Health in the context of psychological flexibility and acceptance and commitment therapy

ABSTRACT
Losing health is associated with an imbalance in one or more areas that are important to an individual. The spectacular achievements of modern medicine have made people believe that the only source of health is the treatment and reduction of symptoms. The ability to function in conditions of unavoidable discomfort can bring back an individual’s loss of balance. The article aims to present the model of Psychological Flexibility and its relationship with selected health aspects of an individual. According to the statement of the founders of Acceptance and Commitment Therapy (ACT), suffering in various forms is an integral part of human life. In situations of discomfort that cannot be avoided, and with which an individual must learn to function on a daily basis over a longer period of time, ACT proposes the development of Psychological Flexibility, which strengthens the psyche and body’s immune resistance. The Covid-19 pandemic, which has been going on for a year, has disrupted the macro balance. At the micro-scale, this balance can be disturbed by chronic disease states such as pain, anxiety and depression. The above conditions reduce the quality of life and health. Psychological Flexibility shapes a set of skills that improve the quality of life and also affect balance despite perceived discomfort. Psychological Flexibility is a base that has a wide application and significance for the quality of life and health. Its higher resources help an individual live a rich, worthwhile life despite suffering from pain, anxiety or pandemic stress.

Key words: psychological flexibility, pain, anxiety, depression, pandemic, Covid-19
Commitment Therapy, suffering, disease, pain, loss, grief, fear and disappointment are inseparable elements of human life [15]. However, they do not have to interfere with an individual’s quality of life if they learn to respond to them with awareness. ACT teaches a person to lead an attentive and conscious life and changes the relationships of an individual with undesirable symptoms in such a way that their occurrence does not interfere with leading a life that is consistent with values. The “side effect of therapy” is often the reduction of symptoms. In turn, the main goal of ACT is to increase PF — a construct that is responsible for the ability of an individual to act in line with values, regardless of the experienced physical or mental discomfort (e.g. pain, anxiety) [15, 16]. PF negatively correlates with such personality trait as neuroticism, whereas it positively correlates with an openness to experience and self-control. PF influences a person’s health globally and helps to smoothly maintain a balance between important areas in their life, which appear to be the specific mental resilience of an individual [17]. Therefore, PF seems to be important in the context of an individual’s resource in situations of discomfort that cannot be avoided, and also in which one has to learn to function on a daily basis over a longer period of time.

This article presents the model of Psychological Flexibility (PF) and its relationship and protective effect on selected health aspects of an individual. The theoretical assumptions of ACT and the PF model are presented on the basis of leading references in this field [15, 16]. Additionally, the relationship between PF and chronic pain, anxiety and depression, as well as stress caused by the Covid-19 pandemic, was analyzed. Scientific databases were reviewed using the following keywords: psychological flexibility, pain, anxiety, depression, stress, pandemic, Covid-19.

**Psychological flexibility and acceptance and commitment therapy**

PF is a construct that is responsible for the ability of an individual to freely choose an action, the direction of which is compatible with the goals and values of the individual, regardless of the experienced difficult thoughts, emotions and sensations. PF has developed in the area of Contextual Behavioral Science (CBS), the source of which has its origin in the classical behavioral analysis [18]. The main goal of CBS is the scientific prediction of behavior in a specific context and its modification [19]. Through the prism of PF, thoughts, emotions and experiences do not have a good or bad label, with their evaluation taking place in a specific context for a given situation. The lower the PF, the more the person, under the influence of an experienced discomfort (e.g. anxiety or pain) reduces (slows down) their actions (while losing the sense of their meaning) [15]. The higher the level of PF, the more an individual can consciously choose a course of action that is consistent with their goals and life values, regardless of their emerging thoughts, emotions or impressions. Moreover, they can persevere in this action [15].

Participation in Acceptance and Commitment Therapy increases and strengthens PF. Through its motivational nature, ACT helps to make an individual aware of which values mean a lot to them and also provides direction to their life [16]. It teaches careful observation and acceptance of one’s emotions, thoughts and feelings, which in turn improves the quality of life and functioning of an individual with psychiatric, somatic or social problems [20–22]. Meta-analyses have shown that ACT has a greater potential to induce psychological benefits and effectiveness in the long term perspective when compared to classical CBT methods [23, 24].

The PF model consists of six processes, such as acceptance, cognitive defusion, flexible focus on the present moment, self-as-context, values, and engaged action. They are responsible for shaping PF and taking action in accordance with the values adopted in life. In turn, their opposition, i.e., avoidance of experience, cognitive fusion, lack of flexible attention, the conceptualized self, the lack of awareness of values, passivity, impulsiveness, and persistent avoidance are responsible for adaptive abilities [15]. PF shapes psychological skills or a set of skills that have a wide application and go beyond a single state of mental or physical health [22]. For example, it appears as a mechanism that explains the influence of personality on the well-being of an individual [25]. The correlation of PF with personality traits, which influence the quality of life, shows the possibility of developing adaptive resources along with the development of PF, regardless of the basic structure of personality [26]. A higher PF is associated with a better mental well-being of obese people, with a higher quality of life in people with type 1 diabetes, and it also positively correlates with a higher mental resistance of people after trauma [27–29].

**Psychological flexibility versus pain**

The Central Statistical Office (CSO) in Poland [30] lists among the six most common chronic diseases/health diseases: chronic back, neck and joint pain. Chronic pain can be caused by damage to the nervous system, undetectable pathology, or psychogenic pain. This type of pain proves the changes that have taken place in the body and becomes a disease that is often very difficult to treat [31]. Chronic pain affects all areas of an individual’s life. It may contribute to the development of depression [32]. If it is not possible to eliminate it,
an important element of functioning will be adapting to bothersome symptoms. Patients report a slowdown in life as a consequence of chronic pain. Pain accompanied with anxiety, as a variable closely related to fear and avoidance, has a significantly detrimental effect on the quality of life of patients [33]. Some data show that it is not the level of pain, but the attitude towards it, that affects the functioning of a person [34].

The chronic low back pain (CLBP) model assumes that fear of pain is related to avoiding painful movements. It was originally developed to explain the transformation of acute back pain into chronic pain [35]. The CLBP model is currently used for research that links the subject of anxiety and pain with the development of disabilities of a broader scope than just chronic back pain [36].

A study on a sample of 252 people with chronic pain showed that PF is an important mediating factor in the relationship between symptoms (pain and anxiety intensity) and the functioning of the respondents. People with lower PF showed sickness absenteeism much more often than people with higher PF [37]. Similar results were obtained in other studies concerning the relationship between PF and the adaptive functioning of people with chronic pain. Higher PF, reflected in acceptance, mindfulness, cognitive defusion, and acting on values, was responsible for more frequent use of health care and more frequent undertaking of jobs [38]. The studies of Rhodes [39] found that chronic pain patients with a higher PF used fewer opioids. Various PF measures have proved to be significant mediators of therapeutic treatment in patients with chronic pain [40]. The participation of patients with chronic pain in ACT increases their PF and acceptance of pain, improves their daily functioning, and reduces their level of depression [41].

Psychological flexibility versus anxiety and depression

In Poland, in 2018, neurotic disorders (approx. 30%) and affective disorders (approx. 20%) were ranked in the first two places among people suffering from mental and drug-free behavior disorders [42]. Coexisting anxiety and depression are responsible for the mental condition of patients - exacerbating the chronicity and severity of any psychiatric and somatic diagnosis, reducing the quality of life, hindering professional development, and increasing the risk of suicide [43–45]. In a longitudinal study, anxiety predicted subsequent depression, which was measured after 12–14 years [45].

There is evidence that higher PF and adaptive emotional schemas show a negative correlation with anxiety [46]. A study on a group of HIV-infected people indicates that higher PF is responsible for lower mental health rates (lower levels of anxiety and depression), as well as a higher quality of life [47]. Higher PF scores were reliable predictors of mental health (lower anxiety and depression) in homosexual men who underwent screening for anal cancer risk. It should be added, however, that the relationship between PF and mental health in this study was mediated by Difficulty Identifying and Describing Feelings (DIDF). Low levels of PF may increase DIDF, and this, in turn, leads to higher levels of anxiety and depression [48].

A study by Masuda and Tully [49] indicated that lower PF in the American student population was associated with higher levels of depression and anxiety. Psychological Inflexibility (PI) in Turkish students partially mediates in the relationship between anxiety against negative evaluation and psychological susceptibility associated with a wide range of mental disorders (with the dominant style of avoidance reactions) [50]. The anxiety of public speaking reported by the student correlated with lower PF in the domains of openness to experience and higher cognitive fusion [51].

Psychological flexibility versus functioning during the Covid-19 pandemic

In Poland, more than two and a half million infections and over 60,000 deaths have been recorded since the beginning of the Covid-19 pandemic (from March 4, 2020, to this day) [52]. Undoubtedly, the Covid-19 pandemic has had a negative impact on the mental health of citizens, which is measured by the level of anxiety and depression [53, 54]. Research indicates PF as an important factor in mental resilience to stress caused by the current Covid-19 pandemic. PF negatively correlates with anxiety, depression, insomnia and suffering from the pandemic, and positively correlates with well-being and coping with avoidance [55, 56]. A lack of PF increases the risk of suicide in the pandemic era [57], whereas a greater openness to experience, and behavioral awareness (as measures of PF) were associated with lower general and peri-traumatic distress in the context of the pandemic [58].

A study conducted during the lockdown in Italy on a group of 1,035 adults showed that global PF and its four subtypes (self-as-context, defusion, values, and engaged action) reduced the destructive impact of Covid-19 risk factors (such as duration of isolation, increase in domestic violence and unhealthy behavior, and infection of relatives with Covid-19) on mental health [59]. A longitudinal study based on 3 measurements and conducted during the lockdown in Spain showed that the lack of PF in the first measurement indirectly predicted symptoms of mental health in the last measurement through autoregressive parallel paths and directly in the same measurement [60]. A study of patients with chronic pain during the Covid-19 pandemic...
showed that PF processes such as pain acceptance, self-as-context, and engaged action can play a protective role in demonstrating anxiety and avoidance [61].

An American study of family functioning during pandemic stress found that a lack of parental PF was associated with depression, Covid-19 stress, discord between family members, toxic parenting, and greater suffering for both parents and their children. Similarly, higher PF measures were associated with greater family cohesion and the use of constructive parenting strategies such as inductive, democratic behavior and positive and supportive parenting practices [62].

Conclusions
PF is a factor of mental resilience that has wide applications and is relevant to the quality of life and health. Its higher resources help an individual live a rich, worthwhile life despite suffering from pain, anxiety or pandemic stress. The strength of this construct is that it can be developed and strengthened within ACT, which in turn may affect all areas of mental, physical and social health, including self-care and raising children [21, 41, 63–65]. The advantage of ACT is its empirical, scientific verifiability. ACT can be used by psychologists, psychotherapists, doctors, and other people involved in improving the health of individuals [22]. Scientific and diagnostic work may be facilitated by the availability of free, reliable research tools that are validated on the Polish population [66, 67]. Therefore, it is worth considering the study of PF on the Polish population and the use of ACT intervention techniques that can improve the health condition of Polish society in times of a pandemic.

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