Choice of conflict resolution strategies in negative emotional states

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Abstract. The article presents the results of checking the hypothesis that the choice of conflict resolution strategy depends on the negative emotional states (anxiety, frustration, aggression, rigidity). The Rosenzweig Picture-Frustration test, «Anxiety. Frustration. Aggression. Rigidity (AFAR)» test, Thomas-Kilmann Conflict Mode Instrument (TKI) have been used for diagnosis of participants’ psychological features. Students of Ukrainian universities have formed the sample. Correlational analysis was performed (SPSS 17.0) to identify the associations between emotional states and behavioral reactions. An association has been established between the state of rigidity and the application of the competing strategy (negative), avoiding (positive); between the state of frustration and the frequency of application of competing (negative), accommodating (positive). The results showed that the possibility of implementing a strategy of avoiding in a state of rigidity is associated with unpreparedness for extrapunitive reaction and expectations that the situation will resolve itself (impaunitive reaction). Therefore, the connections between negative emotional states and the choice of poorly productive conflict resolution strategies may depend on protective mechanisms that are activated in a state of frustration.

1 Introduction

The situation of the COVID-19 pandemic (2020-2022) increases tension and anxiety of people, which is reflected in the high frequency of conflicts interactions. Both stress and frustration act on each other. Feeling stressed or tired in interactions can provoke frustration. Small failures can seem more frustrating, leading to further frustration. Thus, frustration is a complex composition of anger, disappointment, and annoyance [1]. Anger and frustration aren’t effective emotions, but people can’t control sometimes their fillings in public places, where they are the social objects. The effective social interaction presupposes the regulation of one's own state by the participants, and the prediction of the partner's behavior, and an adequate response to the actions of another. That is why, it is important to not only identify frustration, but also to learn how to struggle it.

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Frustration is an emotion that happens in situations in which someone is blocked from reaching an acceptable result [2]. When a man reaches his goal, he feels pleased but when a person prevented from reaching his goal, he may yield to frustration and feels irascible, dissatisfied and even angry [1, 3, 4]. Typically, frustration will take place when actions of a person are producing fewer results than he thinks they should. The more important is the goal, the greater is the frustration. In general, as a result is anger, burning out or loss of self-esteem and self-confidence, stress or depression. Frustration can be destructive when it results in anger, indignation, stress, irascibility and depression or when a person has a feeling of resignation or giving up [4].

There are internal and external sources of frustration. Internal frustration is connected with the reaction of an individual, with problems in fulfilling personal goals and desires; when a person is dissatisfied with the way he or she reacted in a situation or when a man cannot have everything what he wants [3]. Internal sources of frustration arise as a result of real or imagined gaps, connected with lack of self-confidence or fear of social contacts. In addition, conflicts can be an internal source of frustration. For example, when a person has competing desires that disturb with one another, it can cause internal problems. External frustration is the second type of frustration which is connected with outside things that cause frustration like other people behavior, social requirements, norms [3, 5, 6].

The frustration of participants in social interaction very often becomes the cause of the development of a conflict situation. Conflict is the highest degree of development of contradictions in human relations, social groups and society as a whole. It is a difficult contradiction between people, which is associated with acute emotional experiences. The conflict is characterized by confrontation, which aims to eliminate these contradictions. The involvement in interpersonal conflicts has a negative effect on the emotional state of a person but chronic conflict situations or frustration have the most negative influence on people’s well-being. Unresolved needs, desires and frustration can cause great emotional unhappiness [6, 7].

Such scientists as T.M. Oguegbe, L.N. Ezeh, and S.E. Iloke tested the relationship between innovative behavior, conflicts connected with work, family life and organizational frustration in a sample of workers drawn in Nigeria [8]. I. Fykaris, M. Rantzou, V. Matiaki and S. Karolidou investigated prevention and control of intrapersonal and interpersonal conflicts at school, which can cause frustration of hopes in youth [9]. A. Mairaj and D.A. Siddiqui revealed the relationship between such conflict resolution strategies as accommodating, avoiding, compromising, collaborating and competing with frustration at work and organizational citizenship behavior with the role of emotional intelligence on their relations [10]. B. Ogungbamila explored which relational conflict resolution strategy usually employed by heads to solve work conflicts, best cut the level of frustration at work [11]. By the use of Rosenzweig Picture-Frustration Study, G.-M. Dragomir, L.L. Todorescu and A. Greculescu revealed the way adolescents’ frustration tolerance varies under the influence of violence-based movies [12].

2 The aim

The aim of the work was to determine the association between negative emotional states and personal conflict resolution strategies. The article presents the hypothesis that the choice of conflict resolution strategy depends on the emotional state that dominates in the process of interpersonal interaction.
3 Materials and methods

The research question is relevant to this research project: Is there any association between negative emotional states and conflict resolution strategies? This information may be useful for participants of interactions in public place, where conflict situations have often arisen.

As a response, the following is hypothesized for the current study:

H1: The negative emotional states severity indices (anxiety, frustration, aggression, rigidity) have a negative association with frequency of using constructive conflict resolution strategies.

H2: There are the associations between negative emotional states and type of reaction on danger.

A correlational design was used to check these hypotheses. This type of study assumes the sampling one group, homogeneous in composition. The subjects of this sample fill out the psychodiagnostic methods at the same time to control «the effect of environmental context». The important demand of this design is the same controlled conditions for all participants. Under the quarantine conditions caused by the COVID-19 pandemic, the study was conducted during a week (October 2021) in an online format. Correlational analysis was performed in SPSS 17.0.

The predominant emotional states were diagnosed with a questionnaire «Anxiety. Aggression. Rigidity (AFAR)» that determined 4 negative emotional states [13]. The AFAR method measures four components: 1) anxiety (as a tendency to experience anxiety and a sense of failure); 2) frustration (vulnerability to stress factors); 3) aggressiveness (tendency to aggressive reactions to life's difficulties); and 4) rigidity (inability to restructure one's own behavior). These states are defined by psychologists as negative feelings, because they reduce the productivity of activity, block the expression of creativity, spontaneity in the personal self-realization [1, 2]. The questionnaire consists of 40 questions, 10 items for each mental state. The maximum number of points on each scale is 20. Values of 16 points or more are considered high and indicate a pronounced negative personality state.

The Rosenzweig picture frustration test [14] was used to determine the mechanisms for overcoming frustrating situations (obstacles and accusations), which often occur in public place interactions. The Rosenzweig test consists of 24 cartoon pictures, each of them portraying two persons in a complex situation of personal interaction. Each picture contains two "speech balloons," a filled one for the "frustrator" or antagonist, and a blank one for the frustrated person, or protagonist. The subject need fill in the blank balloon with their response to the situation. The verbal responses are scored in relation to a number of psychological defense mechanisms. This methodology is a projective technique [15]. In this study, we have interpreted only the secondary indices, such as reaction direction (extrapunitive (E), intropunitive (I), impaunitive (M)) and reaction type («obstacle-dominated» responses (OD), «ego-defensive» responses (ED), «need-persistent» responses (NP)).

The basis of psychological research was a Thomas-Kilmann Conflict Mode Instrument (TKI) in adaptation of N. Grishina [14] that identifies the frequency of using conflict resolution strategies (competing, collaborating, compromising, avoiding, accommodating). These strategies have differences in two main dimensions: assertiveness and cooperativeness.

Students from different universities of Kyiv (Ukraine) agreed to participate in the study. The majority of them were from Kyiv National Economic University named after Vadym Hetman. The inclusion criteria for participants were age (16+ years old) and being a student. To consider the heterogeneity of the population of students, we tried to apply a maximum variation sampling strategy regarding age, gender, year of study, and field of
study. At the same time, we needed to form a homogeneous sample in composition. Therefore, we tried to include students in the sample in approximately the same proportion for each criterion. We paid the main attention to balancing the number of students by field of study. The study involved students of such special fields: economics (22.5%), psychology (27.5%), management (17.5%), philology (15%), and IT-technologies (17.5%).

4 Results

The results of correlational analysis, presented in the Table 1, show that only certain emotional states are associated with the choice of behavioral strategies. For example, no significant correlations have been established between negative emotional states and constructive collaborative and compromising strategies.

Therefore, they are not an obstacle to choosing and implementing a constructive conflict resolution strategy. Assume that the use of constructive strategies is more related to the acquired skills and knowledge than to the emotional background in which the person is.

It should also be noted that we did not receive indicators of the relationship between strategies and states of anxiety and aggression. This is also an interesting fact that needs to be understood and interpreted.

<table>
<thead>
<tr>
<th>The conflict resolution strategy</th>
<th>Emotional state</th>
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<tbody>
<tr>
<td></td>
<td>Anxiety</td>
</tr>
<tr>
<td>1. Competing</td>
<td>-.23</td>
</tr>
<tr>
<td>2. Collaborating</td>
<td>.07</td>
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<tr>
<td>3. Compromising</td>
<td>-.15</td>
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<tr>
<td>4. Avoiding</td>
<td>.24</td>
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<tr>
<td>5. Accommodating</td>
<td>.07</td>
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Note. * indicates p< .05; ** indicates p< .01.

In a state of frustration, when a person experiences real or conditional failure, inability to achieve a goal or meet an important need, he (she) needs time and effort to rebuild motives (rejection of unattainable, change priorities, agree with each other), restore emotional stability, adapt to existing conditions. This condition can range from weak feelings of confusion and helplessness to strong emotions of anger and disgust. Frustration becomes a favorable background for the activation of the accommodating strategy (p≤.017), but hinders the implementation of the competing strategy (p≤.005). Thus, the person does not deal with the conflict. Avoiding might take the form of postponing an issue until a better time or simply withdrawing from a threatening situation. The emotional state of rigidity blocks the ability to be active in achieving their own goals, so a person rarely uses the strategy of competing (p≤.011). We consider that rigidity prevents individuals from showing assertiveness (insisting on their ideas, strengthening the arguments of their position, showing imposing or dictating own decision). Why so? Because effective competing requires flexible regulation of one’s condition and entering the metacognitive sphere of
control of one’s behavior: strengthening one’s strengths, compensating for one’s weaknesses. Also competing requires a high enough level of energy, a sufficient level of mental arousal.

To better understand the mechanisms of actualization of these negative emotional states, we conducted a correlational analysis between indicators of emotional states and indicators of reactions to a frustrating situation ("obstacle" and "accusation"). Table 2 presents the results of the correlational analysis conducted between the indicators of the dominance of negative emotional states and indicators of the direction of reactions during frustration, which were diagnosed by the Rosenzweig Picture-Frustration test.

**Table 2. Correlation between the emotional states and the type of reaction in the Rosenzweig Picture-Frustration test**

<table>
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<tr>
<th>The type of reaction</th>
<th>Emotional state</th>
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<tbody>
<tr>
<td></td>
<td>Anxiety</td>
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<tr>
<td>E (extrapunitive reactions)</td>
<td>-.38*</td>
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<tr>
<td>I (intropunitive reactions)</td>
<td>.06</td>
</tr>
<tr>
<td>M (impunitive reactions)</td>
<td>.35*</td>
</tr>
<tr>
<td>OD («obstacle-dominated» responses)</td>
<td>.17</td>
</tr>
<tr>
<td>ED («ego-defensive» responses)</td>
<td>-.14</td>
</tr>
<tr>
<td>NP («need-persistent» responses)</td>
<td>-.18</td>
</tr>
</tbody>
</table>

Note. * indicates p< .05; ** indicates p< .01.

In the Rosenzweig Picture-Frustration test, the frustration is a state of tension, confusion, anger and anxiety, caused by dissatisfaction with needs, obstacles on the way to an important goal. According to L. Berkowitz’s cognitive-neoassociationistic model of angry, negative emotional conditions tend to activate ideas, memories, and expressive-motor reactions associated with anger or aggression. The level of these experiences can be intensified by subsequent cognitions involving attributions, assessments, and schematic conceptions. On the other hand, these thoughts can «suppress, enrich, or differentiate the initial reactions» [16]. In other words, the level of frustration can be regulated by various means, which avoids strong negative feelings, especially anger and aggression. «Frustrations produce aggressive inclinations only to the extent that they are aversive and give rise to negative affects» [17].

The evidence suggests that negative emotional states are not related to self-directed reactions (intropunitive reactions). It can be assumed that such forms of response are associated with deeper dispositions (locus of attributive control, level of self-esteem, level of integration of self-concept, etc.) and with formed adaptation strategies that determine the general level of activity – passivity in complex situations, general orientation of reactions to oneself – to the environment, to interference or expectations [18].

The results show that in a state of anxiety, rigidity or frustration, people are so focused on their own emotions that they do not pay attention to the situation. Their activity in analyzing the causes of frustration is reduced, the participation and influence on the situation of others is not analyzed. In addition, we can predict, that people do not aware the contradictions in different cognitive evaluations of the situation, underestimate probability of negative consequences its development.

Thus, the number of extrapunitive reactions is significantly reduced in the state of anxiety (p≤.016), rigidity (p≤.018) and experiencing frustration (p≤.014). However, in a
state of anxiety and rigidity in individuals, the mechanisms that provoke impunitive reactions are activated, namely: devaluation of the importance of the situation, passive expectation of change. There were found significant correlations between the frequency of impunitive reactions and the level of dominance of anxiety (p≤.029) and rigidity (p≤.044).

The study found that negative emotional states are related to the type of reaction to a frustrating situation, namely: the more pronounced the state of frustration is, the less the person pays attention to self-defense (p≤.043); the more pronounced the state of aggression is, the less a person pays attention to the analysis of complications, fixes attention on obstacles (p≤.012).

Frustration may reduce a person's ability to maintain their positive "Self-concept", to protect themselves from guilt, because often experiencing frustration is accompanied by loss of control over events, experiencing their own helplessness, inability to influence the events of his life. Aggression is experienced as contact emotion, direction of dissatisfaction and anger at others, at oneself, not at circumstances. Berkowitz wrote about this that situations that provoke aggression cause hostility (anger) rather than instrumental aggression [17]. Fixation on an obstacle and search of means of their overcoming are displays of instrumental aggression, and hostility activates mechanisms of emotional discharge, decrease in level of physiological excitement. Thus, it is more important for a person who experiences aggression to normalize their inner emotional state than to achieve the goal.

5 Discussion

Our study revealed that the frequency of using of constructive conflict resolution strategies (collaborating and compromising) did not relate with the emotional states in which a person remained. We suggested that these indicators were more related to personal characteristics and learning technologies. In the research which was made by A. Zhmai and O. Konoplia, the scientists revealed that the choice of strategy of collaborating depended on the level of emotional intelligence of the personality, on the ability of personality to understand own emotions and partner’s experience, to manage own emotional state [19]. In Y. Biliak’s literary analysis, the author emphasized that J. Scott was one of the first to link the choice of optimal behavior strategy in a conflict situation with the established mechanisms of emotional control [20]. These mechanisms are aimed at blocking of irrational impulsive urges. It is interesting to note that modern investigations suggest changing the attitude to emotions that arise during the conflict. These emotions not only accompany conflict interaction (an inert byproduct of conflict), they are instrumental in recruiting control [21]. O. Savchenko’s study showed that the focus on emotions is an important metacognitive strategy that regulates the cognitive activity of the personality [22]. T. Kovalkova and T. Malkova noted that negative emotions are the important predictors of work overload and a lack of ability to cope with emotional stress can cause burnout syndrome [23]. Thus, we cannot talk about the negative impact of emotions, or about the negative emotional states of the personality. All emotions (anger, anxiety, frustration) can have a positive effect on human productivity, if a person is able to understand and use this information, to control the course of these emotions. In a research carried by E.J. Jung and S. Lee was also found a positive impact of conflict (state of frustration within a conflictual relationship situation) on human productivity, as it promotes their creativity through the mediation of cognitive persistence [24].

Researchers N. Chistyakova ta P. Frolova showed that in the period of COVID-19, the relationship between the internal orientation of the locus of personality control and the choice of competing strategy in a conflict situation was identified [25]. The scientists explained this connection by the development of intrapersonal conflicts and the reduction
of the adaptive and resource potential of the personality in a situation of real and potential health threats. Also, O. Chepur’s study revealed the dependence of the choice of conflict resolution strategies on the position held by a person in the organization [26]. The research on inquirers has shown that senior inquirers are more inclined to use compromising and avoiding strategies of conflict resolution, but simple inquirers are more likely to use competing in conflicts with subordinates.

C. Ellegaard and P.H. Andersen proposed an interesting explanation of the relationship between rigidity experience and frequency of use of avoiding as a conflict resolution strategy. Researchers have proved that the first reaction of participants to a conflict situation is "a vacuum stage characterized by avoidance", only in the case of enhanced communication between the two parties, discussion of requirements and requests, becomes possible full awareness of the conflict, choice of an adequate way of conflict resolution [27]. It should also be noted that Z. Winstok and Z. Eisikovits curiously interpreted the lack of a direct link between the level of aggression of the parties of the conflict and the form of behavior. Researchers have suggested that aggression is not a reaction to the conflict itself, but to its escalation. Thus, when person has control the level of tension in a conflict situation, the level of aggression does not affect the choice of strategy [28]. We can conclude that the choice of conflict resolution strategies more relates not by the emotional states of a person, but the ability to control these states, using their benefits to regulate their own activities.

It was shown that the encouraging of person innovative growth among employees and implement these principles in their recruitment policy of organization lead to reduce levels of organizational frustration and work-family conflict [29]. It proves that there is a significant relationship between the level of employees’ frustration and their productivity. In addition, it was found that the level of frustration has determined the strength of the work-family conflict.

In study of R.E. Sutton [7], it was demonstrated that many intrusive thoughts have emerged in situation of the anger and frustration experiencing (violation of rules, uncooperating, misbehavior etc.). It is the indicator of losing the person’s ability to use coping strategies. As a result, negative emotions have been lasting during a long time. This data is consistent with the results of our study: in a situation of frustration, people rarely use «ego-defensive» strategies; they lose the opportunities to protect themselves, to transfer responsibility to others. In the study, conducted by K.S. Strunk, S. Faltermaier, A. Ihl, and M. Fielder, we found one of the explanations why people’s ability to protect themselves decreases in a situation of frustration. The authors proved that frustration has strengthened from the person’s inability to disconnect from work. "Thus, workers’ inability to disconnect from work can lure them into excessive availability for taking on additional tasks" [30]. People can separate main and subordinate tasks, set time limits for task performing and regulate the measure of their involvement in the problem.

The extrapunitive reactions, according to V. Sobkin and T. Lyikova, characterize "hostility towards others" [31]. This type of reaction correlates with such personal characteristics as suspiciousness and emotional coldness. The result of this study is consistent with our outcomes: there are the significant negative correlations between the level of negative emotional states and the percentage of extrapunitive reactions in a situation of frustration. Another type of reaction is determined by focusing on "self-accusation". This type of reaction has associations with the level of emotional sensitivity (empathy) and the ability to self-reflection. Such correlations, according to the authors, can explain the frequent activation of the manipulative strategy in a situation of conflict interaction. We did not identify any significant associations between level of negative emotional states and the frequency of intropunitive reactions use in situations with "obstacle" and "accusation".
6 Conclusions

The assumption that negative emotional states block the ability to use constructive conflict resolution strategies has not been confirmed, as we have not obtained significant correlations between frequency using constructive conflict resolution strategies (collaborating, compromising) and predominant negative states (anxiety, frustration, aggression, rigidity). Thus, using constructive strategies depends on other psychological characteristics of the individual, certain objective conditions. However, an association has been established between the state of rigidity and the application of the strategy of competing (negative), avoiding (positive); between the state of frustration and the frequency of application of competing (negative), accommodating (positive). A deeper analysis of the internal mechanisms of behavior in frustrating situations revealed that the possibility of implementing a strategy of avoiding in a state of rigidity is associated with unpreparedness for extrapunitive type of reaction and expectations that the situation will resolve itself (impunitive reactions on frustration). The use of the strategy of accommodating in the state of frustration is explained by the fact that students are not ready to transfer responsibility to others (extrapunitive type of reaction) in this state and with low willingness to defend themselves, assert their position (low level of "ego-defensive" responses). In a state of anxiety, young people are not ready to apply constructive strategies for resolving the conflict, as they expect positive changes without their intervention (predominant impunitive type of reaction). In a state of aggression, person more often activates actions aimed at expressing anger and irritation, than overcoming obstacles (low level of "obstacle-dominated" responses). Thus, the state of aggression blocks the manifestations of instrumental activity of the individual. The obtained results can be used in socio-psychological expertise, since they provide information about the state of social objects and the characteristics of their behavior, based on which it is possible to make predictions about changes in the interaction of participants, to develop recommendations for improving various forms of interaction.

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Compliance with ethical standards

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Informed consent: Informed consent was obtained from all individual participants included in the study.

Data availability

The authors confirm that all data generated or analyzed during this study are included in this published article. Furthermore, primary and secondary sources and data supporting the findings of this study were all publicly available at the time of submission.