

LATIP 2021**International Conference on Language and Technology in the Interdisciplinary Paradigm****LINGUISTIC ANALYSIS OF AUTOMATIC THOUGHTS AND
COGNITIVE DISTORTIONS CAUSING INDIVIDUAL'S
PSYCHOLOGICAL PROBLEMS**

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(a) Moscow State Linguistic University, 38, building 1, Ostozhenka Str., Moscow, 119034, Russia,
info@linguanet.ru**Abstract**

The study implements an interdisciplinary cognitive approach to identifying automatic thoughts that underlie typical psychological problems of a person, explaining the presence and fixation of thoughts that cause cognitive distortions of thinking and revealing the deep connection of person's thoughts and emotions in the formation of personality traits and expressed by linguistic means in language. The aim of the study is to conduct a linguistic analysis of the identified automatic thoughts and cognitive distortions associated with psychological problems of the personality. It provides an overview of modern approaches to the study of thinking in an interdisciplinary paradigm, highlights the problem of analysing automatic thoughts and cognitive distortions, examines the types of cognitive distortions and their features in emotional disturbance of an individual. Linguistic and psychological factors of cognitive distortions, their connection with the emotional sphere of a person and one's typical problems are considered. The study identified automatic thoughts, cognitive distortions and linguistic features in various types of psychological problems (personal, interpersonal and psychological problems of certain areas of life). It conducted a linguistic analysis that revealed the grammatical categories of automatic thoughts in space-time continuum (prospecting and retrospection), lexical increments (emergence) and suggestiveness that are present in them and create loops due to cognitive distortions, such as labelling, mind reading, catastrophizing, positive devaluation, etc. That leads to individual's emotional disorders. Evidence is obtained for the existence of a relationship between automatic thoughts, cognitive distortions and personality traits, and their dependence on linguistic means of expression in language.

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1. Introduction

Linguistics has different approaches to modelling human thinking, identifying structural and semantic errors. For example, in the work of Saldana et al. (2021) investigate cross-linguistic patterns of morpheme positioning and ordering that reflect cognitive biases. Fundamental models of signal recognition of any complexity are being created, such as the receiver operating characteristic (ROC) model, the signal detection theory (SDT) model, etc. (Ahn et al., 2011; Böckenholt, 2012; Dube et al., 2010; Selivanov, 2019; Schubert et al., 2021; Trippas et al., 2018). There are local or middle-level theories that directly explain the mechanisms of cognitive distortions (Popov & Vikhman, 2014; Mozzhukhina, 2018) and their relationship with the emotional sphere of a person (Burn, 1999; Dohr et al., 1989; Ellis & MacLaren, 1998). In addition, thinking as a subject of science is studied not only by linguistics, but also at the intersection of sciences and is studied in various fields of scientific knowledge: mathematics, physiology, psychology, pedagogy, cognitive sciences, etc. (Alekhin & Grekova, 2018; Du et al., 2015; Kryukova et al., 2018; Pishchalnikova, 2021). The understanding of thought processes and their connection with various manifestations of personality is expanding. According to the research tasks, the methods of studying the phenomena associated with human mental activity are also changing (Pishchalnikova, 2021; Zakharova, 2013). In the laboratory of psycholinguistics of the Moscow State Linguistic University, an associative experiment is actively used to identify changes in the semantic field of basic values and the structure of speech action (Kosheleva, 2021; Pishchalnikova et al., 2019). It has been proven that thinking as a phenomenon manifests itself in various spheres of human life and activity. Let's trace its features, expression in language and connection with psychological problems of the personality. A person's thinking determines his behaviour, he makes decisions, draws conclusions, performs actions under the influence of certain circumstances (Kashapova & Ryzhkova, 2015; Schubert et al., 2021).

It is generally accepted that thinking is a process of knowing reality through the characteristics and relationships between phenomena. At the same time, cognition takes place according to the principle "from the general to the particular" (Alekhin & Grekova, 2018). Basically, the cognitive content of a person's thinking consists of forms of thought (concept, judgment, inference), thought processes and operations (analysis, synthesis, generalization and abstraction). At the same time, processes determine operations and become a prerequisite for personality change. This happens through the need to solve new problems (Selivanov, 2019). In this case, one should distinguish between thought processes and memory processes – only thinking creates a subjectively new thing, which indicates its creative characteristics. However, not only the operational composition of thinking and its ability to create new things are a necessary tool of a person, reflecting his knowledge, but there are also phenomena of human mental activity, which sometimes serve as an obstacle to an adequate understanding of the world, his role in it, himself and other people. Such phenomena include automatic thoughts and cognitive distortions.

The concept of "automatic thoughts" was first introduced by the founder of cognitive therapy, Aaron Beck, in 1979 (Beck & Freeman, 2017). According to his concept, automatic thoughts are negative human cognitions, which are the result of the work of cognitive circuits. A person has a general idea of the world around him. It is a kind of picture, which includes his subjective and objective ideas. They

depend on the processes of physiology and are relevant at the current time, where the basic needs of a person, first of all, form his preferences. Consequently, automatic thoughts are determined by the attitude: to the surrounding world, ongoing processes and events (principles of interaction with the environment); to the parameters of time (its excess or a feeling of its lack, the ability to organize things); to oneself (assessment of one's abilities, appearance, physical strength); to other people (assessment of their behaviour, mental abilities, external data). Automatic thoughts arise as a result of the work of "schemes" or cognitive structures that are responsible for human behaviour and life experience. It is important to note that "schemas" are made up of beliefs that become part of a person's thought processes, emotional responses, and behaviour. Dysfunctional states develop on the basis of "schemes" and "automatic thoughts". He is visited by negative feelings; behaviour adjusts to incorrect cognitions, which leads to non-adaptive methods of human interaction with himself and the world around him. According to the observations by Aaron Beck, such people "... often have no idea how they became who they are, how they create problems for themselves or how they can change" (Beck & Freeman, 2017, p. 14).

In Aaron Beck's opinion, schemes can be attributed to the following areas of human life:

- personal (determines how a person perceives himself);
- family (refers to the role and place of a person within their own family);
- cultural (schemes related to cultural attitudes and principles of a person);
- religious (determines adherence to certain religious views);
- gender (determines the principles of human behaviour, depending on the gender to which he refers himself and to those rules and relations that are accepted among his people);
- professional (all attitudes related to professional activities) (Beck & Freeman, 2017; Beck, 2006).

It is important to note that the schemes can be a) active, which a person uses in everyday life. These may include rules of conduct, principles of communication with others. At the beginning of the 20th century, such scientists as Pavlov, Watson, Skinner described examples of operant thinking that influenced behavioural patterns; and b) passive, which the person is not aware of. Such schemes are formed through the indirect influence of others, for example, praise for good behaviour, approval for striving to achieve better results. In some cases, schemas can be recognized. At the same time, a person, having schemes that interfere with his comfortable and productive life may not be able to resist their influence. This is due to the fact that patterns have strong cognitive and emotional connections, as well as habitual behavioural patterns, the attempt to change which leads to an increase in the level of anxiety. In addition, any schemes are associated with pleasure, if the goal is achieved, or painful sensations, if it is impossible to achieve the desired.

In some cases, such as in personality disorders, the number of attitudes affecting a person exceeds the norm and dysfunctional schemes are formed. There is a substitution of such schemes for those aimed at the normal perception of information messages, their reproduction and the assumption of what will happen in the future. This is due to the fact that the patterns of behaviour necessary for survival (striving for competition, predation and craving for communication) are not in demand in the modern world, they begin to manifest themselves in the form of behaviour that is interpreted as personality disorders.

Dysfunctional schemes produce large-scale structures. From an insignificant detail, global assumptions can grow. They affect various areas of the personality:

- cognitive area (through thought processes, the situation is assessed);
- emotions (a person begins to experience certain feelings);
- motives (a decision is made on how to proceed, aimed at the desired result);
- will and actions (an action is taken to achieve a result);
- control (behaviour is restrained if it is regarded as unproductive).

Schemes can be latent or activated by a significant stimulus. How a person responds to a stimulus will be dictated by the content of the schema. Active, often dysfunctional schemes have a high power of influence and a minimum trigger threshold and easily suppress adaptive circuits suitable for normal life. The more often dysfunctional schemes are triggered, the greater the range of stimuli that can influence this mechanism. The dominance of dysfunctional schemes can be traced from the beginning of the cognitive process to its completion. At the same time, the sphere of control assumes an important role. With dysfunctional schemes, there is a suppression of motives and actions that are adequate and acceptable for the situation.

Dysfunctional schemes, as a rule, are transformed into a personal assessment, expressed in such formulations as “successful or not successful”, “smart or stupid”, “lucky or loser,” etc. They are often not recognized by a person and are expressed in the form of automatic thoughts.

Schemes, attitudes and automatic thoughts are based in human thinking. Initially, Aaron Beck identified several levels characteristic of it:

- arbitrary thoughts. They are superficial and well understood by man;
- automatic thoughts. They lie on a deeper level and are difficult to comprehend. In fact, it is a flow of thoughts that coexists with a stream of conscious thoughts;
- intermediate beliefs. Flexible and more aware than the next level. They contain methods of action, rules, ideas about how it can be, images of faith, opinions, assumptions of a positive and negative nature, principles. With their help, coping strategies of human behaviour under stress are formed;
- deep installations. They are embedded deeper than anyone else is and are practically not realized. At the same time, it is they that determine how a person perceives himself and the surrounding reality.

Depth attitudes are fundamental and they are a part of cognitive schemes. According to Aaron Beck, attitudes are defined by the following meaning:

- attitudes about helplessness. This includes negative personality assessments. The person may feel like a failure or incapable of certain actions or achievements;
- attitudes about rejection. They are related to the attitude of other people. They are characterized by assessments of the feelings of another person, his thoughts. They are based on doubts and fears that a person is not loved, is not desired, looks bad in the eyes of others;
- attitudes about worthlessness. They contain negative characteristics of a person about himself. At the same time, a person can act as evil, immoral, unfit, etc. (Radyuk et al., 2018).

Automatic thoughts inevitably lead to cognitive biases. Although cognitive biases have been found

previously, their relationship is undeniable (Beck & Beck, 2011; Jewell, 2011). Let's consider the essence and main mechanisms of cognitive distortions.

The concept of "cognitive distortion" was introduced in 1970 by Kahneman and Tversky.

Cognitive distortions are usually understood as negative thoughts or errors that a person's thinking makes (Beck, 2006). In fact, these are irrational tricks of the brain, formed by the example of one's own and someone else's life experience (Kryukova et al., 2018). It should be noted that mistakes made due to a lack of education do not fall under the definition of cognitive biases (Mozzhukhina, 2018).

According to Kahneman and Tversky, human thinking consists of two systems:

- the first system is responsible for associative perception and speed of response. At the same time, the response to the stimulus is transformed into a ready-made solution. This system is characterized by cognitive distortions, like unconditioned, quickly formed beliefs;
- the second system creates images for analysis and has the ability to detect cognitive errors, which allows it to be used as a resource for working on errors.

A well-known mistake of thinking is an attribution error. When assessing others, failures tend to ascribe to the influence of human qualities, and responsibility for a positive experience is assigned to external circumstances, such as luck, stroke of fortune, higher powers. At the same time, the opposite situation is when a person evaluates himself. Personal victories, in this case, are influenced by the qualities of a person, and unfavourable circumstances are responsible for failures (Kashapova & Ryzhkova, 2015). Another mistake is incorrect accounting of probabilities. In those cases when the probability of an event is minimal, it is assigned the leading position. At the same time, events that will occur in most cases are practically not taken into account at the time of forecasting (Popov & Vikhman, 2014).

Cognitive distortions can be detected when processing tasks of a different spectrum: when making decisions, predicting future events, checking the fairness of a situation and assessing the behaviour of people around (Kryukova et al., 2018; Schubert et al., 2021). In the meantime, information that is not in demand for a person is checked more carefully for the possibility of achieving the desired. With regard to the information in demand, the level of requirements has been reduced and a number of possibilities are being checked for achieving a result (Mozzhukhina, 2018). The emergence of cognitive distortions does not depend on the volitional efforts of a person: they appear arbitrarily and automatically (Kryukova et al., 2018).

Cognitive distortions are built on judgments based on the following phenomena:

- knowledge is considered relevant if there is an error;
- an error in assessing the level of knowledge and full understanding of the material;
- the Dunning-Kruger effect, in which knowledge is overestimated or underestimated.

According to Baron's model, cognitive distortions arise for a number of reasons:

- thinking relies on information that attracts attention and, often, is in maximum accessibility;
- what is happening is justified by information that is not related to the subject of assessment;
- the assessment takes into account a single factor (Popov & Vikhman, 2014).

In order for a cognitive distortion to take shape, several phenomena of an inadequate form must take place:

- perception of oneself or the world around;
- processing of incoming information;
- subjective reproduction of the information received, as a solution to the stimulus (Kryukova et al., 2018).

Table 1. Types of cognitive distortions

Cognitive distortions	Manifestation	Examples of automatic thoughts
Dichotomous thinking (All-or-nothing thinking)	A person perceives a situation in polarity, evaluates it from the position of good and bad, or black and white spectrum. At the same time, intermediate options are completely excluded. This distortion is based on the protective mechanisms of the psyche, in which at the moment of difficult situations, instead of a tendency to overcome, negative experience is exaggerated	If I can't get a good mark, then I'm talentless.
Catastrophizing	The future with such a distortion is seen by a person in a negative version. The person gets the feeling that everything is hopeless and nothing good is foreseen ahead.	My excitement will not allow me to perform on stage.
Discounting the positive	When assessing the situation, only negative factors and bad points are taken into account.	My luck still allows me to hold this position.
Emotional reasoning	A person's feelings and beliefs influence the assessment. At the same time, the facts confirming the opposite are ignored.	I feel that the event will be boring.
Labelling	With this type of thinking, the people around are assessed categorically and according to the minimum set of characteristics.	My friend is short-sighted.
Overgeneralization	This distortion involves focusing attention on the basis of a single, often negative experience, which extends to the assessment of oneself out of the context of the situation.	My mistake at the meeting suggests that I do not know how to behave in society.
Magnification or Minimization	With this distortion, there is an exaggeration the importance of own problems and shortcoming, or minimization the importance of own desirable qualities (it is so called the "binocular trick").	Bonus does not mean that I do a good job.
Mental Filter	The full spectrum of events is being missed. Assessment of what is happening is carried out through negative events.	Despite the fact that I fulfilled the plan, my mistake in the report indicates that I am stupid.
Mind reading	A person assumes that others think about him or her, endows them with thoughts and opinions.	He or she thinks I'm not attractive / handsome.
Personalization	A person is convinced that the focus of attention of others is shifted to his or her person and shortcomings.	She / he talks to me rudely because I cannot explain my request.
"Should statement"	At the heart of this distortion is the idea of responsibilities to oneself and others or criticism any people including him- or herself with "Shoulds" or "Shouldn'ts" (the same with "Musts", "Oughts", and "Have tos").	I have to get married before twenty-five because that's the way it is.
Blaming	The distortion comes from believing that others have the power to affect someone's life, even more so than oneself	It is you who made me feel bad
Fallacy of change	The fallacy of change has someone expecting other people will change their ways to suit one's expectations or needs, particularly when he or her pressure them enough.	Every time my partner goes out, I let him know it's not OK with me
Tunnel thinking	The situation is influenced by negative assessments.	The doctor is too young to make a correct diagnosis.

Cognitive distortions, as previously defined, are based on judgments of a special nature. They set the content of the distortion. Aaron Beck created a classification of cognitive distortions (Beck & Freeman, 2017). Examples of cognitive distortions with automatic thoughts are presented in Table 01.

Cognitive distortions negatively affect a person's life due to the fact that they become the cause of incorrect or inaccurate decisions. This may include assessing personal success and interpersonal interactions. As a rule, such errors arise due to direct comparisons based on inaccurate deviations in estimates towards minimization or, conversely, overestimation. At the same time, two factors can become the causes of errors: comparisons made spontaneously, and an incorrect combination of elements that prove the essence of the phenomenon (Smith et al., 2020). In some cases, if a person has mental disorders, a combination of cognitive distortions may be observed. Examples of the relationship between cognitive distortions in mental disorders and the corresponding behavioural strategies are given in Table 2.

Table 2. Cognitive distortions in mental disorders

Mental disorders	Cognitive distortions	Behavioural strategies
Depressive	Overgeneralization	Negative ideas about how it should be, that, when deviated from the ideal, is transformed into negative ideas about yourself and the world around you and generates a sad mood; feeling of loss and loss; feelings of inferiority
	“Should statement”	
	Catastrophizing	
	Negativism	
	Dichotomous thinking	
	Personal responsibility	
Anxiety	Magnification	Efforts are aimed at expectations of the future, which is presented in a negative way and leads to a decrease in the emotional background
	Catastrophizing	

Cognitive distortions represent a complex structure that is built on the beliefs of a person and generating automatic thoughts and behavioural patterns in certain conditions of human interaction with the surrounding reality and in the perception and assessment of one's own abilities. We will conduct a linguistic analysis of automatic thoughts and cognitive distortions that cause psychological problems of the individual.

2. Problem Statement

In addition to highlighting automatic thoughts and cognitive distortions and forms of their manifestation, it is important to determine their connection with psychological problems of the personality in healthy people. These reflect the pain points of a person, contributing to looping thoughts, accumulating negative emotions and fixing the problem in a verbal pattern, the linguistic analysis of which makes it possible to predict the level of potential stuck on problem and identify with the help of which linguistic markers they take their shape.

3. Research Questions

Human language is the main means of expressing thoughts. Only through it can the phenomena of the psychic be manifested. Therefore, it is important to identify which linguistic patterns are used by

healthy people who face psychological problems of the personality. We assume that a linguistic analysis of their requests will allow one to:

- reveal the most frequent requests that contain a psychological problem and classify them;
- identify automatic thoughts and cognitive distortions that cause such problems;
- detect linguistic markers and speech pattern of automatic thoughts and cognitive biases, taking into account the psychological problem of the personality.

4. Purpose of the Study

The aim of the study is to conduct a linguistic analysis of the identified automatic thoughts and cognitive distortions of the personality with psychological problems.

5. Research Methods

The research procedure included a longitudinal study of automatic thoughts and cognitive distortions in healthy adults with psychological problems, followed by a linguistic analysis of speech patterns. The study sample consisted of 30 people (average age – 36.7 years old; 23 female and 7 male persons).

Research methods included interviewing, testing, linguistic analysis and statistical data processing

In the interviews, the socio-demographic characteristics of the research participants, automatic thoughts, potential psychological problems of the personality (requests for their solution) are clarified. The following methods are used in the study: a diary of automatic thoughts, Beck's test to determine the level of anxiety; Karelin's test to determine the mood. Study participants are asked to keep a diary of automatic thoughts that come to mind in a problem situation. The repetitive thought cycle is recorded for a subsequent linguistic analysis. The research results are processed using qualitative and quantitative analysis using the SPSS statistical package with methods of mathematical analysis (descriptive statistics, nonparametric tests and correlation analysis).

6. Findings

6.1. The study identified the types of requests from healthy people as follows:

- interpersonal problems associated with relationships with people around (50.0 %);
- personal problems associated with low self-esteem, attitude towards oneself (23.3 %);
- problems of certain spheres of life, which could be related to health, finance, career, education, are found in 16.67 % of people;
- problems of parent-child relations are identified (10 %).

At that, for people with each type of psychological problem, the following personal characteristics are revealed. When making inquiries about solving interpersonal problems, hyperthymicity and emotiveness prevail, which indicates the involvement of the emotional component in communication and experiences due to misunderstanding on the part of opponents. When inquiries about solving problems of a personal nature prevail, imbalance, exaltation and pedantry prevail, which testifies to the high demands

placed on oneself and the instability of emotional experiences. Emotiveness and anxiety predominate in requests for solving problems in various spheres of life, which indicates a positive mood of the subjects, but incontinence and a tendency to unreasonable experiences. In matters of parent-child relations, hyperthymicity and demonstrativeness prevail, which may indicate experienced situational conflicts with vivid outbursts of anger and a feeling that a person was underestimated in childhood or paid little attention.

It should be noted that emotiveness, excitability and imbalance are found in all types of requests, which allows us to conclude that these personality traits can be used as a diagnostic tool for the “risk group”.

6.2. The study participants are found to have automatic thoughts of the content as follows:

6.2.1. in requests for solving interpersonal problems:

- value judgments in relation to others;
- predicting thoughts and actions that people may take in the future according to relation to the subject;
- full or partial acceptance of responsibility for problems in relationships;

6.2.2. In inquiries about personality problems:

- predicting an unsuccessful outcome to one's actions;
- personal negative assessments;

6.2.3. in requests for solving problems in certain areas of life:

- predicting failures;
- prohibitions on the performance and implementation of certain actions;

6.2.4. in requests for parent-child relationships:

- value judgments regarding the feelings of parents;
- assessment of parental behaviour.

For every request and every automatic thought, cognitive biases are identified. Thus, interpersonal problems are characterized by mind reading (65.3 % of cases), labelling (7.2 %), excessive personal responsibility (7.2 %), catastrophizing (7.2 %), tunnel thinking (7.2 %), dichotomous thinking (7.2 %). Personal problems are characterized by catastrophizing (57.1 % of cases), discounting the positive (14.3 %), labelling (14.3 %), dichotomous thinking (14.3 %). For people with problems in various spheres of life, tunnel thinking (33.3 %), catastrophizing (33.3 %), “Should statement” (16.7 %), dichotomous thinking (16.7 %) are characteristic. And parent-child relationship problems are characterized by mind reading (66.7 %), labelling (33.3 %). Noteworthy is the result of preference for cognitive distortions depending on the psychological problem. So, for problems related to other people, cognitive distortion "mind reading" prevails, and for personality problems "catastrophizing". For psychological problems

from other spheres of life and activity, cognitive distortions occur with the same frequency. At the same time, thought processes relate mainly to assessments of upcoming events. Other cognitive distortions reflect personal attitudes toward one's own accomplishments. It is important to note that labelling in the case of inquiries about parent-child relationships and about solving personal problems occurred in relation to oneself on the part of the research participant.

6.3. As a result of the linguistic analysis of the automatic thoughts of each participant, the following linguistic categories are identified (Malinskaya, 2016; Pishchalnikova, 2021):

- cohesion (lexical integrity of the text and the relationship between its elements);
- retrospection (expressive form, in which there is the previous content of the text);
- prospecting (expressive form, in which there is a prerequisite for the future meaning of the text);
- suggestiveness (brightness of an image that causes emotional experiences);
- emergence (the formation of a new quality in a system that tends to change);
- continuum (relation to the parameters of time, place).

The linguistic features of automatic thoughts have been found for requests of a different nature. It is found that all thoughts are characterized by cohesion. Thoughts are in the form of complete sentences. None of the thoughts examined are characterized by a continuum. At the same time, “prospecting” prevails in requests for solving interpersonal relations problems (57.1 %), “retrospection” is found in 21.4 % of participants, “emergence” in 14.3 %, and “suggestiveness” in 7.1 %. “Prospecting” (57.1 %), “suggestiveness” (28.57 %) and “emergence” (14.3 %) also prevail in inquiries about personal problems. “Prospecting” is found in requests for solving problems in certain areas of life in 83.3 % of participants, and “retrospection” in 16.67 %. In inquiries about parent-child relationships, “suggestions” are found in 66.7 % of the participants, and “retrospection” in 33.3 %.

Thus, thoughts about problems of an interpersonal and personal nature, as well as about the problems of certain spheres of life, are mainly directed towards the future perspective, which is expressed in the form of doubts about upcoming events or future assessments from others.

In thoughts about interpersonal and personal problems, about parent-child relationships, there is a brightly coloured image that characterizes others or the subject him- or herself.

Retrospection is typical of thinking about interpersonal problems, about the problems of certain areas of life and parent-child relationships. This is expressed in an appeal to the subject's past experience, which allows us to conclude about the influence of past experience on the assessment of the current situation. In this case, retrospection is not found in thoughts about personal problems, which gives the right to believe about the nature of thoughts in such situations in the continuum “here and now” or in the future.

Emergence is revealed in the thoughts of subjects with interpersonal problems, where another person is endowed with new qualities within the framework of the situation, and in personal problems, where the subject him- or herself is endowed with new qualities.

The final research results of the linguistic analysis of the study participants' statements containing automatic thoughts and cognitive distortions according to the identified psychological problems are presented in Table 03.

Table 3. Linguistic analysis of automatic thoughts and cognitive distortions associated with psychological problems of the personality (fragment)

Psychological problems	Automatic thoughts	Linguistic analysis	Cognitive distortion
Interpersonal Problems	I find many people unprofessional and dumb.	suggestiveness	labelling
	My man does not accept me as a strong person and he doesn't want to walk next to me.	emergence	mind reading
	If I tell people what I think or say "no" to their request, they will find me rude and tactless.	prospecting	mind reading
	I think people might find me obsessive.	prospecting	mind reading
	I am guilty of conflicts with other people.	retrospection	excessive personal responsibility
	My beloved will find a replacement for me, be unfaithful to me or lose interest.	prospecting	catastrophizing
Personality problems	I can't do anything.	prospecting	discounting the positive
	I will waste money in business and disappoint people.	prospecting	catastrophizing
	I'm not good for anything.	suggestiveness	catastrophizing
	I'm bad because I don't fulfill my duties.	emergence	dichotomous thinking
	I'm alone.	suggestiveness	labelling
Problems of certain spheres of life	Thinking about problems will ruin my relationship.	prospecting	catastrophizing
	Employers won't hire me due to work breaks and small children.	prospecting	tunnel thinking
	Time spent on work and study will be wasted.	prospecting	catastrophizing
	I can't afford to take a rest.	retrospection	"should statement"
	I will never repay the loan.	prospecting	catastrophizing
Parent-child relationship problems	Being overweight will lead to health problems.	prospecting	dichotomous thinking
	My mom doesn't love me.	retrospection	mind reading
	The stepfather does not understand that there is a family, love and human relationships.	suggestiveness	mind reading
	I'm a bad mom.	suggestiveness	labelling

7. Conclusion

Thus, the study identified automatic thoughts, cognitive distortions and linguistic features in various types of psychological problems (personal, interpersonal and psychological problems of certain areas of life). The author conducted a linguistic analysis that revealed the grammatical categories of automatic thoughts in space-time continuum (prospecting and retrospection), lexical increments (emergence) and suggestiveness that are present in them and create loops due to cognitive distortions, such as labelling, mind reading, catastrophizing, positive devaluation, etc. That leads to individual's emotional disorders. Evidence is obtained for the existence of a relationship between automatic thoughts,

cognitive distortions and personality traits, and their dependence on linguistic means of expression in language.

Linguistic analysis of the fixation of a psychological problem in a verbal template makes it possible to predict the level of potential stuck on a problem and to identify with the help of which linguistic markers they take their form. Our further research has shown that the transformation of the verbal template using logical, grammatical, lexical means and image reconstruction leads to a rethinking of psychological problems, their elimination or weakening.

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