IRSTI 15.41.21

https://doi.org/10.26577/jpcp.2022.v82.i4.01

S.T. Bapayeva¹, B. Khalym², M.K. Bapayeva³*

¹Turan University, Kazakhstan, Almaty ²Al-Farabi Kazakh National University, Kazakhstan, Almaty ³Kazakh National Women's Teacher Training University, Kazakhstan, Almaty *e-mail: m.bapaeva@mail.ru

FORGIVENESS OF AMBIGUITY IN TERMS OF PANDEMIC AND TOLERANCE TO AMBIGUITY: THEORETICAL VIEW

The study describes tolerance to ambiguity based on a structural theoretical review with constructivist interpretation using hermeneutic methodology and an analytical approach. The main trends of their transformation and formation in the fields of psychology, philosophy, Human Resource Management and psychological health were identified. In order to reveal the content and structure of the researched phenomenon, the history of its formation was analyzed. The phenomenon of tolerance to ambiguity is closely related to the current problems in human history. In this regard, the article outlines opportunities for future research on ambiguity tolerance. The mentioned problem is related to mental characteristics of a person that arose in the context of a pandemic that has covered the whole world. The possibility of pandemics and forced self-isolation to reflect mental changes such as acute and chronic stress, post-traumatic stress, as well as to influence a person's behavior on their confidence in the effectiveness of their actions, various psychosomatic reactions, increased anxiety and depression, anger and aggression directed at themselves and the external environment will be discussed. At the same time, such an analysis of disciplines and concepts related to the changing object of a research was carried out in the process of preliminary understanding of the chosen topic, and was carried out in relation to our scientific beliefs, as well as the experience conducted through praxis.

Key words: tolerance to ambiguity; stress, pandemics, emotional states, psychological features of an individual.

С.Т. Бапаева¹, Б. Халым², М.К. Бапаева³* ¹«Тұран» университеті, Қазақстан, Алматы қ. ²Әл-Фараби атындағы Қазақ ұлттық университеті, Қазақстан, Алматы қ. ³Қазақ ұлттық қыздар педагогикалық университеті, Қазақстан, Алматы қ. *e-mail: m.bapaeva@mail.ru Пандемия жагдайындағы белгісіздікті кешіру және белгісіздікке

толеранттылық таныту: теориялық шолу

Зерттеу герменевтикалық әдіснаманы және аналитикалық тәсілді қолдана отырып, конструктивистік тұрғыдан интерпретациялау арқылы құрылымдық-теориялық шолу негізінде белгісіздікке толеранттылықты сипаттайды. Психология, философия, адам ресурстарын басқару, психологиялық денсаулық салаларында олардың трансформациясы мен қалыптасуының негізгі тенденциялары анықталды. Зерттелген құбылыстың мазмұнын, құрылымын ашуға мүмкіндік беру үшін оның қалыптасу тарихына талдау жасалынды. Белгісіздікке толеранттылық феномені қазіргі кезеңде адамзат тарихында өзекті проблемалармен тығыз байланысты. Осы орайда мақалада белгісіздікке толеранттылық туралы болашақ зерттеулердің мүмкіндіктері көрсетілген. Бұл мәселе әлемді жайлаған пандемия жағдайында туындаған тұлғаның психикалық ерекшеліктеріне байланысты. Пандемия мен мәжбүрлі өзін-өзі оқшаулау жедел және созылмалы күйзеліс, жарақаттан кейінгі стресс сынды психикалық өзгерістердің көрініс беруіне, сонымен бірге адамның мінез-құлқына, оның өз әрекеттерінің тиімділігіне деген сеніміне, түрлі психосоматикалық реакцияларға, мазасыздық пен депрессияның жоғарылауына, ашуланшақтық пен адамның өзіне әрі сыртқы ортаға бағытталған агрессия тудыруына ықпал ету мүмкіндігі талқыланады. Сонымен қатар өзгермелі зерттеу объектісіне қатысты пәндер мен тұжырымдамалардың мұндай талдауы таңдалынған тақырыпты алдын-ала түсіну процесінде жүргізіліп, ғылыми нанымдарымызға, сондай-ақ праксис арқылы жүргізілген тәжірибеге қатысты жүзеге асырылды.

Түйін сөздер: белгісіздікке толеранттылық; стресс, пандемия, эмоциялық күйлер, тұлғаның психологиялық ерекшеліктері.

С.Т. Бапаева¹, Б. Халым², М.К. Бапаева^{3*}

¹Университет «Туран», Казахстан, г. Алматы ²Казахский национальный университет имени аль-Фараби, Казахстан, г. Алматы ³Казахский национальный женский педагогический университет, Казахстан, г. Алматы *e-mail: m.bapaeva@mail.ru

Переживание неопределенности и проявление толерантности к неопределенности в период пандемии: теоретический обзор

Исследование описывает толерантность к неопределенности на основе структурного теоретического обзора с помощью конструктивистской интерпретации с использованием герменевтической методологии и аналитического подхода. Выявлены основные тенденции их трансформации и формирования в сферах психологии, философии, управления человеческими ресурсами, психологического здоровья. Для того, чтобы дать возможность раскрыть содержание, структуру изучаемого явления, был проведен анализ истории его формирования. Феномен толерантности к неопределенности на современном этапе развития науки и общества тесно связан с актуальными в истории человечества проблемами. В этой связи в статье представлены возможности будущих исследований толерантности к неопределенности. Речь идет о психических особенностях личности, возникающих в период пандемии, охватившей весь мир. Обсуждаются возможности влияния пандемии и вынужденной самоизоляции, способствующие проявлению психических изменений, таких, как острый и хронический стресс, посттравматический стресс, а также влияние на поведение человека его уверенности в эффективности своих действий, различных психосоматических реакций, повышенной тревожности и депрессии, раздражительности и возникновения агрессии, направленной на самого человека и внешнюю среду. Кроме того, такой анализ предмета и концепций в отношении к изменяющемуся объекту исследования проводился в процессе предварительного понимания выбранной темы и был осуществлен в соответствии с научными убеждениями авторов, а также практики, основанной на праксисе.

Ключевые слова: толерантность к двусмысленности; стресс, пандемии, эмоциональные состояния, психологические особенности личности.

Introduction

In a global context of the pandemic, there is concern about the threat of COVID-19 coronavirus, and a state of complete ambiguity remains around it. Therefore, despite the further development of the pandemic, the global fight against the virus can have a long-term impact on economic growth, employment and politics. All of this, in the end, causes fear and anxiety in everyone and creates a state of ambiguity.

However, it is not a mistake to say that this situation encourages to develope and undersstand of previously unseen resource states in a person, and tolerance for ambiguity as an individual's personality prepares him to accept it as a norm of life, turns the surrounding reality into a creative subjective confidence.

Tolerance of ambiguity in the current global situation can contribute to increasing a one's ability to achieve personal maturity, stability and integrity, and overcome anxiety.

Ambiguity forces a modern man to live in changing, volatile, unpredictable environment. The speed, depth and unpredictability of change lead to an increase in the amount of personal changes required for successful adaptation and survival in a constantly changing environment to the global challenge of personal development.

The phenomenon of tolerance to ambiguity is closely linked with the current problems of our time. The rapid flow of information and the rising pace of life have created a problem of global uncertainty in human life. This creates a problem of psychological well-being of a person. While unprecedented measures aimed at slowing and stopping the spread of Covid-19 have helped countries to save time and reduce the burden on their health systems, we cannot say that the social and economic costs have been minimal.

Due to the rapid spread of the new COVID-19 coronavirus pandemic to many countries around the world, the introduction of physical distance and isolation measures, and the closure of schools and businesses, people began to feel fear, anxiety, and panic. During quarantine condition, people still can not meet their needs, are not allowed to go where they want and are not able to be with the people they want. This applies to both the general population and individual groups of citizens, such as the elderly, health care providers and the people with disabilities. The best way to overcome ambiguity is to acknowledge its existence.

Pandemics and forced self-isolation can further contribute to acute and chronic stress, the subsequent formation of post-traumatic stress, sleep disorders and psychosomatic reactions, increased anxiety and depression, irritability and aggression directed both to themselves and outwardly.

Anxiety is a natural emotion. Anxiety is more common among people with lower levels of sensitivity to stress, who respond more easily to any stimulus. Another characteristic of people with high anxiety is low tolerance for ambiguity. It is difficult for a person to accept the idea that we cannot control everything. As a result, it causes anxiety due to ambiguity followed by fear, which in its turn, interferes a person and prevents human development.

For example, man is a being in constant development and formation. Although he is under a lot of stress, he moves from one state to another. There is no doubt that survival contributes to sustainable development and infinite change.

For this reason, useful experiences of ambiguity are experiences painted in a positive emotional tone: curiosity, search, situational activity, activation of the imagination, the emergence of new insights, joy, excitement, enthusiastic research and lead to a change in the nature of the ambiguity situation from a creative and meaningful point of view.

Ambiguity reveals the desire of many people to control. To ensure security, we need to change our behavior to control what we can really control and use, but it does not matter if we change our thoughts about what we cannot control.

Of course, while stress mobilizes the body's immune system, chronic stress might have weakened it.

Although a person really shows concentration and takes reasonable precautions, his attention, thinking and willpower, and general health may deteriorate.

This is, where it is important for everyone to be able to help themselves, understand their resources and direct them in a positive direction.

For example, during the pandemic, many people have been motivated to show compassion and give a hand to the loved ones, even the strangers who have never been involved, which has increased their emotional intelligence, demonstrated empathy, and therefore it has contributed to tolerance for ambiguity.

The range of stress and emotions we have experienced can even have a positive consequences on our illness and grief. Studies show that people who have gone through very difficult life experiences help them to be psychologically and physically stable.

Methodology

This research work is a part of the classical and the modern disciplines related to the variables of an object of study, in particular, «tolerance of a person in crisis situation to uncertainty».

As a result of this kind of theoretical review, general and specific concepts related to the subject matter were interpreted, and concepts and approaches to this issue were implemented using the hermeneutic method (Dilthey, 1928).

In this sense, the following principles of interpretation were considered. First, the authors selected a reference bibliography on the topic, taking into account their knowledge of the subject of the study; in particular, the works of classical and modern authors of relevant studies on tolerance to ambiguity and human stress tolerance in such situation were analyzed.

Such an analysis of disciplines and concepts related to the subject of variable research was carried out in the process of preliminary understanding of the chosen subject and in relation to our scientific beliefs, as well as the practice were implemented through Praxis.

Secondly, the process of interpretation of concepts was followed by the principle of understanding the text based on the dialectic of the particle and the whole, which was named as «hermeneutic circle» by the philosopher V.Diltey, that means understanding the whole consisted of understanding its individual parts, and the principles of pre-understanding the whole were followed for understanding the parts (Dilthey, 1928). This connection has become an integral part of the understanding of this work.

In particular, it can be said that at this stage of theoretical research, an attempt to understand the topic on person's tolerance to ambiguity, and stress tolerance was carried out after authors had their own understanding in advance.

Theoretical review

The phenomenon of tolerance to ambiguity

The idea that people do not like ambiguity and avoid has been confirmed by a number of wellknown psychologists. For example, J.Bruner hates some situations by saying like, «when it is impossible to categorize and identify any event, we feel fear in the face of uncertainty» (Burtlett, 1932). Formulates in the same sense (Bruner, 1967).

As to E. Barlett some of the subjects are unknown. E.Tolmen also considered the need to give a certain conformity to objects and events and wrote about the need for a position. (Tolmen, 1951). M. D. Vernoy states that « subjects feel uncomfortable and unsatisfactory until the structure of unknown situations is formed (Vernon, 1952).

From the point of view of cognitive psychology, a person does not like any type of cognitive inconsistency and tries to avoid it. To eliminate this discrepancy, a person can change their attitude. According to L.Festinger, dissonance is psychologically uncomfortable, which leads a person to reduce dissonance or come to an agreement. In this case, a person actively tries to avoid situations and information that can cause dissonance (Festinger, 1957).

In general, the main psychological theories of this direction are based on the idea that people do not prefer inconsistency, instability or contradictions by nature.

SM Andersen and A. Schwartz studied the role of intolerance to ambiguity in a state of depression. It is known that this factor affects on the development of depression only in the presence of thoughts about the negative aspects of life. This highlights the importance of the cognitive component of the uncertain approach (Andersen, 1992).

Thus, the above-mentioned researchers believe that in conditions of ambiguity, various negative emotions can be arised.

Motivational aspects of ambiguity

When analyzing the studies, motivational aspects of ambiguity are noted to be researched. According to the most of researchers, ambiguity motivates and formulates (Kagan, 1956; Berlyne, 1960). Subjective assessment of ambiguity is distinguished as one of the most powerful active factors (Kitaev-Smyk, 1983). For example, in the famous experiments of B.V.Zeigarnik, it was shown that a person tends to complete unfinished actions (and ambiguity means unfinished ones) (Zeigarnik, 1981).

Research by the scientists such as Fiske and Maddie has shown that some unknown and diverse material needs a certain stimulus that motivates a person more than repetitive stimuli (Fiske and Maddi, 1961).

For Example, J.Kagan considers the desire to resolve ambiguity (along with hostility and power) to one of the main motives of behavior. Interestingly, as per J.Kagan, another source of motivation is the motivation for success, which is the secondary and serves to solve ambiguity (Kagan, 1956).

He believes that ambiguity is caused by a discrepancy between the following situations:

- 1. Two knowledge;
- 2. knowledge and experience;
- 3. behavior and knowledge.

According to J.Kagan, the main source of ambiguity is the inability to predict the future. According to his model, people sometimes resist ambiguity and sometimes try to avoid it, depending on the presence of coping mechanisms and the meaning of their conscious or unconscious involvement (Kagan, 1956).

According to D.E. Berline's theory of motivation, a person prefers actions with a more uncertain outcome, since the beginning of the result allows you to minimize the current ambiguity. In this case, the greater uncertainty of an action result, the greater number of such alternatives, the more alternative results of the action will get equaled.

D.E. Berline introduces the concept of «collative» or «comparable» variables (collective variations)» that influence on the activation of human behavior. This term means that the content of received information goes through comparison processes, in which the inconsistency with previously known and probable information is reduced. The scientist identifies four types of collative variables: novelty, ambiguity, complexity, and spontaneity. These qualities, according to D. E. Berline, «depend on comparison or identification between stimulus elements (referring to different parts of the stimulus field acting simultaneously, or stimuli distributed over time) (Berlyne, 1966).

Collative variables form an important group of conditions that affect the «motivational potential». The potential of motivation is an approximate value that summarizes all the features of information search, which are:

• collative variables (novelty, ambiguity, suddenness, complexity);

- affective motivation;
- strong external motivation;
- motivation of internal need.

Based on the above, D.E. Berline identifies various types of motivational behavior: perceptual interest, cognitive interest, subversive behavior, and authentic. During subversive behavior, the subject adapts to receive stimuli from any source with «comparable properties», and not from a separate source, which is considered to be the object of ambiguity. It provides aesthetic satisfaction, not allowing subjective ambiguity search (Berlyne, 1966). Subjects participating in K. Schneider's experiments independently choose the tasks of different levels of difficulty and evaluate the degree of confidence in success. Here, the concepts of subjective ambiguity and subjective probability had the same content. In his research, the scientist used three indicators of subjective uncertainty:

- the longest decision-making time;
- minimal reliability;
- the scaled probability of success is equal to 0.5.

The data obtained by the researcher show that all the above indicators of subjective ambiguity overestimate the objective probability equal to 0.5. Moreover, it is only characteristic of probabilistic assessment of one's own successes and failures, and reassessment of random events is almost invisible (Schneider, 1981).

The history of the phenomenon of ambiguity

Smming up some results, the above data from various studies prove that uncertainty motivates human behavior, but it is one of several motivatinal factors, that has contributed to the existence of many motivational theories. For example, the information model reduces the influence of the motivation to minimize ambiguity related to the effectiveness of one's actions, while the risk choice model is influenced by the motivation to maximize self-esteem. According to the attribution model, a person tends to choose tasks for which the decision belongs to him.

Uncertainty has become an integral part of the modern world. The development of technologies and the growth of innovations aimed at establishing reliability and increasing the security of life, at the same time, increase the diversity of possibilities, which in turn leads to the emergence of ambiguity.

The latter is recognized as a subject to be studied not only in psychology, but also in physics, mathematics, economics, biology and other sciences. Ambiguity as a phenomenon is encountered at all levels of human life: in everyday life, in interpersonal relations, in relations between groups, in decisionmaking situations in education and professional activities.

D.A.Leontiev, D.A.Osin E.G.Lukovitskaya (2016) show that a person's need for trust begins with religious extremist movements and ends with personal anxiety.

According to N.V.Kruglova, a person who is resistant to ambiguity can feel comfortable even in a state of high uncertainty. He can act effectively in an unfamiliar environment and often takes responsibility with a lack of information, is able to make decisions without long doubts and without fear of failure. In exceptional cases, he can see the opportunity to develop and demonstrate his abilities and skills.

If a person cannot tolerate ambiguity, then he will tend to perceive particularly difficult situations as dangerous rather than new opportunities. A lack of information or its lack of clarity can cause discomfort to a person. People, who do not tolerate ambiguity feel better in a familiar environment and come close to achieve specific goals and simple tasks. The main sources of ambiguity intolerance can be: the novelty of the problem, the complexity of the problem, and the insolubility of the problem (Kruglova, 2009).

It should be noted that tolerance for something is different from tolerance for someone, in this case tolerance for ambiguity is determined by the socio-cultural and economic context of tolerance. G.A.According to Asmolov, the semantics of the term tolerance is determined by three different concepts, which are:

1. Stability, endurance (including adverse factors of the natural environment: cold, heat, noise, changes in light regime, time zones and its cataclysms, i.e. sudden changes: floods, droughts, earthquakes);

2. Tolerance;

3. Available tolerances. The translation spectrum of the English word tolerance (from the point of view of the psychological state of a person) is used in a very broad sense: acquired stability, tolerance to uncertainty, ethnic stability, the limit of human stability (tolerance), stress tolerance, tolerance to conflicts, behavioral deviations (Asmolov, 2000).

At the same time, as a result of the anti-epidemic measures and related changes (first of all, quarantine and isolation, in situations arised in relation to the sources of funds necessary for everyday life in the usual activities for people), loneliness, depression, addiction to alcohol, aggressiveness directed at oneself and others, suicidal behavior – contributing to the occurrence of situations such as behavior.

According to R.W. Norton (1975), the concept of uncertainty « can be described by 8 main categories:

• multiple judgments;

• inaccuracy, incompleteness, and fragmentation;

- probability;
- lack of structure;
- lack of information;
- variability;
- incompatibility and inconsistency;

incomprehensible.

Depending on the research context, ambiguity can mean different phenomena. For example, T.V. Kornilova (2015) says that ambiguity is based on ambivalence and ambiguity, while other authors differ from the concept of «uncertainty», which considers future uncertainty or insufficient information (Grenier, 2005).

As noted by K. Stoycheva (2010), the introduction of the concept of «uncertainty tolerance» into the psychological apparatus was caused by the need to explain the peculiarities of a person's behavior in uncertain, ambiguous situations, in particular, a person's willingness to accept or avoid these situations.

In order to reveal the content and structure of the studied phenomenon, it is better to look at the history of its formation.

More attempts have been made not to produce a single description of the phenomenon of uncertainty, but to consider human behavior in similar situations. A concept that describes a person's attitude to uncertainty is considered to be the concept of ambiguity to tolerance.

The phenomenon of uncertainty not only has different definitions, but also is considered in different contexts and conceptual systems. Therefore, an important task is to reveal the meaning that a person puts into the concept of uncertainty.

A person's need to overcome uncertainty is considered within the framework of meaning preservation model, and it is shown that in case of violation of his semantic logic, compensatory mechanisms of confirmation of his meaning are activated in other spheres. The French philosopher Alain Badiou (2013) introduced the concept of «preparation for an event», which describes a position of openness to new possibilities and uncertainty. According to E.T. Sokolova (2015), four negative and one positive reactions to situations of uncertainty are distinguished within the framework of clinical psychology. Negative types of reactions include intolerable anxiety, feelings of inconsistency and confusion, lack of access to internal resources, manic states, and lack of inhibitory standards. The positive type refers to the experience of interest, excitement and joy. A number of studies have examined the relationship between attitudes toward uncertainty and personal characteristics. For example, S. Maddi (2005) emphasized readiness to act in uncertain situations as a necessary component of maintaining mental health within the framework of his vitality theory.

Usually, the term ambiguity is considered in the context of the term ambiguity tolerance. In addi-

tion, researchers distinguish behavioral manifestations of low or high levels of uncertainty tolerance. For example, intolerance is the inability to imagine positive and negative symptoms for a person, tendency to dichotous assessment of the environment, dogmatism, rigidity, aggessivenesrmos, high level of anxiety, etc (Frenkel-Brunswik, 1949; Bochner, 1965). High levels of tolerance for ambiguity are associated with curiosity, awareness, life satisfaction, extroversion, and other positive characteristics (Furnham, 2013).

According to E. Frenkel-Brunswick, the term «Tolerance of uncertainty» began its history of development in the issue of ethnic stereotypes (Frenkel-Brunswik, 1949). Further, the question arises as to how important this characteristic is for a person or whether it is activated, only when perceiving certain objects. According to the additional research, ambiguity tolerance/intolerance has been considered in authoritarian personality theory (Adorno, 1950). In order to move away from the political content and return the phenomenon to psychological characteristics, S. Badner described 3 main features of the unknown situation: novelty, complexity, undecidability (Budner, 1962). In general, since he defined intolerance of ambiguity as a method of perceiving unknown situations as a threat, S.Badner outlined a number of criteria for individual perception of danger, which described the phenomenological and immediate reactions of a person to a situation of ambiguity: phenomenological submission (experience of discomfort), phenomenological denial (suppression), immediate submission (avoidance), immediate negation (destructive or reconstructive activity).

Also, S.Badner showed the positive pole of experiencing unknown situations – tolerance to ambiguity. Based on the work carried out, S. Bochner (1965) recognized two main characteristics of ambiguity intolerance: firstly, a negative reaction to uncertain situations affects emotional and cognitive levels, including cognitive styles, social attitudes and interpersonal behavior; second, people with intolerant behavior in case of uncertainty show similar behavior in the perception of objects.

The next transitional stage in the study of ambiguity tolerance is related to the study of the phenomenon as a dynamic characteristic. If previously the attitude to the situation of uncertainty was taken as a stable independent variable, then at the beginning of the 2000s we will talk about the possibility of personality development айтамыз (Deroma, 2003). At the same time, a number of researchers found that the level of tolerance for uncertainty decreased with increasing age of respondents, and respondents showed an increase in conservative attitudes and a greater orientation to stability (Kajs, 2010).

According to D. Kahneman, P. Slovik and A. Tversky (2005), the stability of opinion is affected by the skill of interpretation, in particular, a person with a highly developed ability to interpret can reconcile many conflicting facts and new evidence without changing his position. The same topic includes heuristics, that is, knowledge gained through experience. D. Kahneman and A. Tversky call them «mental traps» because they can lead a person to make the wrong decision. It is possible that the main feature of heuristics is to reduce human effort and simplify cognitive processes by referring to existing schemes.

According to N.Taleb, the main drawback of the theory of D.Kahneman and A. Tversky is defined in its consideration of the aspect of ambiguity (Taleb, 2013). In their works, the authors focus their research on risk situations, probability measurement and statistical calculations. N.Taleb in his famous work «Black Swan» describes the infinite ambiguity in which statistics and past experience cannot be applied.

An interesting approach to an issue of behavior under ambiguity can be related to the concept of human intellectual and personal potential. It is determined by the fact that the intellectual and personal characteristics of a person form a single mechanism of human decision-making by overcoming ambiguity (Tolmen, 1951). However, intellectual and personal potential is only a condition and does not completely determine the choice, so the highest level in decision-making is only the self-awareness of an individual.

According to K.I. Kornev (2006), the phenomenon of uncertainty is mixed with the concept of a problem situation as a special task. Uncertainty situations differ from problem situations not only in their important characteristics, but also in their impact on a person. Uncertainty hinders a person's ability to evaluate and predict a likely outcome. This leads to the fact that a person is not able to use a coping strategy to overcome a stressful event, that can be used to deal with the intended problem situation. As V.A. Bodrov (1996) said that in case of constantly changing situations, the most effective behavior is to search for information about the available situation, but in practice, a person begins to be guided not by problem-oriented strategies of struggle, but by emotional-oriented reactions.

One of the difficulties in studying a person's attitude to ambiguity depends on his personal un-

derstanding. If the researcher presents his own standardized version of uncertainty, then he may not meet the criterion of an uncertain situation in the subject, but if a person is asked to describe a situation of uncertainty independently from his own experience, then he will face difficulties in comparing the obtained results in a wide sample.

The locus of ambiguity experience is reflected in all theories that tend to consider this phenomenon as an experience inside a person or as something happening externally.

As per N.V. Kruglova (2009), a person who is tolerant of ambiguity can feel comfortable even in a state of high ambiguity. He is able to act effectively in an unfamiliar environment and often takes responsibility when there is a lack of information, is able to make decisions without long doubts and without fear of failure. In an exceptional situation, he can see the opportunity to develop and demonstrate his abilities and skills.

If a person is not able to tolerate ambiguity, then he will tend to perceive particularly difficult situations as dangerous rather than new opportunities. A lack of information or its lack of clarity can cause discomfort to a person. People who do not tolerate ambiguity feel better in a familiar environment and are closer to achieving clear goals and simple tasks. The main sources of ambiguity intolerance can be: the novelty of the problem, the complexity of the problem, and the insolubility of the problem.

There is a lot of modern research on this topic.

For example, S.Petrocchi, P. Iannello, G. Ongaro et al. (2022) aimed to test a relational model to identify the determinants of stress caused by Covid-19 lockdown, finding that exposure to Covid-19 was positively related to anxiety and health information seeking, and that tolerance for ambiguity was directly related to distress.

According to the results of researches by the scientists like N.I. Pogorilska, R.Y. Synelnykov B.I. Palamar, S.V. Tukaiev & L.L. Nezhyva (2022) the vast majority of respondents perceive the pandemic as a dangerous, uncertain situation and make hasty decisions based on polar judgments, react with anxiety, try to avoid uncertainty, tend to give up unusual things. There are negative consequences of their behavior (loss of time management skills, laziness), which indicate that the anxiety factor is directly related to the sources of general intolerance.

At the same time, as a result of the anti-epidemic measures and related changes (first of all, quarantine and isolation, in the usual activities for people in relation to sources of funds necessary for everyday life) loneliness, depression, addiction to alcohol, aggressiveness directed at yourself and others, suicidal behavior caused to contribute to the occurrence of such situations.

Tolerance to ambiguity as an individual trait of a person

We may not be mistaken to say that Covid-19 pandemic period is accompanied by constant ambiguity. At the moment, people around the world may not be able to say exactly what things are waiting for their lives in the near future. Since the beginning of pandemic, a lack of reliable information about the disease, treatment and methods of its prevention, medical possibilities is becoming more complicated, moreover a lot of information, which is not always reliable is distributed through the mass media and social networks. As a result, it is quite possible that many people feel fear and panic due to suncertainty of the possibility of continuing their work. Certainly, the degree of our fear and panic get stabilized and characterize the danger of the situation we face. As psychotherapist, associate professor of Northwestern State Medical University after I.I.Mechnikov, the Chairman of the Association of cognitive behavioral psychotherapy D. Kovpak (2020) has concluded that pandemic would have ended one day and how we would come out of it depends not on its duration, but directly on us. Pandemic and a forced self-isolation can further contribute to an acute and a chronic stress, a formation of post-traumatic stress, sleep disorders and psychosomatic reactions, increased anxiety and depression, anger and aggression directed at a person himself and the external environment.

What we can see from this, in a state of ambiguity, people tend to choose the most negative scenario. A human psyche «does not like» to be tolerant of ambiguity. The strategic goal of its adaptation is to be ready for any threat. Therefore, if you have experienced high anxiety during pandemic, it means to be a normal state.

Anxiety is a natural emotion. Anxiety is more common among people with a low threshold of sensitivity to stress, who can react faster to any stimulus. Another characteristic feature of people with high anxiety is a low tolerance for ambiguity. It is difficult for a modern person to accept the idea that not everything can be controlled. As a result, anxiety and fear arise as a result of ambiguity, and would interfere a person from being developed.

Man is a being in constant development and formation. No matter what kind of stress he endures, he changes from one state to another. Survival requires constant development and endless change.

According to Robert Leahy, a well-known psychotherapist from New York, head of the American Institute of cognitive therapy».. we are all trapped in an «international trauma trap»where everyone feels that their life or the lives of the beloved ones are in danger. «When we are concerned, we tend to show ambiguity as a negative outcome. But ambiguity is a neutral world – we can not predict what will happen» (2009).

A person's behavior during a pandemic is often determined by their ability to take responsibility for their decisions. In ambiguous situations, transferring responsibility to another person, a lack of confidence in independent decision-making and putting off the decision, or decision-making based on emotional rather than rational logic, is becoming more complicated. However, there is no doubt that a person's behavior is significantly influenced by his belief in the effectiveness of his actions, because in a state of ambiguity, it is natural for a person to feel different levels of confidence-distrust states.

Although people experience a wide spectrum of negative emotions, from discomfort to panic, ambiguity is one of the most common phenomena in life. It is a normal situation, because the implementation of any action is connected with the limitation of ambiguity; any goal, any choice, is based on turning uncertainty into confidence. Life itself always creates ambiguity.

Ambiguity and confidence do not contradict each other, on the contrary, they complement each other. Ambiguity tolerance as an individual quality of a person is the acceptance of ambiguity as the norm of life, which creatively transforms the surrounding reality into subjective confidence.

A certain degree of tolerance for ambiguity indicates the ability to overcome anxiety in achieving a personal maturity, stability, and integrity. The best way to deal with the stress caused by ambiguity is to recognize that it exists.

Conclusion

The results of the analysis show the heterogeneity of ambiguity design with a multifaceted structure. As for the ways of coping with uncertainty, they coincide with many described ways of coping with difficult or critical situations, although certain differences are apparent. The theoretical analysis allows us to take a new look at the issue of individual differences in relation to ambiguity. The World Health Organization is still reporting promising positive changes not due to indifferent attitude to COVID-19 situation. All over the world, different measures are being taken in different countries, focusing on maintaining physical and mental health, but not losing optimism. Such measures are the key to psychological stability, so it is important that people solve them together. The fact that people take care of each other, express social and emotional support is one of the most important qualities of their nature. Perhaps we are not mistaken to say that although, Covid-19 epidemic has disrupted the usual way of life, it has opened up new opportunities for some people. People were able to communicate with each other by phone and video communication, have understood that each person has their own psychological needs, show more care and sensitivity to our loved ones.

References

- Frenkel-Brunswik E., Levinson D. J., Sanford R. N. & Adorno T. W. (2019) The authoritarian personality. Verso Books. http:// public.eblib.com/choice/PublicFullRecord.aspx?p=6071120.
- Andersen S. M. & Schwartz A. H. (1992) Intolerance of ambiguity and depression: A cognitive vulnerability factor linked to hopelessness. *Social Cognition, no 10* (3), pp. 271-298. Doi.org/10.1521/soco.1992.10.3.271
- Asmolov A.G. (2000) Na puti k tolerantnomu soznaniju [On the way to a tolerant consciousness]. M.: Smysl, 255 p. Users/User/ Downloads/tolerance.pdf . (In Russian)
- Badiou A. (2013) Filosofija i sobytie [Philosophy and Event]. M.: Institute of General Humanitarian Research, 192 p. Users/User/Downloads/badyu_a_filosofiya_i_sobytie.pdf. (In Russian)
 - Berlyne D.E. (1960) Conflict, Arousal and Curiosity. N.Y.
- Berlyne D.E. (1966) Ljuboznatel'nost' i poisk informacii [Curiosity and information search]. *Voprosy Psychologii*, no 4, pp.54-60. (In Russian)
 - Bochner S. (1965) Defining intolerance of ambiguity. Psychologist Record, no 15, pp. 393-400.
- Bodrov V.A. (1996) Kognitivnye processy i psihologicheskij stress [Cognitive processes and psychological stress]. *Psychological Journal*, no 17 (4), pp. 64-74. (In Russian)
 - Bruner J.S. (1967) A study of thinking. Goodnow J.J. Science Editions. N.Y. Budner S. (1962) Intolerance of Ambiguity as a Personality Variable. *Journal of Personality*, no 30, pp. 29-50.
 - Burtlett F.C. (1932) Remembering. Cambridg, Cambridg University Press.
- Deroma V., Martin K., Kessler M.L. (2003) The Relationship between tolerance for ambiguity and need for course structure. *Journal of Instructional Psychology*, no 30 (2), pp. 104-109.
 - Dilthey W. (2001) The Formation of the Historical World in the Human. Cambridge: Cambridge University Press, 452 p.
 - Festinger L. A. (1957) Theory of cognitive dissonance. Evanston, IL: Row Peterson, 313 p.
 - Fiske D.W. and Maddi S.R. (1961) Functions of varied experience. Homewood. Ill.: Dorsey.
 - Frenkel-Brunswik E. (1949) Tolerance towards ambiguity as a personality variable. American Psychologist, no 3, 268 p.
 - Furnham A., Marks J. (2013) Tolerance of ambiguity: a review of the recent literature. Psychology, no 4 (9), pp. 717-728.
- Grenier S., Barrette A.M., Ladouceur R. (2005) Intolerance of uncertainty and intolerance of ambiguity: similarities and differences. *Personality and Individual Differences*, no 39 (3), pp 593-600.
- Kagan J. (1956) The measurement of overt agression from fantasy. Journal of Abnormal and Social, 52 p.
- Kajs L.T., McCollum D.L. (2010) Dealing with ambiguity: assessment of tolerance for ambiguity in the context of school leadership. *Educational Leadership*, no 14, pp 77-91.
- Kaneman D., Slovik P., Tverski A. (2005) Prinjatie reshenij v neopredelennosti: Pravila i predubezhdenija [Decision-making in Uncertainty: Rules and Biases]. Kharkiv: Publishing House Institute of Applied Psychology Humanitarian Center.

Kitaev-Smyk L.A. (1983) Psihologija stressa [Psychology of stress]. M., pp. 368. (In Russian) Kornilova T.V. (2015) Princip neopredelennosti v psihologii vybora i riska [The principle of uncertainty in the psychology of

- choice and risk]. *Psychological research*, no 8 (40), pp. 11. (In Russian)
- Kruglova N.V. (2009) Aktualizacija tolerantnosti k neopredelennosti v jepohu krizisa [Actualization of tolerance to uncertainty in the era of crisis]. Izvestiya RSPU named after A.I.Herzen, July, no 110, pp. 298-304. (In Russian)
- Kornev K.I. (2006) Specifika kopinga v uslovijah neopredelennosti [The specifics of coping in conditions of uncertainty]. Collection of materials of the All-Russian Conference. May 18-19. Novosibirsk, pp. 24-35. (In Russian)
- Kovpak D. (2020) Krizis i pandemija jeto ne tol'ko opasnost', no i vozmozhnost' [Crisis and pandemic are not only a danger, but also an opportunity]. https://vk.com/@psihologsh-dmitrii-kovpak-krizis-i-pandemiya-eto-ne-tolko-opasnost-no-i
- Leont'ev D.A., Osin E.N., Lukovickaya E.G. (2016) Diagnostika tolerantnosti k neopredelennosti: Shkaly D. Maklejna [Diagnostics of tolerance to uncertainty: D. McLane scales]. M.: Smysl. (In Russian)
- Leahy R.L. (2006) The Worry Cure. Stop worrying and start living. Paperback, pp. 231-249.

Maddi S. (2005) Smysloobrazovanie v processah prinjatija reshenija [Meaning formation in decision-making processes]. *Psychological Journal*, no 26 (6), pp. 87-101.

Norton R.W. (1975) Measure of ambiguity tolerance. Journal of Personality Assessment, no 39 (6), pp. 607-619.

Petrocchi S., Iannello P., Ongaro G. et al. (2022) The interplay between risk and protective factors during the initial height of the COVID-19 crisis in Italy: The role of risk aversion and intolerance of ambiguity on distress. *Curr Psychol*, no 41, pp. 437–448. Doi.org/10.1007/s12144-021-01601-1

Pogorilska N. I., Synelnykov R. Y., Palamar B. I., Tukaiev S. V., & Nezhyva L. L. (2021) Features of psychological experiences in severe quarantine during the covid-19 pandemic: the role of tolerance for uncertainty. Wiadomosci Lekarskie (Warsaw, Poland: 1960), no 74(6), pp. 1312-1316. Doi:10.36740/wlek202106104

Schneider K., Heckhausen H. (1981) Subjective uncertainty and task preference. In: H.I.Day(ed.). Advances in Intrinsic Motivation and Aesthetics. N.Y.

Sokolova E.T. (2015) Klinicheskaja psihologija utraty Ja [Clinical Psychology of Self-loss]. M.: Smysl. (In Russian)

Stoycheva K. (2010) Tolerance for ambiguity, creativity, and personality. *Bulgarian Journal of Psychology* (SEERCP 2009 Conference Papers, Part Two), vol.1, no 4, pp.178-188.

Taleb N. (2013) Chernyj lebed'. Pod znakom nepredskazuemosti [The black swan. Under the sign of unpredictability]. M.: KoLibri. (In Russian)

Tolmen E.C. (1951) A psychological model. In: Toward a General theory of Action, eds T. Parsons and E.A. Shils, Harvard University Press, Massachusetts, pp. 279-361.

Vernon M. D. (1952.) A further study of visual perception. Cambridge University.

Zejgarnik B.V. (1981) Teorija linnosti K. Levina [K. Levin 's theory of personality]. M.: MGU, 117 p. (In Russian)

Литература

Frenkel-Brunswik E. Levinson D. J. Sanford R. N. & Adorno T. W. The authoritarian personality. Verso Books, 2019. http://public.eblib.com/choice/PublicFullRecord.aspx?p=6071120.

Andersen S. M., & Schwartz A. H. Intolerance of ambiguity and depression: A cognitive vulnerability factor linked to hopelessness // *Social Cognition*. $-1992. - N \ge 10$ (3). -P. 271-298. https://doi.org/10.1521/soco.1992.10.3.271

Асмолов А. Г. Толерантность от утопии к реальности [Текст] / А.Г. Асмолов // На пути к толерантному сознанию. – М., 2000. – С. 255. Users/User/Downloads/tolerance.pdf

Бадью А. Философия и событие. – М.: Институт Общегуманитарных Исследований, 2013 – С.192. Users/User/Downloads/ badyu_a_filosofiya_i_sobytie.pdf

Berlyne D.E. Conflict, Arousal and Curiosity. - N.Y., 1960.

Берлайн Д.Е. Любознательность и поиск информации // Вопросы психологии. – 1966. – №3. – С. 54-60.

Bochner S. Defining intolerance of ambiguity. *Psychologist Record.* – 1965. – №15. – P. 393-400.

Бодров В.А. Когнитивные процессы и психологический стресс // *Психологический журнал.* – 1996. – №17 (4). – С.64-74. Bruner J.S. A study of thinking. Goodnow J.J. Science Editions. – N.Y., 1967.

Budner S. Intolerance of Ambiguity as a Personality Variable //Journal of Personality. - 1962. - №30. - P. 29-50.

Burtlett F.C. Remembering. – Cambridg: Cambridg University Press, 1932.

Deroma V., Martin K., Kessler M.L. The Relationship between tolerance for ambiguity and need for course structure // *Journal* of *Instructional Psychology*. $-2003. - N \ge 30$ (2). -C.104-109.

Dilthey W. The Formation of the Historical World in the Human. – Cambridge: Cambridge University Press, 2001. – 452 p. Festinger L. A. Theory of cognitive dissonance. – Evanston, IL: Row Peterson, 1957. – 313 p.

Fiske D.W. and Maddi S.R. Functions of varied experience. – Homewood: Dorsey. – 196 p.

Frenkel-Brunswik E. Tolerance towards ambiguity as a personality variable //*American Psychologist.* – 1949. – N_{23} . – P. 268.

Furnham A., Marks J. Tolerance of ambiguity: a review of the recent literature // *Psychology*. – 2013. –№4 (9). – P. 717-728. Grenier S., Barrette A.M., Ladouceur R. Intolerance of uncertainty and intolerance of ambiguity: similarities and differences //

Personality and Individual Differences. - 2005. - №39 (3). - P. 593-600.

Kagan J. The measurement of overt agression from fantasy//*Journal of Abnormal and Social Psychology.* – 1956. – № 52. Kajs L.T., McCollum D.L. Dealing with ambiguity: assessment of tolerance for ambiguity in the context of school leadership // *Educational Leadership.* – 2010. – №4. – P.77-91.

Канеман Д., Словик П., Тверски А. Принятие решений в неопределенности: Правила и предубеждения. Харьков: Издательство Институт прикладной психологии «Гуманитарный Центр», 2005.

Китаев-Смыл Л.А. Психология стресса. – М., 1983. – 368 с.

Корпнилова Т.В. Принцип неопределенности в психологии выбора и риска // *Психологические исследования.* – 2015. – №8 (40) – С.11.

Круглова Н.В. Актуализация толерантности к неопределенности в эпоху кризиса // «Известия РГПУ им. А.И.Герцена» – 2009. – № 110. – С. 298-304.

Корнев К.И. Специфика копинга в условиях неопределенности. В кн.: Человек в условиях неопределенности // Сборник материалов Всероссийской конференции. 18-19 мая 2006. – Новосибирск. – С. 24-35.

Ковпак Д. Кризис и пандемия – это не только опасность, но и возможность. –2020https://vk.com/@psihologsh-dmitrii-kovpak-krizis-i-pandemiya-eto-ne-tolko-opasnost-no-i

Леонтьев Д.А., Осин Е.Н., Луковицкая Е.Г. Диагностика толерантности к неопределенности: Шкалы Д. Маклейна. – М.: Смысл, 2016.

Leahy R.L. The Worry Cure. Stop worrying and start living. – N.-Y.: Piatkus. *Продолжение. Начало: Развитие личности.* – 2009. – \mathbb{N}_{1} . – C. 206-232; – \mathbb{N}_{2} . – C. 231-249.

Мадди С. Смыслообразование в процессах принятия решения // Психологический журнал. – 2005. – №26 (6) – С. 87-101. Norton R.W. Measure of ambiguity tolerance. Journal of Personality Assessment. – 1975. – №39 (6) – С. 607-619.

Petrocchi S., Iannello P., Ongaro G. et al. The interplay between risk and protective factors during the initial height of the

COVID-19 crisis in Italy: The role of risk aversion and intolerance of ambiguity on distress // *Curr Psychol.* – 2022. – №41. – P. 437-448. Doi.org/10.1007/s12144-021-01601-1

Pogorilska N. I., Synelnykov R. Y., Palamar B. I., Tukaiev S.V., & Nezhyva L.L. Features of psychological experience. – Warsaw, Poland. – 2021. – №74(6). – P. 1312-1316. Doi:10.36740/wlek202106104

Schneider K., Heckhausen H. Subjective uncertainty and task preference // In: H.I.Day (ed.). Advances in Intrinsic Motivation and Aesthetics. - N.Y., 1981.

Sokolova Е.Т. Клиническая психология утраты Я. - М.: Смысл, 2015.

Stoycheva K. Tolerance for ambiguity, creativity, and personality // Bulgarian Journal of Psychology (SEERCP 2009 Conference Papers, Part Two. – 2010. – Vol.1-4. – P. 178-188.

Taleb N. Черный лебедь. Под знаком непредсказуемости. – М.: КоЛибри, 2013. Tolmen E.C. A psychological model. In: Toward a General theory of Action, eds T. Parsons and E.A. Shils. – Harvard University Press, Massachusetts, 1951. – P. 279-361.

Vernon M. D. A further study of visual perception. – Cambridge University, 1952. Зейгерник Б.В. Теория личности К. Левина. – М.: МГУ, 1981. – 117 с.