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A cognitive behavioral model for Adjustment Disorder: Conceptualization, empirical evidence and clinical implications

Un modèle cognitivo-comportemental du trouble de l'adaptation : conceptualisation, preuves empiriques et implications cliniques

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ABSTRACT

Introduction and background. – Adjustment Disorder (AjD) is a highly prevalent mental health condition, currently ranked as the 11th most commonly used diagnosis. Prevalence rates vary by population, ranging from 12.4% in oncology aftercare to 27.3% among individuals experiencing involuntary job loss. AjD is also linked to increased suicide risk, underlining the need for targeted clinical interventions. Despite its prevalence, AjD has long been understudied and often confused with normal stress reactions or other disorders like depression and anxiety. The ICD-11 has provided a clearer diagnostic framework, identifying two main symptom clusters: (1) preoccupation with the stressor and (2) failure to adapt. The development of the International Adjustment Disorder Questionnaire has improved diagnosis, but theoretical models to guide interventions remain limited.

Previous conceptualizations. – Earlier models of AjD were based on PTSD theories, assuming AjD shared similar symptomatology, though less intense. These models emphasized intrusive memories, avoidance, and negative appraisals. However, newer approaches have shifted focus. Eberle and Maercker proposed that preoccupations, persistent, stressor-related thoughts, are central to AjD, though they did not provide concrete clinical applications. Empirical findings have since supported this shift, highlighting the need for a model grounded in cognitive-behavioral therapy (CBT).

Proposed CBT-based model for AjD. – This paper presents a preliminary CBT conceptualization of AjD, which incorporates empirical findings and aims to guide therapeutic intervention. The model identifies six core components: (1) **nature of the event** – includes the event's severity, duration, and consequences, (2) **predisposing factors** – environmental, psychological, and demographic vulnerabilities, (3) **preoccupation with the event** – negative, repetitive thoughts linked to maladaptive appraisals, (4) **emotional response** – emotions like sadness, fear, guilt, and hopelessness triggered by appraisal, (5) **experiential avoidance** – strategies such as distraction, rumination, or substance use aimed at avoiding the event or its consequences, (6) **failure to adapt** – impairment in daily functioning, such as sleep, work, or concentration. The model posits that a stressful event, combined with predisposing vulnerabilities, leads to negative appraisals. These appraisals trigger emotional distress and preoccupations. Avoidance strategies reinforce these thoughts and emotions, leading to functional impairments, which in turn reinforce the cycle.

Clinical illustration. – The case of Victor, a 40-year-old man who experienced a disabling car accident, illustrates the model. Victor's preoccupations about his lost job and role as a father, combined with emotional struggles and avoidance, led to impaired functioning, despite not meeting criteria for PTSD or major depression. This supports the specificity and relevance of the AjD model.

Empirical support for model components. – Empirical studies support the model's components: (1) **nature of event:** job- and health-related stressors are strongly linked to AjD, (2) **predisposing factors:**

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risk factors include being female, unemployed, young, having low income/support, or a history of mental illness; (3) **preoccupations**: four types have been identified, related to Negative Views of Self and Future, Indignation, Perceived Change, and Injustice and Incomprehensibility; measured using the Event-focused Repetitive Thoughts Questionnaire (ERTQ); (4) **experiential avoidance**: denial and disengagement worsen symptoms, while acceptance and cognitive reappraisal are protective; (5) **failure to adapt**: associated with disrupted routines and lower psychological functioning.

Clinical implications and techniques. – This CBT model informs the development of Adjustment-Focused CBT (AF-CBT), which includes: (1) **restructuring preoccupations** – using cognitive restructuring to challenge negative thoughts, address guilt, and promote hope, (2) **developing acceptance** – techniques such as writing an “acceptance letter” to the event help patients face the reality of the stressor and reduce avoidance, (3) **increasing adaptation** – problem-solving strategies and motivational tools encourage functional adaptation and reduce emotional burden. These interventions draw on evidence-based CBT techniques and align with core principles originally developed for depression treatment.

Strengths compared to previous models. – This model enhances prior conceptualizations by introducing *predisposing factors* and *experiential avoidance* as core mechanisms. It also operationalizes preoccupations through a validated assessment tool and integrates CBT strategies, offering a clear clinical application.

Limitations and future directions. – While promising, the model is still preliminary. Most supporting studies are cross-sectional or qualitative, and causal relationships remain to be empirically tested. The model currently focuses on a single-event framework and would benefit from expansion to multi-event or crisis contexts.

Conclusion. – This paper presents a preliminary cognitive-behavioral model of AjD, centered on preoccupation, experiential avoidance, and failure to adapt. The model not only deepens theoretical understanding but also provides structured therapeutic guidance. Future clinical trials are essential to test and refine this model, with the goal of developing effective, evidence-based treatments for individuals suffering from Adjustment Disorder.

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R É S U M É

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Le trouble de l'adaptation est une condition largement répandue mais sous-étudiée depuis des décennies, bien qu'il soit associé à un risque élevé de suicide. Il se caractérise par des réactions émotionnelles anormales après un événement stressant (par exemple, un divorce, une maladie, un licenciement). Il existe actuellement un manque de conceptualisation théorique du trouble de l'adaptation. Pour combler cette lacune, nous proposons un modèle cognitivo-comportemental du trouble de l'adaptation. Nous suggérons que la nature de l'événement stressant et les facteurs prédisposants contribuent à des préoccupations initiales liées à cet événement. Ces préoccupations peuvent déclencher une réaction émotionnelle. Les patients peuvent alors s'engager dans un évitement expérientiel de ces expériences, refusant de reconnaître l'existence de l'événement. Cette stratégie maintient les préoccupations et conduit à un échec de l'adaptation. Nous présentons ensuite des preuves empiriques soutenant ce modèle. Sur la base de cette conceptualisation, nous proposons trois interventions thérapeutiques clés : (1) cibler les préoccupations à l'aide de techniques de restructuration cognitive, (2) traiter l'évitement expérientiel par l'écriture d'une lettre d'acceptation, et (3) remédier à l'échec d'adaptation en utilisant des approches motivationnelles et de résolution de problèmes.

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1. Introduction

Adjustment Disorder (AjD) is a highly prevalent mental health disorder and the 11th most frequently used diagnosis [39]. Its high prevalence has been identified across various settings. A meta-analysis of 24 psychiatric epidemiological studies in physical medicine reported a 15.4% prevalence of AjD [33]. More specifically, researchers [26] identified a 12.4% prevalence of AjD in 2141 patients receiving oncology aftercare. The prevalence was even higher – 27.3%, among individuals who had lost their jobs involuntarily [35]. AjD is also associated with a significantly increased risk of suicide, highlighting the critical importance of providing targeted interventions for AjD [12,22].

Altogether, these findings underscore the necessity of studying and understanding the psychological mechanisms underlying AjD. However, the condition has been overlooked in psychological research for many years. It has only been within the past decade that researchers have begun developing conceptualizations of AjD. This delay may be due to the difficulty of distinguishing AjD from normal stress reactions and from clinical or subclinical presenta-

tions of other mental health disorders such as depression or anxiety [1,3,11].

The most recent revision of the International Classification of Diseases (ICD-11 [49]) provides a clearer framework for understanding AjD. In ICD-11, AjD is defined as a maladaptive response to an identifiable psychosocial stressor or multiple critical life events (e.g., a breakup, unemployment, or family conflicts). It is characterized by two core symptom clusters: (1) preoccupation with the stressor or its consequences (e.g., repetitive negative thoughts about the stressor or its effects), and (2) failure to adapt to the situation (e.g., inability to recover, difficulty concentrating, or sleep disturbances).

The symptoms must not be better explained by another mental health disorder (e.g., mood or other stress-related disorders) and typically resolve within six months unless the stressor persists for a longer duration [49].

To aid clinicians in diagnosing AjD, a screening tool, the International Adjustment Disorder Questionnaire, has been developed based on the ICD-11 framework [41]. While this development marks significant progress, the lack of theoretical

conceptualizations for AjD remains a pressing issue. Theoretical models are essential for guiding therapeutic interventions, yet research into AjD's theoretical underpinnings has been scarce.

This lack of theoretical development has practical consequences. A review found that the quality of evidence for the effectiveness of psychological and pharmacological treatments for AjD was rated as low to very low [34]. We argue that this lack of evidence is closely tied to the absence of robust theoretical models, which are necessary for guiding research and developing gold-standard interventions.

2. Previous conceptualizations of AjD

To date, only a few conceptualizations of AjD have been proposed. The first was based on adaptations of Post-Traumatic Stress Disorder (PTSD) theories [32]. Maercker and colleagues suggested that PTSD models could be applied to AjD, with the key difference being that PTSD is triggered by life-threatening, traumatic events beyond the range of normal human experience, whereas AjD is not. This distinction was thought to result in similar symptomatology but with reduced intensity. Accordingly, PTSD models such as those by Brewin et al. [8], Ehlers and Clark [17], Foa et al. [20], and Horowitz [25] were applied to AjD, emphasizing the role of negative appraisals of the event, avoidance strategies, and impairments in memory construction.

More recently, the same research team proposed a new conceptualization of AjD that moves away from the PTSD framework [16]. Contrary to earlier assumptions [32], the nosography of AjD in ICD-11 does not include intrusive memories in its clinical description. This suggests that traumatic memory processes [8,29] are less relevant for understanding AjD. Instead, preoccupations appear to better characterize AjD. Empirical findings support this shift: preoccupations have been identified as the most central symptoms in non-clinical samples [30,31], while failure to adapt and functional impairment emerge as the most central symptoms in clinical populations.

It has been suggested that, in its early stages, AjD may be characterized by the onset of preoccupation symptoms, which can progress to failure to adapt and functional impairment in its clinical manifestation. Consequently, preoccupation symptoms may serve as a key target for early interventions [31]. Eberle and Maercker [16] propose that preoccupations are the core mechanisms underlying AjD, defining them through four characteristics:

- preoccupations involve factual (neutral) thoughts;
- thoughts in preoccupations are stressor-related;
- preoccupations are time-consuming;
- preoccupations are often associated with negative emotions.

However, recent empirical studies suggest that this definition may not fully capture the nature of AjD [45]. In their study, the authors interviewed patients with AjD and observed that while preoccupations were stressor-related, time-consuming, and associated with negative emotions, they also involved non-factual thoughts, such as inappropriate guilt related to the event.

Furthermore, Eberle and Maercker [16] do not propose concrete clinical interventions for AjD, leaving a significant gap in the theoretical framework. To address this, we propose the development of a cognitive-behavioral conceptualization of AjD. Evidence-based models are essential for designing psychotherapeutic programs. For example, a wide range of cognitive-behavioral therapy (CBT) models has been developed [5,6,8,13,14,19], which have informed effective interventions [10,15,21,38,40].

The aim of this paper is to explore and propose a preliminary, comprehensive, cognitive-behavioral, evidence-based conceptual-

ization of Adjustment Disorder (AjD). We propose that this model should:

- be based on fundamental scientific principles;
- incorporate experimental knowledge in the field of AjD;
- provide structured guidelines for psychotherapeutic interventions, combining validated approaches with innovative techniques.

3. Core components of the model

3.1. Definition of the concepts

We identified several core components in our conceptualization, based on previous empirical studies [30,31,43,44,45,48], as well as prior conceptualizations related to Adjustment Disorder [16,32], and Cognitive Behavior Therapy [2,4,37].

The different components involved in the model are:

- the nature of the event;
- predisposing factors;
- preoccupation with the event;
- emotional response to the event;
- experiential avoidance of the event;
- failure to adapt.

The nature of the event refers to its characteristics, including duration, the individuals involved, and the socio-economic, environmental, and personal consequences. Numerous potential stressors may trigger AjD, such as divorce, separation, family conflict, retirement, unemployment, personal illness, or financial problems.

Predisposing factors correspond to environmental, psychological, and socio-demographic risk factors that increase vulnerability to developing AjD.

Preoccupation with the event refers to the thoughts patients have about the event. For example, patients may think, "The event ruined my life", "This is my fault", or "I will never get my life back." Following Beck's [4] original theory, we assume that negative appraisals within these preoccupations have a detrimental impact on psychological well-being.

Next comes the **emotional response to the event**, which aligns with traditional models of emotional regulation, where the appraisal of a stimulus is the precursor to emotional activation [23]. Patients experienced various emotion in relation with the event, sadness, guilt, anger, fear, hopelessness...

Experiential avoidance refers to strategies people use to cope with the event. Patients try to struggle with event using various therapeutic strategies such as distraction, rumination and substance use. They refuse to acknowledge the event or its consequences.

Failure to adapt corresponds to disruptions in basic functions such as sleeping and eating, as well as difficulties in performing daily activities (e.g., work, leisure, and family responsibilities). Patients often report that they struggle to complete tasks because they are constantly thinking about the event and find it hard to concentrate.

3.2. Interaction between the concepts

Initially, a **negative event** occurs, and its nature interacts with **predisposing factors**, leading to the appraisal of the event. For example, individuals with fewer resources (e.g., limited psychological skills or difficult socio-economic circumstances) are more

likely to appraise the event negatively. Similarly, more severe or burdensome events are more likely to elicit negative appraisals.

This negative appraisal constitutes the preoccupation and then triggers an **emotional response**. Patients begin to struggle with the event, refusing to accept it and its consequences, while ruminating on it. This struggle and the repetitive thoughts keep the negative appraisal and emotional activation alive, creating a vicious cycle.

The ongoing negative thoughts and emotional responses disrupt daily functioning, resulting in **failure to adapt**. For example, patients may struggle to sleep due to intrusive thoughts or find it difficult to concentrate during leisure activities. This disruption amplifies the negative evaluation of the event, exacerbating its indirect consequences and reinforcing the cycle.

The interactions between these factors are displayed in Fig. 1.

3.3. Clinical vignette

3.3.1. General description

Victor is a 40-year-old patient and an outpatient at a trauma center in France. He seeks help because he was in a car accident a year ago. His right leg is now injured, and he can no longer stand for extended periods. As a result, he had to quit his job as a school cook.

When Victor attends consultations, he appears sad but not depressed, he still finds pleasure in certain activities and maintains a level of functionality. His mood is low but manageable. The main issue is that he constantly thinks about the accident and its consequences. He believes he can no longer be the father he wants to be for his 6-year-old daughter and feels frustrated that he can no longer work.

Victor does not describe intrusive memories of the event. He sustained a brain injury, so his memories of the accident are

incomplete. He continues to drive but dislikes revisiting the road where the accident occurred. Despite this, he is able to face it when necessary.

Victor fits the AjD conceptualization well. PTSD is a less appropriate diagnosis because he does not experience intrusive memories or avoidance of traumatic triggers. Depression is also less suitable because his low mood is directly related to the event, and his thoughts focus entirely on the stressful incident. This suggests that interventions targeting the stressful event are most appropriate.

3.3.2. Interaction between the concepts

In Victor's case, the **nature of the event** (his inability to work or play with his daughter due to his injury) increases the likelihood of a **preoccupation**. His limited financial resources exacerbate his difficulties in coping with the event.

Victor's appraisal of the event leads to feelings of sadness and anger, as well as stress about his future. He struggles with the situation, finding it unacceptable. He spends significant time ruminating on how things might have been different if the accident had not occurred.

These repetitive thoughts prevent Victor from focusing on productive activities, such as home improvement projects he started after the accident. The **emotional burden** further prevents him from engaging in new daily activities, creating additional emotional difficulties. This, in turn, increases his frustration and anger about the entire situation, reinforcing the cycle of negative thoughts and emotional distress.

4. Empirical evidence

There is some evidence supporting this model.

4.1. Nature of the event

Among samples from the general population, previous studies have identified the main events associated with Adjustment Disorder (AjD) as problems related to work, particularly due to time pressure or workload, family or personal conflicts, and the illness or death of a loved one [42,44,48]. Moreover, one study compared participants with AjD to those without AjD following a stressful event and found that job- or health-related stressors were associated with a higher risk of developing AjD [50].

4.2. Predisposing factors

Various studies have examined the risk factors associated with AjD. A meta-analysis of 70 studies involving 3,449,374 participants found that female gender, younger age, unemployment, stress, physical illness or injury, low social support, and a history of mental health disorders were predictors of adjustment disorders [27].

Similarly, research has shown that transdiagnostic skills are associated with greater levels of AjD and stressor-related symptoms [46,47,48]. Transdiagnostic skills include both overt and covert adaptive behaviors, such as:

- emotion regulation: the ability to reduce the intensity of aversive emotions;
- behavioral activation and planning: the ability to plan and organize daily activities;
- emotional identification: the ability to identify and label one's emotions;
- assertiveness: the ability to express opinions and needs constructively;

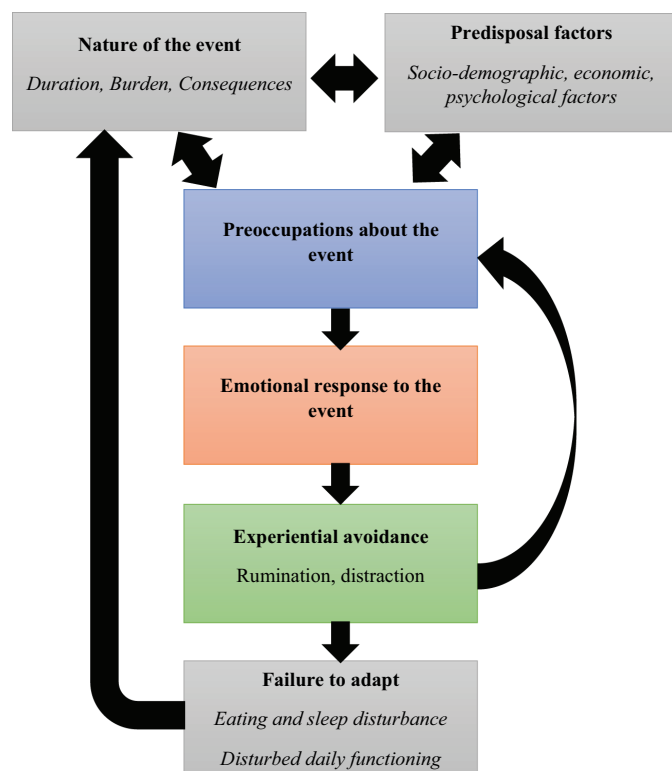


Fig. 1. Cognitive behavioral conceptualization of Adjustment Disorder.

- problem-solving: the ability to address challenges in daily life;
- emotional confrontation: the ability to face aversive emotions.

These findings support the idea that certain psychological skills may protect individuals from developing AjD.

Similarly a systematic review found that female gender, unemployed status, stress, low income, low social support, and a history of mental health disorders predicted adjustment disorders compared to no mental health condition [28].

4.3. Preoccupations

Preoccupation is one of the core symptoms of AjD. In prior research [43,45], four main types of preoccupations were identified through a qualitative study and a quantitative study conducted with both French and Swiss samples.

These preoccupations were measured using the newly validated Event-focused Repetitive Thoughts Questionnaire (ERTQ). The four main types of preoccupations, along with example items from the questionnaire, are as follows:

- injustice and incomprehensibility (e.g., “How could this happen?”);
- negative vision of self and future (e.g., “I am useless since the event.”);
- indignation (e.g., “What happened was shameful”);
- perceived change (e.g., “I have to readapt my life.”).

The results of these studies indicated that preoccupations were generally associated with greater emotional difficulties and more severe AjD symptoms. Among the four types of preoccupations, negative vision of self and future was found to be the most predictive of emotional difficulties.

4.4. Experiential avoidance

Previous qualitative and quantitative findings have demonstrated that experiential avoidance strategies are common among patients with AjD and are associated with higher levels of AjD symptoms [44,45].

More specifically, Vancappel et al. [42] found that certain avoidant coping strategies, such as denial, substance use, and behavioral disengagement, were particularly detrimental. Conversely, strategies like acceptance and cognitive reappraisal were more protective.

This aligns with the broader literature on experiential avoidance, which suggests that such strategies may contribute to the persistence of emotional distress [9,38].

4.5. Failure to adapt

Failure to adapt has also been described in qualitative studies, with patients reporting that this exacerbates their emotional difficulties [45]. Quantitative research has further shown negative associations between AjD symptoms and stable routines, such as regular sleep patterns and consistent eating habits [44].

5. Implications for clinical interventions

This model has several implications for clinical interventions. These interventions can be labeled as Adjustment-Focused CBT (AF-CBT).

5.1. Restructuring preoccupations

Psychotherapy should target preoccupations, particularly because they appear to be a central process and a key target for early intervention [31]. Cognitive restructuring techniques, such as Socratic questioning, deccentration, and the identification of cognitive biases, should be employed. These techniques were originally developed by Beck [4] to treat patients suffering from depression, and empirical studies have supported their efficacy in several studies [18].

More specifically, a negative vision of self and future should be addressed by working on the “crystal ball” effect, reminding patients that no one can predict the future. Therapists should help patients recall experiences where positive outcomes occurred unexpectedly. Patients can also be encouraged to explore potential beneficial consequences of the event, such as having more time for oneself or gaining new experiences.

A future imaginal scenario could be written collaboratively with the patient to envision a constructive perspective of their life moving forward. Responsibility for the event can also be explored through attributional exercises, where patients are guided to distribute the causal roles of the event across various factors. The goal of this part of therapy is to help the patient think: “The event was burdensome, but I can cope with it, and there may even be something positive to gain from this experience.”

5.2. Developing acceptance of the event

This stage focuses on helping the patient develop acceptance of the event and exposing them to the reality that the event has occurred. Based on our experience, this intervention can be conducted alongside cognitive restructuring.

One effective approach is the acceptance letter. Patients are encouraged to write a letter addressed to the stressful event. The letter consists of several paragraphs:

- description of life before the event: this includes what their life looked like prior to the event;
- description of the event and its consequences: patients describe the facts of the event, as well as their thoughts, emotions, and physical sensations associated with it;
- acceptance statement: this paragraph begins with “Dear event, I now accept that you are...” At this stage, alternative thoughts can be incorporated to help the patient achieve acceptance.

The aim of this intervention is to allow patients to face the event fully and integrate it into their life narrative. To our knowledge, this technique has not been preliminarily assessed within CBT, but can be compared to what is typically done in exposure therapy for traumatic memories in patients with PTSD [21]. The idea is to expose the patient to both the facts and the reality that the event occurred. A similar approach is used in therapy for patients suffering from prolonged and complicated grief, where they are exposed to the idea of the death of their loved one [7].

5.3. Increasing adaptation to the problem

At this stage, the focus shifts to enhancing the patient's ability to adapt to their situation.

First, motivation is provided. One technique is to share inspirational stories, such as the story of Louis Joseph César Ducornet, an artist born with atrophied limbs who painted using his toes. This demonstrates how passion and determination can overcome significant obstacles.

The next step is to identify all the problems contributing to the patient's suffering and address them systematically. Solutions may not be available for every problem, and for unsolvable issues, acceptance becomes the primary strategy.

The goal of this module is to empower patients to take proactive steps toward improving their situation and to reduce the emotional burden caused by the problems they face.

This intervention can be compared to traditional problem-solving techniques originally developed for depression [4], which have been widely shown to be effective across several conditions and supported by meta-analyses [51].

6. Improvements compared to previous models of AjD

Our theoretical conceptualization presents several advantages compared to previous models of Adjustment Disorder (AjD) [16,32]. Notably, it introduces two additional core components: (1) predisposing factors and (2) experiential avoidance. These additions offer new potential therapeutic targets within psychotherapy.

Furthermore, the description of preoccupations is more precise, supported by the development of a psychometric tool specifically designed to measure such preoccupations, whereas previous models offered more general definitions.

Finally, the model is grounded in cognitive-behavioral therapy (CBT) principles, which strengthens both its clinical relevance and its scientific foundation. Moreover, it provides a wide range of potential therapeutic interventions to support patients suffering from AjD.

7. Limitations

This model has some limitations. The empirical evidence supporting it is limited. Most of the supporting arguments are derived from qualitative and cross-sectional studies. The causal relationships between the different concepts have not been directly assessed. This is particularly true for the concept related to failure to adapt, which is difficult to define. Unlike preoccupations, there is no available tool to more broadly assess what constitutes a failure to adapt. Future studies are needed to evaluate these relationships in order to strengthen the theoretical framework.

Another limitation of this model is that it includes only one event. Other models propose the management of several simultaneous decompensation factors. This is the case of the crisis model. Crisis intervention is a model for the treatment of acute states of psychological decompensation, including some formal psychiatric disorders [24]. In this model, a crisis develops when the individual's customary adaptive coping mechanisms are inadequate to deal with the perceived threat, whether actual or impending. However, this model is mainly applicable to situations of acute decompensation. Then, one prospect for our CBT model is to evolve into a multi-event model, and to be applied in acute situations, in order to complement existing models.

8. Conclusion

The aim of this paper is to provide an evidence-based cognitive-behavioral model for AjD. This model focuses on three core mechanisms involved in AjD: preoccupation, experiential avoidance, and failure to adapt.

It also offers a broad range of possibilities for clinical interventions. However, further empirical studies are required to test the predictions of this model. Clinical trials based on this conceptual framework are now essential for further exploration.

Disclosure of interest

The authors declare that they have no competing interest.

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