

# Six aspects of openness to experience

## Abstract

This paper presents a detailed review of international literature sources about openness to experience, and describes six aspects of openness to ideas, openness to actions, openness to aesthetics, and openness to fantasy openness to feelings. Systematized and presented current results of international studies of this problem.

**Keywords:** openness, openness to new experience, openness to ideas, openness to actions, openness to aesthetics, openness to fantasy openness to feelings

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## Introduction

Openness is one of the Big Five factors, personal characteristics, which describe the ability to adequately take ideas, situations and lifestyles, even if they are completely new and unusual. Five-factor personality traits integral model was created using the methods of cluster analysis and factor American psychologists P Costa, L Goldberg, and others. The longest and the most detailed questionnaires from the Big Five, NEO-PI-R, Costa & McCrae<sup>1</sup> identified distinctive qualities of each of the features that stand out in each of these six aspects for a better understanding of the past. A sixth aspect of openness to experience is: open action, ideas, values, aesthetics, imagination and feelings.

## Openness to action

Openness to action is characterized by participation in various events and the enjoyment of novelty. Costa & McCrae<sup>1</sup> viewed openness to actions as a psychological aspect of a person's motivation to participate in something new and complex. A strong relationship was found between this aspect and extraversion, which, according to Costa & McCrae,<sup>1</sup> reflects a purely behavioral tendency, but it turned out that openness to actions also includes a cognitive element. In order to better understand the behavioral component of openness to action, many researchers also studied "Sensation Seeking." This is because extraversion and openness to actions are often positively correlated with the sensation search phenomenon. The search for sensation was defined by Zuckerman<sup>2</sup> as "the need for different, new, complex events (sensations), as well as the willingness to take on physical and social risks for the sake of such experience." This is due to the search for high incentive actions, including the willingness to take on various risks and in a way that often implies such a feature as impulsivity.

A study of openness to actions demonstrates the confirmation of the hypothesis that people with a high degree of openness to actions have much better physical and mental health. This is because people with high openness to actions more often choose behavior that makes them happy.<sup>3</sup> For example, when examining patients with Parkinson's disease; it was found that a lower level of desire to search for novelty was associated with a higher level of depression.<sup>4</sup> Dua<sup>5</sup> found that openness to action implies "emotional stability, no depression, and a positive effect on thoughts and real life experiences." In a more recent study, Garcia<sup>6</sup> and colleagues found that the desire to search for novelty is also associated with less depression. Carrillo<sup>7</sup> and colleagues also faced similar results: a higher degree of openness to actions was significantly less associated with neuroticism and depression. Similar results were found regarding gender differences. Men who have a higher natural level of dopamine are usually more open to action than women and less depressed.

Booth-Kewley SB & Vickers,<sup>8</sup> Jr., conducted an experiment that showed that people with a high degree of openness to actions reported greater willingness to take risks, and also found that openness was the only significant personality trait that implies such readiness. There are studies that demonstrate a direct connection between openness to actions and willingness to take risks in connection with the desire to have fun and explore what may cause a negative impact on healthy behavior.

## Openness to ideas

Openness to ideas more includes the cognitive component. People with high rates of openness to ideas show greater flexibility in "information processing and environmental research."<sup>9</sup> However, as Batey & Furnham<sup>10</sup> states, extroversion and openness to actions "predict the quantity, but not the quality of ideas." A high degree of openness to ideas is fraught with willingness to try new things, explore and reflect on new developments. High points of openness to ideas can and do not reflect a willingness to demonstrate new behavior, but always indicate a greater interest in actions that carry the potential to increase knowledge.<sup>11</sup> Costa & McCrae,<sup>1</sup> defining features related to openness to experience, found that openness to ideas is most interconnected with intelligence, subjects with higher scores in this aspect, demonstrate greater efficiency in processing, organizing, and thinking about information.<sup>9</sup> Along with openness to values and aesthetics, openness to ideas is most due to the manifestation of cognitive flexibility, unlike simple knowledge of facts. However, openness to ideas, or openness in general, cannot be used to measure intelligence, since it describes the dimension of personality. High openness is also often explained by the educational level, which makes the question of using it to define intelligence very controversial.<sup>12</sup>

It was also found that the level of openness of students determines their level of creativity in many areas related to both the arts and the humanities (Silvia and others, in the press). However, several problems were identified. The first of which is the measurement of plasticity of creativity. Since this factor consists of extraversion and openness, the measurement may not be accurate. Some introverts have thus proved to be more open and creative than extroverts.

The second problem relates to the manifestation of creativity in some areas. High creativity and openness were found in students who show a high interest in the sciences along with art. However, students demonstrating an interest in the field of mathematics did not show a high level of creativity. This may indicate the aesthetic aspect of openness, indicating the insufficiency of intellect alone and the need for some natural interest and creative ability. DeYoung,<sup>13</sup> Quilty & Peterson proposed to divide openness into an intellectual component

and a creative component, including imagination, creativity and aesthetics.

Openness to ideas reveals numerous links with introspective and expressive behavior, which carries the potential to increase self-esteem, flexibility and life satisfaction. A person open to ideas, dealing with life changes, analyzing and defining identity, as well as reflecting on current events, demonstrates greater flexibility and willingness not only to think about it, but also to make reasonable changes in his life. Whitbourne also found that through flexibility, people begin to feel more self-confident and that they have a sense of control in overcoming different life situations, and also found out that more open people are more likely to look for opportunities to replenish knowledge to get higher education. Costa & McCrae<sup>1</sup> also proved the link between significant life events and openness. Besides, people with a high degree of openness to ideas show less susceptibility to stress.

Studies by Oswald,<sup>14</sup> Schneider TR<sup>15</sup> conducted immediately after measuring the level of psychological stress also showed that high openness to ideas suggests lower levels of cortisol.

## Openness to values

Openness to values is defined by researchers as the degree of a person's susceptibility to change. People with a high degree of openness to values will most likely reject non-traditional norms and traditions. For example, in political psychology, this is often used to analyze the differences in individual personality characteristics between "conformists" and "nonconformists". Taking into account the fact that conservative people are less entrepreneurial, socially adapted, and prefer stereotype and a stable structure of society, liberal people are more likely to support protests and revolutions in the light of acceptance of changes. One study also found that low openness to values is associated with authoritarianism and a tendency toward aggression. This study also demonstrated that cultural conservatism highly values the most traditional work ethic and accepted female roles. While openness to values encourages independent thinking, action, and susceptibility to change, low openness to values encourages protection of stability and security. Thus, it is considered that openness to values can determine whether a person prefers change in some aspects of his life or not.

Despite these positive results, McCrae<sup>16</sup> stresses that personality traits relate to sustainable dispositions, while values serve as cognitive representations of sustainable goals and guidelines on how people prefer to live their lives, "traits describe what people are, and values relate to what people consider important." One of the studies of Van Heale and his colleagues showed that there is a relationship between conservative ideology and aspects of openness among Western Europeans. However, one aspect with which there was no relationship was the aspect of values. Thus, it is not clear whether psychological factors, regardless of their ideological content, are associated with a liberal or conservative ideology. Hiel & Mervielde argues that conservatism may be differently represented in different cultures, in some cases it may be associated with certain personality traits, such as open-mindedness, but in other cultures, such as Western Europe, we may not get the same results. Jonassaint<sup>17</sup> and colleagues found that people with a high degree of openness to values are at increased risk of mortality from heart disease. Another study found that active smokers had a significantly higher level of openness to values than

non-smokers.<sup>18</sup> However, this does not mean that the growth of smoking is associated with an openness to change and the results require further research.

## Openness aesthetics

Openness to aesthetics is one of the most emotional aspects, which is described as the ability to evaluate various forms of art, but this aspect does not apply to the assessment of particular types of art. Openness to aesthetics turned out to be deeply connected with cognitive flexibility and intelligence. Some studies have found that high scores on the aesthetic scale of openness are significantly associated with creative activities.<sup>19</sup> However, the connection with intellect or creativity, but the fact of accepting experience for its own sake, makes it different from other aspects. Some studies looked at some aesthetic markers as universal and unique to openness to experience. For example, the so-called aesthetic chills or chills (aesthetic chills) as emotional responses to the experience of beauty. These are emotions that are similar to those that feel during a sublime emotional state, in which there is a feeling of fear and a deep appreciation. Such emotions are like cold surprise, but very pleasant and different from the excitement that arises in connection with taking risk and is probably characterized by a higher openness to actions.<sup>20</sup> People exposed to aesthetic experiences are among those who show the highest sensitivity and emotional sensitivity. This type of people pays the most attention to all types of internal and external stimuli, which in turn is associated with a phenomenon called orientation sensitivity.<sup>21</sup> They also love to be involved in events that absorb and cling to them emotionally. Thus, these people often, although not at the level of clinical emotional disorder, simultaneously experience conflicting emotions of high intensity. As a result of a strong emotional component, they also tend to have high rates of fantasy inclination, especially with regard to feelings. In addition, these characteristics were vividly expressed in people who have low points on the extraversion scale, but high points on openness to experience. Thus, an active search for breadth and depth of experience cannot simply be expressed through points of vigorous activity, but must also take into account the emotional aspect.

Several studies have identified the relationship between the aesthetic aspect of openness and artistic creativity, which, as it turned out, correlated with emotional disorders.<sup>22</sup> In one study, the aesthetic aspect was found to be most strongly associated with depression. Scientists also found that people with a high degree of openness to aesthetic experiences were mostly not extroverts, and were more notable for their high neuroticism and high rates of depression. The values of these results are very uncertain, firstly, because a person will not necessarily experience depression while practicing creativity, and secondly, he may be involved in art, and experience a decrease in the feeling of depression at the same time. The results of the relationship of openness to aesthetics, introversion and neuroticism are also ambiguous. Although it is known that introverts are often more emotional, regardless of whether they express it or not.

## Openness of fantasy

Like openness to aesthetics, openness to fantasy is also strongly associated with a person's emotional predisposition. It covers the tendency to be involved in fantasy, which not only includes a developed picture of thinking, but also a high level of creativity

and certain emotions. While most studies suggest that such openness may increase the risk of depression, some studies have suggested that fantasizing may have both positive and negative effects, depending on the emotional contribution, so this question remains controversial. Returning to the Wolfstein & Trull study, the openness of fantasy was also associated with depression. Wolfstein & Trull suggested that the openness of fantasy may have a positive relationship with mental health, since openness and self-actualization are interrelated.

However, it must be remembered that self-focusing associated with fantasies and openness to feelings can also be a sign of depression. Self-Awareness Theory of Depression (Self-Awareness Theory of Depression) states that when people experience some kind of loss or failure, they face a difficult struggle for the difference between their actual and ideal state.<sup>23</sup> In this case, fantasizing can potentially play a significant role and lead to an increased risk of depression and negative emotions. Taking into account this theory, the researchers suggest the possibility of such people have a high degree of openness of fantasy. It is worth noting that the results showed a greater connection between the openness of fantasy and depression, if the subject of research was extraversion as opposed to introversion. Another study by Garcia et al. Produced the same results; fantasy turned out to be more harmful to the mental health of extroverts than introverts. Wolfstein & Trull hypothesized that extroverts may be more susceptible to the presence of negative fantasies that are associated with failures in social relations, while introverts may not be involved in such fantasies, which explains this result. The study by Carillo and colleagues also explored the role of openness of fantasy in predicting depression and faced similar results. In addition, they also explored gender differences and found that women have higher rates of fantasy than men and are thus more susceptible to depression than men. Carillo and colleagues discovered that fantasy may indicate not only ordinary depression, but also, for example, such characteristics as “neuroticism, familial inadequacy, personality disorders and lack of positive influence”. It may also happen that fantasy people are more likely to do this because they are dissatisfied with reality, and fantasy gives them a sense of control over their own inner reality. It was also suggested that overly positive fantasies about the future could actually have a negative impact on health, potentially suppressing motivation and action, thereby increasing their vulnerability to depression.<sup>24</sup> However, it is possible that positive fantasies can provide the desire to act and change circumstances, as long as they are feasible and are within realistic boundaries.

Referring to all types of openness, Costa & McCrae<sup>1</sup> argue that openness does not necessarily determine positive mental health, or vice versa unsuitability. They say that an open person is able to experience and reflect on several events, positive and negative, and is able to find a balance of positive and negative reactions to these events. Perhaps for some, fantasizing is a source of motivation for change, so they foresee a negative result in the future, while for others, it can be a source of depression because they are more prone to negative fantasies. Regardless of this, fantasizing has a significant impact; it demonstrates the power of judgment in which thinking about a situation can influence one's perception of an event.

## Openness to feelings

Openness to feelings is recognized by many researchers, the most difficult aspect. Such people appreciate emotions, are more sensitive to emotional events, and also experience most emotions

more strongly, which in certain cases can lead to frustration, because a person may be confused and overwhelmed with emotions. High openness to feelings is often associated with extensive experience of anxiety and neuroticism. Studies also show that women tend to be more open to feelings than men, and that this is due to higher rates of anxiety and mood changes in women.<sup>25</sup> Jonassaint and his colleagues studied how various aspects of openness to experience are associated with irritation and found that the aspect of feelings had the most significant impact. They also found that high openness to the senses has a favorable protective effect against disease. Whether openness to feelings is appropriate depends greatly on the assessment, which is the basis and cause of emotional experience and actions. Assessment describes how everyone deals and interacts with the situation in the environment. In a study of the effects of evaluation on affect and activity, Schneider<sup>26</sup> showed that evaluating something as a problem led to a positive impact, and evaluating how a threat led to a greater negative impact. It was also found that it was not extraversion, which, as is often supposed, associated with assessments, was the impetus of this effect, but openness. By presenting a subject with a task, it was found that efficiency was also related to openness, the higher the openness to the feelings, the better the diligence. A study examining the specific effect of openness on regulation under stress also showed that higher openness to feelings increases the positive outcome. The ability of people with a high degree of openness to participate more effectively in regulating emotions and seeing things that are useful rather than threatening has spread to research in the field of openness and life satisfaction. It turned out not only that people endure the joy of the possibility of increasing knowledge, but they are also able to better cope with the problems that they face, because they make an effort to think positively about them. While these results are related to cognitive flexibility, researchers should not confuse this aspect with intelligence or other mental abilities.

Stephan<sup>27</sup> explored the relationship between openness and life satisfaction in the elderly. He found out that openness to feelings is positively correlated with self-esteem of life satisfaction in the sphere of health and finance. Stephan believed that this is due to the fact that open people adapt in response to how they feel, experiencing new situations or ideas. Open-minded people tend to look for opportunities for personal growth and reflect on their life experiences. Such opportunities may include a wide range of intellectual and cultural activities that allow a person to increase and maintain their cognitive abilities, contributing to higher life satisfaction. Thus, the inability to adapt or cope effectively can actually lead to greater vulnerability in a stressful situation for people with low openness and provide a protective effect to those who have a high openness to feelings.<sup>28</sup> In February 2015, as part of the master's thesis, we also conducted a study of openness to experience on the basis of the innovative site of the National Research Tomsk State University. The sample consisted of 34 men and 32 women. The following methods were used as diagnostic methods: the Big Five-2 questionnaire (BFQ-2), in the adaptation of E.N. Asina, “The scale of psychological well-being” K.Riff, in the adaptation of N.N. Lepeshinsky, a questionnaire of causal orientations by E. Desi, R. Ryan, in adaptation O. E. Dergacheva, L.Ya. Dorfman, D. A. Leontiev, questionnaire “The desire for change”. The objectives of the study included checking two assumptions.

The first hypothesis put forward by us is that women, due to their personal characteristics, are more open to new experience than men, based on the study of foreign psychologists David P. Schmitt; Realo, A; Voracek, M., & Allik, J. who say that openness among women

is usually higher than among men has not been confirmed. We believe that these differences are largely determined by the cultural characteristics of a particular nation. The second hypothesis related to such a concept as migration readiness, based on the description of the main strategies for building a lifestyle in new sociocultural conditions, includes such factors as openness to change and found in the works of E.V. Galazhinsky and V.I. Klochko. We formulated the assumption that such traits may have subjects, with high informational and geographical mobility, this hypothesis was confirmed at the level of the trend (the empirical value of  $U_{emp}=383.5$  is in the uncertainty zone). Our findings suggest that this issue requires further research. Perhaps on a larger sample and its more rigorous differentiation in the number or duration of such trips, differences between groups will be more significant. Thus, our analysis of each of the six aspects of openness to new experiences allows us to understand the complexity of this feature. Psychometric tests clearly demonstrate the fact that openness to new experience is different from other traits and can claim independence, despite being thrown into empirical challenges with respect to this phenomenon. Openness to experience, the most controversial of the features of the Big Five, with which you can describe a huge number of people, like those who appreciate art, love to travel, try new products and those who like to fantasize. A person can be open in relation to a myriad of things; we only hope that a detailed look at certain types of the main features of the big five can give a clearer understanding of openness, experience and its importance for the individual.

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## Conflicts of interest

The author declares that there is no conflict of interest.

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