

Experiential Avoidance Process Model: A Review of the Mechanism for the Generation and Maintenance of Avoidance Behavior

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ABSTRACT

Experiential avoidance refers to a phenomenon in which individuals exhibit an unwillingness to engage with certain personal experiences, including physical sensations, emotions, thoughts, memories, and behavioral tendencies. They employ cognition and emotions to avoid these experiences. Extensive research has linked experiential avoidance to various mental diseases, conduct disorder, and posttraumatic stress disorder. While the existing literature highlights the significance of understanding experiential avoidance as a central mechanism underlying psychological symptomatology development and maintenance, further investigation is required to comprehend its dimensions and mechanisms fully. Therefore, this article aims to provide a comprehensive review of the current theories and empirical evidence on experiential avoidance while elucidating its association with psychopathology. We propose a model of experiential avoidance processes based on an extensive review and critical analysis of the previous emotion regulation model that integrates expressive suppression and cognitive reappraisal during emotion regulation through experiential avoidance. This proposed model seeks to explain both the formation and maintenance aspects of experiential avoidance by offering valuable insights for future research. We also examined the association between experiential avoidance and various psychiatric disorders, including anxiety, depression, obsessive-compulsive disorder, and posttraumatic stress disorder. Elaborating on these mechanisms provides a roadmap for future research endeavors and clinical interventions.

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INTRODUCTION

The avoidance of negative memories' influence on emotions is a prominent research focus in psychology. In recent years, the self-protective mechanism individuals employ to evade reexposure to negative memories has been termed "Experiential Avoidance."¹ Experiential avoidance encompasses two primary forms: suppression and situational escape/avoidance. Suppression involves attempting to control or eliminate immediate experiences of unwanted thoughts, feelings, memories, or physical sensations. Situational escape/avoidance entails modifying contextual factors associated with undesirable personal experiences.² Hayes¹ emphasized that experiential avoidance encompasses all methods used to alter experiences through escape and avoidance.¹ Experiential avoidance represents an autonomous strategy employed by individuals as a means of regulating emotions, a self-protective mechanism to mitigate potential catastrophic consequences. Therefore, experiential avoidance

serves as an effective short-term strategy for regulating emotional expression and promptly preventing undesired negative affective states. Serving as a relatively harmless short-term coping strategy for emotional expression, experiential avoidance can prevent further harm too. However, excessive cognitive, emotional, and behavioral avoidance necessitates significant time and energy for management and control, leading to disordered processes. Moreover, excessive avoidance impedes progress toward valuable goals and limits available experiences. Over time, attempts at changing the events to be avoided along with their underlying contexts are considered strong psychopathological factors.³ Consequently, excessive avoidance behavior contributes to anxiety and other stress-related mental disorders.⁴ Thus, far-reaching implications link experiential avoidance with various mental disorders such as depression,⁵ anxiety,⁶ conduct disorder, and posttraumatic stress disorder (PTSD).⁵

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Recent advancements in psychopathology research have significantly contributed to understanding experiential avoidance within the realms of behavioral psychology and neuropsychology.

Experiential avoidance, as an inhibitory coping strategy for emotion regulation, is associated with a range of psychiatric disorders, including anxiety and depression. Current research has primarily focused on investigating strategies employed by individuals to avoid adverse experiences across various contexts and how interventions and adjustments to individuals' cognitive states can facilitate their ability to confront and process these experiences in a more positive manner. Gross's model of emotion regulation highlights the association between experiential avoidance as an emotion regulation strategy and various factors. It is imperative to figure out the determinants of the emergence of experiential avoidance, as well as understand its developmental and maintenance mechanisms, which are ambiguous so far. This study provides a comprehensive review and synthesis of the existing literature on experiential avoidance. Furthermore, it integrates and presents a process model for the emergence of experiential avoidance based on Gross' emotion regulation model and Linehan's emotion generation and regulation model. Additionally, this paper explores experiential avoidance and depression, behavioral inhibition, as well as PTSD, aiming to provide guidance for contemporary research in this domain.

The Emergence of the Concept of Experiential Avoidance

The concept of experiential avoidance emerges from relational frame theory (RFT), which aims to explain fundamental aspects of human language and cognition based on a set of interconnected behavioral principles. Relational frame theory posits that the bidirectional stimulus function of language and cognition allows individuals to easily associate neutral events with significant psychological experiences, thereby influencing psychological processes. For example, if you are afraid of dogs or have been bitten by a dog, and your friend has a dog

named "Perle," you will associate "Perle" with fear, and you will be frightened when you hear "Perle" is called. Because you associate the language (the name of the dog "Perle") with negative cognitive experiences, this bidirectional transformation in language function leads to an increased occurrence of negative experiences and pain compared to trauma.⁷ For instance, the recollection of painful stimuli triggered by language pain strengthens suggestions and induces potential danger. Humans can organize linguistic equivalence stimulus relational networks, enabling them to respond to, infer, transform, and establish relational frames. Similarly, suppose you are supposed to walk through a forest leisurely. However, upon hearing that there are snakes in the forest as perilous as "Perle," even if you have never encountered one before, apprehension would naturally arise. Drawing from the description provided, one might infer the potential of being bitten on the foot and associate the forest with imminent danger, possibly making a hasty retreat. Consequently, when entering a forest in the future, feelings of nervousness and concern over potential hazards may prevail.

Overall, relational frames, relational networks, as well as the abstraction and transformation processes within nonarbitrary environments are utilized in RFT for explaining how linguistic and cognitive factors influence behavioral.⁸ According to Hayes' perspective, experiential avoidance is rooted in the negative evaluative effects resulting from the bidirectional stimulus functions of language and cognition. These negative effects make individuals' behavior inflexible when confronted with a change, hindering direct behavioral engagement with new events. Negative language also compels individuals to confront aversive thoughts and emotions such as self-criticism or imagined negative consequences; consequently, leading them toward various attempts at self-denial to escape or avoid these aversive experiences. Hayes et al⁹ have posited that rigid adherence to verbal rules can lead to experiential avoidance, which is a common feature of many psychopathologies. Behavioral studies indicate that animals are motivated to avoid negative affect, as evidenced by the reluctance of mice to return to a room where they received an electric shock.¹⁰ A large body of literature supports the notion that individuals avoid aversive personal experiences, and experiential avoidance may serve as a self-protective mechanism against future harm following trauma. In essence, experiential avoidance refers to intentionally avoiding certain internal experiences, such as thoughts, feelings, memories, or physical sensations, including those deemed unpleasant or distressing.¹¹

Although experiential avoidance has been interpreted as a short-term self-protective mechanism and may provide temporary relief from discomfort, these cognitive, emotional, and behavioral avoidance strategies are not considered pathological behaviors.¹² However, excessive

MAIN POINTS

- A process model of the experiential avoidance reveals an intrinsic mechanism regarding its emergence, maintenance and development.
- The inappropriate use of expressive suppression strategies in the regulation of emotions is a significant risk factor for the formation of experiential avoidance.
- The maintenance and development of experiential avoidance is reinforced by its detrimental effects on context, attention, cognition, and emotional response.
- Experiential avoidance is highly complex as it permeates the entire process of emotion regulation, yet it also offers more opportunities and ways for interventions targeting experiential avoidance.

avoidance increases the likelihood of perpetuating the avoidance behavior, requiring significant time and energy to manage and control cognition, emotion, and behavior. This dysfunctional process hinders progress toward valuable goals and limits the individual's range of experiences. Simultaneously, experiential avoidance is negatively reinforced by evading or minimizing the impact of specific types of discomfort. A paradoxical effect emerges: while avoiding behavior is negatively reinforced in the short term, it reinforces concerns about the long term. Consequently, individuals find it more challenging to respond effectively to negative thoughts, emotions, and feelings. Habitual and persistent aversion to unpleasant experiences (including avoiding or inhibiting these experiences) is believed to be associated with various problems.¹ Thus, long-term attempts by individuals to alter avoidable events along with their underlying causes are thought to contribute significantly to psychopathology.³

The Category of Experiential Avoidance

The essence of experiential avoidance lies in its roles as an emotion regulation strategy that excessively relies on defensive avoidance tactics. Experiential avoidance primarily encompasses repression and situational escape/avoidance strategies. Suppression refers to the active effort to regulate or eliminate immediate experiences of negative private events, such as unwanted thoughts, feelings, memories, or physical sensations. Situational escape/avoidance involves attempting to modify contextual factors that are likely associated with the occurrence of undesirable internal experiences.² Therefore, experiential avoidance includes any behavior aimed at eluding unpleasant internal experiences or the external circumstances that trigger them.¹ These avoided experiences may encompass thoughts, emotions, physical sensations, or other distressing internal states. Experiential avoidance does not specify a particular form or manifestation of behavior but rather represents a broad category of behaviors united by their common goal of escaping unwanted internal experiences.¹³ Thus, experiential avoidance is a type of behavior sustained through negative reinforcement and can encompass various seemingly unrelated behaviors serving this purpose. It reflects individuals' specific approach in dealing with negative encounters and encompasses cognitive, emotional, and behavioral coping strategies employed when confronted with stressful situations, such as thought suppression,¹⁴ emotional suppression,¹⁵ inhibition, and avoidant responses¹⁶ to as experiential avoidance. Experiential avoidance is encompassed within various cognitive strategies, such as thought suppression, emotional suppression, and avoidance responses. It encompasses all the ways in which specific actions are undertaken to modify an individual's negative experiences. Experiential avoidance is believed to consist of two interconnected components: a reluctance

to engage with aversive personal experiences, including physical sensations, emotions, thoughts, memories, and behavioral tendencies; and the utilization of avoidance behavioral strategies to evade negative experiential events like alcohol abuse, drug addiction, behavioral inhibition, and risky sexual behavior.⁶

The Process Model of Emotion Regulation

Revised in 2001 as "The Process Model of Emotion Regulation," Gross previously proposed a model of emotion regulation,¹⁷ which delineates 5 pivotal stages in the process of emotion generation: (1) situation selection, (2) situational modification, (3) attentional deployment, (4) cognitive alteration, and (5) experiential, behavioral, or physiological responses modulation. The first 4 stages primarily focus on emotional cues and were formerly referred to as reappraisal as the principal mechanism for emotion regulation; whereas the fifth strategy targeting emotional response is known as expressive suppression. Furthermore, these 5 factors are believed to exert sequential influences.¹⁸ From this perspective emerges the understanding that experiential avoidance represents an inhibitory strategy for regulating emotions. In 2007, Linehan et al proposed a model of emotion emergence and regulation based on Gross' model, positing that emotions are comprised of 5 interconnected subsystems.¹⁹ These subsystems encompass (1) emotional receptivity to cues, (2) internal and/or external events serving as emotional cues, including attention to and appraisal cues, (3) emotional responses involving physiological reactions, cognitive processing, experiential responses, and urges to act, (4) nonverbal and verbal expressions and actions, and (5) aftereffects following the initial emotional may include secondary emotions.²⁰ It is also hypothesized that emotion is an interactive event where a person's emotional response is not solely determined by the arousal cues in the situation but rather through their interaction. Consequently, the behavior resulting from an emotional response is not only influenced by the response itself but can also be the cause of subsequent emotions. Linehan argues that modifications in any interactive system can impact the functioning of the system. Furthermore, it suggests that emotional regulation occurs both automatically and consciously. Therefore, individuals have the ability to modify their emotions at any given point for change—a notion supported by numerous researchers investigating emotion regulation. Thomas conducted a meta-analysis examining strategies derived from process models of emotion regulation effectiveness summarizing previous studies on emotion regulation while various strategies along with their classifications—highlighting the intricate complexity and diversity inherent in emotion regulation.²¹ According to this analysis, experiential avoidance represents a conscious or automatic adaptive mechanism developed within an interactive system for regulating emotions triggered by

external events. Experiential avoidance is essentially an individual's escape strategy in response to emotion regulation triggered by external events.

But what triggers the chain reaction in the emotional system? Why does the individual choose a specific emotion regulation strategy? What initiates emotion regulation? Gross has provided further clarification on these inquiries by proposing an extended model, incorporating a rating system for emotions. The appraisal system encompasses behavior, both internal and external environments, an external value system, and evaluation of these perceptions. These 4 components form a closed cycle, where each component influences the next. Over time, this cyclical process creates a spiral of change.²²

What initial strategy do individuals opt for in emotion regulation? In 2020, Gross and McRac proposed that the emotion regulation process commences with a comparison between the expected (goal state) emotional state and the actual emotional state. Additionally, they introduced a monitoring component to their novel process model of emotion regulation, asserting that monitoring plays a crucial role in situational recognition and facilitates the detection of the entire cycle of emotion regulation through regulatory strategies. Specifically, the determinants of the initial choice and subsequent changes in emotion regulation strategies remain poorly elucidated, while the underlying regulatory processes involved in emotion regulation are inadequately described, which hampers interventions targeting emotion regulation disorders such as experiential avoidance. In 2006, Chapman proposed an experiential avoidance model of deliberate self-harm in a discussion of deliberate self-harm.¹³ However, Chapman's experiential avoidance model only addressed the development of emotional responses into experiential

avoidance and neglected the impact of experiential avoidance on cognitive reappraisal during subsequent emotion regulation cycles.

Assuming that positive cycles promote subsequent behaviors while negative cycles inhibit them, it is crucial to assess their perceived value in determining developmental direction. Positive and beneficial values encourage behavior and facilitate upward spiral development, while detrimental values hinder behavior and lead to downward spirals. Therefore, values play a critical role in shaping subsequent behavioral strategies. Experiential avoidance represents a negative tendency to employ inhibition as an emotion regulation strategy for future behaviors. Inhibition inhibits behavior, leading to downward spiral. Building upon Gross, Chapman, and Linehan's model of emotion regulation, we propose a whole process model of experiential avoidance, depicted in Figure 1.

In this model, our focus lies in elucidating the mechanisms of the formation and maintenance of experiential avoidance. Specifically, we aim to explore how expressive inhibition in the preceding cycle develops into experiential avoidance within the emotion regulation cycle, as well as how such experiential avoidance subsequently influences cognitive reappraisal in the subsequent cycle. In this model, based on Gross' theory of emotion regulation, if the preceding situation triggers an emotional reaction through attention, appraisal, and response processes, individuals with a high tendency to react emotionally and low levels of stress tolerance may consciously employ suppression as a regulatory strategy to mitigate the ongoing situation. Specifically,¹³ they activate complex response-expressive suppression strategies encompassing cognitive inhibition, behavioral inhibition, and emotional suppression. However, these 3 inhibition strategies can

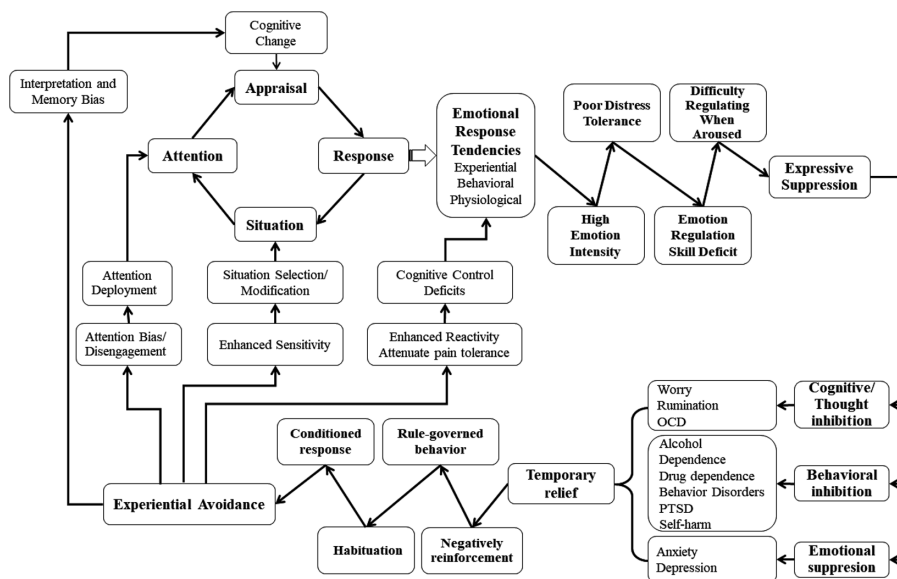


Figure 1. Graphic depiction of the experiential avoidance process models. (Partial reference to Gross's model of emotion regulation²³ and Chapman's experiential avoidance model of deliberate self-harm.²⁴)

lead to various psychiatric disorders. While initially aimed at the short-term alleviation of negative emotions, over time these strategies become habitual due to negative reinforcement from inhibition. The resulting avoidance tendency becomes a conditioned response toward certain situations and develops into experiential avoidance. This developing experiential avoidance heightens sensitivity to situational selection and increases susceptibility to anxiety and panic reactions.²³ Moreover, it diverts attention away from tasks more easily.²⁴ Experiential avoidance also influences behavior evaluation by memory bias leading to biased interpretation.²⁵ It intensifies emotional responses while decreasing pain tolerance,²⁶ thereby weakening control over emotional tendencies. Therefore, influenced by the multifaceted factors triggered by experiential avoidance, the appraisal system generates detrimental evaluations, thereby perpetuating a downward spiral in subsequent cycles and establishing a closed loop of negative experiential avoidance.

Previous research has demonstrated that expressive suppression is associated with executive dysfunction.²⁷ Moreover, it hampers the learning of motor sequences.²⁸ Additionally, suppressing the expression of negative emotions may have implications for collective action at both individual and societal levels.²⁹ Emotion regulation through expressive suppression can hinder individuals' engagement in collective behaviors within society.³⁰ Individuals with higher levels of social anxiety are more inclined to employ expressive suppression as a means to avoid potential social exclusion; consequently, this form of emotion regulation may impede their involvement in novel behaviors and social experiences.³¹ Prolonged use of expressive suppression entails various adverse consequences³² such as heightened sympathetic responses leading to inhibition,¹⁵ impaired memory function,³³ and reduced interpersonal satisfaction.³⁴

Gross posits that expressive suppression is a response-focused strategy. Expressive suppression encompasses cognitive, emotional, and behavioral regulatory mechanisms aimed at inhibiting and controlling thoughts, cognition, emotion, and behavior. Consequently, it can be categorized into cognitive inhibition, behavioral inhibition, and emotional suppression.⁶ Cognitive inhibition involves restraining unwanted thoughts through thought suppression while employing distraction and worry as means. Previous research has demonstrated the paradoxical nature of this strategy,³⁵ whereby attempts to suppress thoughts ironically lead to their amplification, subsequently contributing to worry, rumination, and obsessive-compulsive disorder (OCD).³⁶ Behavioral inhibition represents a safety-oriented behavior employed to mitigate threatening or negative experiences. It manifests as avoidance behaviors rooted in neuropsychology principles. Corr's reinforcement sensitivity theory (RST) proposes that the interconnected

neurobiological systems of behavioral inhibition, behavioral approach, and fight-flight-freeze system collectively influence personality traits, motivation levels, and emotional responses.³⁷ The neural activity underlying the behavioral inhibition system (BIS) primarily involves limbic structures such as the amygdala, septal hippocampal system, and ambivalent stimuli, resulting in outputs comprising of behavioral restraint, attentional shifting abilities, and physiological arousal. Kagan regards behavioral inhibition as a fundamental aspect of one's behavior structure.³⁸ However, with advancing age, a higher degree of behavioral inhibition may impede the development of self-regulatory mechanisms, leading to negative or erroneous information processing tendencies.³⁹ Several studies have identified a positive association between susceptibility to behavioral inhibition and various psychological conditions, including anxiety,⁴⁰ social anxiety,⁴¹ the progression of behavioral inhibition into alcohol dependence⁴² and drug dependence,⁴³ conduct disorder,⁴⁴ and self-injury.¹³ Emotional suppression refers to the regulation of one's emotions in response to different emotional stimuli in a manner that is socially acceptable and adaptable.⁴⁵ It plays a crucial role in monitoring, evaluating, and modifying both external and internal processes related to emotional responses.⁴⁶ While emotional suppression may reduce outward expression of emotions, it does not diminish negative emotions or emotional arousal itself.⁴⁷ It can lead to an increase in negative emotions while decreasing positive ones. Additionally, it impacts physiological activities such as decreased cardiovascular activity, lower heart rate, increased blood pressure levels, and heightened activation of the sympathetic nervous system.⁴⁸ Individual inhibition and avoidance of emotional responses (including physical, subjective, and behavioral responses) have been demonstrated to be associated with compromised mental and physical well-being.⁴⁹ For effective regulation and expression of emotions play a pivotal role in the management of breast cancer among women. Optimal emotion regulation strategies (reduced) empower patients to better adapt to and accept their condition,⁵⁰ thereby positively influencing treatment outcomes. Stressful experiences can trigger various negative emotions and broader emotional states, while the manner in which emotions are regulated and expressed not only impacts psychological adjustment but also endocrine and immune function.⁵¹ Distinctions exist between different coping strategies concerning overall health. A positive problem-focused coping style is positively correlated with overall health, whereas a negative avoidance coping style coupled with self-control is inversely associated with overall health. Recent studies indicate that emotional disorders resulting from emotional inhibition are significantly linked to depression, anxiety disorders,⁵² social anxiety disorder,⁵³ as well as eating disorders.⁵⁴

The purpose of expressive suppression strategies, including cognitive inhibition, behavioral inhibition, and emotional suppression, is to temporarily attenuate negative emotional responses to a situation. This serves as a transient regulatory mechanism aimed at reducing the intensity of negative emotional reactions or avoiding undesired emotional arousal. However, if this strategy is repeatedly utilized and negatively reinforced over time, it can lead to the habitualization of negative affect and the development of regulated behavioral control. Consequently, expressive suppression becomes an automatic conditioned response to “experiential avoidance.” Thus, the inertia associated with expressive suppression may trigger a detrimental developmental cascade whereby this avoidance behavior impairs emerging skills that have adverse effects on multiple domains’ development. The ensuing negative consequences are outlined as follows:

- a. Heightened sensitivity to contextual stimuli among individuals leading to early contextual decision-making; individuals exhibiting high levels of experiential avoidance are more prone to experiencing panic symptoms, severe cognitive symptoms, anxiety, panic attacks, and lack of control those with low levels of experiential avoidance.²³ Participants displaying elevated levels of experiential avoidance also experience of anxiety and emotional distress within the given situation.⁵⁵
- b. Experiential avoidance is associated with heightened emotional responses and anxiety sensitivity, playing a mediating role in the development of anxiety sensitivity for psychopathological disorders such as anxiety.⁵⁶ The process of emotional avoidance significantly influences the physical stress, where the avoidance response may not be contingent upon actual physical sensations but rather on their perceived occurrence.⁵⁵ Experiential avoidance entails habitual utilization of coping strategies involving avoidance, thus establishing a connection between distress intolerance and experiential avoidance strategies.⁵⁷ Individuals exhibiting high levels of experiential avoidance demonstrate increased sensitivity to distress and reduced tolerance toward it.²⁶ Moreover, experiential avoidance can amplify negative emotions triggered by feelings like distress through catastrophization.⁵⁸
- c. Attention is distracted or diverted from the target, which affects the use of attention. There is a causal relationship between cognitive avoidance and attentional bias.²⁵ And there is also a causal relationship between cognitive avoidance and attentional bias for negative emotions.²⁴
- d. Avoidance of experience impairs working memory capacity, distorts memory and interpretation, causes cognitive changes, and thus affects value evaluation. Cognitive changes refer to the utilization of higher cognitive abilities such as working memory and long-term

memory, judgment, and reasoning processes. Working memory is a crucial cognitive factor closely associated with emotion regulation.⁵⁸ Specifically, it can be defined as the extent to which controlled attention can be maintained while performing various tasks and excluding unwanted information from conscious awareness.⁵⁹ Notably, there exists a positive correlation between working memory capacity and emotion regulation.⁶⁰ Numerous experimental studies have also demonstrated that individuals with greater working memory capacity are more proficient in effectively suppressing emotions and engaging in cognitive reappraisal techniques.⁶¹ Furthermore, working memory ability plays a significant role in inhibiting intrusive thoughts and behaviors,⁶² serving as a mediating factor between inhibitory coping strategies and anxious autobiographical intrusions. The ability to inhibit intrusive thoughts is closely related to one’s working memory capacity.⁶³

Therefore, experiential avoidance results in heightened attention toward irrelevant stimuli, leading to an increased cognitive load and a reduced capacity for working memory tasks and the suppression of intrusive thoughts. Experiential avoidance can also amplify sensitivity to contextual stimuli, influence previous contextual decisions attention from goals, impair attentional utilization, disrupt memory and interpretation processes, induce and impact value judgments. Simultaneously, avoidance can result in diminished cognitive control and compromised monitoring of emotional responses, including subjective experiences and extended behavioral regulation. This perpetuates a cycle that engenders a vicious cycle of experiential avoidance.

Experiential Avoidance and Mental Disorders

Experiential avoidance, as a maladaptive cognitive and emotional strategy, is commonly employed to evade negative experiences through mechanisms such as thought suppression, emotional repression, avoidance response, and reappraisal. Thought suppression engenders self-contradiction in goal-oriented thinking and exacerbates internal conflict. Emotional suppression entails the avoidance of emotional responses and is linked to detrimental psychological and physical health outcomes. Moreover, employing behavioral avoidance strategies for stress management has been associated with adverse psychological consequences. Consequently, experiential avoidance represents a factor that plays a pivotal role in the development and perpetuation of pathology.⁶⁴ It can give rise to various psychological disorders, including depression, anxiety disorders, conduct disorder, and PTSD.

Experiential Avoidance and Depression

Depression has become one of the most important mental illnesses threatening human health, and there is a strong

positive correlation between experiential avoidance and depression.^{65,66} The relationship between experiential avoidance and depression exists even at subclinical levels.⁶⁵ Factors contributing to the onset and maintenance of depression include depression attributions, despair, decreased self-esteem, dysfunction, and rumination. Experiential avoidance is an avoidance-oriented coping strategy that is thought to lead to the weakening of individual behavior, rumination (referring to a tendency to recursively consider symptoms, causes, and consequences of negative affect), impaired emotional processing, increased negative cognition, and negative emotions, ultimately leading to depression. Hayes believes that this avoidance of experiences alters a person's emotional experience, thereby increasing psychological distress and exacerbating depressive symptoms.⁶⁷

Experiential avoidance is a significant predictor of various psychiatric disorders, including major depressive disorder. Therefore, experiential avoidance scores are more than epiphenomena of emotional disorders, and that experiential avoidance may be conceptualized as a relevant transdiagnostic factor affecting the course and development of comorbidity of emotional disorders, especially in women with affective disorders.⁶⁴ Compared to men, there is a stronger association between experiential avoidance and depression in women.⁶⁸ Women with high levels of experiential avoidance are more susceptible to experiencing depression, while those with low levels of experiential avoidance are more likely to manifest symptoms such as black mood and reduced interest and pleasure. Furthermore, it has been observed that there is an intergenerational transmission of both experiential avoidance and depression from mothers to daughters.⁶⁸ The research heightened association between experiential avoidance and depression in women may be attributed to social and cultural factors. Females are often expected to maintain silence and suppress emotional expression compared to males, increasing their emotional repression and adopting more experiential avoidance strategies. Additionally, females tend to face greater familial and occupational stressors, which make them more prone to anxiety-related conditions; hence, they resort to employing avoidance strategies to cope with these emotional disturbances.⁶⁸

Experiential Avoidance and Anxiety Disorder

Anxiety disorder is the most common mental disorder that usually begins in early childhood. Experiential avoidance is closely related to anxiety, anxiety-related PTSD, social anxiety, and generalized anxiety disorder.⁶⁹ In the case of anxiety, emotional inhibition, thought inhibition, and risky behaviors caused by experiential avoidance are significantly negatively correlated with health. Avoidance-oriented strategies, such as the inhibition of thoughts and emotions, have been found to increase in anxiety

situations. Similarly, subjective stress and physiological disturbances also increase in anxiety situations.⁷⁰

In the case of anxiety, there exists a positive correlation between an individual's physiological responses and the level of anxiety, thereby providing further evidence to support the association between anxiety and physiological responses. Stress is a multidimensional construct encompassing stressor exposure, psychological stress perception, and biobehavioral responses to stress. Subjective stress is a subjective experience characterized by emotional stress resulting from an individual's emotional response to a specific stimulus or situation. This stress can manifest as physiological changes (alterations in heart rate, respiration, etc.), psychological states (anxiety, depression, etc.), and behavioral patterns (e.g., avoidance). In the context of anxiety, individuals may employ various avoidance coping strategies to alleviate subjective stress; however, these strategies often lead to heightened physiological responses. For instance, experiential avoidance can exacerbate pain perception. Consequently, anxious individuals may experience elevated levels of subjective stress in situations that carry potential risks.⁷¹ Thus, uncertainty-induced stress coupled with avoidance strategies can intensify anxiety disorders such as OCD and generalized anxiety disorder.

Experiential Avoidance and Obsessive-Compulsive Disorder

Obsessive-compulsive disorder is defined as a mental disorder characterized by two types of impairments: obsessions and compulsions. Obsessions are related to cognitive inhibition, while compulsions are related to behavior inhibition. Obsessions refer to intrusive, unwanted thoughts, or images that patients are unable to ignore or block. Compulsions, on the other hand, are perseverative behaviors or rituals that patients are unable to interrupt or stop. Obsessive-compulsive disorder is characterized by inhibitions, and the core of OCD lies in the failure of inhibition. Chamberlain emphasized the importance of failures of cognitive and behavioral inhibitory processes in OCD. The researchers find that a failure of cognitive inhibition is primarily related to obsessive symptoms, and a failure in behavior inhibition is linked to compulsions.

Research has demonstrated that individuals with OCD who fail in motor inhibitory control and cognitive flexibility may resort to memory inhibition as a means of suppressing intrusive thoughts. However, thought suppression has a paradoxical effect, leading to heightened activation of suppressed thoughts. Those occasional unwanted thoughts or stimuli are perceived as innocuous by most individuals, whereas excessive active resistance can inadvertently reactivate negative ruminations. Thus, active resistance and avoidance behaviors are characteristics of OCD symptoms. Conversely, chronic thought suppression can contribute to rumination, depression, and anxiety.

Additionally, it engenders hypervigilance toward one's own thoughts and cognitive processes while prematurely initiating behavioral inhibitions. As a result, individuals with predispositions for OCD are more prone to activating their BIS.

Experiential Avoidance and Posttraumatic Stress Disorder

Posttraumatic stress disorder is a severe psychiatric disorder in which psychological distress, physiological overreactions, avoidance of traumatic experiences, and emotional and cognitive changes are triggered after a person has suffered trauma. After being traumatized, a person may use a strategy to avoid stimuli that remind them of the traumatic event.⁷² Therefore, experiential avoidance as negative emotion regulation is closely related to PTSD symptom severity.^{73,74} Patients with PTSD use a variety of avoidance strategies, with cognitive avoidance being the most common. Clinically, PTSD patients typically use thought inhibition, a cognitive activity to avoid or stop certain thoughts and memories. However, studies have shown that thought inhibition increases the likelihood of other anxiety disorders (such as OCD and generalized anxiety disorder).²⁵ On the contrary, increased focus on negative memories of one's trauma may cause the negative memories to remain present. The severity of traumatic stress disorder is determined by the arousal caused by the invasive pain and avoidance cognition and behavior.⁷² Although avoidance coping may be effective in some cases in the short term,⁷⁵ the severity of experiential avoidance may predict behavioral stress disorder PTSD in the long term.^{76,77} After studying 188 people injured in road traffic accidents, Mayou found that posttraumatic syndrome has nothing to do with neurological disorders, but is closely related to frightening memories of accidents. The initial pain caused by the invasive memory that causes "neuroshock" after an accident injury can predict PTSD severity at 12 months,⁷⁸ and invasive memory experiences that last several months can predict long-term PTSD symptoms.⁷⁹

Moreover, experiential avoidance has been consistently linked to various psychological disorders, including social anxiety, eating disorders,⁸⁰ sleep disorders,⁸¹ alcohol dependence,²⁰ drug dependence,³ and self-harm.⁸² In summary, as previously discussed, experiential avoidance plays a crucial role in the development and maintenance of psychopathology. Naturally, as an emotion regulation strategy, there are great individual differences in experiential avoidance. The differences are associated with social relationships, childhood influences, and personality traits. Hughes⁸³ further expounded on the correlation between personality traits and emotion regulation, positing a hierarchical structure of personality traits encompassing Neuroticism, Extraversion, Openness-to-experience, Agreeableness, Conscientiousness within

the big 5 domains, 10 aspects. Numerous studies have proved the link between psychiatric disorders resulting from experiential avoidance and personality traits, for instance, the association between OCD and personality traits,⁸⁴ as well as the connection between borderline personality disorder and adolescents' experiential avoidance.⁸⁵ Additionally, investigations have explored the relationship between chronic pain patients' personality traits and experiential avoidance.⁸⁶ However, it is crucial to emphasize that our present study's process model of experiential avoidance primarily focuses on elucidating the mechanisms of the emergence, development, and maintenance of contextual emotion regulation through avoidance behaviors.

Despite the correlation between experiential avoidance and many mental health disorders, it is important to emphasize the important and positive role of experiential avoidance. Behavioral inhibition is the behavioral manifestation of experiential avoidance, in which safety behaviors are taken to reduce threatening or negative experiences. Behavioral inhibition has been conceptualized in terms of both neuropsychology and behavioral structures.⁸⁷ Therefore, behavioral inhibition is considered to be the common influencing factor on anxiety and depression, while the weaker behavioral approach will influence depression. However, both behavioral inhibition underactivity and behavioral approach hyperactivity lead to attention deficit hyperactivity disorder (ADHD). Meanwhile, experiential avoidance as an avoidance coping (disengagement) strategy is effective for emotionally centered coping strategies in the face of uncontrollable situations for short periods of time. Proactive avoidance behaviors, which prevent stimuli that cause harm, can serve as adaptive mechanisms. Similarly, refraining from certain activities can provide temporary respite from distressing emotions such as tension and anxiety. Experiencing avoidant safety behaviour enhances an individual's sense of control. In all of these avoidance strategies, the organism gains a sense of control over the environment and potential threats.

CONCLUSION

Experiential avoidance, as an inhibitory emotion regulation strategy, has been linked to various mental disorders and is a focus of research related to interventions for these disorders. However, the mechanisms underlying the generation and maintenance of experiential avoidance remain unclear, which hinders its use in emotion regulation interventions. In this paper, we review previous research on experiential avoidance as a functional dimension of psychopathology and critically examine existing models of emotion regulation. Based on our discussion and review of theories and mechanisms related to experiential avoidance generation, we aim to clarify the determinants that lead to its emergence during emotion regulation

processes as well as its maintenance and development mechanisms. Drawing from prior research findings, we propose a model that illustrates how expressive inhibition influences the development of experiential avoidance during emotion regulation processes while also impacting cognitive reappraisal. The proposed model identifies the determinants underlying the emergence of experiential avoidance and elucidates the mechanisms through which it is perpetuated and developed. This serves as a crucial guide for intervening in instances of experiential avoidance. We further discuss the relationship between experiential avoidance and various mental disorders, such as depression, anxiety, OCD, and PTSD. Elaboration of these mechanisms provides direction for future research and development of clinical interventions.

This study focuses on the determinants and mechanisms underlying the emergence, development, and maintenance of experiential avoidance as an inhibitory strategy for emotion regulation, as well as its effects and interrelationships with mental disorders. The findings of this study serve as a crucial guide for us in the realm of emotion regulation. In order to circumvent experiential avoidance during the process of emotion regulation, preexisting evaluations play a pivotal role in determining whether our subsequent strategies for regulating emotions are facilitative or inhibitory. Simultaneously, the expressive inhibition determines the development of experiential avoidance, which in turn influences each dimension of cognitive reappraisal within the subsequent cycle of emotion regulation. These findings present more for potential interventions targeting experiential avoidance. However, there still remain some limitations. For example, the selection of emotion regulation strategies is also influenced by personality traits, goals, motivation, self-efficacy, and other factors. Furthermore, it is necessary to further investigate the effects of experiential avoidance on cognitive reappraisal dimensions such as context, attentional processes, and cognitive flexibility in terms of simultaneity or selectivity, along with their intensity and frequency. Additionally, this study does not address experiential avoidance interventions, which constitute a crucial aspect of this process.

Through this study, it becomes evident that experiential avoidance, as a strategy for regulating emotions, permeates all stages of the entire process of emotion regulation, including both expressive inhibition and cognitive reappraisal. Interventions targeting experiential avoidance in emotion regulation are intricate and multifaceted. Nevertheless, the research presents numerous opportunities and ways for implementing experiential avoidance interventions at every stage of emotion regulation. Therefore, future research on selecting entry points for experiential avoidance interventions in different psychiatric disorders, evaluating their effectiveness, and comparing their effects will be a complex yet crucial and meaningful area of investigation.

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