliefs describing what we can and cannot do. Not complying with these injunctions leads to an inner conflict and strong discomfort, which means that most of us would rather follow script injunctions even when they were clearly detrimental to us. A script injunction for depression is "not to exist", which often leads to suicidal thoughts. As it was mentioned earlier, it is linked with the undeveloped Nurturing Parent ego state, which might support a depressive individual. Instead, there is a conflict between the Parent and Child ego states, which might be called an "impasse". The lack of consent places an individual in a constant dilemma between to want and to be able to. Life with this dilemma strengthens the sense of worthlessness and favours suicidal thoughts (Widdowson, 2015, p. 43).

As far as the personality structure is concerned, depression can be explained both by the structural and functional model. "Although a number of depressive symptoms and processes can be understood using TA concepts of structural analysis, several TA writers have used the functional model to understand the process of a person with depression. The harsh, self-critical process which is a key feature of depression is considered to be connected to a harsh, critical Parent ego state which dominates the internal dialogue of the depressed individual at the conscious, out-of-awareness and unconscious levels [...] This process is described [...] in functional analysis terms as the presence of a strong and over-developed Critical Parent transacting internally to the Adapted Child, who in turn responds

with guilt, shame, despair and a sense of worthlessness. Additionally, the internal Nurturing Parent is seen as relatively weak, which results in the individual being unable to sustain any positive sense of self-esteem. As the accuracy of the Parent-driven self-critical dialogue and the 'I am bad' response of the Child ego state is accepted by the depressed individual as the 'truth', the negative beliefs about self, others and the world also can be viewed as contaminations of the Adult ego state." (Widdowson, 2015, p. 44). On the other hand, structurally it might be the strict Parent in the Child resulting in the feeling of oppression and helplessness.

Within the framework of the dramatic triangle, there is not one role assigned to a depressive person. They can act as a saviour, maintaining the life position 'you are OK, you should be saved.' However, it could be equally well the role of a victim, though the situation in which a depressive individual adopts a position 'I am not OK and you are not OK' engaging a supporting person in sharing their misery is worse.

**Contaminations.** "These tend to be inaccurate or maladaptive rules, beliefs or expectations regarding the self, others and the world. As a broad rule of thumb, contaminations which the individual took in from his environment tend to be Parent contaminations, whereas contaminations which are internally generated and based on the individual's own process tend to be Child contaminations. As contaminations are mistaken for Adult content, the individual usually unquestioningly accepts the validity and truth of them. In the therapy room, some contaminations are obvious in the client's conversation. Others are less obvious and are either revealed through 'slogans' regarding the individual's expectations or rules which he lives by. Contaminations may also be implied or inferred from what the client is discussing. Some examples of contaminations include: 'Always expect the worst because then you won't be disappointed'. 'I must put other people before myself'. 'I must be liked by everyone'. 'People will think less of me if I make a mistake'. Because contaminations affect Adult functioning and are experienced by the individual as true, they act as a filter on reality. Consequently the individual may make note of information which he perceives justifies or confirms the contaminations and may discount information which does not." (Widdowson, 2015, p. 45).

**Distorted thinking patterns.** "As people become more depressed, these cognitive biases become more pronounced and dominant. These represent a maladaptive frame of reference which interferes with effective Adult ego state functioning and reality testing. These biased distortions are both based on and support an individual's limiting script beliefs about self, others or the world and her script system/associative network. The mechanisms which support these biases are discounting and grandiosity and contaminations of the Adult ego state. As these biases in Adult thinking support depression, it can be helpful to address these in therapy. As with all interventions, it is important to present these to the client in a sensitive manner to reduce the risk of the client seeing the information as being

another reason to feel bad about themselves. It can be useful to explore with your client aspects of her development from which her biased thinking patterns originate" (Widdowson, 2015, p. 47).

There are the following examples of distorted thinking patterns: black and white thinking about everything, catastrophising, predicting only negative scenarios, "reading in one's thoughts," treating neutral events too personally, generalising, hair-splitting – paying attention to irrelevant details or tunnel vision, i.e. focusing on negative sides, neglecting positive ones.

**Frame of reference.** All stimuli potentially strengthen negative beliefs and facilitate script realisation, which forms a self-perpetuating vicious circle strengthening the depressive structure. "Everyday failures or ordinary disruptions in everyday life can become the "justification" of negative prognoses" (Widdowson, 2015, p. 48)

**Life script in depression.** "Depression can be conceptualised as involving the activation or presence of a particularly powerful and negatively weighted life script. When someone is depressed, she will characteristically hold a series of negative script beliefs about herself, other people, the world and their future" (Widdowson, 2015, p. 49).

The examples of negative scripts are: negative thinking about oneself such as: I am weak, I'll lose, I am worthless, inadequate, not loved, unattractive and clumsy. Negative thinking about other people: other people are: not interested, critical, off-putting, distant, do not deserve our trust, too needed, too emotional, etc. Negative thinking about the future: I will be rejected, abandoned, alone, disappointed, the future will be terrible, disappointing; I shall never get what I expect, I will always feel like that.

What is important in Widdowson's concept is the belief that an individual can develop a negative script at any stage throughout their whole life. Negative script beliefs are usually as follows: do not live, do not be, do not be close, do not be yourself (as you are not good enough), do not achieve success, do not feel (do not have any needs), do not belong to anyone, do not be important (as your needs are not important), do not need (as you do not deserve it), do not feel joy, do not feel too good with yourself, you do not have any right to enjoy life (Widdowson, 2015, p. 50).

"In the theory of TA, depression might be perceived as a repeated and non-adaptive strategy of managing. A dejected person would often respond to stress with depression, sadness, loss of the feeling of self-esteem and the feeling of oppression and inability to manage. [...] Script beliefs about oneself for a person experiencing depression can include: "I am inherently bad/worthless, not loved/inadequate/worse." "If something goes wrong, it is my fault. I do not initiate things as I might spoil them. I am a failure" and "I am helpless." Script beliefs about others might include: "Others are better than me" and "Others will reject me." Script beliefs about the world might include: "The world is a cruel and unjust place" and "Life is pointless, lacks sense and hopeless" (Widdowson, 2015,

pp. 50–51). "Within depression secondary feelings include a profound feeling of loneliness, shame, sadness, rejection, worthlessness, inadequacy, hatred towards oneself, being not loved, and helplessness, misery and despair. These feelings do not provide an individual with any information and do not direct adaptively their actions leading to their successful accomplishment or problem solution. Instead, they strengthen each other and maintain depression" (Widdowson, 2015, p. 52). It leads to the formation of "emotional patterns" in depression, such as: shame and guilt, fear and anxiety, sadness and anger.

**Forbidden feelings.** Some feelings are suppressed and their existence is denied. Most probably, they were historically forbidden and have become part of a script pattern, a depressive individual learnt to avoid them, experiencing something that can be called the "rapid alert system". The aura of warning, similarly to migraine, prevents an individual from experiencing a forbidden feeling, from certain activities, leading to ineffectiveness in chosen actions. "This system driven by fear and constant suppressing of emotions are regarded as an important mechanism in the development and maintenance of depression [...] it is possible that an individual suffering from depression might feel that positive feelings such as *well-being*, *caring about oneself* and *pride* are forbidden feelings" (Widdowson, 2015, pp. 53–54). As we might guess, not only does it maintain depressive thoughts but it is also a factor increasing one's susceptibility to depression. Further on, it is linked with disturbance during the time when priorities are set and caring about oneself is considered selfish and undesirable.

The concept and description of depression by Widdowson was practically proven in his own analysis of cases of people suffering from depression (Widdowson, 2011, 2012a, 2012b, 2012c, 2013, 2014a, 2014b) and in the research conducted by teams with his participation (Benelii et al., 2016a, 2016b, 2017a, 2017b, 2017c).

From the point of view of prevention, the TA concept can be regarded as useful as it allows for diagnosing depression symptoms, helps to find patterns leading to depression and includes psychotherapeutic procedures (not discussed in this article) which might alleviate the symptoms and improve the quality of life of ill people. Taking into account the consequences of depression for a human being, it is worth remembering the situation of those who are not diagnosed, do not undergo any treatment, frequently do not notice any symptoms of the disease in themselves — convinced that "they are just like that". Promoting knowledge about depression might help those people or someone from their environment understand the problem. TA and its terminology combines possible reasons of depressive states, their symptoms and consequences. The lucid language of TA is useful in analysing utterances and comments on the Internet and social media (Pierzchała, 2016; Wieczorek, 2018).

Widdowson's concept of depression and its description were practically proven in his own analysis of cases of people suffering from depression (Widdowson, 2012a, 2012b, 2012c, 2013, 2014a, 2014b) and in the research conducted by teams with his participation (Benelii et al., 2016a, 2016b, 2017a, 2017b, 2017c, 2018a, 2018b, 2018c, Zanchetta 2019a, 2019b). Three first articles by Widdowson (2012a, 2012b, 2013) have a similar structure and read as follows: "Hermeneutic Single-Case Efficacy Design (HSCED) is a systematic case study research method involving the cross-examination of mixed method data to generate both plausible arguments that the client changed due to therapy and alternative explanations. The present study uses HSCED to investigate the outcome of short-term TA psychotherapy with a man with moderate depression and comorbid social anxiety. The objective of the research was to investigate the effectiveness of short-term TA therapy for the treatment of depression and to explore and identify key aspects of the TA therapy process and associated factors promoting change amongst effective cases" (Widdowson, 2012a, p. 3).

The analysis of the efficacy of using TA in depression treatment was conducted with the help of the same methodology. The analysis is complex and its results let us assess that the therapy is effective. "This positive replication of the effectiveness of short-term TA therapy for the treatment of depression in a second systematic case study clearly indicates that TA psychotherapy shows considerable promise as a psychological therapy for the treatment of depression and is another step forward to the recognition of TA as an evidence-based therapy" (Widdowson, 2012a, p. 12). In case of a patient named Denise, the best results were noticeable at the beginning of her therapy, its final part slowed down. "The conclusions of the judges are that Denise changed substantially and that these changes were substantially due to the effects of therapy. Denise attained clinically significant change on all three quantitative outcome measures and had sustained her improvement throughout follow-up. Her change interview responses provided a clear and compelling argument regarding the magnitude and breadth of her changes and that these changes were primarily due to the effects of therapy" (Widdowson, 2012a, p. 13). Widdowson achieved similar results for a patient called Tom (2012b) and Peter (2012c), although the results obtained for the latter one were not completely clear. The therapy results may often be unclear and it is not always possible to pronounce clearly and finally the cause and effect links between the therapy and its final result; it seems that it was the case here. A similar situation took place in case of a patient called Linda (Widdowson, 2013). The results are nor clear either, it was possible to notice a positive change, but that change was not sustained once the therapy was finished. Nevertheless, it allows for a positive evaluation as far as using TA in depression therapy is concerned and it shall be important further here.

However, in case of a social media analysis, a series of nine articles written by Benelli and co-authors (the first three were written with Widdowson) and two articles by Zanchetta and co-authors (Benelli et al., 2016a, 2016b, 2016c, 2017a, 2017b, 2017c, 2018a, 2018b, 2018c) seem to be more useful. The first nine arti-

cles bear the same title: TA Treatment of Depression: A Hermeneutic Single Case Efficacy Design Study, they differ by patients' names. The last two articles by Zanchetta and co-authors (2019a, 2019b) present a simplified methodology which does not require the help of competent judges. Apart from a diagnosis in the light of DSM5, all aforesaid articles offer a complex diagnosis in the light of TA and a therapy plan, which shall be useful while determining key words for the social media analysis. The majority of the cases presented confirms the efficacy of TA in depression treatment. Although the results are not always clear, it can be assumed that TA has at least an auxiliary function in depression treatment. The display of eleven depression diagnoses from the perspective of TA puts forward life positions with always 'I am not OK' and further on, depending on a case, 'you are not OK either' or 'you are OK'. The diagnoses emphasise a traumatic impact of childhood experiences, which seems particularly relevant in case of depression prevention. The TA theory emphasises the strength of script notes.

One can give the following examples of diagnosis elements referring to script notes: "Depression was conceptualized as a consequence of self-critical ego states dialogue internalized during early childhood and adolescence. She presented several injunctions tied to depressive symptoms and personality traits: Don't be you, Don't be angry, Don't enjoy, Don't be close, as well as Please Others and Be Strong drivers" (Benelli et al., 2016a, p. 5). "Dominance of her powerful internalised critical Parent and a lack of positive recognition from the protective nurturing Parent. She presented with Please Me and Be Strong drivers, the injunctions Don't be you, Don't be important, Don't feel and Don't express emotion (in particular anger and sadness). There was also some evidence of a Don't succeed injunction" (Benelli et al., 2016b, p. 22). "Script conclusions and decisions were observable through script beliefs and contaminations such as: 'I feel I'm not good enough', 'I need others to help me', 'others don't listen to me', 'I don't like others', 'others don't like me', 'I feel judged' (Zanchetta et al., 2019a, p. 7) or "Furthermore, the underlying injunctions: 'Don't trust' (often I feel I am betrayed), 'Don't be important' (I feel I must respond to everything), 'Don't belong' (I feel as if no one likes me), 'Don't be a child' (I'm always the caretaker, not the one cared for), 'Don't want' (I give up easily and adapt to the desires of others), 'Don't (be engaged with your life)' (whatever I do seems wrong), 'Don't make it' (I feel a failure about my life), 'Don't think' (I'm not very smart and feel inferior), and 'Don't feel successful' (I always feel blamed) were also identified" (Zanchetta et al., 2019b, p. 35). What seems to be useful for further analyses are script injunctions diagnosed in depressive persons, which first occur in the accounts of relevant persons and then become crucial for describing reality. It is worth stressing that especially in Polish culture part of these injunctions seems to sound positive, emphasise modesty and politeness. Although it cannot be directly proven that traditional upbringing patterns potentially favour depression, it is worth undertaking such a discussion.

## Symptoms of depression in social media

The Internet and social media in particular are a unique mirror reflecting interests and problems of Internet users. Analysing net browsing we know what people are interested in, what surprises or amuses them. Analysing comments in social media we have an opportunity to learn about their way of thinking, often very intimate, as apparent anonymity facilitates exposure. A description of experienced depression presented in the book entitled *Kortyzol* by Przemysław Gulda is a good example of this way of thinking: "I was not able to, I could not give up social media. And they have become a perfect way, an efficient tool to hurt myself, to make myself trip, to aim at my Achilles tendon and shoot myself in the foot, to open freshly healed or not healed wounds and consequently deprive myself of an opportunity to leave the past behind and move forward."

The writer's words accurately show a contemporary function of the Internet, which has become life space as important and sometimes even more important than the real world. On the Internet we look for information on everyday world events, share and describe our experiences and publish the results of scientific analyses. To a great extent, the analysis of Internet information flow corresponds to daily life. Maybe in the future, if the tendency to abandon the analogue media continues, this analogy will increase. The Internet offers a particular form of analysis, once impossible to conduct, that is Big Data analytics. "The amount of data generated by people from the beginning of their existence to 2003 is estimated to equal about 5 billion gigabytes. If the data are stored and recorded on discs, a whole football pitch can be covered with such discs. The same amount of data was generated every two days in 2011 and every ten minutes in 2013. This indicator is still growing considerably, which can be proven by the fact that 90% of data in the world have been generated over the last few years. This huge data boom earned an expression – Big Data [...] used for data which cannot be processed or analysed with the use of traditional methods, processes and tools" (Janczyk, 2016, p. 101). It is not only about the amount of data, it is important what is analysed and how it is done. A lot of information is left in the web unintentionally, which shows our way of functioning or lifestyle. "As far as data are concerned, it is not only their number and volume that matters, but also their nature understood as the level of their structuring. Comments, e.g. on a social networking site are texts written freely by its users, so they differ dramatically from records in a credit card transaction base or registers of temperature and pressure measurements in a car engine [...] The first type of data is not structured, whereas the last two ones are. Those generated by people and being a register of their experiences (such as texts, photographs, films) are of a non-structured nature. Data coming from registers of people's and other objects' behaviour (transactions, clicks, "likes", logging, etc.) are structured [...] these are data usually collected for other purposes than data analysis and obtaining information/knowledge" (Żulicki, 2017, pp. 181–182). In further analyses, it is the number of likes, shares and views of a given post that is as important as written comments. All further analyses should concern the Polish language area and one should be aware of the fact that language has a big importance for Big Data analytics.

The main analysis concerns the frequency of searches of a given phrase on the Internet. It is assumed here that if things we are looking for on the Internet are not random, they correspond to our interests or observations. The number of searches diagnoses to a certain extent the dynamics of a given phenomenon. In order to determine how much Internet users are interested in depression, it was compared to popular issues of concern such as: diabetes, obesity and cancer. This choice is linked with the frequency of occurrence for these diseases, deaths and a number of online publications.

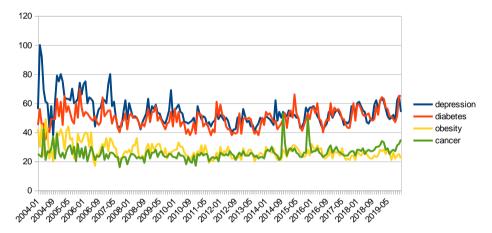


Figure 1
Compare the search volume of different queries. Analysed from 2004 till now

Source: own research, https://trends.google.pl, access: November 2019, colours: blue – depression, red – diabetes, yellow – obesity, green – cancer, analysed from 2004 till now.

The analysis of trends for Google searches (Figure 1) lets us state that depression is the most frequently searched entry (in this set) and certainly diagnoses both the level of concern with the issue and probably the experience of depressive states or observing them in one's environment. The indexed Internet content for these entries is also very important. For the Polish language these are the following figures: depression  $-5\,380\,000$ , diabetes  $-4\,650\,000$ , obesity  $-1\,660\,000$  and cancer  $-1\,820\,000$  results. It is worth remembering that the figures concern the Polish language only.

Apart from what we look for, what we upload, share and like on the Internet is equally and often even more important. The analysis of social media shall be conducted with the help of Unamo tools. The adoption of a psycho-social char-

acter of depressive issues constitutes an important assumption for further analyses. Relations with others, lifestyle, life experiences provoke different reactions, including depressive ones. The psycho-social character of depression constitutes a springboard for a discussion on preventing that disease. Location of critical areas may make it possible to understand the nature of this phenomenon better. The relation between mood swings, information search and publishing comments regarding depression can be traced in time, here, for bigger clarity, in an annual cycle. The Google search for the entry of depression is mainly connected with such dates as St. Valentine's Day, the beginning/ end of a (school) year, Christmas or holiday season. For the year 2019 (Figure 2), the biggest number of searches for depression fell on St. Valentine's Day, which corresponds to descriptions of depression in TA terminology presented earlier. Additionally, it can be noticed that the green line of searches for the cancer entry shows a similar progress, which can suggest that an increase in the number of suicidal thoughts might be connected with growing anxiety over being diagnosed with cancer.

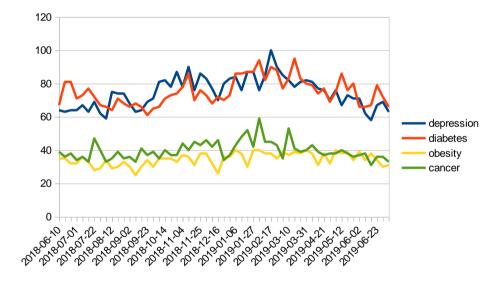


Figure 2
Compare the search volume of different queries. Analysed from 6.06.2018 r. to 7.07.2019
Source: own research, https://trends.google.pl, access: November 2019, colours: blue – depression, red – diabetes, yellow – obesity, green – cancer, analysed from 6.06.2018 r. to 7.07.2019.

For social media, the distribution of results looks slightly different. The biggest number of searches concerning depression can be observed in social media at the turn of a year (Figure 3 and Table 1). The second biggest number of posts occurring in a given period of time is 15<sup>th</sup> May for women and 23<sup>rd</sup> May for men – most probably the growth in the number of comments due to approaching

Mother's Day. The third period of time, similar to the trend analysis is St. Valentine's Day. Analysing the division into gender, it can be noticed that women are active more often in this area, but their activity apart from the aforesaid period of time does not differ from men's comments.

Women predominate practically all social media, apart from the "communities" category, which in Unamo software corresponds to portals uniting people with similar interests. It is a relatively small part of social media and for the analysed period of time it contains about 77 000 comments for about 2 000 000 of all analysed posts. In case of the word 'depression', the most popular comments could be found on the portal www.wykop.pl, which contains widely-understood titbits from all over the world, both from the area of science and pop-culture, funny films and memes. Regardless of an entertaining nature of the portal, its comments often have serious content. Let me quote a comment of the most popular category: "I'm feeling worse and worse. 3 months ago a girl I love broke up with me. I waited for too long to make a step forward; and propose. Finally, when I bought a ring, I didn't even manage to kneel as she left me. Now, during this holiday time, we are living about one kilometer from each other. I can see her dating some guy. I'm ruined. I was ready to give up my job for her and move to the city where she's still studying... And now I'm alone. No friends 'cause everyone's very busy. No place to go. On top of this, there is depression. I'm in the doldrums and I'd like to finish my life but I can't make this step. And I'm pouring out my grievances here. I'm sitting in my car, in the middle of nowhere and I'm howling. I'm a wreck." As we can see, entertaining content is not an obstacle for serious comments.

Table 1 "Depression" – sources of mentions sort by Gender. analysed from 6.06.2018 do 7.07.2019

Male	Female
28.38% (356 922)	62.47% (785 633)
14.99% (24 224)	24.87% (40 178)
34.52% (26 995)	8.58% (6 711)
28.78% (63 660)	24.47% (54 138)
10.71% (23 211)	33.64% (72 943)
0.33% (47)	2.32% (335)
0.54% (1)	1.61% (3)
4.2% (599)	65.38% (9 320)
1.53% (754)	1.23% (608)
	28.38% (356 922) 14.99% (24 224) 34.52% (26 995) 28.78% (63 660) 10.71% (23 211) 0.33% (47) 0.54% (1) 4.2% (599)

Source: own research, https://social.unamo.com, access: November 2019.

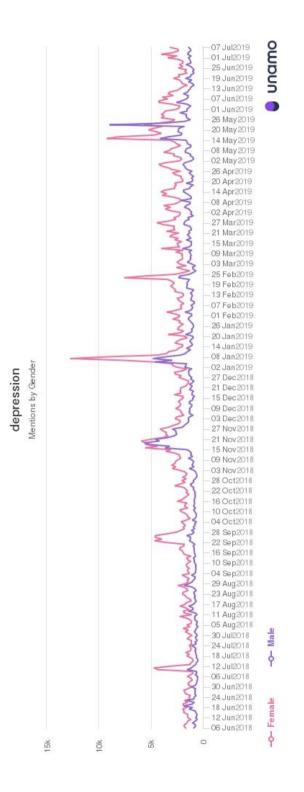
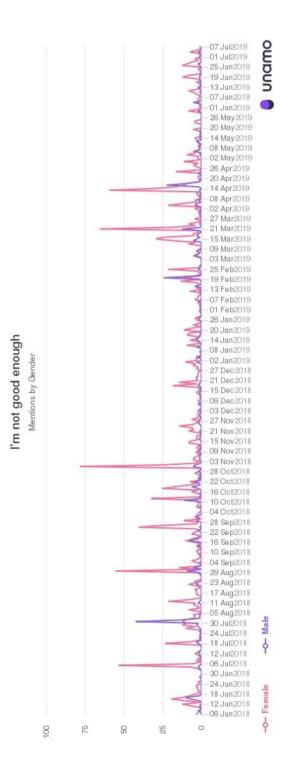


Figure 3 "Depression" – mentions history by Gender. Analysed from 6.06.2018 to 7.07.2019

Source: own research, https://social.unamo.com, access: November 2019, analysed from 6.06.2018 do 7.07.2019.



"I'm not good enough" - mentions history by Gender. Analysed from 6.06.2018 to 7.07.2019 Figure 4

Source: own research, https://social.unamo.com, access: November 2019.

The analysis of occurrence for the word 'depression' certainly constitutes an introduction to the use of TA in social media research. The terminology of TA lets us find characteristic expressions in people's comments, which might suggest the existence of beliefs guiding our life. In the majority of cases, the analysis is complex and following online comments does not suffice to express a reliable opinion on someone's state of mental health. However, some elements of TA theory can be searched directly or indirectly. It is about the occurrence of stroke filters, beliefs about others, beliefs about life, drivers or racket behaviours.

An example of a racket system that can be directly searched in social media is the Racket System that shows beliefs such as "People are annoyed by my needs", "I must adapt to others' needs" (Benelli, 2016c, p. 37), "Others do not care enough for me" (Benelli, 2018a, p. 6), "I'm not good enough" (Zanchetta, 2019a, p. 7). This last expression, using exactly these words, occurred in online comments under research over three thousand times, and in modified versions much more frequently (Figure 4).

Comments that occur around this expression are often quite dramatic, e.g. general ones, directed towards oneself, "I'm not a good enough mother. I have no patience. I get nervous for trivial reasons. I've got an impression that I roam the house and complain all day long. For a few days I've kept telling my children to tidy their room and it's preaching in the desert. Later I scream so much that I make my throat sore..." or "I'm afraid. — I was afraid to upload any photo on my profile — what if people don't like it? — I was afraid to set up my instagram account, because who would like to follow me? — I was afraid to set up a you tube channel as who would subscribe? — I was afraid to say anything to the digital camera — what if there is a wave of criticism? — I was afraid to be a coach — what if I'm not good enough? — I was afraid to chat up a girl I fancied — what if she rejects me? — I was even afraid to post it — what if I turn out pseudo-intellectual? Fears do not disappear, they change their form."

Comments of an Internet user describing her relationship with another person: "I felt like death as I'm not good enough, I have no money, job, I'm sitting at home and rotting. Dinner, washing, cleaning, next, a row with my husband who's come back from work and asks what I've done to become more professionally active, screams, sometimes scramble, sleep at the end, or sometimes not. This scenario lasted half a year. At the beginning I had money from my last salary with overtime and a bonus for night shifts, when money finished I had to get dependent on my husband's generosity. For the last months, he has counted every coin and constantly asked me what I spend this money on and how much I've got left, no matter where I was I had to answer immediately. I felt like a beggar, unworthy of any trust whereas I am a savvy and reasonable one. For half a year I haven't bought myself even a pair of socks..."

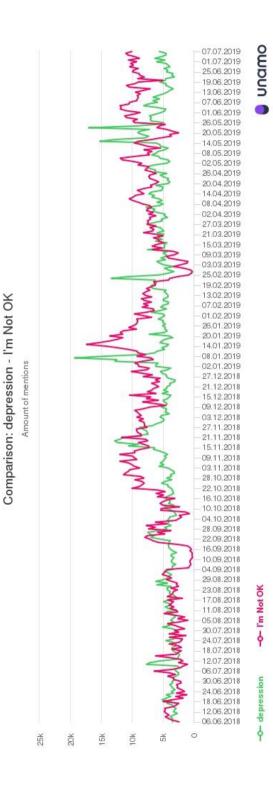
Social media also show stories of people who work on themselves or notice a negative impact of certain beliefs, for example: "Comparing children to their classmates or siblings we usually mean well and our goal is to motivate a given child to achieve more. Meanwhile, the child perceives our words like criticism and reproach. They hear a clear message "I am not good enough." They are afraid there is something wrong with them as all the time mom and dad want them to act differently. Everyone is different and unique thanks to it. There is no other person in the world like our child, that is why we should allow them to be themselves and accept both their ups and downs," or "I used to be so stupid that even if I didn't believe someone telling me I was not good enough, I would not manage in life and that I definitely should not set up my own business as [...] and generally what for it somehow stayed in my head, blocked me slightly and fed my fears. Fortunately, I managed to order things in my head though it took me some time. Today I manage my life and my own company. On my own. It turned out I've learned and can be independent and self-sufficient, but it requires very careful time management from my side. Which does not mean I've given up healthy eating for myself and my Family. When I have no time at all – I do not torture myself with slog + remorse – I let it go and count on good-quality half measures. And that's it. It has to be easy, fast and healthy – it's possible, I assure you."

Diagnostically crucial expressions in the language of TA make it possible to preliminarily select threads in social media. Later on, they can be ordered with regards to the time of their occurrence, popularity, transmission, comments, etc. A supplementary asset of the Big Data technology is the possibility of analysing people's utterances from a certain time perspective and working on archived data. Many threads analysed in the research were deleted at a certain moment. Yet, they do not disappear from Internet content, it is only more difficult to access them. These comments offer a fascinating opportunity to trace changes taking place in the human psyche.

A separate category of analysis is observing less precise comments that suggest a life position dominating in depressive thinking, i.e. "I am not OK" linked with the belief that others are OK or not OK either. This pattern is present in almost all descriptions of depression coming from authors dealing with TA.

Expressions suggesting that one is worse or weaker than others are so general that they occur in social media more frequently than the ones described above. Unamo software finds almost two millions posts for the expressions "I'm worse" and "I'm weaker."

It is interesting to study the comparison of the distribution of utterances linked with the word 'depression' and those suggesting that we are not OK (Figure 5). Despite the differences in the annual distribution of utterances, some periods of similar distribution or activity growth periods occurring next to each other can be noticed. The biggest number of utterances in both categories can be found at the turn of a calendar year. Significant similarities occur in the November period. St. Valentine period looks quite interesting as the growth in the occurrence of the word 'depression' is linked with a distinct decrease in expressions suggesting that we are not OK. In this case, as there is quite a significant drop in these expressions (September period looks similar), we can guess that it is a sign of helplessness and weakness manifested by lack of energy for writing posts.



Comparison mentions history: depression and I'm Not OK. Analysed from 6.06.2018 to 7.07.2019 Source: own research, https://social.unamo.com, access: November 2019.

#### **Conclusions**

TA theory offers concept language that allows for diagnosing depression and taking certain therapeutic measures. The aforesaid research cycle concerning individual cases makes it possible to assume that TA is efficient in depression treatment. At the same time this specific language helps to identify symptoms of depression in everyday utterances of people that surround us. It seems to be particularly useful for parents, teachers and educators. Within the framework of Educational TA used in the school system, the diagnostic perspective of TA can be treated as an early warning system concerning teenage problems. Life positions, script injunctions or beliefs that favour depression can be, in a certain period of time, modified during pedagogical work. Additionally, the language of TA opens the doors to a new field of analysis, that is social media Big Data analytics. There are two fields of analysis available. The first one covers the analysis of general key words on a big scale, covering millions of posts, and the search for patterns and relations, which might be difficult to notice during individual analyses. The latter field is treating key words as a point of departure and analysing Internet threads, blogs, portals or reactions to particular posts or articles.

### **Bibliography**

- Benelli, E., Revello, B., Piccirillo, C., Mazzetti, M., Calvo, V., Palmieri, A., Sambin, M., Widdowson, M. (2016a). TA Treatment of Depression: A Hermeneutic Single-Case Efficacy Design Study 'Sara'. *International Journal of Transactional Analysis Research & Practice*, 7 (1), 3–18, <a href="https://doi.org/10.29044/v7i1p3">https://doi.org/10.29044/v7i1p3</a>.
- Benelli, E., Scottà, F., Barreca, S., Palmieri, A., Calvo, V., De Rénoche, G., Colussi, S., Sambin, M., Widdowson, M. (2016b). TA Treatment of Depression: A Hermeneutic Single-Case Efficacy Design Study 'Penelope'. *International Journal of Transactional Analysis Research*, 7 (1), 19–34, https://doi.org/10.29044/v7i1p19.
- Benelli, E., Boschetti, D., Piccirillo, C., Quagliotti, L., Calvo, V., Palmieri, A., Sambin, M., Widdowson, M. (2016c). TA Treatment of Depression: A Hermeneutic Single-Case Efficacy Design Study 'Luisa'. *International Journal of Transactional Analysis Research*, 7 (1), 35–50, <a href="https://doi.org/10.29044/v7i1p35">https://doi.org/10.29044/v7i1p35</a>.
- Benelli, E., Moretti, E. Cavallero, G.C.., Greco, G., Calvo, V., Mannarini, S., Palmieri, A., Widdowson, M.D.J. (2017a). TA Treatment of Depression: A Hermeneutic Single-Case Efficacy Design Study 'Anna'. *International Journal of Transactional Analysis Research & Practice*, 8 (1), 3–20, <a href="https://doi.org/10.29044/v8i1p3">https://doi.org/10.29044/v8i1p3</a>.

- Benelli, E., Filanti, S., Musso, R., Calvo, V., Mannarini, S., Palmieri, A., Widdowson, M.D.J. (2017b). TA Treatment of Depression: A Hermeneutic Single-Case Efficacy Design Study 'Caterina'. *International Journal of Transactional Analysis Research & Practice*, 8 (1), 21–38, <a href="https://doi.org/10.29044/v8i1p21">https://doi.org/10.29044/v8i1p21</a>.
- Benelli, E., Bergamaschi, M., Capoferri, C., Morena, S., Calvo, V., Mannarini, S., Palmieri, A., Zanchetta, M., Spinelli, M., Widdowson, M. (2017c). TA Treatment of Depression: A Hermeneutic Single-Case Efficacy Design Study 'Deborah'. *International Journal of Transactional Analysis Research & Practice*, 8 (1), 39–58, https://doi.org/10.29044/v8i1p39.
- Benelli, E., Procacci, M.A., Fornaro, A., Calvo, V., Mannarini, S., Palmieri, A., Zanchetta, M. (2018a). TA Treatment of Depression: A Hermeneutic Single-Case Efficacy Design Study 'Giorgio'. *International Journal of Transactional Analysis Research & Practice*, 9 (2), 3–22, <a href="https://doi.org/10.29044/v9i2p3">https://doi.org/10.29044/v9i2p3</a>.
- Benelli, E., Gentilesca, G., Boschetti, D., Piccirillo, C., Calvo, V., Mannarini, S., Palmieri, A., Zanchetta, M. (2018b). TA Treatment of Depression: A Hermeneutic SingleCase Efficacy Design Study 'Sergio'. *International Journal of Transactional Analysis Research & Practice*, 9 (2), 23–41, <a href="https://doi.org/10.29044/v9i2p23">https://doi.org/10.29044/v9i2p23</a>.
- Benelli, E., Vulpiani, F., Cavallero, G.C., Calvo, V., Mannarini, S., Palmieriand, A., Zanchetta, M. (2018c). TA Treatment of Depression: A Hermeneutic Single Case Efficacy Design Study 'Beatrice'. *International Journal of Transactional Analysis Research & Practice*, 9 (1), 42–63, <a href="https://doi.org/10.29044/v9i2p42">https://doi.org/10.29044/v9i2p42</a>.
- Booth, L. (2007). Observations and reflections of communication in health care could Transactional Analysis be used as an effective approach? *Radiography*, *13* (2), 135–141, <a href="https://doi.org/10.1016/j.radi.2006.01.010">https://doi.org/10.1016/j.radi.2006.01.010</a>.
- Depression and Other Common Mental Disorders. *Global Health Estimates*, WHO 2017.
- Erskine, R.G. (2010). *Life Scripts: A transactional analysis of unconscious relational patterns*. London: Karnac.
- Gałecki, P., Święcicki, Ł. (eds.) (2015). *Kryteria diagnostyczne z DSM-5* (pp. 89–109). Issue I. Wrocław: Edra Urban & Partner.
- Gulda, P. (2019). Kortyzol. Warszawa: Pruszyński i S-ka.
- Hammen, C. (2006). Depresja. Gdańsk: GWP.
- Heitzman, J. (ed.) (2017). *Zaburzenia depresyjne*, *DSM-5*. Wrocław: Edra Urban & Partner.
- Jasik, K., Jaślikowska, U., Zbrojkiewicz, M., Ślusarska, B., Jasińska, M., Grzegorczyk, M., Nowicki, G. (2016). Czynniki związane z występowaniem depresji u osób dorosłych. Przegląd systematyczny literatury polskiej w latach

- 2009–2014. *Journal of Education, Health and Sport*, 6 (4), 297–318, http://dx.doi.org/10.5281/zenodo.50206.
- Janczyk, J. (2016). Big Data w relacji do procesów zmian w edukacji. *Dydaktyka Informatyki*, 11, 100–108, <a href="http://dx.doi.org/10.15584/di.2016.11.13">http://dx.doi.org/10.15584/di.2016.11.13</a>.
- Kerr, C. (2013). TA Treatment of Emetophobia A Systematic Case Study 'Peter'. *International Journal of Transactional Analysis Research*, 4 (2), 16–26, <a href="https://doi.org/10.29044/v4i2p16">https://doi.org/10.29044/v4i2p16</a>.
- Michalska-Leśniewicz, M., Gruszczyński, W. (2010). Czynniki psychologiczne w depresji. *Psychiatria*, 7 (3), 95–103.
- Murakami, M., Matsuno, T., Koike, K., Ebana, S., Hanaoka, K., Katsura, T. (2006). Transactional analysis and health promotion. *International Congress Series*, 1287, 164–167, <a href="https://doi.org/10.1016/j.ics.2005.12.055">https://doi.org/10.1016/j.ics.2005.12.055</a>.
- Minister Zdrowia, PROGRAM POLITYKI ZDROWOTNEJ, Program zapobiegania depresji w Polsce na lata 2016–2020.
- Pierzchała A. (2016). Po dwóch stronach ekranu, czyli wirtualne relacje interpersonalne w perspektywie analizy transakcyjnej. World Journal of Theoretical and Applied Sciences, Bezpieczeństwo dzieci i młodzieży w przestrzeni wirtualnej teoria i praktyka, 1 (4), 117–128.
- Radziwiłłowicz, W., Lewandowska, M. (2017). Od traumatycznych wydarzeń i dysocjacji do Ja cielesnego i objawów depresji w poszukiwaniu syndromu autodestruktywności u młodzieży dokonującej zamierzonych samookaleczeń. *Psychiatria Polska*, *51* (2), 283–301, <a href="https://doi.org/10.12740/PP/63801">https://doi.org/10.12740/PP/63801</a>.
- Shirai, S. (2006). How transactional analysis can be used in terminal care. *International Congress Series*, *1287*, 179–184, <a href="https://doi.org/10.1016/j.ics.2005.12.052">https://doi.org/10.1016/j.ics.2005.12.052</a>.
- Steiner, C. (2009). *The Heart of the Matter: Love, Information and Transactional Analysis*. Pleasanton, CA: TA Press.
- Stuthridge, J. (2006). Inside Out: A Transactional Analysis Model of Trauma. *Transactional Analysis Journal*, *36* (4), 270–283, <a href="https://doi.org/10.1177/036215370603600403">https://doi.org/10.1177/036215370603600403</a>.
- Wieczorek, Z. (2018). Wykorzystanie analizy transakcyjnej w badaniach mediów społecznościowych. *Edukacyjna Analiza Transakcyjna*, 7, 133–159, <a href="https://doi.org/10.16926/eat.2018.07.09">https://doi.org/10.16926/eat.2018.07.09</a>.
- Widdowson, M. (2011). Depression: A Literature Review on Diagnosis, Subtypes, Patterns of Recovery, and Psychotherapeutic Models. *Transactional Analysis Journal*, 41 (4), 351–364.
- Widdowson, M. (2012a). TA Treatment of Depression A Hermeneutic Single-Case Efficacy Design Study 'Denise'. *International Journal of Transactional Analysis Research & Practice*, *3* (2), 3–14, <a href="https://doi.org/10.29044/v3i2p3">https://doi.org/10.29044/v3i2p3</a>.

- Widdowson, M. (2012b). TA Treatment of Depression A Hermeneutic Single-Case Efficacy Design Study 'Tom'. *International Journal of Transactional Anlysis Research & Practice*, 3 (2), 15–27, <a href="https://doi.org/10.29044/v3i2p15">https://doi.org/10.29044/v3i2p15</a>.
- Widdowson, M. (2012c). TA Treatment of Depression A Hermeneutic Single-Case Efficacy Design Study 'Peter'. *International Journal of Transactional Anlysis Research & Practice*, 3 (1), 3–13, https://doi.org/10.29044/v4i2p16.
- Widdowson, M. (2013). TA Treatment of Depression A Hermeneutic Single-Case Efficacy Design Study 'Linda' a mixed outcome case. *International Journal of Transactional Anlysis Research & Practice*, 4 (2), 3–15, https://doi.org/10.29044/v4i2p3.
- Widdowson, M. (2014a). Transactional Analysis Psychotherapy for a Case of Mixed Anxiety & Depression: A Pragmatic Adjudicated Case Study 'Alastair'. *International Journal of Transactional Analysis Research & Practice*, 5 (2), 66–76, https://doi.org/10.29044/v5i2p66.
- Widdowson, M. (2014b). Avoidance, Vicious Cycles, and Experiential Disconfirmation of Script. Two New Theoretical Concepts and One Mechanism of Change in the Psychotherapy of Depression and Anxiety. *Transactional Analysis Journal*, 44 (3), 194–207, <a href="http://dx.doi.org/10.1177/0362153714554207">http://dx.doi.org/10.1177/0362153714554207</a>.
- Widdowson, M. (2015). *Transactional Analysis for Depression: A Step-By-Step Treatment Manual*. London and New York: Routledge Taylor & Francis Group.
- Wilson, S. (2006). Using transactional analysis as a psychotherapist: how to use TA in clinical situations. *International Congress Series*, *1287*, 173–178, https://doi.org/10.1016/j.ics.2005.10.007.
- Zanchetta, M., Farina, L., Morena, S., Benelli E., (2019a). TA Treatment of Depression. A Simplified Hermeneutic Single-Case Efficacy Design Study 'Giovanni'. *International Journal of Transactional Analysis Research & Practice*, 10 (2), 4–31, https://doi.org/10.29044/v10i2p4.
- Zanchetta, M., Picco, A., Revello, B., Piccirillo, C., Benelli, E. (2019b). TA Treatment of Depression. A Simplified Hermeneutic Single-Case Efficacy Design Study 'Margherita'. *International Journal of Transactional Analysis Research & Practice*, 10 (2), 32–65, <a href="https://doi.org/10.29044/v10i2p32">https://doi.org/10.29044/v10i2p32</a>.
- Żulicki, R. (2017). Potencjał big data w badaniach społecznych. *Studia Socjologiczne*, *3* (226), 175–207.
- https://www.politykazdrowotna.com/48211,umieralnosc-w-polsce-najczestsze-przyczyny-zgonow. Access: 25.10.2019.

# Depresja w świetle teorii analizy transakcyjnej – analiza mediów społecznościowych przy pomocy Big Data

#### Streszczenie

Analiza wyników badań epidemiologicznych pozwala stwierdzić wzrost częstości zachorowań na depresje. Trzeba też mieć świadomość istnienia osób, które znajdują się na pograniczu depresji, a także tych, którzy z różnych powodów nie będą nigdy zdiagnozowani, a są osobami chorymi. Depresja znacząco obniża jakość życia chorych i ma poważne konsekwencje zdrowotne. Dodatkowo jest to istotny problem społeczny, który wiąże się ze skutkami psychologicznymi dla otoczenia chorego oraz rosnącymi kosztami leczenia depresji. Opis depresji jest złożony, wiąże się z czynnikami psychospołecznymi, pojawia się wiele modeli depresji i sposobów radzenia sobie z chorobą. Wzrost wiedzy na temat depresji może przyczynić się do wcześniejszego diagnozowania, a w określonych sytuacjach do zapobiegania chorobie. Model depresji przedstawiony w teorii analizy transakcyjnej jest przydatny w opisie i zrozumieniu problemów depresyjnych. Specyficzny język analiz transakcyjnej przydatny jest w procesie edukacyjnym, pozwala też na analizę zjawiska poprzez rozpoznawanie specyficznych zachowań i wypowiedzi. Język ten można wykorzystać w analizie mediów społecznościowych, które od pewnego czasu są odbiciem problemów realnego życia.

Slowa kluczowe: depresja, analiza transakcyjna, Big Data, media społecznościowe.