Соціальне уникнення як патогенетичний зв'язок між соціальним тривожним розладом і посттравматичним досвідом

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Соціальне уникнення у концепції «уникнення коригуючого емоційного досвіду» розглядається як один із патогенетичних факторів, що впливає на перебіг і розвиток психічних розладів і посилює дистрес.

Ми провели огляд досліджень, які вивчали роль соціального уникнення у патогенезі соціального тривожного розладу серед осіб з посттравматичним досвідом або без нього. Критеріями включення були: 1) у суб'єктів діагностовано соціальний тривожний розлад; 2) соціальний тривожний розлад та/або посттравматичний стрес були в центрі уваги дослідження; 3) було проведено певне оцінювання чи огляд впливу соціального уникнення; 4) суб›єктами були підлітки або дорослі.

Дослідження ролі уникнення соціальних подій як травматичного тригера та пов'язаних із ним соціально значущих факторів (стигма, дискримінація, життя в умовах постійного ризику тощо) вказує на кореляцію між патогенезом соціальної фобії та коморбідними симптомами посттравматичного дистресу. Управління стратегіями соціального уникнення та прийняття свідомого досвіду соціальної взаємодії передбачає готовність людини гнучко реагувати, залишатися в контакті зі своїми емоціями та думками, не витрачати внутрішні ресурси на позбавлення від внутрішніх проблем. На нашу думку, це сприятиме зниженню сприйняття соціальних подій як травматичного (ретравматичного) фактора, зменшенню клінічно значущих проявів соціальної тривожності та запобіганню розвитку посттравматичного дистресу. Обговорюються обмеження та наслідки цих висновків для психологічної підтримки та модифікації психотерапевтичних втручань соціального тривожного розладу.

Ключові слова: соціофобія, соціальна тривожність, соціальний тривожний розлад, посттравматичний стресовий розлад, посттравматичний стресовий розлад, соціальне уникнення, уникнення досвіду, соціальна взаємодія.

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Social avoidance as a pathogenetic link between social anxiety disorder and post-traumatic experience

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Social avoidance in the concept of "avoidance of corrective emotional experience" is regarded as one of the pathogenetic factors that affect the course and development of mental disorders and increase distress.

We conducted a review of studies that studied the role of social avoidance in social anxiety disorder among individuals with or without post-traumatic experience. Inclusion criteria were: 1) subjects were diagnosed with social anxiety disorder; 2) social anxiety disorder and/or post-traumatic stress was a focus of the study; 3) some assessment or review impact of social avoidance was made; 4) subjects were adolescents or adults.

The study of the role of avoiding social events as a traumatic trigger and related socially significant factors (stigma, discrimination, living at constant risk, etc.) indicates a correlation between the pathogenesis of social phobia and comorbid symptoms of post-traumatic distress. Managing social avoidance strategies and accepting the conscious experience of social interaction presupposes a person's readiness to react flexibly, stay in contact with their emotions and thoughts, and not spend internal resources to get rid of the inner concerns. In our opinion, this will help reduce the perception of social events as a traumatic (retraumatic) factor, reduce clinically significant manifestations of social anxiety and prevent the development of post-traumatic distress. Limitations and implications of these findings for the psychological support and modifying psychotherapeutic interventions of social anxiety disorder are discussed.

Keywords: social phobia, social anxiety, social anxiety disorder, posttraumatic stress disorder, PTSD, social avoidance, experiential avoidance, social interaction.

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Introduction

Life experiences of people who have suffered traumatic events are often associated with mental disorders and psychological well-being disturbances. Individuals who have experienced military action or being in a zone of military conflict may tend to experience psychological difficulties for a long time after wartime. The loss or restriction of habitual social relationships and cultural traditions that could provide adaptation and recovery increases the risk of various psychological problems, including post-traumatic stress disorder (hereinafter – PTSD) [1]. Despite the fact that a large number of studies have already been published on the post-traumatic experience of mastering life events and the development and course of post-traumatic stress disorder and its comorbidities, these issues remain relevant. The relevance of shifting the focus from post-traumatic experience in times of military conflict to socio-traumatic events (including the experience of unforeseen loss of a loved one, violence, terrorism or genocide, etc.) adds to the relevance. We want to highlight the impact of the social "experiential" aspect of interaction on people's mental health and psychological well-being with traumatic experiences. Avoiding a traumatic experience can be seen as an adaptive response immediately after the onset of a "traumatic" event. At the same time, most publications suggest considering the problem of avoidance as a pathogenetic mechanism that prevents recovery after the trauma. It is expected to complicate building resourceful social relations related to secure attachment, unconditional acceptance, and higher quality of life.

Scientific sources point to evidence that experience avoidance is an essential element in the pathogenesis of anxiety disorders, mood disorders, and general distress associated with traumatic experiences [2-5]. Individuals with anxiety disorders who avoid corrective experiences and / or suppress emotions need longer to recover from unpleasant stimuli or the effects of their impact [6, 7]. A preliminary review by Collimore and colleagues in 2010 summarized the availability of scientific data on the overlap of genetic vulnerabilities and environmental conditions as factors that increase susceptibility to social interaction distress and, accordingly, the risk of social phobia and PTSD [8]. Thus, the traumatic experience can determine the prevalence of these disorders and their comorbidity as a complex factor. It combines a direct response to the traumatic content of the situation and fear of social consequences. Summarizing the results of the various studies, among individuals with a history of traumatic experience, the prevalence of social anxiety disorder may relate to a tendency of avoiding anything associated with a traumatic event or situation, rather than typical negative beliefs about others' judgment.

The current version of the manual for diagnosing mental disorders DSM-5 states that "trauma" is an etiological phenomenon resulting from the impact of an event in which there is an imminent threat of actual death, serious injury, or sexual violence [9]. In addition, clarification (presented in the DSM-5) that the experience of a traumatic event or situation may be considered a key criterion when a person is not directly threatened. Sometimes it is difficult to distinguish objective characteristics of traumatic stress, events, or typical beliefs that might be useful for differential diagnosis in a patient's life history [10-12]. R.J. Pinto and colleagues suggest that the perceived threat may be a much more likely causal factor in the development of PTSD than a predetermined list of "traumatic" events [13]. Perhaps, experiencing the repetitive or unpleasant details associated with a traumatic event is often devalued or understated among practitioners, especially in cases of sexual violence or constant harassment, when the fact of threat to life is not confirmed.

Our study aims to conduct a generalized review of scientific sources on social avoidance in the context of comorbid social anxiety disorder of persons with psychotraumatic experience. We assume that social avoidance and its degree increase the risk of developing PTSD and are associated with a predisposition to social anxiety disorder (hereinafter - social phobia or SAD).

METHODS

Studies were identified through the electronic database PubMed from January 1, 2000, to August 1, 2021 (the results of the selection process shown in Figure 1). We searched for the following terms: ("social avoidance" OR "experiential avoidance") AND ("social phobia"

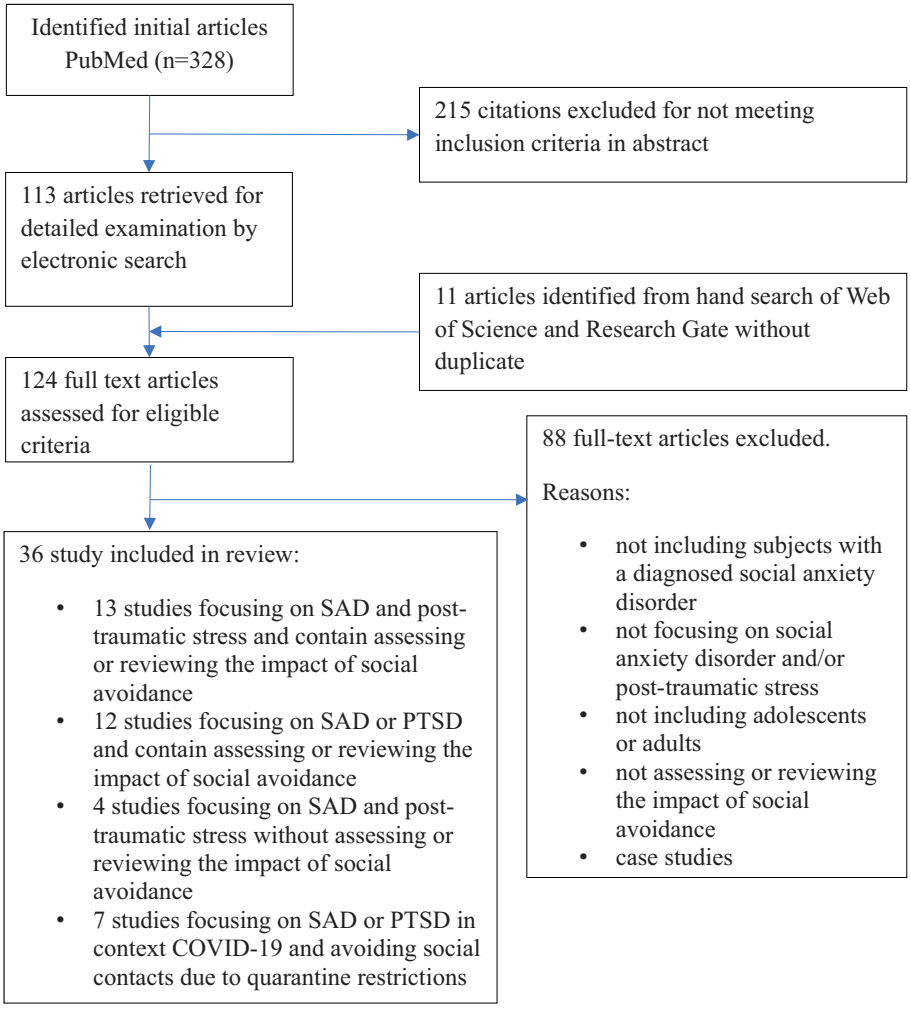

Fig. 1: Flowchart of study selection

OR "social anxiety disorder") AND ("PTSD" OR "post-traumatic stress*") in August 2021. Additionally, using Web of Science and Research Gate, we reviewed articles that had cited publications from the database search. After that, we reviewed the reference lists of all publications meeting the criteria. We applied these search strategies to titles and abstracts, restricting them to those published in English. We included studies where: 1) subjects were diagnosed with social anxiety disorder; 2) social anxiety disorder and/or post-traumatic stress was a focus of the study; 3) some assessment or review impact of social avoidance was made; 4) subjects were adolescents or adults. We operationalized "social avoidance" to include experiential emotional avoidance, avoidance behaviors, and avoidance social interaction by shame and/or guilt. We also introduced "focus of the study" to be mentioning social anxiety disorder, social phobia, post-traumatic stress disorder, post-traumatic stress, social trauma or trauma-related shame and guilt in the article title or abstract. "Avoidance social interaction by shame and/or guilt" and "trauma-related shame and guilt" were included because shame and guilt are traits that reflect individual differences in cognitive, affective, and behavioral responses to interpersonal interaction and regarding others' evaluations, and associated with experiential emotional avoidance [14, 15].

This review included original research studies; reviews and case studies were excluded (Table 1). All studies were screened by two reviewers independently and confirmed that all studies met the inclusion criteria. The last reviewer studied any disagreements and formed the final list of the included studies.

Table 1

Characteristics of studies included

Authors/Year	Study setting and design	N	Mean age	% female	Sample characteristic	Clinical status	Type of anxiety symptoms	Circumstances of the trauma anamnesis	Assessment or review impact of social (experiential) avoidance	Assessment method	Co-occurrence
1	2	3	4	5	6	7	8	9	10	11	12
Kashdan TB, Julian T, Merritt K, Uswatte G (2006)	Cross-sectional	77	54-55	-	Outpatients, residential inpatients and veterans	Clinical / non-clinical	PTSD, SAD	War-related trauma	Subscale in social anxiety disorder and PTSD scores	Mixed (interview and questionnaire)	-
Kashdan TB, Morina N, Priebe S. (2009)	Cross-sectional	174	-	-	Survivors of the war	Clinical / non-clinical	PTSD, SAD	War-related trauma, including refugees during the war, being internally displaced	Subscale in social anxiety disorder and PTSD scores	Mixed (interview and questionnaire)	MDD
Hofmann SG, Litz BT, Weathers FW (2003)	Cross-sectional	82	49-52	-	Combat veterans	Clinical / non-clinical	PTSD, SAD	War-related trauma	Subscale in social anxiety disorder and PTSD scores	Mixed (interview and questionnaire)	MDD
Knowles KA, Sripada RK, Defever M, Rauch SAM (2019)	Cross-sectional	2,151	30-62	7,6	Outpatients, residential inpatients and veterans	Clinical / non-clinical	PTSD, SAD, OCD, GAD, Panic disorder	War-related trauma	Subscale in social anxiety disorder and PTSD scores	Questionnaire survey	MDD
McMillan KA, Sareen J, Asmundson GJG (2014)	Cross-sectional	1,715	above 18 and older	72,7	Nationally Representative Sample	Non-clinical	PTSD, SAD, OCD, GAD, Panic disorder	-	-	Interview survey	Mood disorder, substance use disorders
McMillan KA, Asmundson G. (2016)	Cross-sectional	1,715	above 18 and older	72,7	Nationally Representative Sample	Non-clinical	PTSD, SAD, OCD, GAD, Panic disorder	War-related trauma, assaultive violence, other shocking event (serious/life-threatening accident, illness etc.), unexpected death someone close, childhood maltreatment	-	Interview survey	-
McMillan KA, Asmundson G, Sareen J. (2017)	Cross-sectional	1,715	above 18 and older	72,7	Nationally Representative Sample	Non-clinical	PTSD, SAD, OCD, GAD, Panic disorder	-	-	Interview survey	Lifetime suicide attempts
Kvedaraite M, Zelviene P, Elklit A, Kazlauskas E. (2020)	Cross-sectional	590	19-20	67,7	Youth sample	Non-clinical	PTSD, SAD	Life-time trauma exposure, childhood traumatic experiences, distressing social events	Subscale in social anxiety disorder and PTSD scores	Questionnaire survey	-
Gren-Landell M, Aho N, Carlsson E, Jones A, Svedin CG. (2013)	Cross-sectional	5960	16-20	49,6	Youth sample	Non-clinical	PTSD, SAD	Lifetime victimization	Subscale in social anxiety disorder and PTSD scores	Questionnaire survey	-

Continuation of the table

1	2	3	4	5	6	7	8	9	10	11	12
Rabinak CA, Mori S, Lyons M, Milad MR, Phan KL. (2017)	Experimental	44	-	-	Youth sample	Clinical / non-clinical	PTSD, SAD	-	Subscale in social anxiety disorder and PTSD scores	Questionnaire survey	Rate of depression
Bandelow B, Charimo Torrente A, Wedekind D, Broocks A, Hajak G, Rüther E. (2004)	Cross-sectional	170	-	-	Youth sample	Clinical / non-clinical	SAD	Early traumatic experience, including separation from parents, parents' marital discord, sexual abuse, familial violence, childhood illness, and other factors	-	Interview survey	-
Carleton RN, Peluso DL, Collimore KC, Asmundson GJ. (2011)	Cross-sectional	601	18-55	64	General sample	Non-clinical	PTSD, SAD	Social traumatic events and other traumatic events (e.g., natural disaster, motor vehicle accident, sexual assault)	Subscale in social anxiety disorder and PTSD scores	Questionnaire survey	-
Erwin BA, Heimberg RG, Marx BP, Franklin ME. (2006)	Cross-sectional	45	above the age of 18	84,1	General sample	Non-clinical	SAD, PTSD-like symptom	Social traumatic events	Subscale in social anxiety disorder and PTSD scores	Mixed (interview and questionnaire)	-
Bjornsson AS, Hardarson JP, Valdimarsdottir AG, et al. (2020)	Cross-sectional	139	29-31	33,1	Outpatients, residential inpatients sample	Clinical / non-clinical	PTSD, SAD, OCD, GAD, Panic disorder	Social traumatic events and other life-threated traumatic events	Subscale in social anxiety disorder and PTSD scores	Mixed (interview and questionnaire)	Mood disorder, substance use disorders
Gray E, Beierl ET, Clark DM. (2019)	Cross-sectional	164	22–52	57,6	General sample	Clinical / non-clinical	PTSD, SAD	-	Subscale in social anxiety disorder and PTSD scores	Questionnaire survey	Rate of depression
Cheng Q, Shi C, Yan C, Ren Z, et al. (2021)	Cross-sectional	233	14-16	42,06	Youth sample	Non-clinical	Social anxiety symptoms	-	Separate subscores	Questionnaire survey	-
Im S, Kahler J. (2020)	Cross-sectional	266	18-56	77,8	General sample	Non-clinical	SAD, GAD, Panic disorder, Specific phobia	-	Separate subscores	Questionnaire survey	MDD
Mahaffey BL, Wheaton MG, Fabricant LE, Berman NC, Abramowitz JS. (2013)	Cross-sectional	406	20,1	66,3	General sample	Non-clinical	Social anxiety symptoms	-	Separate subscores	Questionnaire survey	Rate of depression, anxiety and distress
Spinhoven P, Drost J, de Rooij M, van Hemert AM, Penninx BW. (2014)	Longitudinal study, Cross-sectional	2981	18-65	66,8	Outpatients, residential inpatients sample	Clinical / non-clinical	SAD, GAD, Panic disorder with or without agoraphobia	-	Separate subscores	Mixed (interview and questionnaire)	MDD, dysthymia
Asher M, Hofmann SG, Aderka IM. (2021)	Cross-sectional	164	24-26	50	General sample	Clinical / non-clinical	SAD	-	Separate subscores	Mixed (interview and questionnaire)	MDD

Continuation of the table

1	2	3	4	5	6	7	8	9	10	11	12
Kashdan TB, Goodman FR, Machell KA, et al. (2014)	Cross-sectional	84	28,3	61,9	General sample	Clinical / non-clinical	SAD	-	Separate subscores	Interview survey	-
Sarfan LD, Cody MW, Clerkin EM. 2019	Cross-sectional	88	19,5	61,4	General sample	Non-clinical	Social anxiety symptoms	-	Separate subscores	Questionnaire survey	-
Henschel AV, Williams JL, Hardt MM. (2020)	Cross-sectional	170	18-54	79	General sample	Non-clinical	PTSD	Life-time trauma exposure, sudden loss, or witnessing someone being physically attacked (injured) or killed, and witnessing someone attempt to or actually sexually assault someone else	Separate subscores	Questionnaire survey	-
Plumb JC, Orsillo SM, Luterek JA. (2004)	Cross-sectional	160	18-39	66,9	General sample	Non-clinical	PTSD-like symptom	Life-threatening events	Separate subscores	Questionnaire survey	Rate of depression
Reddy MK, Pickett SM, Orcutt H. (2006)	Cross-sectional	987	under the age of 22	47,5	General sample	Non-clinical	Non-specific anxiety symptoms	Psychological and sexual abuse	Separate subscores	Questionnaire survey	Rate of depression, anxiety and distress
Kelly MM, DeBeer BB, Meyer EC, Kimbrel NA, Gulliver SB, Morissette SB. (2019)	Longitudinal study, Cross-sectional	145	37,8	14,6	Combat veterans	Clinical / non-clinical	PTSD	War-related trauma	Separate subscores	Mixed (interview and questionnaire)	-
Leonard KA, Ellis RA, Orcutt HK. (2020)	Cross-sectional	326	19,3	31,2	General sample	Non-clinical	PTSD	Life-time trauma exposure, childhood traumatic experiences	Separate subscores	Questionnaire survey	-
Krans J, Peeters M, Näring G, Brown AD, de Bree J, van Minnen A. (2017)	Cross-sectional	63	32-39	61,9	General sample	Clinical / non-clinical	PTSD, SAD	Life-threatening events	Subscale in social anxiety disorder and PTSD scores	Mixed (interview and questionnaire)	-
Zayfert C, DeViva JC, Hofmann SG. (2005)	Cross-sectional	443	38,1	75	Outpatients, residential inpatients sample	Clinical / non-clinical	PTSD, SAD	Life-time trauma exposure, childhood traumatic experiences, including physical or sexual abuse in childhood	-	Mixed (interview and questionnaire)	Rate of depression
Tang W, Hu T, Hu B, et al. (2020)	Cross-sectional	2485	16-27	61,3	General sample	Non-clinical	PTSD	Exposure to COVID-19	Avoiding social contacts due to quarantine restrictions	Questionnaire survey	Rate of depression
Magson NR, Freeman J, Rapee RM, Richardson CE, Oar EL, Fardouly J. (2021)	Cross-sectional	467	13-16	26,9	General sample	Non-clinical	Non-specific anxiety symptoms	Exposure to COVID-19, media exposure	Avoiding social contacts due to quarantine restrictions and disfunction social connectedness	Questionnaire survey	Rate of depression, COVID-19 related distress

Continuation of the table

1	2	3	4	5	6	7	8	9	10	11	12
Hawes MT, Szenczy AK, Klein DN, Hajcak G, Nelson BD. (2021)	Cross-sectional	451	12-18	-	General sample	Non-clinical	Social anxiety, panic/somatic, generalized anxiety symptoms	Exposure to COVID-19	Avoiding social contacts due to quarantine restrictions	Questionnaire survey	-
Arad G, Shamai-Leshem D, Bar-Haim Y. (2021)	Cross-sectional	99	19-34	84,8	General sample	Non-clinical	Social anxiety symptoms	Exposure to COVID-19	Subscale in social anxiety disorder score	Mixed (interview and questionnaire)	Rate of depression
Zheng L, Miao M, Lim J, Li M, Nie S, Zhang X. (2020)	Cross-sectional	1847	18-66	58,4	General sample	Non-clinical	Non-specific anxiety symptoms	Exposure to COVID-19	Social psychological problems through psychological distancing	Interview survey	
Olivera-La Rosa A, Chuquichambi EG, Ingram GPD. (2020)	Cross-sectional	1054	27,9	75,5	General sample	Non-clinical	Social anxiety symptoms	Exposure to COVID-19	Social psychological problems through psychological distancing	Questionnaire survey	
Ferreira MJ, Sofia R, Carreno DF, Eisenbeck N, Jongenelen I, Cruz JFA. (2021)	Cross-sectional	586	18-78	73	General sample	Non-clinical	Non-specific anxiety symptoms	Exposure to COVID-19	Separate subscores	Questionnaire survey	Rate of depression, anxiety and distress

Notes: Abbreviations: PTSD - post-traumatic stress disorder, SAD - social anxiety disorder, GAD - generalized anxiety disorder, OCD - obsessive–compulsive disorder, MDD - depressionw

The role of traumatic experience in the formation of PTSD and social phobia

In most studies, the psychological consequences and trauma-related disorders are presented in the context of PTSD. Studies of the relationship between social avoidance, social phobia, and the formation of PTSD or complications of its course are found in the cases of service in the Vietnam War and the war in Kosovo [16-17]. Scientific sources indicate that people with PTSD have an increased risk of excessive social anxiety. It is associated with impaired processing of traumatic experiences and the formation of changes in a personal response. Studies of veterans with post-traumatic stress disorder have indicated a higher level of severity of social anxiety signs and social anxiety disorder compared to veterans without PTSD in their medical history [18, 19]. At the same time, the number of studies on the development of PTSD among people with a primary diagnosis of social phobia is limited.

Because most of the current studies are mainly focused on the treatment of PTSD or social phobia, it should be noted that data on their prevalence and high comorbidity (ranging from 14.8% to 46.0%) cannot be related to the general population [20]. The review by Collimore and colleagues in 2010 summarized the scientific data on the overlap of genetic vulnerabilities and environmental conditions as factors that increase responsiveness to social interaction distress and, the risk of social phobia and PTSD [8]. Thus, the traumatic experience can determine the prevalence of these disorders and their comorbidity as a complex factor that combines a direct response to the traumatic content of the situation and fear of social consequences.

One of the most profound studies in the United States (n = 34,653) found a significant severity of PTSD psychopathological symptoms among patients with comorbid social anxiety disorder in all clusters of symptoms. Further adjustment to the association with depressive disorder and other common anxiety disorders did not significantly change the research results [20]. Additional research by K.A. McMillan and G.J.G. Asmundson (2016) shows that individuals with comorbid PTSD and social phobia have a unique history of traumatic experiences compared to those suffering from one of these disorders. In particular, it indicates that women with comorbid disorders are more likely to report a history of childhood abuse and neglect [21]. At the same time, compared with those who have PTSD or social phobia alone, individuals with a comorbid combination of PTSD-SAD showed an increased risk of suicide attempts and a lower level of physical and mental quality of life [22]. A 2019 study of Lithuanian youth found a strong link between symptoms of social anxiety and probable post-traumatic stress disorder [23]. Clusters of PTSD symptoms were higher in the social anxiety group, and the symptoms themselves were notably correlated with the symptoms of social anxiety. Another important finding was that people with social phobia were less likely to discuss the traumatic event or the content of their own experiences with others. Earlier, Gren-Landell and colleagues published similar data in a sample of adolescents from Sweden [24].

However, we believe that the negative experience of social interaction and relationship support in the pathogenesis of social phobia can modify the vulnerability and perception of the situation as threatening, including directly for life. Patients with both SAD and PTSD demonstrated generalized expectations of an aversive outcome, even when a trigger never signals a negative consequence [25]. "Socio-traumatic" life events, mediating the perception the of threat level, will activate the appropriate neurobiological and cognitive mechanisms of anxiety. Combined with genetic vulnerability, the experience of relationship and attachment to significant actors, psychological aspects such as fear of negative evaluation and intolerance to uncertainty, it will promote the development of clinical symptoms of social phobia and PTSD. Thus, the experience of humiliation and rejection in social situations, which contributed to the formation of deep beliefs, relevant rules of life, and coping strategies characteristic of social phobia, will play a role in recognizing the threat as real, especially in crisis events. In our opinion, this gives grounds to consider social anxiety disorder and PTSD as options on the continuum of response to a traumatic event.

Although negative social phenomena and events are not usually considered traumatic, most individuals with social phobia report a single event or persistent social experience of humiliation, rejection, and criticism as clinically significant distress [26-27]. According to a survey on perceptions of negative social events that are regarded as disturbing or traumatic in Canada, about a third of respondents said that negative social events such as public humiliation or ridicule, abuse, or bullying in public situations are perceived as no less disturbing and traumatic as events met by criterion A according to DSM-5 [27]. Thus, negative social experiences can cause signs of hyper excitability and avoidance of stimuli (including the mention of events), according to their severity, changes in cognitive performance, emotional shifts (including signs of emotional numbness) and mood disorders, and sometimes obsessive bright associations and memories that resemble the symptoms of an invasion. Recent research also recognizes the impact of negative peer experiences in childhood and adolescence, bullying, or discrimination due to sociocultural differences on the formation of social phobia in the future. In a study by Erwin et al. (2006) of outpatients, it is reported that all subjects in the socially anxious disorder experienced a socially stressful event. There was also a significant difference in the frequency of concomitant recurrences or events avoidance. This correlated with the assessment of the severity and duration of adverse events or situations from negative experience compared to other anxiety disorders [28]. The results of the study, published in 2020 by the team of Bjornsson Andri S. and colleagues, indicate that compared with groups of subjects who had a primary diagnosis of one of the common anxiety disorders and experienced humiliation or rejection, individuals with social anxiety disorder suffered from clinically significant post-traumatic symptoms of stress disorder in response to social trauma [29]. Although this group of individuals was not diagnosed with PTSD (according to validated diagnostic criteria), the results may indicate a closer association between these events. The vast majority of participants in this group believed that "social trauma" as an event or series of events caused social anxiety. Thus, in response to significant social trauma, they developed a clinically significant fear of negative evaluation and increased avoidance of social situations. Further analysis of the context of traumatic events did not reveal statistically significant differences in the types of traumas, particularly the experience of bullying, mental/physical and/or sexual violence/harassment [29]. Similar conclusions can be found in the works published earlier. Therefore, the above factors contribute to the formation of unproductive cognitive strategies for assessing social situations and oneself in them, consolidating the experience of negative and traumatic life events that should be avoided [28].

In the context of the above, the traumatic perception of social rejection and/or humiliation can be explained as an unproductive person's interpretation of others' intention to distance themselves on purpose, create conditions of social isolation, and "get rid" of the unwanted subject. A person's desire for affiliation and the evolutionary context of group survival, individual self-isolation and/or avoidance of social interaction can be seen as a direct threat to life or life support that contributes to suffering and impairs quality of life. Thus, the fear of being rejected by a significant group or subject, in the long run, is as life-threatening as a physical injury or the experience of imminent threat.

We recognize that different motivational aspects are likely to be involved in the process of social avoidance in social phobia and PTSD, but dysfunctional coping strategies that potentiate and modify the predisposition to these disorders may be common.

Social interaction avoidance as a mechanism of association between traumatic experience and social phobia

Avoiding emotional experiences of social interaction other than the previous one is seen as one of two types of "safety-oriented behavior" (the other is impression management). Both variants increase anxiety in the person performing the safety behavior and might have implications for the treatment of SAD [30]. Avoidance of emotional experiences is usually described as a regulatory strategy to minimize anxious feelings, thoughts, and behaviors in social situations and spending of internal resources to prevent potential consequences of

inevitable encounters with triggers of a traumatic experience or its memories. Thus, conscious direct avoidance of situations or events, or special forms of limited avoidance (such as eye contact, disclosure of personal information or attempts to carefully prepare and have several rehearsals in mind before the situation, etc.) are aimed at regulating unpleasant emotions or unacceptable beliefs about themselves or others. This potential mechanism of experiential avoidance mediates the influences of cognitive fusion and rumination on social anxiety [31, 32]. The results of the study by Mahaffey B.L. and colleagues suggest that dysfunctional cognitions specific to experiential avoidance and social anxiety overlap and don't predict the symptoms of social anxiety [33]. At the same time, the avoidance of corrective experience of social interaction, as a transdiagnostic factor, significantly affects the course and development of concomitant emotional disorders and increased psycho-emotional distress compared to the severity of other symptoms [34, 35]. The findings of Kashdan T.B., Goodman F.R., and colleagues demonstrate that the effect of experiential avoidance depends upon the level of social threat and opportunity [36]. Recent findings highlight the role of experiential avoidance and state post-event processing in the relation between social anxiety symptoms and worsening self-evaluation biases of social skills across time [37].

Individuals who have experienced psychological trauma, both as a result of real threats (such as military events or terrorist attacks) and "social trauma" trying to process and adapt to new experiences, overcome unpleasant emotions, thoughts and memories also face external factors modifying vulnerability to mental pathology (mood disorders, anxiety disorders, PTSD, etc.). Thus, complaints of unpleasant feelings and emotional reactions, automatic, obsessive thoughts and beliefs, and bodily sensations may be associated with certain (non-specific) events, social interactions, or their specific consequences. The association of a real or probable threat with specific thoughts and feelings learned in this way will reduce the ability to cope with natural negative emotions and feelings that arise during difficult situations in everyday life. That is why the new dysfunctional rules of life and implicit strategies formed on this association aimed at "automatic" avoidance do not involve processing and accepting emotions and thoughts as appropriate and natural to the life situation [38].

Avoiding social interaction, which is associated with "traumatic experience", increases the body's hyperexcitability as anticipation anxiety and willingness to respond in advance when these adverse events or changes in mental state may occur. This assumption is also supported by the signs of hyperexcitability when responding to uncertainties.

At the same time, despite the problems associated with avoiding corrective experiences, it can be noted that patients often focus on short-term relief of discomfort after "escape" and, accordingly, on avoidance strategies as effective. Appropriate response correlates with insufficient consideration of long-term consequences for maintaining psychological well-being and "survival" in the context of social expectations and requirements. In particular, after traumatic events, avoidance of experience (in terms of unwillingness to experience unwanted thoughts, emotions, or bodily sensations, as well as attempts to change or avoid these experiences) was more associated with the severity of PTSD symptoms in life history than trauma and distress in the moment of the event [39]. A number of publications mention that the experimental avoidance of traumatic social interaction situations involved long-term persistence of post-traumatic stress disorder either partially or completely mediated psychological distress [39-42].

The study results indicate a similarity between social anxiety disorder and PTSD in the form of recurring, obsessive, and anxious memories and/or thoughts around previous traumatic events [24]. Gray E. and colleagues found that patients with SAD reported greater use of both types of safety behavior: avoidance and impression management than patients with PTSD [30]. They mentioned that increase in avoidance safety behaviors in PTSD might reflect the tendency of individuals with PTSD to avoid talking to other people about their trauma. This tendency could explain why PTSD patients report more avoidance behaviors such as saying little and staying on the edge

of groups. It should be noted that memories of traumatic events in the context of the clinical picture of PTSD are associated directly with the content of "trauma" according to criterion A DSM5. In contrast, memories of traumatic events or experiences of social interaction are mediated by self-perceptions [43]. A review of the related literature indicates that people suffering from social anxiety tend to have more negative perceptions of themselves, conditional self-esteem, persistent prejudices and judgments about social evaluation from others and demonstrate negative interpretation of possible consequences when trying to solve these problems.

Fear of negative evaluation is often described as the fear and / or discomfort of expecting other people to tend to have negative judgments about them, their experiences, or reactions in life situations or to certain challenges. Zayfert C. and colleagues noted: "Attributions of self-blame may lead to heightened self-focused attention, expectancies of negative evaluation by others, and avoidance of social situations" [44]. In most cases presented in the scientific literature, the sense of shame is more strongly associated with anxiety symptoms, including significantly with social anxiety symptoms and PTSD symptoms, thus deserving a central role in understanding the affective structure of these nosologies.

Studies of military men with combat experience indicate that feelings of shame and guilt (appropriate for them experiential emotional avoidance) associated with traumatic experiences have caused the severity of PTSD and explained the differences in response and variability in the clinical picture of PTSD, including comorbidity. Zayfert et al. (2005) indicate an increased sense of guilt associated with trauma (not focusing on shame) in people with comorbid post-traumatic stress disorder and social phobia, compared with those diagnosed with PTSD alone [44]. Previous reviews suggested that the negative experience of returning home and feelings of shame (meaning "evil man who kills", etc.) has become more predictors of avoiding social interaction and social anxiety disorder among veterans, rather than the severity of distress of combat experience [8]. Studies of the relationship between the experience of trauma and the perception of community rejection as an element of interpersonal dysfunction demonstrate the indirect impact of post-traumatic experiences on the severity of symptoms and social, interpersonal dysfunction due to social disapproval. In social disapproval, a feeling of shame mediates the protective goal of warning a person about their negative reputations compromised social position, thus increasing the need to avoid the undesirable consequences of such social interaction. Thus, the connection between social interaction avoidance, characterized by disturbed interpersonal processes, and reducing positive experiences with comorbid social phobia, is no less relevant than with PTSD directly.

We also research on the impact of avoiding social contacts due to quarantine restrictions during COVID-19. We recognize that the experience of living in pandemic settings can also be seen in the context of social trauma: feeling of extreme fear considered the significant risk factor for psychological distress after the outbreak of the COVID-19 epidemic [45]. Report about the impact of social isolation on mental health in the context of the COVID-19 finds that adolescents have increased symptoms of anxiety and depression compared to the pre-lockdown period [46]. It was expected that with the reduction in social contacts and interaction due to lockdown and quarantine measures, feelings of loneliness and social anxiety symptoms would increase, as there are fewer opportunities for correction of emotional experiences. Instead, people with a social anxiety disorder received positive reinforcement to avoid social situations through quarantine, and home confinement concerns were associated with decreased social anxiety symptoms [47; 48]. Quarantine restrictions buffered the effect of the COVID-19 pandemic on severity of social anxiety and moderated the mediation effect of psychological distancing on social anxiety caused by the COVID-19 pandemic [49]. In addition, the destabilization of health can be predicted when removing the quarantine restriction. In our opinion, experiential avoidance (avoid negative internal experiences, feelings, thoughts, etc.) may be linked to the severity of the fear of contamination and emotional distress due to social adversity associated with social distancing and quarantine restrictions. A study by An-

tonio Olivera-La Rosa and colleagues showed that high sensitivity to pathogen disgust predicted lower social desirability, and increased social anxiety predicted higher perceptions of illness and lower judgments of trustworthiness [50]. Other findings suggest that experiential avoidance was the strongest predictor of a negative response (depression, anxiety, stress, loneliness, and negative emotions) during COVID-19 pandemic crisis in Portugal [51]. The results of the study suggest that the COVID-19 quarantine is not the only cause of any change in the severity of social anxiety. At the same time there are not enough studies that meet the inclusion criteria to analyze the relationship between social interaction avoidance, traumatic social experience due to quarantine COVID-19 and social phobia.

Summary and prospects

Summarizing the information obtained it can be concluded that the comorbidity of PTSD and SAD should be considered in the shared vulnerability model (Fig. 2). Thus, factors that are common to both disorders: social avoidance, feelings of shame, fear of negative evaluation, may be increased by individual factors such as gender, age, content, and frequency of traumatic experiences.

The most studied pathogenetic case is when the experience of a traumatic event that may pose an immediate threat increases the risk of PTSD. In addition, avoidance of social interaction (including seeking help), feelings of shame because of the context and role of the individual in the situation, and consequently fear of rejection and condemnation can lead to the manifestation of clinically pronounced signs of social anxiety disorder. At the same time, studies of the role of the social event as a traumatic trigger and related socially significant modifying factors (stigma, discrimination, living in constant risk, etc.) indicate that people with social phobia experience severe distress that contributes to PTSD or manifests itself in clinically significant symptoms of post-traumatic stress.

The time spent on avoidance and cognitive rehearsals and the significant effort around following avoidant strategies reduce conscious contact with the experience of social interaction and thus hinder the achievement of healing after a traumatic event or other goals. In this way, a person's life circumstances and capabilities are limited by fears of a possible increase in emotional distress or other social dysfunction, increasing feelings of uncertainty, uncontrollability and shame.

Future studies could develop our understanding of the pathways by which experiential emotional avoidance leads to social anxiety disorder among individuals with post-traumatic experience and its impact on recovery. In our opinion, targeting psychological intervention on breaking the harmful cycle of experiential avoidance may reduce social anxiety symptoms and improve emotional regulation associated with a post-traumatic experience. Processing the traumatic experience, focusing on the emotionally corrective experience, addressing aspects of behavior related to social avoidance and other interpersonal difficulties will help accept life situations and reduce perceptions of social events as traumatic. Accepting a conscious

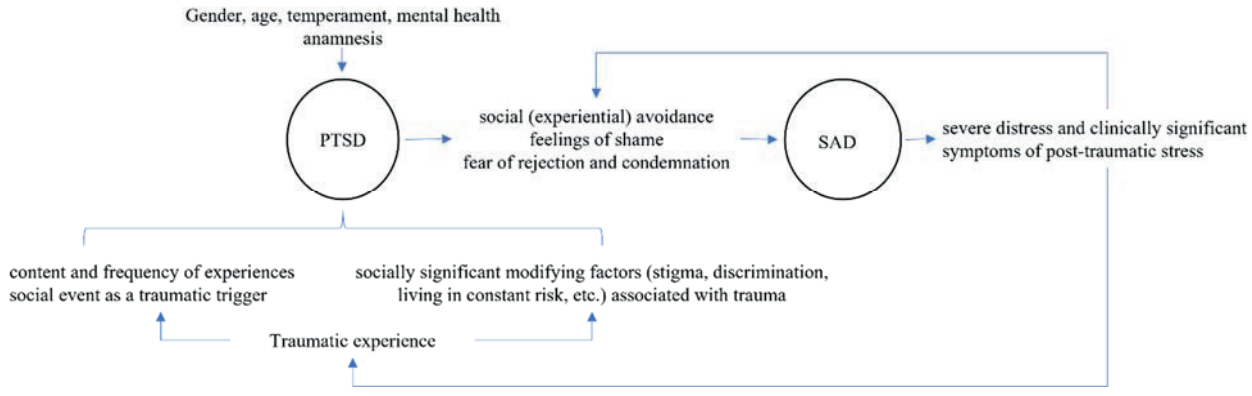

Fig. 2: Vulnerability model PTSD and SAD

experience of social interaction implies a person's willingness to react flexibly and stay in contact with their emotions and thoughts rather than spending internal resources to get rid of these inner experiences. Acceptance will enhance distress and traumatic experiences while avoiding experiences reinforces deep-seated beliefs and behaviors and devalues the role of emotional experiences in post-traumatic growth. In particular, interventions aimed at reducing safety-oriented behavior and affecting emotional regulation due to acceptance are components of acceptance and commitment therapy (ACT) and cognitive-behavioral therapy (CBT) for SAD [52, 53].

Finally, our findings may potentially help confirm the correlation between traumatic experiences and avoidance of social interaction in the pathogenesis of social anxiety disorder and PTSD, expanding and complementing models of psychological care and support in mental health care as a result.

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