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Bakalárska práca

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**Intrapsychické konflikty a ich prežívanie pri riadení činnosti a
správania**

**Intrapsychic conflicts and their regulation during the activity and
behavior**

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Rada by som venovala poďakovanie PhDr. Luděkovi Stehlíkovi, Ph.D., za jeho podporu, užitočné rady a trpezlivosť pri písaní tejto práce.

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Abstrakt

Bakalárska práca sa zaoberá vnútornými konfliktami a ich prejavmi počas prežívania a správania. V teoretickej časti práce rozoberáme základné charakteristiky konfliktu z hľadiska jeho obsahu a kategorizácie; ďalej emocionálne, kognitívne a behaviorálne komponenty podieľajúce sa na vzniku konfliktu; jeho vnútornú dynamiku a možnosti regulácie sprevádzaného napätia. Cieľom práce je popísať dopad konfliktu na ľudskú psychiku a identifikovať efektívny spôsob, akým sa možno s konfliktom vyrovnáť. Intervenčné metódy spracovávania konfliktu navrhujeme rozdeliť do dvoch kategórií – priame a nepriame metódy. Vo výskumnej časti práce vzájomne porovnáваме ich účinnosť formou experimentu, v ktorom účastníkov rozdelíme do skupín podľa aplikovanej intervenčnej metódy a budeme hodnotiť rozsah ich vnútorného konfliktu pred a po použití intervencie.

Kľúčové slová:

Intrapersonálny konflikt – emócie – kognitívne procesy – správanie – regulácia emócií

Abstract

This bachelor thesis examines internal conflicts and their effect on inner experience and behaviour. The theoretical part of the thesis involves the description of the basic characteristics of conflict based on their content and categorisation; emotional, cognitive and behavioural components that contribute towards the creation of conflict; the dynamics of conflict and the possibilities of the regulation of the resulting tension. The goals of our work are to depict the impact of the internal conflict on the human mind and to identify the various approaches to conflict resolution. We have suggested dividing the intervention techniques into two main categories –direct and indirect techniques. In the empirical part of the thesis, we compare the effectiveness of such techniques in a form of an experiment. The participants are divided into the experimental groups according to the intervention technique applied. The measurements before and after the intervention will be evaluated with regards to the extension and severity of the internal conflict.

Key words:

Internal conflict – emotions – cognitive processes – behaviour – emotion regulation

Table of Contents

Prologue	8
Theoretical part.....	10
1. Basic Characteristics of Conflict	10
1.1 Content of Conflict	10
1.2 Intensity, Valence and Direction of the Opposite Forces	11
1.3 Conflict during the Psychological Development	12
2. Three Components of Conflict	15
2.1 Emotions	15
2.1.1 Unintegrated Affect	15
2.1.2 Signal Anxiety	17
2.2 Cognition	18
2.2.1 Cognitive Dissonance	18
2.2.2 Implicative Dilemmas	29
2.2.3 Automatic Thoughts	20
2.3 Behaviour	21
2.3.1 Two Factor Learning Theory	21
2.3.2 Learning, unlearning and conflictive behaviour	23
3. Conflict During the Regulation of Behavior	26
3.1 Disorganization of Behavior	26
3.1.1 Invasion of Affect	26
3.1.2 Functional Barrier and Symbol	28
3.2 Research on Implicit Emotion Regulation	32
3.2.1 Effect of Implicitness	33
3.2.2 Function of Verbalization	34
Empirical Part	37
4. Research Goals	37
5. Research Design	39
6. Participants	40

7. Research Methods	41
8. Data Analysis	44
9. Discussion	48
9.1 Methodological limits	48
9.2 Statistical limits	49
10. Research Ethics	51
Conclusion	52
Bibliography	54
Attachment 1.	I
Attachment 2.	II
Attachment 3.	IV

Prologue

Not many studies have been conducted specifically on the topic of internal conflicts. We believe that conflict stands behind many psychological problems, maladaptive behaviours and personal crisis. All of the aforementioned might lead to some severe disorders if not identified and addressed at the outset (anxiety, emotional disorders, depression, OCD, phobias, eating disorders etc.). Conflict is what often blocks the symptom extinction. People think that if they give up their maladaptive behaviours and bad habits (avoiding society, not eating, smoking, drinking etc.) they will not be capable to survive and maintain their balance and sanity. In those cases, conflict has reached its extremity. However, before this has happened, before person loses control over their actions and becomes a slave to a particular symptom, there is a moment to stop and reflect. A point in which the person has to make the choice between facing the problem or avoiding it and its solution. At such moments, a deep change is required, which will always appear difficult and challenging at the beginning. We believe that awareness of such points in life, the capability to identify tension and its causes, together with the ability to choose the most adaptative of all options is an important factor for mental health. Tension is commonly perceived as a negative bias, yet understanding it in a creative way, tension can be a very helpful sign of a malfunction of the old habits and strategies. It can signify the need for the re-invention of such behaviour to fulfill the original purpose again. Therefore, in our work, we would like to declare that conflict is a natural and unavoidable phenomenon of psychological development.

We were surprised by how little was written about the matters of conflict so far. That is why we have attempted to shed more light on this topic. In the first chapter, we describe basic characteristics of conflict as it is depicted in the literature. In the second chapter, we talk about the three main factors or levels of conflict – emotions, cognition and behaviour. We try to present a unified view of the phenomenon, using the standpoints of various psychological schools. In the third chapter, focus is on the various researches on conflict and the regulation of emotion.

The goals in this work are to describe the impact of conflict on the human mind and to identify possible methods of conflict regulation. Because there are almost no officially published internal conflict resolution techniques, in the practical part of the work, we investigate if the techniques of emotion regulation can have any effect on the reduction of

tension related to conflict, since emotions are one of the core components of the conflict. Finally, we compare the effect of implicit and explicit approaches to emotion regulation and conflict resolution. It has been suggested by other authors that indirect approach towards emotion regulation and conflict comprehension might be more successful than direct confrontation. All the aforementioned terms are explained in detail in the following chapters of this work.

Theoretical Part

1 Basic Characteristics of Conflict

1.1 Content of Conflict

If one searches for the term 'conflict' in psychological dictionaries and handbooks, one will see that it is commonly related to the field of interpersonal psychology. Interpersonal conflict is a collision of goals and intentions among two and more individuals. It is beneficial to study this topic in order to improve interpersonal communication and achieving goals within the group. But a similar event may occur within the single individual, as well. Vasiljuk (1988) simply defines internal conflict as a meeting of something with something else. A confrontation of various phenomena of human consciousness, such as different motives, reactions, emotions, cognitions, wishes, goals, attitudes or values. It can be anything that is not in consonance with some other psychological content. It may appear less urgent to study intrapersonal conflict because the signs and symptoms are hidden inside (but not less disturbing) and consequently more difficult to examine than its interpersonal aspect. Nevertheless, together with Nakonečný (1997), one can agree that intrapersonal conflicts are a natural consequence of the psychological establishment of the human mind. Therefore, they are not less frequent than the interpersonal version. It might just have happened that they have been less observed and studied. Internal conflict is an unavoidable condition that triggers the decision-making process. Whenever there is more than one option to choose, the conflict may emerge with a different level of severity. If there was no conflict, there would be no need to make a choice. When one looks at the top of the pyramid, internal conflict is a matter of motivation because it is a collision between two or more different goal settings (ibid.). The inability to make a decision may lead to general tension. If the behaviour doesn't match the goal, it brings frustration. The actions of a frustrated person or a person in conflict has no objective. He or she falls into resignation and regression. The difference between frustration and simply undergoing a difficult situation is that in the first case the behaviour is disorganised but in the second case the goal is clearly settled but simply more difficult to achieve (Miller, 1960).

The self-discrepancy theory (Higgins, 1987) is one of the belief incompatibility theories. Self-image is a representation of certain attributes to one's own self. There are three main domains of the self. The actual self is a group of characteristics that a person believes that

actually belong to his or her personality. A more or less accurate image of what someone believes to be at that moment. The ideal self is a facet of representations and attributes that are desired to be possessed. It includes hopes, wishes, and aspirations. The last group of beliefs portrays the features that humans think, should be possessed. They are related to duties, responsibilities, and obligations. Those three domains of self may enter into a discrepant relationship. That brings the person's own self-concept into conflict. Discrepancy between the actual and the ideal self may happen for example when we are failing to achieve our dream role or when one would rather be braver or less dependent on someone than one actually is. The actual vs. the ought self-discrepancy can be experienced by a child who knows that lying is not accepted but at the same time, the truth is too difficult to admit, or when an employee is aware of that if he or she worked harder, he or she would earn more results but because of self-comfort or other reasons he or she doesn't do it. Conflict is not merely a rational event, it's deeply interconnected with its emotional roots. Achieving no outcomes during attempts to get closer to one's ideal or ought self, causes dejection related feelings. On the other hand, bringing negative instead of positive outcomes increases agitative related feelings.

1.2 Intensity, Valence and Direction of the Opposite Forces

The Forcefield Analysis developed by Lewin (1935) emphasises the perception of the reality in the terms of physics. Every individual lives in his particular life-space that can be described as a field filled with forces. Every behavior is directed towards the reward or away from the threat. Conflict here is defined as an opposition of approximately equally strong field forces. Such situations produce a state of tension, affective outbursts, increased general pressure and a restriction of free movement. The degree of tension depends on the strength of the positive or negative valences. Accordingly, the conflicts are divided into the following groups:

- a) two positive valences - the choice between two equally desired options. This type of conflict is the easiest to resolve because even if one of the options has to be eliminated, the remaining one will recover the loss by its pleasant consequences (choosing between two holiday-destinations).
- b) positive against negative valence – an unpleasant action leads to a pleasant consequence (a child wants to climb the tree but has a fear of heights). The subject usually leaves the field to return later for the next attempt. The active personalities don't remain in the field as long as the passive ones.

- c) two negative valences – both options are undesired. It is the most difficult conflict to overcome since both choices bring negative consequences (unpleasant task versus the threat of punishment). This often leads to the state of paralysis and resignation.

Generally, the conflict is resolved through movement in the direction of the stronger valence. One can consider Lewin's model to be oversimplified and theoretical. The various options that can be faced during the conflict are not always black and white. Quite often it happens that there is something positive about “the negative” option and something negative about “the positive” option. In every case, the analysis of the forces is a useful tool to bring some light to the description of the problem at the very first stages of the conflict resolution.

1.3 Conflict during the Psychological Development

As has already been mentioned, in this work, we would like to present the conflict as a natural phenomenon that is necessary for every change allowing the development from the simple structures to the more complex. Therefore, we cannot continue without mentioning the work of the following authors. Erikson (1999) stated that conflict and tension are both sources of the growth. It is demonstrated in his eight psychosocial developmental stages. Each of the stages is dominated by a central conflict that needs to be resolved to proceed successfully. In the beginning, the newborn is choosing between basic trust and mistrust. There is an inner tendency to trust the people around him. If the parents do not fail in satisfying this tendency, the newborn will learn about hope. Children around the age two, tend to act more independently. If their environment permits testing their own powers and resources, they will win the conflict between autonomy and shame - gaining the will. The third stage (3-5 years) is characterised by the opposites - initiative and guilt. The child needs to be able to set their own goals. Making their own decision may bring feelings of not being accurate for having their own “head”. That could lead to loneliness and guilt. With the right support, it will be overcome by the establishment of the sense of initiative. Comparison of the child with others in the social environment creates certain doubts about one's own skills. By choosing the right skills and by getting the space to improve them. Confidence in one's own competency should be gained. That is the fourth stage (5-12 years). In the fifth stage, (12-18 years) the exploration of self-identity should be allowed to avoid ending up in the role confusion. It involves experimenting and defining both – who I am and who I am not. The sixth stage (18 – 40 years), is about learning how to live and share lives with partner. According to our experience, we may develop an intimate relationship of love with one partner, or stay alone,

change partners and suffer from deprivation and isolation. The seventh stage (40 – 65 years), brings forth the conflict of generativity and stagnation. A person is balancing life, deciding whether or not the main goals of life have been achieved. We should be capable of sharing our knowledge, skills, and achievements with others (raising children, taking care of parents). Integrity versus despair are competing in the final developmental stage (65 and older). The experience of life should lead to the acceptance and fullness. The resolution is wisdom, enables reconciliation of the achieved victories, as well as the defeats. In Erikson's point of view, conflict defines our secure personal identity, mature friendships and relationships, and the selection of long-term vocation and ideological values. It defines who we are and who we are going to become.

If resolved properly, the crisis may be understood in a productive manner. In its center stands conflict (Kast, 2018). Both conflict and crisis are an opportunity to improve. Under the condition of being approached in a creative way, they have positive aspects. We can perceive them as a turning point, where old and ineffective attitudes must clear the way for the new behaviour. We can categorise the crisis according to the following criteria (Vymětal, 1995):

- a) developmental or traumatic crisis – the difference between them is that the developmental crisis is an unavoidable part of the natural expansion. The traumatic crisis is a consequence of an unexpected unfavourable change like the sudden loss of a partner, family member or job.
- b) obvious or latent crisis – the obvious crisis is being fully realised. In the latent crisis, the content is hidden. A certain level of tension may appear, however, it's not clear what is its origin.
- c) acute or chronic crisis – the acute crisis is more extreme and compulsive. The beginning and the trigger are easy to determine, as well as the ending. The chronic crisis is continuous and persistent. The end and the start are almost impossible to trace. It can result in the acute crisis.

We would like to close this chapter with the psychoanalytical point of view which describes the cultural determination of the conflict and its pathology. The more restricted the culture is, the more discord it brings about between its members and norms. A very strict culture employs many prohibitions. It can be difficult to fit various individualities in the single normative box. As a consequence, conflict is considered to be an integral part of human life (Horney, 1966). It is not neurotic to have conflicts if the person is aware of undergoing it. That requires having clear insight and self-reflection, being able to identify the causes of a

problem and options for the future actions. Facing the conflicts and resolving them is supposed to bring inner freedom. In case of a real neurosis, the conflict is hidden. The neurotic person feels the symptoms of the conflict like anger, anxiety, and fear without apparently any relevant cause. Such behavior is inconsistent. Excluding the symptoms from the personality leads to the externalization of the conflict to the outer world. There is a high incompatibility between the person and the environment. It's an extreme level of the conflict resulting in a psychological disorder.

2 Three Components of Conflict

After having talked about the basic characteristics of internal conflict we should focus on its manifestation in human consciousness and behaviour. There are many authors from different fields of psychology who write about this topic. We didn't want to limit our work by the concrete framework of the concrete psychological school. Rather, we are trying to describe intrapsychic conflict as a phenomenon in its whole complexity. That is why in the following chapter we have divided it into three main parts. Each one is dedicated to one aspect of the psychic nature – emotions, cognition and behaviour and its regulation.

2.1 Emotions

2.1.1 Unintegrated Affect

The oldest internal clues that help us to direct our behaviour are emotions. Emotions are simple signals of what we like or dislike in our environment and also in our inner world. The limbic system which is the center of emotional processing is phylogenetically older than the cortex which is responsible for cognitive processes. The emotions are more basic, more authentic and much more direct than thoughts. They are usually the first warning sign of the conflictive state of the psyche. This expressive warning has usually a negative character in the form of unwelcomed anxiety. On the other hand, the subject can notice some unknown feelings that are not familiar to him or to her. It means that those feelings are not integrated into an actual attitude, however, they do exist.

In the work of Storolow (Storolow & Brandchaft, 1987), internal conflicts are considered to be the consequence of the emphatic failure of parents, or other important parental figures, in the acceptance of the child's early feelings and affects. The child in the early stages of development is spontaneously expressing its feelings without any restriction of culture or society. The conflicted state is not basically caused by parents. It is a natural state that permits the child's development. Storolow also mentions the developmental pre-requisites of a particular conflict stage in a similar manner to Erikson. At this point, experiencing some new situation the child loses its sense of coherence which was achieved previously. A new concept will be formed for example, when the child experiences for the first time the death of a pet or in a worst case scenario, of some family member. In the beginning, it is not clear what

has happened and how the child should feel about it. Of course, the intense grief will appear because of the sudden loss. But the death is also naturally interesting - children can be curious about it, even though the expected reaction is mourning and sadness. Attuned parents would let the child express this “bizarre” curiosity or whatever else they would feel. The loss of cohesion of the self-experience of the child could be restored by the integration of a new experience to the self. On the other hand, parents can be unresponsive to a child's affectation or promote the expected reaction (expected by their personal value system, culture or society). The unwanted affect can be still expressed internally to consolidate the nuclear sense of coherence since there hasn't been any internal rules established yet. The problem appears when the moment comes to choose if it is right or wrong – such choice depends on the parents. The described process of self-integration requires the isolation of the child as an independent subject. After this process is has been completed, the child needs to re-establish a tie with parental figures. There is a strong need for acceptance of the new discovery by the surroundings. The inadequate reaction of the parents doesn't permit an integration of the new affect and it causes a specific developmental derailment:

“When a parent will consistently require an archaic state of oneness with a child, then the child's strivings for more differentiated selfhood become the source of severe conflict and guilt.”
(Storolow, 1987, p. 245)

The archaic oneness of a parent with the child can be expressed in many different ways. In our example, it is the blockage in the exploration of the big philosophical question of the death. It can also be difficult and complicated for the parents themselves. The challenge to reconsider their own former attitudes could be harmful to the subjective well-being, or it is not required by the culture or community where the family lives. It might be easier avoid talking about it and simply grieve. But this oneness can also mean another affect that is not permitted in the concrete environment. Depressive parents don't permit happiness, excessively positive parents don't permit sadness and so on. The child usually chooses the parents acceptance as the right solution. Afterwards it is confirmed by many situations where the intolerable affect appears and consequently is being refused by the parents. The result is a strong inner conflict because it arises from the most primal of child experiences.

2.1.2 Signal Anxiety

It almost seems like the three components of Freud's well-known structure of the personality (1988) can never get on well together. Id, the lower part of personality produces blind impulses; the Superego, evaluating what is “good” and what is “bad” blocks them in a civilised fashion and the Ego is there to apply this blind energy in an adequate way – finding a successful compromise. There are two possible categories of internal conflicts in the Freudian paradigm. The first is the conflict between the Ego and Superego, which is very common. A person knows which behaviour is expected but for various reasons is not able to act as it is supposed to. The difference between Storolow's unintegrated affect and Freud's restriction of Ego functions by Superego, is that Storolow talks about the stage where the Superego hasn't yet been formed. The restriction comes from the outer world, the Superego is external. Throughout ontogenetic development the Superego gets internalised but still it operates based on the same principles that have been described in the previous subchapter. Here, we would like to focus on the life situations that appear in adulthood – the subsequent formation of the internal conflict.

In the second category, there are conflicts between the Ego and Id. As we mentioned before, the Id is the main source of the vital energy. It is the animal part of the personality. It is not always possible to satisfy all its needs. The theory of signal anxiety (Freud, 1990), examines the tension arising at the moment when the Ego isn't able to gratify impulses coming from the Id. It can be resolved by the restriction of some ego functions. Ego avoids this way of conflict with the Id. At this stage, it is not yet a symptom. The impulsive energy from the Id is transformed into anxiety. This anxiety is called “signal” because it is the first warning of the process in which the libido is being turned away. Paradoxically according to Freud, signal anxiety isn't produced by the Id whose needs were unsatisfied but by the Ego which demonstrates its discomfort. Cathectic energy of the repressed impulse is automatically turned into anxiety. From Freud's point of view, the Ego is not as powerless against the Id as we might think. For example, Id wants to walk right towards the edge of the roof with the purpose of looking down to the street and the Ego doesn't want to do it because of the potential danger of falling down. The basic instinctive impulse or “the fight reaction” is transformed into the anxious “flight” reaction. The anxiety lasts because the Ego still remembers the feeling of curiosity to look down but also the restriction that came after. Here is the clear conflictive aspect of its situation. These conditions can be repeated in various life

circumstances. The reaction of Ego can always lead to the “flight” reaction and the new internal conflict can be formed. We prefer the alternative in which the anxiety produced by the blocked stream of energy that cannot find its application in outer reality. Because in the end the Ego satisfies its needs according to the principle of reality and Id is the one that stays unsatisfied - general anxiety lasts. We suggest that the seat of anxiety is in the Freudian terminology of the Id.

2.2 Cognition

2.2.1 Cognitive Dissonance

A specific form of the conflict is a cognitive tension. It is not perceived in such a destructive manner as the signal anxiety. Still, it is extremely unpleasant, paralysing the clear stream of thoughts. A person tends to be consistent in the cognition (values, beliefs, knowledge and attitudes). Dissonance (Festinger, 1957) is common in situations when new information appears or when we prefer only a certain part of the concept but not the whole scenario. Two cognitive elements are dissonant when they don't fit together. It means that one doesn't emerge from the other. It is quite difficult to make coherent the huge quantum of information that we store as a content of our cognitions even only under the criteria of a simple logic. And it's even harder to keep it away from the influence of our emotions and fulfilled or unfulfilled intentions. When the subject can choose to change his knowledge or to change his/her behaviour it might seem to be easier to take a little “shortcut” because the change of knowledge is not conditioned by an action or any kind of sacrifices. The basics of Festinger's hypothesis is that the existence of dissonance perceived in an individual's cognition is pathologically uncomfortable (ibid.). It will motivate the person to reduce it and achieve consonance. In addition, while trying to reduce the dissonance, the person will actively avoid situations and information which, would likely increase the dissonance. Of course, that doesn't change anything apart from the subjective perception of the situation. An obstacle to such a “shortcut” is that sooner or later, the “improved” or adjusted cognition will demonstrate its unresponsiveness to the reality. A person can believe for some reasons that the trees are blue but exposed repeatedly to the experience of a green tree, cannot stay blind to the fact that something doesn't work. The stronger (the more personally important) is person's image of the blue tree, the harder it is to prove otherwise. The conclusion is that the magnitude of dissonance is positively related to the quantity of the resistance for change.

Cognitive dissonance is from our point of view the least serious aspect of the cognitive conflict. It is not pathological either. It is quite common in our everyday behaviour. Nevertheless, in combination with some pathological processes it can be threatening.

2.2.2 Implicative Dilemmas

George Kelly (1991) described a specific system of the subjective reality construction. A personal construct is an element organising cognition according to their content. It helps with orientation in the reality around us and also inside our own mind. Kelly developed a unique tool called The Repertory Grid. It's an interviewing technique aimed at the role constructs of the subjects (ibid.). There are some titles like “the teacher you liked” or “the person you feel sorry for”, “mother”, “father” etc. The subjects have to write concrete names to those titles. During the evaluation, the constructs that identify the different groups of persons should become visible. The construct here is perceived as something that stands behind those cognitive contents. There are various forms of the grid, focused on various topics such as self-identification, personal roles or just the general full context form. The point of this technique is that the constructs found by a psychologist during the interpretation of the grid, canalise the way how the subject anticipates events drawing the conclusion that it is the way in which the reality is perceived through the activity of psychological processes. Some of the discovered constructs may be in contrast. They predict what does the subject do under stress. Other characteristics are permeability. It means that they stand behind more than one figure.

Feixas, Cipriano & Varlotta (2007) used the technique of the repertory grid in order to explore the relationship between cognitive conflicts and somatisation. Here we can return to the main idea of this chapter – conflicts are displayed in all the psychological processes. Somatic symptoms are usually attributed to some form of organic disease. The hypothesis is that the tension arising from contrasting cognitive constructs can be harmful not only to the psychological state of the subject but also to his somatic functions. This statement is operationalised in their study by the positive relation between the extent of somatisation, measured by SCL-90-R (Symptom Checklist – 90- R) and the scoring in the special part of Kelly's repertory grid, dedicated to implicative dilemmas.

Implicative dilemma is a specific kind of cognitive conflict. It comes out when the desirable solution of some conflictive situation has negative implications. The subject consequently resists the change, tends to decide on remaining blocked in the conflict, favoring

the symptom creation rather than the healing process of the change. Let's look at an example of a person who has to choose between relationship or independence. The desired alternative for this subject is to stay in the relationship, but at the same time, it has a negative implication – being dependent on somebody. Being dependent might be perceived with a negative connotation. Therefore, it creates an implicative conflict between the positive valence of having a relationship and the negative valence of losing the freedom. Feixas and his co-workers examined a sample consisting of 111 patients, before the start of the therapeutic process. During the evaluation, they compared the most relevant constructs for each participant. The form of the grid focused on identification of the constructs “the ideal self” and “the actual self”. When the scoring in those two constructs is similar, it means that the subject is congruent. In the case of discrepant constructs between the actual and the ideal self the scoring is notably different. It predicts an existing implicative dilemma in the subject's construction of the representation of his own self. It was confirmed that the presence of an implicative dilemma in the grid was related to the extent of the tendency to somatise. The factors like age, sex or level of self-esteem were less relevant.

A special category of cognitive constructs, we should mention in this part, are values. Hnilica (2000), in his study of the conflict between values in the context of life quality, declares that during the confrontation of hierarchically primal values, the subject experiences an intensive lowering of his life quality. He noticed that in a sample of university students, there are the most often conflicting values of love, representing the family life versus the self-realisation related to studies and career. A tendency to avoid any contact with factors connected to the conflict was observed, the direction of the attention to other spheres, lower life satisfaction, lower experiencing positive emotions, often sleep problems and sleep disorders, using more alcohol and tobacco, less physical activity and generally a worse medical state of participants.

2.2.3 Automatic Thoughts

Based on the previous studies (Feixas, Cipriano & Varlota, 2007; Hnilica, 2000), we can consider that the organism reacts in some way to the organisation or disorganisation of our cognition. Now we are going to look closer at this relationship between the body and mind. Inappropriate emotional and physiological reactions can be caused by a dysfunctional cognition also according to Ellis & MacLaren (2005). They say that in contradiction to the

rational thoughts which are consistent with reality, and are adaptable, flexible and helpful in the achievement of goals; there are also irrational thoughts with dogmatic and rigid characters, that are unresponsive to reality, blocking the development of the subject. Irrational thoughts can be dissonant and also dilemmatic in the manner as we described before. Another important feature is that they appear in the mind automatically. They have mostly a self-evaluating character (in a negative way). It is like having another voice in the head that is criticising the actions we take constantly. Automatic thoughts are autonomous which means that they are usually not a result of any thoughts or reasoning. They have an imperative impact on a person's behavior. They say what should be done and that the person does it with blind trust.

The irrational aspect of the causes of automatic thoughts are that they are in conflict with reality and the subject's possibility to adapt to his environment adequately. Ellis (ibid.) explains concretely when and why such kind of thoughts appears. In his schema A-B-C, "A" represented as a stimulus, "B" as a blank space and "C" as a reaction. For example, a tragic break up after a long-lasting relationship can influence negatively the future expectations in new relationships. If the other partner is guilty of betrayal, we may fall into a circle of automatic thoughts like "all the men/women are the same", "I will be never able to find a normal relationship" or "there is no such a thing like real love". We can notice the absolute character of such thinking. Whenever an opportunity to form a new romantic relationship appears, the person may experience feelings of hopelessness, anger or resignation. As we can see, the space between the stimulus and reaction seems to be blank. Actually, Ellis noticed that in this blank space a thought appears. This cognitive element appears thanks to the related stimulus and causes an emotionally inadequate reaction. The complication is that these relationships are not always so clear as it is in our example. The automatic thought doesn't have to be conscious. They can be perceived consciously but without establishing the connection with an appropriate stimulus, which causes the loss of control over the person's behaviour that becomes more conflictive every day. The conflict is between the behaviour (inappropriate reaction) and the natural tendency to adapt to the environment. The broken-hearted person would naturally like to live happily and find another partner but instead, the feelings of emptiness and sadness develop whenever some stimulus related to the failure from the past appears.

2.3 Behaviour

2.3.1 Two Factor Learning Theory

Emotions and cognition are both parts of human behaviour. But here we would like to talk about behaviour as being about the repertory of reactions that were learned during the development of the subject. It can be the reaction to some emotional state, cognitive process, biological change or external stimuli. In this perspective, we can see that behavior also includes previously mentioned phenomena. The learning theory distinguishes two kinds of reaction – conditioned and unconditioned. Psychic components we mentioned earlier in this chapter could be divided according to this distinction. The unconditioned stimulus causes the unconditioned reaction. This reaction is natural and typical for all members of species. For example, the tension that the subject feels during signal anxiety is unconditioned. It is natural for all human beings that when the instinctive energy flowing from the lower part of personality meets a block, it produces some pressure. Innate is also the other kind of anxiety arising from cognitive tension and the feeling of dissonance of the thoughts. Those emotional and cognitive signals are always the same. They only show that something doesn't work as it is supposed to. They are simple signals of potential conflict arising from the need for a change. Such collision always brings tension. The difference lies in the person's reaction to it which is conditioned. When the affect can't be integrated, it is consequently pushed aside – repressed. But it can also be integrated – we can see another possibility to react. Then in the case of automatic thoughts we observe a wide range of cognitive reactions caused by the same stimulus that in one person brings fear and in another one, for example, curiosity. Not everybody thinks automatically that when they meet a dog it always has to bite them. These reactions share one common feature - they are conditioned. They are the central objects of the learning theory.

Mowrer (1960), writes about two versions of the learning theory. The difference between them is that they describe two distinct kinds of learning. The first one is just simple conditioning. In some emotionally strong situations there are stimuli from the subject's surroundings and from his internal psychosomatic reality related to one strong emotion that is being experienced. Later when this stimulus appears again, the subject tends to feel the same strong emotion from before, even if there is no current reason to do so. We can use the simplest example with the elevator. If something bad happens such as an accident or attack in the elevator, the subject can acquire a strong aversion to this neutral object. The charge of this stimulus will be changed from neutral to aversive. Another more complicated example, based

on the same principle, is creating a connection between negative feelings about one's self and the own body appearance typically in the case of anorexia. This connection is of course quite simplified in our example. Mowrer's conclusion is that the first version of learning is an emotional learning. It is also known as Pavlovian or classical conditioning. It is based on visceral and vascular responses and is essential for any other kind of conditioned learning. The second type of learning is called a habit formation and is more complex. It involves both versions of learning. Habit formation is conditioned by the consequences of the subject's behaviour. They can be positive (reward) or negative (punishment). It's not as automatised as emotional learning. It is rather a problem solving and a search for the efficacious solution in the concrete situation. However, the reaction he talks about can be and usually is primarily unconscious. This type of conditioning, also known as instrumental is not direct. The whole process (again simplified) starts with classical conditioning. It goes through emotions. Only emotions are capable of being attached to some new stimuli. We may return to the example of anorexia. An anorexic person learns that the body appearance is responsible for the negative feelings that are present almost permanently during thinking. Concretely, those feelings can be related to the volume of the fat which is wrongly interpreted as the cause of failure in social acceptance. This is the emotional learning part. Habit formation appears at the point, when the subject consciously or unconsciously tries to deal with this unpleasant situation. Because body is now representative of all what is wrong. The habit that the subject will achieve can take a form of body harming or the intensive motivation to lose weight. Such reactions always appear in the moments when negative feelings occur. Reward is the feeling of the social acceptance incorrectly linked with the changed body appearance. This reward decreases the amount of negative feelings. Formed habits are there to help to achieve reward and maintain the state of hope.

2.3.2 Learning, Unlearning and Conflictive Behaviour

Inhibition of the habit is also dependent on the conditioning. The meaning of stimulus can be changed by repeated exposition to this stimulus without the presence of the associated emotion. For example: touching the iron without burning the skin. It is about the negative link being removed. The association is interrupted. A similar effect is observed when the expected reward does not appear after some kinds of behaviour. When a little child pretends to be sick to catch the attention of the parents, it will stop doing that if the parents stop responding to him. Or we can say, they stop reinforcing its inadequate behaviour. This is extinction. Another type of unlearning is counterconditioning. The missing reward must be replaced by

the punishment to establish the new association. Technically it is habit “reformation”. It is typical for extremely pleasant and addictive behavioural patterns like smoking, taking risks etc. When a smoker takes too many drinks during the night while smoking too many cigarettes he/she will consequently feel sick. This feeling of sickness can be subscribed to the smoking habit. Usually, a pleasant activity like smoking is associated with unpleasant consequences – the sickness.

The problem of learning and unlearning is that they can contradict:

“One learning mechanism, that of motivation and reward caused “a habit” to be established; punishment through conditioning, then caused a new motive that of fear, to come into existence; and its reduction served to reinforce an antagonistic “habit”.” (Mowrer, 1960, p. 390)

This kind of conflict situation causes the subject a certain kind of rigour. The subject is willing to perform an old well-known reaction, the one that always brings the reward. But suddenly, punishment comes after the same reaction. The question is, what happens now? In Mowrer's theory, learning involves to some degree frustration. It comes at the moment when the subject realises that the old reaction doesn't bring reward but punishment. It is a moment of confusion, when the subject must decide whether to keep it or to change it for a different kind of reaction. It's a classical scene of the conflict situation.

Again, we can see that conflict is also in this concept perceived as something natural. When the reward changes to the punishment it also requires the change of behaviour in order to avoid the negative and to reach positive consequences. A certain degree of frustration is necessary for any change. Behaviour that leads to punishment is signalled by cognitive or emotional dissonance as we discussed earlier in this work. It is the subject's responsibility to find a new and adaptable way of achieving rewards. In other words, the affect must be integrated. It must get some space to be manifested and experienced. Cognitive tension, caused by rigid and “short” cognitive constructs signifies failure in getting some kind of profit from the life. They must be reconstructed and extended to permit the learning of an adequate behaviour. Adequate behaviour is characterised by subjective well-being, personal, psycho-bio-social development and fulfillment of one's whole potential. During the pathological learning process, we can see a different pattern. When the frustration and confusion appear,

the subject chooses an inadequate solution. The fear or hope is related to the wrong stimuli. Usually, it takes the shortest possible way to achieve positive feelings, which doesn't have to be the correct one. For example, when one of the partners dies, it is natural that the other one will have to undergo a period of mourning. The source of positive feelings was removed and the search for a new source must begin (inside or outside). But when the person wrongly attributes lost positive feelings only to this one dead partner, it blocks her or him in looking for new positive stimulation (some activity or another partner). The mourning transforms into depression. As the old habit is not available anymore (reward is irreversibly gone), a new one must be established. The subject is not able to choose between the two constructs of being an independent widow/-er or staying dependent wife/husband of the dead partner. Often the subject doesn't even see the choice between the two roles. Only strong sadness and hopelessness overtake the entire personality. Experiencing intensive negative feelings caused by loss and the incapability to accept it, the person chooses the easiest way to achieve positive feelings and to eliminate the negative – for example using alcohol or drugs. That is how an inadaptable habit is formed. This unfavorable situation can be changed by illumination of the wrong established associations. In our example, it would mean that the lost partner wasn't the only sense of the life and of course, that drinks or other substances are not an equal source of the positive feelings. After this the initial state of confusion can reappear again. That can reveal repressed tension or other affects that didn't get space before. This process consists of a double challenge: cognitive and emotional. Finally, new behavior can be taught. The trick is to learn behaviour that allows psychic development under any conditions.

Changes in our environment are natural. It's quite difficult to capture the huge complexity of stimuli which surround us and which belong to our inner world. It is complicated to associate them with the corresponding emotional, cognitive and behavioural patterns (almost only possible to identify them retrospectively!). The goal of this chapter is to shed light on the various kinds of manifestations of intrapsychic conflict. It is not common to relate contributions of psychoanalytic authors with representatives of behaviourism. However, emotions and cognitions are two important factors in learning of adaptable behaviour. We believe that behavioural analysis is not complete without concerning also phenomena from the internal psychic world of a person whether they are conscious or unconscious.

3 Conflict During Regulation of Behaviour

In the following chapter we will introduce Lurija's work which was for us the most inspiring in the field of uconflict exploration. We will see how conflict affects behavior and psychological processes and that will lead us to the possibilities of its regulation and resolution.

3.1 Disorganisation of Behaviour

3.1.1 Invasion of Affect

Very interesting studies on the topic of conflicts, are presented by Lurija (1932), in his book, *The Nature of Human Conflicts*. Its complex perspective involves emotions, cognition (not using that particular term), regulation of behaviour and its inhibition. Conflict is described here as a destruction of the organisation of behavior, and it is believed that this destruction is not chaotic and random. It has its own structure and laws. Certain levels of disorganisation of behaviour occur always when the affect is present. Motor reaction and speech response were picked to describe the whole motor and central behavioural activity. Speech response represents the intellectual response, associations, and thoughts. The motor reaction was divided into active and passive. It is also possible to say voluntary and involuntary motor actions. In some experiments, he examined spontaneous movements of hands, pulse, respiration, plethysmogram and psychogalvanic reflex as well. Other authors never perceived the affect as a system of disorganisation of active behavior. Lurija was the first lacking the answers - a generalised structure of this process - description of involuntary actions disturbing voluntary behaviour. He dedicated his research to find them.

The missing laws of affect were, based on the many observations, finally suggested as following: at first there must be present. Certain stimulus that will evoke affective behaviour in a person. It always depends on the psychological structure of that person, affect may be included in various ways. The second condition is decreased action of a kind of barrier that is supposed to handle the affect. At this stage, we cannot say much about it but we will return later to this topic because it has a big importance in this context. The last rule is that the extension of mobilised excitation is always excessive. It is more than a person can operate at that moment.

In other words, conflict causing affect usually appears when a person runs into an unexpected situation in which one encounters emotionally very strong factor. At the same time, the ability to deal with it is lowered by the shock. As a result, we can observe a loss of control.

Another attribute of the conflict is the depth. There are very deep conflicts which can affect the whole personality. There are superficial ones which are more trivial, such kind of the conflict is considered to be “*external violence of psyche*”. A different physiological reaction is present. Excitation stays further from the motor and psychic area, it is displayed mostly as a vegetative function such as breathing or pulse. However, the hands, for example, remain calm. After removing the stimulus, the symptoms tend to disappear and it is generally easier to resolve such conflict, so the same reaction will not be necessarily present next time. For the deeper conflicts, Lurija uses the term complexes. They were categorised as “*internal violence of the psyche*” and it is much more complicated to resolve them. Physiological reaction to emotionally significant stimulus always demonstrates excitation in the motor area (movements of hands for example) which are also accompanied by excitation in vegetative systems as well. The subject is taking it extremely personally, he seems to be very touched. Such conflict dominates the personal life for a longer period of time and can be the trigger for most of the neurotic disorders. The impossibility to resolve this kind of deep-rooted conflict at once causes its removal from consciousness – the complex will become unconscious and consequently, his tendency to become pathological increases.

The unconscious complex was cut off from consciousness in order not to disturb the behaviour. Once it has been disconnected from the thoughts it is disconnected from the motor area as well. The subject regains control over his reactions and “clear thinking” returns. This state is unfortunately only temporal. Unconscious affect remains active and it still has the potential to break into the behaviour with the same or even bigger valency whenever the incriminated stimulus/trigger reappears again. Direct attempts of inhibition of affective symptoms do not work at all either. The produced tension will be expressed anyway, but this time by the other means - modifications or symptoms. It can circulate from vegetative systems to the motor area or even it can take the form of speech sabotage (which are the three main areas observed in Lurija’s research).

The crucial step from our point of view was the fact that Lurija distinguished two main structures of the affect. Some of his probands were reacting more or less as „normal”. The others appeared to respond in a more anxious manner. Here are some behaviours, characteristic of “the anxious group”. The activity is impulsively ruptured when the emotionally significant stimulus appears between neutral stimuli. Speech reaction is delayed,

filled with pressure and accompanied by intense motor excitation. Movements are unorganised with direct motor impulses. Coordination and higher cortical regulations are immediately destroyed. It looks like some form of return to the primitive stages of development. Excitation is flowing freely and unobstructed throughout the whole body and mind. It doesn't seem to be neutralised by the subject's reaction. This kind of affect is called diffused.

In the other response the examined group dominated complete coordination. There was an obvious regulating process. Impulsive reactions were absent, there was no sharp fluctuation and speech pressure was accurate. Excitation created by the stimulus was purposefully delayed and transferred into the motor and speech area. It offers an actual basis for the reaction process where is no "leakage". The full amount of mobilised energy is used regularly and meaningfully. This affect Lurija called organised. The difference in these two patterns of response is the level of effective usage of excitation.

3.1.2 Functional Barrier and Symbol

For the effective transference of created excitation, the responsible mechanism is called the functional barrier. There was a component missing which would be responsible for coping with the affect and directing it in the right and teleological way. A wall that would separate the excitation from the direct motor reaction. Something that would hold the person integrated on most of the occasions. As we saw above, some people are able to work with their affects. They know how to keep the control over their actions in almost any difficult situation, no matter how strong and personally, significant stimulus is present. They will not become the slaves of the direct spontaneous reaction. Not everyone was able to achieve such control. Many subjects acted like children. They expressed their feeling straight away. And many times, unintentionally - shocked by their own response. Lurija mentioned following notice:

"...there is some 'barrier', obstructing the direct transfer of excitation to the motor area and allowing the organism to prepare itself for activity..."

(Lurija, 1932, p.289)

In the beginning, it was supposed that this barrier is situated somewhere between the motor and *connecting area* (the term that Lurija uses for any mental processes). Subjects with strong functional barrier are more successful in catalysing the excitation than subjects with the weak functional barrier. It holds the affect away from the motor area and redirects it up to

higher psychological processes. It was assumed that this kind of partition between controlled and uncontrolled behaviour was not innate. Because the children don't dispose of the same level of control as adults. Which means, the barrier must be developed slowly at a very young age of an individual and it should be reinforced by later experiences. It can't be said much, so far, about this phenomenon. However, it was obvious that this is the determinant, that makes difference between organised and diffused affect.

Many experiments were done to clarify the work of the functional barrier. The most interesting were those with the posthypnotic suggestion. The examiner suggested to the subject during hypnosis an inhibition of a certain kind. This inhibition produced conflictive behavior because it was a foreign component in their mind, producing negative affect during the encounter with the original intention of the person. For example, it was suggested that the proband cannot say the words '*red*' and '*blue*'. After waking up from the state of hypnosis subject suffered from amnesia to this suggestion. The examiner asked him to define the colors of objects surrounding him, and to subject's surprise, he wasn't able to complete this apparently simple task. An artificial conflict was planted in his mind. The immediate reactions of various probands were diverse. But after the close analysis, they showed 3 structurally distinctive patterns of reaction to that internal conflict.

Reaction pattern I.: The subject almost completed the task. He named the colors with satisfactory confidence and without any doubts when suddenly he was asked to pronounce the words '*red*' or '*blue*', he got stuck, unable to get any sound out of his throat. Those circumstances brought him to a direct confusion. The incriminated word was ready to utter but it never came out. His response was inhibited in the last possible moment. Which lead to a complete blockage of any speech or motor response. The subject simply totally froze. Here we can observe the strongest kind of inhibition and the most pathological one, as well. Because the excitation did not make its way out, it paralysed the whole system instead.

Reaction pattern II.: It is identical to the previous one. The subject doesn't accomplish the task again. However, this time the excitation wasn't blocked. It flows over into tonic innervations and it's clearly visible on the tremor of the active hand or even both hands and legs. The intention to pronounce the prohibited word is formulated as a reactive possibility. But the subject looks like he doesn't remember the correct answer. Which is highly unlikely because they were challenged by the same task before the hypnotic suggestion and they didn't show any difficulties to enumerate all the discussed the colors from the list. They are trying to say the name of colour but it is not coming in a proper way. It resembles some speech disorder. As a consequence of the failure, the excitation arises.

Reaction pattern III.: This pattern is the unique one, bringing essential outcomes to the research, because some subjects were actually capable of mastering inserted conflict. Even though they were not able to pronounce directly the name of the color, they found another way how to define it. For example, when the subject was pointed out to say the word 'red', he replied by the word 'carmine' or he mentioned an object from his childhood indicative by its red color. It is not the correct answer we expected to hear. But such offering of new speech exit or a replacing image is a very creative way how to master the conflict. Inventing some *intellectual substitution* for the original word moves the conflict from motor area to coupling-up area. It is an indirect attempt to solve the problem. The subject remains calm (no unintentional movements) and focused – fully controlled. His behavior is not disorganised by sudden affect.

It might be relevant to say that the posthypnotic suggestion is maybe not a very respected scientific method, nowadays. But we believe it is undeniable that it served well in the production of the artificial internal conflict. Possibly today someone could suggest more appropriate means how to reach the experimental stage of the conflict, with the higher level of reliability. For the Lurija's decade, they were quite sufficient because the hypnosis was still pleased by the good reputation.

It is supposed that type of affect present in certain person can have predictive value to its personal features, mental health, and inclination to various mental diseases.

“The disturbance and the production of primitive, diffuse forms of excitation will definitely indicate the typological features characteristic for the personality.” (Lurija, 1932, p.72)

Based on the above-mentioned patterns, two types of personality were described: the labile type is characteristic by the predisposition to the diffused affect during the conflict. The functional barrier is weaker. Excitation runs out to the motor area where it is wasted by unintentional movements. The reactions are not timed accurately and the overall reaction doesn't succeed in neutralising the affect. The stable type of personality delays the excitation and elaborates it sufficiently for a meaningful and controlled reaction. It is interrelated with the organized sort of the affect.

Lurija personally never published an official inventory to test the labile or stable type of personality. In later decades his follower Charles Golden, came up with the standardised test called Lurija-Nebraska Neuropsychological Battery (LNNB). It evaluates motor, tactile,

visual skills, receptive and expressive speech, left and right hemisphere and others (Gordon, 1999). It is mainly used to identify and to locate brain damage. The most important is the ability to differentiate between brain damage and mental illness and between an injured and uninjured patient. However, it can be used to sketch which mental illness is present as well.

As we observed in the experiment with the artificial conflict, any direct approach to control the behaviour leads to negative results. Apparently, it can only be embraced by some indirect means. Attempts to require from the subject a maximum speed of association, most likely bring immediate paralysis of the associative process connected with hyper excitability of the motor area. Here we can return to the principle of the functional barrier. Conclusively, Lurija assumed that its purpose is to delay the flowing excitation before it will hit the motor or central systems. In other words, it is supposed to hold the energy and direct it up slowly, to the higher mental processes in reasonable amounts. It matures by the restraint of primitive activity (unintentional movements). As far as we are talking about indirect action instead of explicit ones, we may expect that the functional barrier is a mechanism of a cultural cause. But what can we imagine under the label of indirect actions?

The term *indirect action* is for us parallel with the term, *intellectual substitution* which emerged from the experiments with the artificial conflict. *Intellectual substitution* might be any descriptive replacing image of the original input (the 'red' was 'carmine' or the toy from childhood with the red color). To say it in a very basic way, it is something that stands for something else but it is not a simple copy. It's a whole new way of expressing it. The only two conditions are that both concepts must share the same attributes in some way which can be also only at the subjective level. It doesn't have to be understandable in general for everyone. It can be based on previous experience (the toy) or some irrational feeling. The second condition is that they must both represent the same meaning in a certain aspect. Basically, it fulfills the function of a symbol. Luria declares that every symbolic system may be a powerful mean of organising affect.

At the end of the book is discussed the role of the will in the process of the organisation of the behaviour. He doesn't support the idealistic idea that human willpower is the direct force that makes things move. We do only what we decide to do and control our actions completely by some spontaneous dynamics seated on the top, over the rest of the psychological processes. On the other side, the will is not pure automatism either. He doesn't find himself even on the side of the strictly materialistic point of view. The will is a phenomenon only present in cultivated human. It might appear together with the development of the consciousness, the

speech and the civilisation itself. It should be related to the mechanism of the functional barrier because they both control the behaviour. And as we know from the previous pages, the excitation cannot be operated, embraced or grabbed directly – functional barrier doesn't work directly. He hypothesised that the will must be engaged indirectly as well, precisely through auto-stimulation. Where the direct methods of willpower are replaced by some indicators according to which, an individual may respond in a definite manner. Settling an artificial stimulus (indicator or signal) which acts upon him, makes the person perform the reaction automatically or we can also say organised. This function of an auxiliary stimulus may fulfill the speech as well.

We may conclude that according to Lurija, organisation of behaviour, affect control, conflict resolution, willpower, symbol and speech are related. Further experiments can clarify this connection. We will bring some more illustrating material in the following subchapter.

3.2 Research on Implicit Emotion Regulation

Since Lurija's times, there were not much research published, leading in the same direction as his own. But in recent decades some noticeable studies have appeared about the possibilities of emotion regulation during conflict. They could refresh and enrich Lurija's discoveries. Pennebaker developed the technique of expressive writing (Pennebaker, 2016). He worked with people with chronic diseases such as diabetes, asthma, autoimmune and inflammatory disorders, and cancers. If the level of the disease was moderate, it means it was not too severe (when the more substantial treatment was required) and not too neglected (when the patient actually doesn't perceive the distress yet), he acquired some positive therapeutic results with the method of expressive writing. It consists of unrestricted writing about what bothered the patients the most. There are no limits to the content, no importance is paid to grammatical mistakes, spelling, writing style or the audience. The writer is writing for himself only - literally to clear his head. Writing should take about 20 minutes per day however it should not finish until there are some disturbing topics still remaining. The secret of this method is the verbalisation of internal processes and contents. Writing about complicated, painful and unexpected situations elucidates the new facts and meanings. Decomposing complex experiences and organising them into more understandable packages helps to move beyond them.

Lieberman and his colleagues examined students with arachnophobia. Their research (Kircanski, Lieberman & Craske, 2012), was focused on the various ways people can regulate the negative emotions caused by the phobia. The sample was first exposed to the real spider (Chilean rose-haired tarantula). They were encouraged to approach it in three steps ending with touch. After that, they were randomly assigned into four groups according to the intervention technique. To measure the level of the fear, skin conductance was used, displaying the emotional arousal and self-reported level of fear. The results show that the most successful group was the one using the technique of affect labeling. They were asked to verbalise their current emotions, to focus on them without trying to change them, to form clear, distinct ideas of an emotion (*"I feel anxious the disgusting tarantula will jump on me"*). It is an example of implicit emotion regulation technique. The subject does not attempt to regulate the emotions directly and with effort like it is during the explicit control of emotions. The second group of students was less successful using the re-appraisal, which is an example of direct attempt to control emotions. It is basically the re-judging of an emotional experience. First, we form an appraisal, a quick and automatic judgment of the situation. If we keep some distance and re-judge or think differently about the same emotional stimulus, we should come to its neutralisation by creating another, evocative stimuli to reduce the emotional significance of the original one (Gross, 1998). They were asked to form a neutral word about what they experienced during the encounter with the spider (*"Look at that little spider, it cannot hurt me"*). That is the re-appraisal method (ibid.). In the third sample, group was engaged technique of distraction. Their task was to speak about the unrelated topic with the purpose to forget about the negative feelings. The last group was dealing with the spider exposure only. They did not receive any instructions to verbalise their experience. The last two groups (distraction and exposure alone) were the least successful in the emotion regulation, as was expected by the authors. The real research question was if the implicit emotion regulation (affect labeling) will be more effective than the explicit emotion regulation (re-appraisal and distraction).

3.2.1 Effect of Implicitness

Our question is why the affect labeling method brought better results than the rest. We will look closely at the implicit character and also in the process of verbalisation that is peculiar for this method of emotion regulation. Let's start with the implicitness. To make it more understandable we borrowed the definition from Koole & Rothermund:

“Implicit emotion regulation may be defined as any process that operates without the need for conscious supervision or explicit intentions, and which is aimed at modifying the quality, intensity, or duration of an emotional response. Implicit emotional regulation can thus be instigated even when people do not realize that they are engaging in any form of emotional regulation and when people have no conscious intention of regulating their emotions.” (Koole & Rothermund, 2011, p. 390).

Why would unrealized activity work better than intentional attempts to gain control? Indirect emotion regulation might work better than the explicit in the real-life environment because it is more spontaneous. We are interfering daily with the stimuli that are triggering our emotional responses. Those emotions should be regulated to avoid their invasion of our ongoing activities, situational demands, and long-term goals. Their implicit regulation is then triggered automatically as well, in the moments such as demanding situations, negative affects, threats to close relationships, or positive or negative feedback (Koole & Rothermund, 2011). The role of emotions is to create a quick evaluation of a situation – appraisal. The appraisal of a situation cannot be deliberately chosen. To become a personal belief, an emotional appraisal must be perceived as the true interpretation of a situation. However, people's attempts to change their automatic appraisals and personal beliefs have limited success - when the appraisal is the result of the deliberate attempt to modify the interpretation of what happened, it is less convincing to be the real “true” (ibid.). To transform the new appraisal into a personal belief some automatic processes might be employed. We are talking about selective attention or affective processing biases that are influencing which information will be accessible for creating a judgment. It appears like biases and other automatic processes might have higher chance to regulate emotions and to change personal beliefs than arbitrary decisions to correct them. The last reason why the regulating emotions implicitly is more powerful is that abstract, self-focused deliberate thinking may lead to a loss of connection between mind and body (ibid.). It may lead to experiential neglect or loss of cognitive access into emotions, bodily sensations, and feelings. Creating distance can reduce control over the emotions because it depends on efficient mind-body interactions. Making emotion-including decisions is cultivating such interactions and preventing the conflict more than merely abstract decisions to simply delete some unwanted feeling just because it seems to be irrational at that moment. Those were few ideas why the affect labeling as an implicit of emotion regulation could be more rewarding than explicit methods.

3.2.2 Function of Verbalisation

At this point, we would like to look closely at the process of verbalization, which is the core procedure of affect labeling (and it is also automatized or implicit). Verbalisation is basically a kind of symbolic conversion (Lieberman & Torre, 2018). It is converting an emotional stimulus into a symbolic representation = verbal expression. Converting the stimuli into language is an act of categorisation. It allows a closer exploration of the stimulus and its causes and consequences. Categorisation is the key process of thinking and creating of cognitive constructs. Etkins and co-workers supposed that for the effective mental functioning it is required that cognition is protected from any emotional conflict (Etkins, Egner, Peraza et al., 2006). They managed to prove this hypothesis in their psycho-neurological study. fMRI was used to observe cerebral activity during the solving of the emotional version of the classic Stroop conflict task. Their conclusion was that emotional conflict is resolved via the reduction in amygdalar activity accompanied by activation of the rostral anterior cingulate cortex (rACC). This cortical area is responsible for conflict monitoring after it is alerted through amygdala. Amygdala is therefore a kind of alarm that needs to be switched off. Transferring the problem to the higher cortical area like rACC (for example through verbalisation), brings cognitive access to the original emotional conflict (alert). This act should increase the chances of effective conflict resolution – first eliminate the emotional part of the conflict, then bring it up to enable elaboration via the thinking process (direct or indirect). Studies that measured emotional arousal through the autonomic system response (skin conductance, heart rate, voice pitch etc.), confirm this finding. After shifting to the mental representation (or verbalisation) of the feelings, emotional excitement decreases (Lieberman & Torre, 2018; Kircanski, Lieberman & Craske, 2012). Once the higher processing prefrontal regions of cortex have the emotional information in the symbolic format, there is no need to keep the alarm (amygdala). The autonomic system response also calms down. An individual solving his conflict can focus more on the cognitive resolution. We already saw similar outcomes in Lurija's research (Lurija, 1932). When the tested subjects were trying to approach the conflict directly, a firm tension was indicative in their performance which was paralysing them and reducing their speech response and ability to overcome the conflict to zero. It looks like indirect intervention (intellectual substitution) is somehow bypassing the petrifying burst of tension when facing the emotional conflict straightforward.

Emotional labeling has a rather regulatory than expressive meaning. We might ask a question, why do we dispose of so many verbal expressions to name the emotions if they are

expressive enough by themselves? People all around the world are capable of recognising when their partners, colleagues or friends are angry, sad or happy. The answer could be that verbalising the emotions we are not merely naming them but controlling them and inhibiting them (Wood, Lupyan, & Niedenthal, 2016). An interesting fact is that in the vocabulary of the across the globe, there are more words that name the negative emotions over the positive ones (ibid.). Most probably it is not because it's more pleasant to communicate negative feelings, but again, because we need to regulate them more strictly than positive feelings. This way we may confront and grab them in a more sophisticated and cultivated manner – using the words. But as was mentioned above, the abstract grip must be match the original emotion. If it disconnects from the former stimulus it might be misleading and create conflict (adequate experiential connection, mind-body interaction). That could explain why it was proved that the self-generated labels used in emotional labeling had the long-term effect, while the labels provided by the research had only an immediate effect (Lieberman & Torre, 2018). The verbalisation or the transformation into the cognitive sphere should be performed by the same person that is experiencing the disruption of negative emotions (conflict).

In this subchapter, we were trying to illustrate Lurija's key findings of overcoming the disorganisation of behaviour (conflict), with some more recent research. They were mostly focused on the regulation of emotional conflict highlighting the mechanism of implicit emotion regulation and the work of the verbalisation of emotions. It looks like indirect intervention (intellectual substitutions, affect labeling) is somehow bypassing the petrifying burst of tension when facing the emotional conflict in a straightforward way. Furthermore, the emotional level of the conflict is the most urgent aspect of the conflict (when comparing to cognitive and behavioural aspects) that needs to be solved primarily.

Empirical Part

4. Research Goals

Conflict is a phenomenon that could stand behind many psychological problems. There is not much empirical data collected to clarify the resolution of internal conflicts. Through the analysis of the theoretical resources we have tried to describe how other authors drew the picture of conflict. The most inspiring for us was Lurija's study (1932), where he pointed out that it is possible to embrace the conflict by using its *intellectual substitution*. Substituting an emotional excitement in a symbolic way (speech) also brought better results than direct attempts to eliminate or overcome the conflict. It was suggested that the conflict cannot be reduced directly, by the power of will only. The general excitation caused by the conflict must be faced indirectly, by transforming it into another exit. Such transformation can be achieved by employing an auto-stimulating command or auxiliary stimulus. This function may fulfill the speech.

We didn't find any further research about developing those findings. We decided to focus on emotion regulation, because emotions are the key component of the conflict. And at the same time other research shows (Lieberman & Torre, 2018; Etkin, Egner, Peraza et al., 2006) that cooling down the emotions is a sign of ongoing cognitive intervention. Emotions are the most expressive and disturbing component of conflict in comparison to its cognitive and behavioral aspect with regards to the regulation of behavior. Probably because they stand in the core of cognitive and behavioral affiliations. At first, we concentrated on the research in emotion regulation.

- I.) Our first research goal is to test the hypothesis that the emotion regulation techniques can support conflict resolution. We suppose that emotion regulation techniques (direct or indirect) can diminish the emotional tension related to particular conflict which should lead to the more successful conflict regulation.

Secondly, we decided to look closely at a specific kind of emotion regulation - implicit emotion regulation, since the implicit or indirect character of conflict regulation was one of Lurija's essential outcomes. We noticed that a parallel to above mentioned *intellectual substituting* could be a technique of labeling of conflict-related emotions (Kircanski,

Lieberman & Craske, 2012). It works based on the principle of verbalisation which enables the transformation process of the negative, conflict-related emotions into a word or a label. By this conversion we should be able to decrease general tension and gain higher control over the emotion connected with conflict. At the same time, it supplies the spontaneous categorization and organization of often chaotic emotions. It internalizes the negative emotion related to the conflict which could be previously perceived as foreign or not belonging to the “I”. In opposition to implicit emotion regulation stands explicit emotion regulation. An example of such method is re-appraisal (Gross, 1998). We chose to use it in our research because the common denominator of re-appraisal and the affect labeling method is the process of verbalisation. However, each of the methods employs it in a different manner – implicit or explicit. The re-appraisal technique brought also many positive results in the field of emotion regulation. The main difference from affect labeling is that its central purpose is not ventilating the emotional tension but it is directly trying to change or neutralize the negative emotion. It's basically aiming to suppress the negative emotion by attempting to re-judge the situation involving the promotion of neutral emotions. That is why we believe it will be less successful for emotion regulation in comparison to the previously mentioned indirect methods such as affect labelling used in Kircanski, Lieberman and Craske's work (2012) or intellectual substituting used in Lurija's research (1932).

- II.) Our second research goal is to verify if the implicit emotion regulation techniques (affect labeling) will be more effective than explicit emotion regulation techniques (re-appraisal) in the acquirement of control over the conflict-related negative emotions.

5. Research Design

In our study we employ quantitative design in the form of randomised controlled trial. We will divide the participants into three groups. Two groups will undergo our intervention in the field of emotion regulation (affect labeling, re-appraisal). The third group will be an active control group, receiving no effective intervention (distraction). Participants will be assigned into groups randomly. Independent variable will be the emotions (negative, those that are related to the conflict). Using our intervention techniques, we will try to reduce them. After that, we will measure the effect on the level of change in the intensity of conflict, evaluated by the Self-discrepancies questionnaire (Higgins, 1986). The measures will be done before and after emotion regulation techniques were employed and additionally also 1 month after the intervention: pre-test + 1 week post test + 1 month post test.

6. Participants

Participants will be chosen from among the students that visit the university psychologist at a time of personal crisis. We will start with a short interview clarifying the causes of the crisis, the nature of the problem and focus on any conflictive tendencies. If they might be present, after the interview the Self-Discrepancies Questionnaire (Higgins, 1986) will be given. The main criterium for the assignment into the research will be the scoring in this test, which is described closely in the following chapter about research methods. The students with a moderate level of conflict only will be accepted. Serious cases, requiring immediate intervention will be excluded (more than 10 discrepancies detected). Assignments will be stopped after we reach number of 168 participants. This number should bring representable results even with regards to it being divided among three groups (Field, 2013). And it also satisfies the total sample size requirement (N=168) withdrew from a priori performed power analysis using G*power 3.1 program. It is described in more detail in the discussion chapter (see the protocol of power analysis in the attachment 3). Before we start implementing the intervention techniques, the participants will sign informed consent. It will be explained to them that conflict was identified in their test results and the emotion regulation techniques might reduce their tension. It will be suggested that they try it for a one-week period. Participants should not know if they are placed in the intervention group or a control group. After collecting our participants, we would be able to describe the sample using descriptive statistics to document information such as gender, age and conflict severity.

7. Research Methods

At the beginning of the experiment we will already know that our participant is experiencing conflict because that was our criterium for choosing them. The selection is the same method we will use to measure their current conditions (before the intervention). There is no need to repeat those measures because they specify the participant's stage before the experiment sufficiently. In this chapter we have more space to explain them in detail.

Self-Discrepancies Questionnaire

Developed by Higgins (1986), based on the self-discrepancy theory mentioned previously in the theoretical part of the work. The participants will be asked to list 10 traits related to their actual, ideal and ought self-concepts. The first column will display the traits that the person actually believes to have at the current state. The second column shows the qualities that would the participant like to possess, the ultimate goals. In the last column the traits that the person believes he or she should possess, the normative rules and prescriptions for the self will be listed. It is important to include both poles of the qualities (good and bad).

To calculate the self-discrepancy score we need to look closer at the qualities listed in the actual-self and ideal-self column. To compare them we need to determine matches and mismatches between the listed attributes. The match is detected when the actual and the ideal concept or actual and ought concept are identical. For example, when a person believes that it is right to be honest (the ought concept), that he or she wants to be as honest and as possible (the ideal concept) and at the same time is currently considering him or herself being a good follower of such ideal, being honest in deed (the actual concept). The mismatch occurs when the actual and the ideal trait or actual and ought trait vary. To stay with the same example, our participant believes it is correct to be honest (the ought trait) but is conflictedly admiring skilled liars (the ideal trait) or is failing to speak the truth about the personal life.

We repeat the same procedures (match and mismatch detection) for the items in the actual-self concepts and the ought-self concepts. The final step is to subtract the final number of matches from the final number of mismatches. The maximum score is therefore, 20 (10+10 matches – 0 mismatches) indicating no self-discrepancies found. The minimum score is 0 (10+10 matches – 10+10 mismatches) indicating 20 detected self-discrepancy concepts. The lower the score is, the more discrepancies are present. Applying our intervention, we expect the score increasement. Example of the questionnaire is available in the attachments (attachment 1).

Intervention methods

To increase emotion regulation, we use below mentioned techniques. Each group of probands will use only one of the techniques. They will be assigned to the groups randomly without knowing if they are in the control group or intervention group. All of them will be instructed to dedicate 30 minutes per day to the method, in a written form. Ideally immediately after any emotionally strong situation. The participants will be re-examined 7 days later. Then the second time will be after 30 days. During the writing up process it will be important to keep it spontaneous – no restriction by the grammar rules, spelling, writing style, or any other formal criteria. Emphasis is on the content, not the form. The content should be about any emotions related to the conflict (positive or negative). Proband is writing for himself only. It can take a form of an emotional journal. The notes should stay private and honest.

- a) **Affect labeling** – is a method of implicit emotion regulation, the goal is to create a clear idea (label) of currently experienced emotion (Kircansky, Lieberman, Craske, 2012). Participants will be advised to not push the negative emotion away but to draw it closer and try to identify them in words. In our experiment they are not supposed to use the objective terms to name particular emotion. They are allowed to also use subjective expressions that will match the experienced feeling. The only conditions are that the emotion has to be verbalised, written down and the label was generated by the participant himself. We can use as an example sentences such as: *“What emotion do I feel right now? I should be happy. But it seems I am not. I think I feel anxious instead. Oh, wait, I am not anxious either. Actually, I am pretty angry. I am mad like a little child.”*
- b) **Re-appraisal** - is a method of explicit emotion regulation, aiming at neutralization of the negative emotional response (Gross, 1998). This group will be briefed to write about their negative emotional response. For example, about the moment when they experienced some inappropriate emotion. They should, describe it and try to reinterpret it to reduce the severity of negative response. It is basically a suppression strategy when the person exchanges deliberately negative attitude for a neutral or positive one. Example: *“It didn’t happen that much. Maybe she didn’t mean what she*

said to me. Or maybe I got it wrong and I am just over reacting. Anyway, this little incident cannot make me lose control.”

- c) **Distraction** – this is our control group. There is no emotion regulation intervention technique employed here. However, the participants will be asked to perform the writing and verbalisation in the same frequency like the other two groups. Their journal will not be about emotions but about their daily routine and plans. They can write at any suitable time of the day. Example: *“Today I woke up early because there was a busy day ahead. I went for a walk with the dog. Then, I prepared the breakfast...”*

8. Data Analysis

The total number of participants $N=168$ will be divided into the three groups according to the intervention received. First group G_1 will undergo intervention type 1 = affect labeling ($N=56$). Group G_2 will receive intervention type 2 = re-appraisal ($N=56$). And the last group G_0 will not get any intervention (placebo, $N=56$). Each participant will be tested in the pretest T1 in which he will obtain a certain score of the number of detected self-discrepancies as it was described before. After that, will be the same test repeated in one-week posttest T2, and in one-month posttest T3. For each subject, the score will be marked in the same row of the table (table 1 in attachments).

Our goal is to find out whether there will be any effect of the intervention throughout the time and also if this effect will be different in groups according to the intervention type used. In other words, we will examine two different types of effect on the dependent variable, and as well the mixture of those two effects. Therefore, we suggest to use Mixed ANOVA or Analysis of Variance with Mixed Design (Field, 2013), developed for testing the interference between one continuous dependent variable (self-discrepancies score) and two or more categorical independent variables (repeated measurements and intervention type). The first independent variable, the repeated measures, can be also called within-subject factor. It will be measured at three gradual levels or conditions (T1, T2, T3). The second independent variable, the intervention, also called between-subject factor has equally three different levels (G_1, G_2, G_0). The dependent variable, observed in all the conditions mentioned above is the intensity of the internal conflict represented by the score obtained in the self-discrepancies questionnaire. Another reason to choose this design is that we are repeating the measures more than two times on more than two groups of participants which other statistic tests cannot handle (such as T-test) because every time we run multiple tests on the same data, the probability of committing the error of I. type grows higher. The following hypothesis will be tested:

$$H_0: \mu_1 = \mu_2 = \mu_3$$

The null hypothesis assumes that there will be no significant difference between the means of the scores of the subjects at the three different time points (T1, T2, T3) and under the three different intervention conditions (G_1, G_2, G_0). It means that there will be no improvement or

worsening of the subjects scores in the pretest, one-week post-test and one-month post-test for the participants in any of the intervention group. We may also split it into three sub-hypotheses:

- a) H_0 = There will be no statistically significant effect of time.
- b) H_0 = There will be no statistically significant effect of the intervention type.
- c) H_0 = There will be no statistically significant effect of the interaction of the time and the intervention type.

$$H_A: \mu_1 \neq \mu_2 \neq \mu_3$$

The alternative hypothesis assumes that there will be significant difference between the means of the subjects scores at the three different time points (T1, T2, T3) and under the three different intervention conditions (G1, G2, G0). We expect to observe a change after the application of a particular intervention. The self-discrepancies scores should be increased. The score mean of each time point is expected to be higher than the previous one in the intervention group G_1 and G_2 but not in the placebo group G_P . We may again split it into three sub-hypotheses:

- a) H_1 = There will be statistically significant effect of time.
- b) H_1 = There will be statistically significant effect of the intervention type.
- c) H_1 = There will be statistically significant effect of the interaction of the time and the intervention type.

The score reduction or improvement is interpreted in the statistical sense with regards to a priori chosen p-value 5%. The subject's score over the three different time points in the three different intervention groups will be different and the probability of this statement being proved wrong is equal to the selected confidence level α .

To test those hypotheses, we need to count the mean sum of squares MS for each factor and their combination derived from standard deviation values SS and means of the particular groups \bar{x} . Then we perform the F-test for each one of the effects separately: effect of the between-subject factor (intervention type), effect of the within-subject factor (repeated measures in time) and effect of the interaction within-subject and between-subject factors. To determine whether our F-statistic indicates a statistically significant result we need to ascertain the critical F-statistic to our calculated F-distribution with our degrees of freedom

(df) and our selected confidence level ($\alpha=0,05$). We can look up the critical F-values in statistical tables (Hendl, 2009) or use a statistical program. When our F-value is bigger than the critical F-statistic, we can refuse the null hypothesis.

Mixed ANOVA is an omnibus statistical test. Therefore, it can only tell us that there are significant differences between the means. However, it does not specify where exactly the differences lie. To break down the main effects and interaction terms we may use the function of contrasts (SPSS) which compares the pairs of effects. We can visualize it in the line chart graphs that could show us nicely the upwards/downwards trends comparison among the effects. At the beginning, we may compare each measurement in time with the following time point (T1 with T2, T2 with T3 and T1 with T3) within each intervention group separately. We are expecting significant change in mean scores within the same intervention group throughout the time of intervention application. Then, we will focus at the effect of increasement of the self-discrepancies scores during the first week of intervention between the affect labeling group and the re-appraisal group. Similarly, we must pay attention to the same group comparison after completing the one-month trial. We are expecting a significant change between those two intervention groups in both mentioned time points (affect labeling intervention type should be more effective than the re-appraisal intervention type or than the no-intervention type group). Also, we must not forget to compare each intervention group with the control group in every time point. Those would be our core contrasts.

Another option is to count the effect size for each contrast that could specify the intervention type effectiveness comparison. We can take the relevant F-values and convert them to an effect size values and consequently compare the effect extensions. Using the following pattern (Field, 2013):

$$r = \frac{\sqrt{F(1, dfR)}}{\sqrt{F(1, dfR) + dfR}}$$

The closer is the effect size value to 1, the stronger effect it is indicating. We will also use it later on to calculate the statistical power of the F-test.

After spotting the right interesting contrasts we may also plan post-hoc tests for further comparisons to test any unexpected hypothesis arising from the nature of above mentioned

expected contrasts. Using other statistical tests, which could be for example calculating the value of the exact mean difference between two groups that would show any unpredicted significant effect using T-test or any other suitable test.

9. Discussion

9.1 Methodological limits

There are couple of research limits we would like to point to in this section. One of them is construct operationalisation. We are measuring the dependent variable (internal conflict extension) using a questionnaire that is focused on the self-discrepancies which are basically one of the forms of the internal conflict as was described in the theoretical part. However, the intervention used to manipulate the dependent variable is not explicitly concerned with internal conflicts. We apply emotion regulation techniques instead of internal conflict regulation techniques. The reason why we decided to do this is so that there are no exact conflict regulation techniques, known to us. Therefore, we substituted them with emotion regulation techniques, since the emotions are one of the core components of the internal conflict as it was, once again mentioned, in the previous chapters. Even though based on that, we assume that conflict related negative emotions could play the role of a correct empirical indicator of the internal conflict as a theoretical construct, it is actually just approximation that should be further verified in other research. In the event that our results were proved significant, we might verify the effectivity of our intervention by measuring the reduction of negative emotions using different tool. It could be, for example, some questionnaire measuring the current emotional state. If there was no change from negative to positive emotions during the one month of the observation while detecting significant conflict resolution effect, it would mean that our intervention wasn't successful and another intervening variable was acting without our attention.

The other source of bias is the experimental design itself. It is very challenging to detect the influence of uncontrolled external variables during the application of the intervention as the participants will apply our intervention methods at home during the time period of one month. Moreover, the measurements collection cannot be done immediately after experienced change (negative emotions release). Other situations may occur that may improve the conflict resolution, besides our suggested techniques. Therefore, we should have a short post-intervention interview with the participant to attempt to identify if there were any other influences that might helped the conflict resolution.

The last risk is the sample size and representation. Based on the a priori performed power analysis in G*power 3.1 program, our F-statistic involving 3 groups and 3 repeated measurements with estimated medium effect size $f = 0,25$ and α error probability = 0,05 is expected total sample size $N=54$ for the within and between-subjects interaction effect, $N= 45$

for the within-subject effect, and $N=168$ for the between-subjects effect (attachment 3). We expect to get sample $N=168$ because such size is sufficient to satisfy the highest sample size requirement among all tested effects (within-subjects F-ratio, between-subjects F-ratio and within/between subjects interaction F-ratio). We have to keep on mind that all the participants are university students (only young people in age 20-30). They join the research voluntarily, which may result in higher level of motivation than the rest of the population. The study should be repeated on different types of samples (older participants for example).

9.2 Statistical limits

To declare our F-statistic being significant we also have to verify couple of assumptions. One of the most important is the assumption of normality. We have to make sure that our data has a normal distribution, since there is no non-parametric test equivalent of mixed ANOVA. Our sample size $N=168$ should be “big enough” (30-100 participants) (Field, 2013), we don't need to worry about normality. Our sample size $N=168$ should be satisfying also with regards to a priori calculated statistical power, as we mentioned previously. We can also check the data for outliers, the very outstanding values that might bias our group means and sum of squared errors. To do so, it is useful to look at the boxplot graphs or histograms and eventually eliminate the extremes. Technically we are talking about mild outliers standing below lower inner fence $Q1 (Q1-1,5*IQ)$ and the extreme outliers located above upper inner fence $Q3 (Q3+1,5*IQ)$, where the IQ is interquartile range.

Another risky point among the assumptions is the homogeneity of variance, assuming the equality of variances calculated for two or more groups. The variance of outcome variables should be the same in each group, particularly dealing with the between-group factor. We can use Levene's test to verify it. Its null hypothesis says that the variances in different groups are equal. When this test turns out to be significant ($p < 0.05$, or other significance level), the H_0 is rejected. The variances are different and the homogeneity assumption is therefore violated. Data must be corrected. To avoid the violation, we randomly elected sufficient number of participants and divided them into the groups by equal number.

The last assumption is to test all the effects and its interaction for sphericity. It supposes that the variances of the differences between all the possible pairs of the data from the same participant are equal. It is especially useful in case of repeated measures variable which plays the role of within subject factor because violation can lead to inflation of the F-ratios. To test the sphericity, we may use Mauchly's test. If it proves to be significant ($p < 0.05$, or other significance level) there is a problem and we need to do the correction adjusting the degrees

of freedom for any F-ratio affected. Greenhouse-Geisser correction is useful in most of the cases. But if the sphericity estimates cross level 0,75 (from 1), it is better to apply Huynh-Feldt correction which is less conservative.

Performing many independent or dependent statistical tests on the same data at the same time for testing various hypotheses brings multiple comparison problem. The probability of significant result increases with each test run. Therefore, we need to also analyse our results from the perspective of familywise error rate = in all the conducted tests together the cumulative Type I error should stay below 0,05. We should come out with a proper follow up test to neutralize and control such peril. We suggest to use Bonferroni method (Field, 2013) which is dividing the α -level by the number of comparisons k .

$$P(crit) = \frac{\alpha}{k}$$

As a price for this correction, we have to count with the fact that Bonferroni procedure can cause a loss of statistical power, after the application our F-test may have less power to detect the effects. The probability of committing Type II error increases. We still prefer to apply Bonferroni among the other post hoc tests because it is more robust as the repeated treatment levels increment.

The final manner how to crosscheck, if we have achieved any significant result is to test the statistical power of our test or in the other words the ability of the test to find the effect if it genuinely exists. It depends on the value of the effect size, the extent of the sample and on the chosen α -level. We would like to achieve the power equal or bigger than 0,8. It would mean that there is at least 80% chance of detecting the effect when it's really present. And (according to: statistical power = $1 - \beta$), only 20% chance of committing the Type II error - β , probability that given test will not find the existing effect. We also have to consider the fact that while using the Bonferroni post hoc test, the statistical power might suffer some harms as it was mentioned above. We simply need to stay aware of that.

10. Research Ethics

We were aspiring to present unique research that would bring authentic results. While interpreting the findings of the other authors we were paying special attention to offer objective and full information about the topic. As well, we were doing our best to cite the used resources in a precise manner according to APA, 6th edition requirements. We completed various procedures to support the credibility, objectivity and repeatability of our research plan. Our participants would be randomly chosen, based on the presence of the examined feature. Their anonymity will be guaranteed during the duration of the whole experiment, and as well after, while publishing the results. The participant's permission will be taken to publish the results. We believe that our experiment doesn't disturb the dignity and personal values of any of the participants. Also, there should be no open hazard in undergoing our suggested intervention. The only harm that can be caused is that the intervention method will not help to resolve the current internal conflict. Talking about the placebo group, receiving no effective intervention could become a risk in our ethics because we prevent one group of the participants (placebo) from getting the same possible advantages as the other two groups receiving the effective intervention. Such threat should be considered and discussed with each participant before the experiment starts. So, they could make a voluntary and independent decision about their participation.

Conclusion

The purpose of this work was to capture the complex nature of the internal conflict and its effects on behaviour. The content of the theoretical part aimed to determine what the other authors understand under the term of internal conflict and its categorisation. Three basic components of the conflict – emotions, cognition and behaviour, were described. Together with Lurija (1932) we incline to see the internal conflict as a destruction of the organisation of behaviour. Conflict produces involuntary emotions, thoughts and actions that must be included in the original direction of behaviour. It can be perceived as a threat that must be approached and assimilated in order to restore the original stability. Based on his research, Lurija (*ibid.*) suggested to employ an intellectual substitution which can be understood as a symbolical replacement or discharge of the accumulated emotional excitation. Because the direct attempts to control the conflict failed, it was suggested to use any symbolic system (such as speech) as a mean of organisation of behaviour. Since there was no further research done following this path, we decided to search in the field of emotion regulation, which we perceive being equivalent to the mentioned affect organisation process. We grabbed the observations of other authors in the terms of voluntary and involuntary regulation or in other words, explicit and implicit, since that was another important feature of our original source of inspiration - Lurija's outcomes. We encountered emotion regulation techniques such as Pennebaker's (2016) expressive writing and affect labeling (Kircanski, Lieberman & Craske, 2012). Both of them are dedicated in decomposing the complex emotional experiences and organizing it into understandable packages via verbalising them (as symbolical system). It is supposed to be a natural way how to gain the control over them, implicitly. In our experimental plan, we suggested to compare this technique with another emotion regulation technique – the re-appraisal (Gross, 1998), where the main goal is to explicitly/directly regulate and neutralize the emotions, similarly employing the process of verbalisation. Our research goal is to test which one of those techniques will be more effective in the overcoming of internal conflict, using the controlled experimental design. Deciding whether the implicit or the explicit emotion regulation method was more successful, we attempt to relate with the outcomes of mentioned Lurija's work (1932).

The main limits of our research plan are probably the construct operationalisation – the emotion regulation techniques used are not focused particularly on internal conflict resolution. However, we believe they might be effective in this field as well, since the emotions are the

core part of every conflict. Another limitation lies in the nature of the suggested trial. Participants will apply the techniques at their homes, where other uncontrolled variables may interfere.

If the hypothesis of implicit or indirect emotion regulation being more effective than the explicit one, won't be rejected, the further research should focus closely on the process of the symbol (intellectual substitution) production. To answer the questions why and how exactly such process works and how it can be induced in order to help the conflict resolution.

Bibliography

- Ellis, A., & MacLaren, C. (2005). Racionálně emoční behaviorální terapie. Praha: Portál.
- Erikson, E. (1999). Životní cyklus rozšířený a dokončený. Praha: Nakladatelství Lidové Noviny.
- Etkin A., Egner T., Peraza D.M., Kandel E.R., & Hirsch J. (2006). Resolving emotional conflict: a role for the rostral anterior cingulate cortex in modulating activity in the amygdala. *Neuron*, 51(6), 871–882. doi:[10.1016/j.neuron.2006.07.029](https://doi.org/10.1016/j.neuron.2006.07.029)
- Feixas, G., Varlotta, N. & Cipriano, D. (2007). Somatización y conflictos cognitivos: estudio exploratorio con una muestra clínica. *Revista Argentina de Clínica Psicológica*, 16(3), 197-203.
- Feixas, G., Melis, F., Varlotta, N. et al. (2011). Conflictos cognitivos (dilemas) en pacientes diagnosticados con trastorno de ansiedad. *Revista Argentina de Clínica Psicológica*, 20(1), 41-48.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford: Stanford University Press.
- Field, A. (2013). *Discovering Statistics Using IBM SPSS (4th ed.)*. London: Sage.
- Freud, S. (1988). *Mimo princip slasti a jiné práce z let 1920-1924: Třináctá kniha sebraných spisů*. Praha: Psychoanalytické nakladatelství.
- Freud, S. (1990). *Inhibitions, symptoms and anxiety* (Strachey, A., Trans.). New York: W.W. Norton & Company, Inc. (Original work published 1926).
- Gordon, T. (1999). Internal consistency and discriminial validity of the Luria-Nebraska neuropsychological battery III. *International Journal of Neuroscience*, 98(1/2), 141-152.

Gross (1998). Antecedent and response-focused emotion regulation: Divergent consequences for experience, expressions, and physiology. *Journal of Personality and Social Psychology*, 74(1), 224-237. doi:10.1037/0022-3514.74.1.224

Hendl, J. (2009). *Přehled statistických metod: Analýza a metaanalýza dat* (3rd ed.). Praha: Portál.

Higgins, E.T. et al (1986). Self-discrepancies and emotional vulnerability: how magnitude and accessibility of discrepancy influence affect. *Journal of Personality and Social Psychology*, 51(1), 5-15.

Higgins, E.T. (1987). Self-Discrepancy: A Theory Relating Self and Affect. *Psychological Review*, Vol. 94, issue 3, 319-340.

Hnilica, K. (2000). Konflikt hodnot a kvalita života. *Československá psychologie*, 44(5), 385-403.

Horney, K. (1996). *Our inner conflicts: A constructive theory of neurosis*. New York: W.W. Norton & Company.

Kast, V. (2018). *Crisis, Crisis Intervention and Posttraumatic growth*. Public lecture, C.G. Jung Institute, Zurich.

Kelly, G. A. (1991). *Psychology of Personal Constructs : Volume 1: Theory and personality*. London: Routledge.

Kircanski, K., Lieberman, M. D., & Craske, M. G. (2012). Feelings into words: Contributions of language to exposure therapy. *Psychological Science*, 23(10), 1086–1091. doi:10.1177/0956797612443830

Koole, S. L., & Rothermund, K. (2011). “I feel better but I don’t know why”: The psychology of implicit emotion regulation. *Cognition & Emotion*, 25(3), 389–399. doi:10.1080/02699931.2010.550505

- Lewin, K. (1935). *A dynamic theory of personality*. New York: McGraw-Hill book company.
- Lieberman, M.D. & Torre, J.B. (2018). Putting feelings into words: Affect labeling as implicit emotion regulation. *Emotion review*, 10(2), 116-124. doi: 10.1177/1754073917742706
- Lurija, A.R. (1932). *The nature of human conflicts*. New York: Grove Press, INC
- Miller, D.R., Swanson, G.E., (1960). *Inner conflict and defense*. New York: Shocken Books.
- Mowrer, O. H. (1960). *Learning theory and behavior*. New York: Ronald Press.
- Nakonečný, M. (1997). *Encyklopedie obecné psychologie*. Praha: Academie.
- Pennebaker (2016). *Opening up with writing it down* (3rd ed.). New York: The Guilford Press.
- Storolow, R. D. & Brandchaft, B. (1987). Developmental failure and psychic conflict. *Psychoanalytic Psychology*, 4(3), 241-253. doi: 10.1037/h0079136
- Vasiljuk F.J. (1988). *Psychologie prožívání: Analýza překonávání kritických situací*. Praha: Panorama.
- Vymětal, J. (1995): *Duševní krize a psychoterapie*. Hradec Králové: Konfrontace.
- Wood, A., Lupyan, G., & Niedenthal, P. (2016). Why do we need emotion words in the first place? Commentary on Lakoff (2015). *Emotion Review*, 8(3), 274–275. doi:10.1177/1754073915595103

