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Review Articles

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Emotion Dysregulation Research: A Narrative Review

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ABSTRACT

In this narrative review, research on emotion dysregulation that was published in 2024-2025 is briefly summarized. The negative effects of emotion dysregulation include externalizing behavior, excessive social media use, decreased well-being, non-suicidal self-injury behavior and suicidality. In several of the studies, emotion dysregulation was treated as a mediating variable. The risk factors/predictors that have been reported for emotion dysregulation include childhood problems, childhood abuse, peer victimization, lifetime sexual violence and cognitive deficits. Several comorbidities have also been noted for emotion dysregulation including the cognitive disorders attention deficit hyperactivity disorder (ADHD) and autism spectrum disorder (ASD) as well as addictions including eating disorder and substance use disorder. Diagnosed psychiatric disorders were also comorbid with emotion dysregulation including depression and anxiety, posttraumatic stress disorder (PTSD), PTSD/generalized anxiety disorder (GAD), obsessive-compulsive disorder (OCD). and borderline personality disorder (BPD). Methodological limitations of this literature include the cross-sectional studies that are inconclusive about directionality of effects and the confounding of emotion dysregulation effects by its many comorbid disorders.

Emotion dysregulation has been defined as the inability to manage emotional experiences or expressions that then limit goal-oriented behavior [1]. Emotion dysregulation has been assessed primarily by self-report scales including the Emotion Dysregulation Scale, the Difficulties in Emotion Regulation Scale and the Brief Emotion Dysregulation Scale which are noted to have good sensitivity, reliability and construct validity [2]. In this narrative review, research on emotion dysregulation that was published in 2024-2025 is briefly summarized. This research was found on PubMed, PsycINFO and Google Scholar by entering the terms emotion dysregulation and the years 2024-2025. Exclusion criteria included non-English papers, pilot studies and proposed protocols.

This current literature on emotion dysregulation can be divided into different sections. The sections include negative effects, risk factors/predictors, comorbidities, potential underlying biological mechanisms and interventions. These are followed by a discussion on the methodological limitations of this literature. Unlike the current literature on most psychological problems, the current literature on emotion dysregulation has not included prevalence data. The prevalence is likely high given that emotion dysregulation is comorbid with many psychological problems. This review briefly summarizes 51 papers including 13 papers on negative effects, 5 papers on risk factors/predictors, 24 papers on comorbidities, 2 papers on potential underlying mechanisms and 7 papers on interventions.

Negative Effects

The negative effects of emotion dysregulation have included misophonia (emotional distress), externalizing behavior, excessive social media use, decreased well-being, non-suicidal self-injury and suicidality. In several of these studies, emotion dysregulation was a mediating variable.

Misophonia

In research on misophonia (defined as emotional distress following specific sounds, e.g. slurping and pencil clicking),

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emotion dysregulation led directly to misophonia (N=4005 U.S. adults) [3]. Surprisingly, other immediate nervous behaviors that result from emotion dysregulation have not appeared in this literature.

Table 1: Negative effects of emotion dysregulation (and first authors).

Negative Effects	First Authors
Misophonia	Dixon
Externalizing Behavior	Liu
Excessive Social Media Use	Rogier, Cho
Decreased Well-Being	Taccini
Non-suicidal Self-Injury	Gao, Faura-Garcia, Robinson, Boyne
Suicidality	DiNicola,Russolillo, Chapham, Tate

Externalizing Behavior

In a study entitled "Emotion dysregulation mediates the relationship between sleep problems and externalizing problems", adolescents (N=1281) were seen at six-month intervals [4]. Sleep problems led to emotion dysregulation which, in turn, led to externalizing behaviors. Because this was a cross-sectional study, the direction of effects was not clear. These could just be bi-directional problems with externalizing behaviors reciprocally leading to sleep problems.

Social Media Use

Social media use was studied in an "ecological momentary assessment study" (repeated sampling of participants' current behaviors and experiences in real time, minimizing recall bias). Social media use was recorded four times per day for seven days (N=50 young adults) [5]. This included daily time on Facebook, Instagram, and TikTok that was retrieved from devices. In this sample, emotion dysregulation led directly to excessive social media use.

Emotion dysregulation has also been implicated in smartphone overdependence based on a network analysis (N= 687 adults) [6]. In this sample, emotion dysregulation led to impulsivity which, in turn, led to smartphone overdependence. Social media and smartphone use in these samples may have been attempts at coping with emotion dysregulation. In turn, excessive social media may have exacerbated emotion dysregulation.

Decreased Well-Being

In research on victims of intimate partner violence (N= 282 women), emotion dysregulation was again a mediator [7]. In this sample, post – traumatic stress (fear, terror, shame and guilt) led to emotion dysregulation which led to a decrease in well-being. Although this was again a cross-sectional study, it was not surprising that victims of intimate partner violence would experience emotion dysregulation and post-traumatic stress that would lead to decreased well-being.

Non-suicidal Self-Injury

Non-suicidal self-injury (NSSI) has been a more serious negative effect of emotion dysregulation in several studies. In research on non-suicidal self-injury in adolescents (N= 3801, mean age =13), family stress (threat and deprivation) led to repetitive non-suicidal self-injury [8]. Once again, emotion dysregulation and impulsivity were mediator variables. Non-suicidal self-injury has also been longitudinally associated with emotion dysregulation in adolescents (N = 785) [9]. Emotion dysregulation in this sample predicted depression symptoms and hopelessness that, in turn, predicted non-suicidal self-injury.

In a sample of adults, those who had engaged in non-suicidal self-injury showed greater emotion dysregulation during a stress induction experience (N= 51 participants with NSSI and 51 without NSSI) [10]. Reappraisal and suppression regulation strategies were used during this stress induction experience. Emotion regulation strategies like these have infrequently appeared in this literature on emotion dysregulation even though they would desirably be included in skill training interventions to reduce emotion dysregulation.

In research entitled "The daily diary study: the relationship between pain tolerance and non-suicidal self-injury and the moderating role of emotion dysregulation", diaries were kept for 14 days (N= 130, mean age =18 years old) [11]. The results suggested that state pain tolerance led to the same day engagement, frequency and versatility of non-suicidal self-injury for those who had recorded more frequent emotion dysregulation.

Suicidality

Suicidality has been the most negative effect of emotion dysregulation. Emotion dysregulation was a mediator between childhood sexual abuse and suicide attempts in patients with substance use disorders (N= 226 outpatients) [12]. In this sample, high scores on the Childhood Trauma Questionnaire led to high scores on the Difficulties in Emotion Regulation Scale, which then predicted suicide attempts. The substance use could have also mediated the relationship between childhood sexual abuse and suicide attempts as could a variable like impulsivity, although it was not measured. The selection of the Emotion Regulation Scale was basically the selection of the mediating variable by the researchers depending on their interests.

Emotion regulation difficulties have also had a mediating effect on the relationship between lack of identity and suicidality or future suicide attempts in an outpatient sample (N=246) [13]. Although emotion dysregulation effects have been confounded by the effects of the disorders themselves in these two samples, the relationship between emotion dysregulation and suicidality has also been noted in samples without disorders. For example, in research on adolescents, emotion dysregulation led to suicide ideation (N=559, mean age=15) which was mediated by internalizing and externalizing symptoms [14]. It's not clear how the internalizing and externalizing symptoms could be mediator variables for the same relationship because they are opposite behaviors.

In still another study on a community sample, greater emotion dysregulation led directly to both suicidal ideation and more serious suicide attempts (N=757) [15]. The direct effects here were noted in the absence of the measurement of mediator variables. And variables like impulsivity that have been serial mediator variables for suicide attempts in other studies were not measured in these samples.

Risk Factors/Predictors

Several risk factors/predictors have been noted for emotion dysregulation. These include multiple childhood problems, childhood abuse, peer victimization, lifetime sexual violence and cognitive deficits.

Table 2: Risk Factors/Predictors of emotion dysregulation (and first authors)

Risk Factors/Predictors	First Authors
Childhood Problems	Baroud
Childhood Abuse	Huang, Ogan
Peer Victimization	Herd
Lifetime Sexual Violence	DeSantis
Cognitive Deficits	Mino

Childhood Problems

Research that yielded multiple risk variables was conducted on children and adolescents in Lebanon (N = 1517) [16]. In this sample, the prevalence of emotion dysregulation was 11% in 5-to-8-year-old children, 9% in 8-to-12-year-old children and 7% in children greater than 12-years-old. The negative risk variables were younger age, poor school performance, parental mental health issues, parental conflict, chronic physical illness and bullying. Unfortunately, regression analysis was not conducted to determine the relative variance in emotion dysregulation that was explained by these variables

Childhood Abuse

In research on the relationship between childhood abuse and emotion dysregulation, college students were sampled (N= 1728) [17]. In this study, childhood abuse led to emotion dysregulation in students reflected by higher scores on The Difficulties in Emotion Regulation Scale.

Emotion dysregulation has also been noted as a mediator in the relationship between family of origin conflict and later conflict in romantic relationships (N = 118) [18]. In this study, family of origin conflict was related to romantic relationship conflicts, another relationship that was mediated by emotion dysregulation. Family of origin conflicts have frequently related to later romantic relationship conflicts independent of emotion dysregulation. The inclusion of mediating variables has been recently popularized by the development of theoretical models that are considered necessary for mediation/moderation analyses.

Peer Victimization

In a study entitled "Longitudinal associations between changes in peer victimization and emotion dysregulation across adolescence", the adolescents were seen at five time points at one-year intervals (N= 167 adolescents, mean age = 14) [19]. Latent change score modeling was used to examine reciprocal associations between peer victimization and emotion dysregulation. A bidirectional association was noted with emotion dysregulation leading to greater relational and overt victimization and victimization increasing emotion dysregulation. Emotion dysregulation also increased over time. The researchers' longitudinal transactional analysis was unique to this study and provides a model for future studies.

Lifetime Sexual Violence

Emotion dysregulation has, not surprisingly, occurred in men who have experienced lifetime sexual violence (N = 532 men from the community and 185 college men) [20]. The prevalence of lifetime sexual violence was reputedly as high as 27%. Those who experienced lifetime sexual violence had greater emotion dysregulation but also greater conformity to masculine norms and greater anger which likely compounded the emotion dysregulation effects.

Cognitive Deficits

In a study on the role of cognitive deficits as a predictor of emotion dysregulation, psychiatric inpatients from Italy were the participants (N=59) [21]. Emotion dysregulation was noted in several psychiatric conditions including personality disorders, mood disorders, substance use disorders and schizophrenia. The cognitive functions that were negatively affected included executive function, inhibition, working memory and cognitive flexibility. Greater impulsivity and cognitive deficits directly led to emotion dysregulation. However, the impulsivity and cognitive deficit effects were confounded by the multiple disorders affecting this sample.

Comorbidities of Emotion Dysregulation

Several comorbid conditions have been noted to accompany emotion dysregulation and may be considered risk variables and/or effects of emotion dysregulation. They include the cognitive disorders of attention deficit hyperactivity disorder (ADHD) and autism spectrum disorder (ASD) as well as addictions including eating disorder and substance use disorder. Diagnosed psychiatric disorders were also comorbid with emotion dysregulation including depression and anxiety, posttraumatic stress disorder (PTSD), PTSD/generalized anxiety disorder (GAD), obsessive-compulsive disorder (OCD) and borderline personality disorder (BPD). It is not clear whether these comorbidities preceded, followed, accompanied and/or exacerbated emotion dysregulation given that most of these studies were cross-sectional rather than longitudinal. Surprisingly, physical comorbidities have not appeared in this literature unlike the literatures of many other psychological problems.

Table 3: Comorbidities of emotion dysregulation (and first authors)

Comorbidities	First Authors
Attention Deficit Hyperactivity Disorder	Marquiles, Hernandez, McQuade, Callovini
Autism Spectrum Disorder	Northrup, Ferguson, Chiu, Restoy
Eating Disorder	Dejavitte
Substance Use Disorder	Mansueto, Gallagher, enguin Cavalli
Anxiety and Depression	Tamminen, Herbert, Galin
Posttraumatic Stress Disorder	Miravelle, Allbaugh
Obsessive-Compulsive Disorder	Sher, Bischof
Borderline Personality Disorder	Mitolo, Waite
Psychopathy	Burghart

Attention Deficit Hyperactivity Disorder (ADHD)

In children with ADHD, emotion dysregulation and depressive symptoms mediated the association between inhibition control difficulties and aggressive behavior [22]. In this sample (N=72 ADHD and 72 typically developing children), inhibitory control difficulties, which could also be called impulsivity, led to emotion dysregulation which, in turn, led to depression.

In a paper entitled "Multimodal assessment of emotional dysregulation in children with and without ADHD and disruptive behavior disorders", the greatest emotion dysregulation was noted in those with the combined problems (N= 129) [23]. The group with the combined disorders had greater emotion dysregulation, greater emotional reactivity/lability, less emotion recognition/understanding and greater callous– unemotional behavior. That the combination of ADHD and disruptive behavior disorders led to greater emotion dysregulation is not surprising. The relationship between emotion dysregulation and greater emotional reactivity, less emotion recognition and greater unemotional behavior is uniquely reported in this study. Unfortunately, a regression model was not used to determine the relative contribution of these other emotion variables to emotion dysregulation.

ADHD in adolescents has been reputedly related to both positive and negative emotion dysregulation [24]. In this study, positive emotion dysregulation included impulse control problems, difficulty engaging in goal-directed behavior, and non-acceptance of positive emotions. Negative emotion dysregulation included peer rejection, negative friendship quality, deviant peer affiliation, aggression, and victimization. The use of the positive emotion regulation category is unique to this study and difficult to interpret as "positive" given that the behaviors included in that category are exclusively negative.

In a study entitled "Influence of temperament and emotional dysregulation on depression symptoms in adults with ADHD", emotion dysregulation led to depressive symptoms (N= 164 adults, mean age =30) [25]. Difficult temperament also contributed to depressive symptoms in this sample. Once again, the emotion dysregulation effects may be confounded by the effects of the second variable, in this case difficult temperament.

Autism Spectrum Disorder (ASD)

Three studies in this literature on emotion dysregulation involved children and/or adolescents with autism spectrum disorder. In a study on emotion dysregulation in children with autism, their parents completed the Emotion Dysregulation Inventory (N= 1864 parents of children 2-to-5-years-old) [26]. The inventory is comprised of two dimensions including reactivity (fast, intense emotional reactions) and dysphoria (low positive emotions, sadness, unease). Those children with autism had more severe emotion dysregulation, four times more reactivity, and three times more dysphoria than children without autism. That the children were experiencing both reactivity and dysphoria suggests a bipolar disorder or manic depression. Emotion dysregulation was highly correlated with autistic traits, sleep problems, speaking ability and parent depression, but again a regression was not conducted to determine the contribution of these different problems to emotion dysregulation.

In a study entitled "Characterizing associations between emotion dysregulation, anxiety and repetitive behaviors in autistic youth with intellectual disability" (N= 150), emotion dysregulation was correlated with "unusual interests" [27]. Anxiety in this sample led to repetitive behaviors. It's unclear how emotion dysregulation and anxiety effects were separated. In the second study on adolescents with autism spectrum disorder, low resting heart rate variability led to emotion dysregulation (N= 23 ASD youth versus 32 typically developing youth) [6]. Emotion dysregulation could also lead to heart rate variability, but the bi-directionality or reciprocal nature of these variables was not considered.

In a review of 55 studies on emotion regulation and emotion dysregulation in children and adolescents with ASD, more severe ASD was associated with greater emotion dysregulation [28]. More severe ASD was also associated with poorer emotion regulation skills, which have rarely been mentioned as the most expected correlates of emotion dysregulation. Emotion dysregulation has typically been studied without assessing emotion regulation skills. Research on emotion regulation skills would help inform intervention research that would likely target those skills to reduce emotion dysregulation.

Eating Disorder

Addictions have also been related to emotion dysregulation. These include eating and substance use disorders. A network analysis suggested a link between eating disorder and emotion dysregulation In Brazilian and Canadian students (N= 1777) [29]. Moderate/severe food addiction led to impulsivity, which in turn led to emotion dysregulation. Impulsivity has been a mediator in several studies that assessed emotion dysregulation either as a predictor or an outcome variable, suggesting that emotion dysregulation and impulsivity are reciprocal or bi-directional variables.

Substance Use Disorder (SUD)

In research on emotion dysregulation in adults with substance use disorder (N=127 with substance use disorder and 127 controls), the participants with substance use disorder had greater emotion dysregulation [30]. The authors suggested that these may be reciprocal conditions and that emotion dysregulation would likely increase the risk of substance use disorder or in the case of this sample exacerbate the substance use disorder.

In another SUD study entitled "Interpersonal trauma and substance use severity: the serial mediation of emotional intolerance and emotional regulation" (N= 130 community members), interpersonal trauma led to substance use severity [31]. This relationship was mediated by both emotional intolerance and emotional dysregulation referred to as serial mediators. This infrequent finding of multiple mediators (serial mediation) simply relates to the authors' theory about the relationship between interpersonal tolerance and substance use. Although serial mediation suggests that the effect of the predictor on the outcome variable is transmitted through two or more mediators and each mediator influences the next in the series, the sequence can reflect the authors' theory rather than an observed sequence. While emotional intolerance may precede emotional dysregulation, the opposite sequence might also be observed.

In research that specifically focused on opioid use disorder as opposed to substance use in general, as many as 78% of the sample (N= 63) returned to opioid use [32]. This group was referred to as the recurrent group. Not surprisingly, the recurrent group experienced greater emotion dysregulation than the remission group.

Cannabis use has also been associated with emotion dysregulation. Different dimensions of emotion dysregulation have been related to problematic cannabis use (N= 741 adults) [33]. These included non-acceptance and impulsivity. Cannabis use disorder was also reported in a sample of outpatients (N=150) including 50% with clinically significant emotion dysregulation [1]. The effects of cannabis disorder on emotion dysregulation were confounded by the effects of comorbid disorders including eating disorders, minor mood disorders and ADHD. Unfortunately, data analyses were not conducted to determine the degree of emotion dysregulation that was related to the different disorders.

Mental Health Problems

Several mental health problems have been associated with emotion dysregulation. These include anxiety, depression, posttraumatic stress disorder with and without generalized anxiety disorder, obsessive-compulsive disorder and borderline personality disorder.

Anxiety and Depression

Anxiety and depression have been related to emotion dysregulation among Canadian athletes (N= 272) [34]. In this study, emotion dysregulation was predictive of mental health problems (both anxiety and depression). It was also related to performance concerns. Athletic performance would undoubtedly be negatively affected by both emotion dysregulation and mental health problems.

The psychophysiological stress response and emotion dysregulation have also been assessed as predictors of psychopathology in adolescents and young adults (N= 106, mean age= 18) [35]. In this sample, sleep problems led to emotion dysregulation which led to depression. Lower heart rate variability was noted after a stress induction in those with emotion dysregulation. That finding was not surprising given that depression has been accompanied by low heart rate variability in several studies. Problematically, this is again a cross-sectional study in which directionality of effects cannot be determined.

Mood dysregulation was a mediating variable in another study on the relationship between heart rate variability and depression [36]. This relationship may have also involved immune system dysfunction and inflammation.

Posttraumatic Stress Disorder (PTSD)

In a sample of women who had a history of interpersonal trauma, emotion dysregulation was a pathway to posttraumatic stress symptoms (N= 380, mean age = 32) [37]. The pathway in this study involved interpersonal trauma leading to high scores on the Difficulties of Emotion Regulation Scale leading to posttraumatic stress disorder. Once again, emotion dysregulation was a mediating variable.

In a study entitled “Understanding emotional dysregulation in PTSD/GAD comorbidity”, once again PTSD was secondary to interpersonal violence (N= 292 women) [38]. Those women who experienced PTSD combined with generalized anxiety disorder versus PDS alone had greater emotion dysregulation. Five out of six emotion regulation strategies differed with the combined PTSD/GAD group having fewer regulation strategies, no acceptance of emotional responses, impulse control problems, lack of emotional awareness, and lack of emotional clarity. Assessing emotion regulation strategies may be more informative for intervention purposes. Reducing emotion dysregulation would require enhancing emotion regulation strategies which could be targeted by intervention research on emotion dysregulation.

Obsessive-Compulsive Disorder (OCD)

Emotion dysregulation has also been a mediator between maladaptive perfectionism and obsessive-compulsive disorder in university students (N= 392, mean age= 22) [39]. In this sample, maladaptive perfectionism led to emotion dysregulation which led to obsessive-compulsive disorder. Presumably, maladaptive perfectionism itself could lead to obsessive-compulsive disorder. However, most researchers have recently explored mediation/moderation models to assess their theories about psychological phenomena.

In a study entitled “The relationship between emotion dysregulation and obsessive- compulsive disorder: an ecological momentary assessment study", those adults with OCD (N= 72) were compared to those adults without OCD (N= 54) over a six-day period on affect, emotion regulation strategies, perceived effectiveness of those strategies and acceptance of emotional experiences [40]. Not surprisingly, those adults with OCD had more negative affect and more avoidance regulation strategies.

Borderline Personality Disorder (BPD)

Emotion dysregulation has also been noted in adults with borderline personality disorder (BPD)(N=28 BPD patients, mean age= 24 years-old) [41]. In this sample of female patients, scores on the Difficulties in Emotion Regulation Scale were also correlated with impulsivity and anger rumination as well as decreased right amygdala volume. Further, emotion dysregulation was related to scores on the Beck Depression Inventory and the Rumination Response Scale. Again, with so many positive correlations, this research would have been more informative if a regression or structural equation modeling had been performed to determine the relative variance in emotion dysregulation that was explained by each of the correlates.

In another sample of adults with borderline personality disorder (N= 48), emotion dysregulation was related to negative urgency, lack of premeditation and lack of perseverance [42]. It’s not clear why these variables were selected as being related to borderline personality disorder as these are not defining features of borderline personality disorder. Positive emotion regulation was also related to sensation – seeking. This relationship is also difficult to interpret as emotion regulation might be expected to be related to less sensation-seeking as opposed to more sensation-seeking.

Psychopathy

Emotion dysregulation has also been noted in adults diagnosed with psychopathy (the absence of empathy and the blunting of affective states) [43]. Psychopathy is reputedly prevalent in as many as 10% of the population and has been typified by three dimensions including meanness, disinhibition and boldness. In this sample of adults with psychopathy (N= 315), alexithymia (difficulty recognizing, expressing and describing emotions) had a mediating role. Alexithymia may have contributed to more variance in psychopathy than emotion dysregulation as the characteristics of alexithymia are more closely related to psychopathy. Again, a regression analysis or structural equation modeling would have been more informative about the relative importance of these variables than the mediation analysis that was conducted.

Potential Underlying Biological Mechanisms

Reduced amygdala volume is the only potential underlying biological mechanism that has been suggested for emotion dysregulation. Reduced amygdala volume has been noted in borderline personality disorder patients and has been correlated with the Difficulties in Emotion Regulation Scale but also with the Beck Depression Inventory and the Ruminative Response Scale [41].

The amygdala was also implicated in a study on emotion dysregulation and addiction, most especially in those experiencing a relapse to drug use [44]. Brain activation was blunted in response to negative stimuli (emotion faces) in those relapsing to alcohol whereas brain activation was heightened in those with cocaine dependence. The affected brain regions not only included the amygdala but also the insula, anterior cingulate and the prefrontal cortex which comprise a large network in the brain.

Interventions

Intervention studies have been surprisingly rare in this literature given the prevalence and severity of emotion dysregulation. Those interventions have included physical activity, mindfulness plus physical activity, dialectical behavior therapy, compassion-focused therapy and estradiol.

Table 4: Interventions for emotion dysregulation (and first authors)

Interventions	First Authors
Physical Activity	Ontiveros, Norpuzi
Dialectical Behavior Therapy	Kuppelin, Ip, Saccaro
Compassion-Focused Therapy	Paucsik
Estradiol	Derntl, Greenfield

Physical Activity

Physical activity has reduced emotion dysregulation in a very large sample of children with ADHD (N= 12,094) [45]. Physical activity combined with mindfulness has been noted to reduce emotion dysregulation as well as insomnia severity among people with major depression [46]. These data were collected at baseline, eight weeks, at the end of the study and four weeks later (N= 50). The combination of physical activity plus mindfulness was more effective than mindfulness or exercise alone. As might be expected, two therapies might be more effective than one alone.

Dialectical Behavior Therapy

In research on dialectical behavior therapy for emotion dysregulation in adults with brain Injury, better scores were noted on the Difficulties of Emotion Regulation Scale after five months of therapy (N= 17) [47]. This may have resulted from emotion regulation skills being taught in addition to the provision of dialectical behavior therapy.

In another dialectical behavior therapy study, the therapy was used to reduce emotion dysregulation, interpersonal dysfunction and non-suicidal self-injury in adults with borderline personality disorder (BPD) (N=120) [14]. The effects were assessed at five time-points across a 12-month period. The greatest decrease in emotion dysregulation occurred during the earlier phases of dialectical behavior therapy. Changes in interpersonal dysfunction mediated changes in emotion dysregulation. Those changes were likely reciprocal with changes in emotion dysregulation also mediating changes in interpersonal dysfunction.

In a systematic umbrella review of 21 systematic reviews and 11 meta-analyses, dialectical and cognitive behavior therapies decreased emotion dysregulation [48]. Not surprisingly, the decrease in emotion dysregulation occurred in a wide range of adults including transdiagnostic psychiatric patients and healthy controls.

Compassion-focused Therapy

A compassion-focused therapy group, an emotion-competencies program as well as a waitlist control group were compared across a 12-week therapy period (N = 179) [49]. In this comparison between the three groups, compassion- focused therapy was more effective in decreasing emotion dysregulation, as the authors hypothesized and as might be expected.

Estradiol

In a study entitled “Estradiol modulates changes in effective connectivity in emotion regulation networks", two resting – state fMRIs were conducted after a placebo and after receiving estradiol [50]. The participants were given an emotion regulation task (to down–regulate emotions during negative images). Estradiol led to a connection from the parietal to the prefrontal cortex which, in turn, led to emotion regulation. Although the authors interpreted the results as the brain pathway change leading to emotion regulation, these cross-sectional study results could also suggest emotion regulation leading to the brain pathway change.

In a study on the effects of stimulant medication on emotion dysregulation in adults with ADHD, aberrant activation and deactivation patterns were reduced [51]. In addition, lower grey matter volume was noted in the limbic and paralimbic areas (network of structures involved in emotions) and, in contrast, greater grey matter volume was reported for the visual and cerebellar areas. The lower grey matter volume in the network involved in emotions might be expected in those with emotion dysregulation.

Methodological Limitations of this Literature

The methodological limitations of this literature could be categorized as problems with assessing emotion regulation almost exclusively by self-report scales, the arbitrary selection of mediator, effects and risk variables, the confounding of emotion dysregulation effects by comorbidities and the limited number of intervention studies.

The problem with the exclusive use of the scales is that they are self-report with questionable reliability. The use of self-report scales also has the problems of recall bias and "faking good" bias. This literature is not only limited to self-report variables but is also lacking experimental stress induction studies which could assess physiological effects of emotion dysregulation.

In addition, emotion dysregulation has been treated as a mediator variable for many different outcome effects depending on the researchers' interests. For example, emotion dysregulation has been considered a mediator between sleep and externalizing problems as well as between sleep and depression. Although it has been included as a mediator variable in several studies, it has rarely appeared as a moderator variable. Theories have been provided in this literature for mediators explaining how and why two variables are related. But the strength and direction of those relationships, which would be indicated by moderator variables, have infrequently appeared in this literature. Emotion dysregulation as a mediator suggests its occurrence, but the strength and frequency of emotion dysregulation have not been assessed. The assessment of a moderator would require longitudinal or repeated sampling.

Most of the studies are cross-sectional as opposed to longitudinal, so the direction of effects cannot be reliably determined. The negative effects studies have typically focused on one effect rather than sequential effects such as a series of individual effects including social media use leading to reduced well-being leading to non-suicidal self-injury leading to suicidality. As a predictor variable, emotion dysregulation has often led to impulsivity which, in turn, has led to multiple negative outcomes such as excessive smartphone use, eating disorder or substance use disorder. Emotion dysregulation has rarely been studied for its Immediate effects, for example, for nervous behaviors like misophonia, which did appear in this literature.

Very few risk factors/ predictors have been explored in this literature. Many predictors and outcome variables could be reversed, as in reciprocal or bi-directional variables. For example, a bi-directional relationship was reported for victimization and emotion dysregulation. The origin of emotion dysregulation has not been traced in a longitudinal study for its developmental trajectory and determination of its underlying biological mechanisms.

Although very few risk factors have been explored, most of them are very serious risk factors, for example, child abuse, peer victimization and lifetime sexual violence. Given the severity of these risk factors, they have surprisingly received little attention as compared to the negative effects. The comorbidities of emotion dysregulation might also be considered risk factors. Almost every psychiatric condition is a comorbidity of emotion regulation in this literature. Given the cross-sectional data, it's not clear whether emotion dysregulation precedes or follows and/or exacerbates the comorbidities. The effects of emotion dysregulation are confounded by the effects of these comorbidities. The mediated relationships are complicated when measured in different conditions as the condition itself might be mediating the relationship.

Surprisingly, the amygdala (and neighboring areas of the brain) was the only potential underlying biological mechanism addressed in this literature possibly because underlying biological mechanism research is expensive. Similarly, intervention research is expensive which may explain the very few interventions that were reported. Although skill training strategies were mentioned as components of intervention programs, emotion regulation strategies were rarely mentioned even though they would be important targets of skill training.

Despite these methodological limitations, this literature has been informative. The severity of the emotion dysregulation effects and the relative absence of underlying mechanism and intervention studies highlight the importance of continuing research on emotion dysregulation and emotion regulation skills.

References

1. Brancati GE, De Rosa U, Acierno D, Caruso V, De Dominicis F, et al. Development of a self-report screening instrument for emotional dysregulation: the Reactivity, Intensity, Polarity and Stability questionnaire, screening version (RIPoSt-SV). J Affect Disord. 2024. 355: 406-414.
2. Wycoff AM, Griffin SA, Helle AC, Haney AM, Watts AL, et al. The Brief Emotion Dysregulation Scale: Development, Preliminary Validation, and Recommendations for Use. Assessment. 2024. 31: 335-349.
3. Dixon LJ, Sevier CJ, Freshley AM. Emotion dysregulation in misophonia: Findings from a nationally representative sample. J Psychiatr Res. 2024. 180: 266-272.
4. Liu X. Emotion dysregulation mediates the relationship between sleep problems and externalizing symptoms in early adolescents: A four-wave longitudinal study. J Affect Disord. 2024. 363: 221-229.
5. Rogier G, Muzi S, Pace CS. Social media misuse explained by emotion dysregulation and self-concept: an ecological momentary assessment approach. Cogn Emot. 2024. 38: 1261-1270.
6. Chiu HT, Ip IN, Ching FNY, Wong BP, Lui WH, et al. Resting heart rate variability and emotion dysregulation in adolescents with autism spectrum disorder. J Autism Dev Disord. 2024. 54: 1482-1493.
7. Taccini F, Rossi AA, Mannarini S. Understanding the role of self-esteem and emotion dysregulation in victims of intimate partner violence. Fam Process. 2024. 63: 2258-2275.
8. Gao Y, Liu J, Liu X, Wang Y, Qiu S. Dimensions of family stress and repetitive nonsuicidal self-injury in adolescence: examining the interactive effects of impulsivity and emotion dysregulation. Child Abuse Negl. 2024. 152: 106804.
9. Faura-Garcia J, Calvete E, Orue I. Longitudinal associations between nonsuicidal self-injury, depressive symptoms, hopelessness, and emotional dysregulation in adolescents. Arch Suicide Res. 2024. 28: 800-814.

10. Robinson K, Cornes JP, Karl JA, Wilson MS, Grimshaw GM. Emotion dysregulation in nonsuicidal self-injury: Dissociations between global self-reports and real-time responses to emotional challenge. J Affect Disord. 2024. 362: 835-842.
11. Boyne H, Hamza CA. A daily diary study: The relation between pain tolerance and nonsuicidal self-injury and the moderating role of emotional dysregulation. J Affect Disord. 2025. 374: 216-224.
12. Di Nicola M, Pepe M, Montanari S, Marcelli I, Panaccione I, et al. Childhood sexual abuse and suicide attempts in patients with substance use disorders: The mediating role of emotion dysregulation. Child Abuse Negl. 2024. 151: 106731.
13. Russolillo A, Spidel A, Kealy D. Lack of Identity and Suicidality: The Mediating Role of Emotion Regulation Difficulties. J Nerv Ment Dis. 2024. 212:122-128.
14. Ip JWY, McMain SF, Chapman AL, Kuo JR. The role of emotion dysregulation and interpersonal dysfunction in nonsuicidal self-injury during dialectical behavior therapy for borderline personality disorder. Behav Res Ther. 2024. 180: 104594.
15. Tate M, Sinha R, Wemm S. Cumulative adversity and emotion dysregulation effects on suicidal ideation and attempts in a community sample. J Psychiatr Res. 2024. 170: 277-282.
16. Baroud E, Alrojolah L, Shamseddeen W, Ghandour LA, Elbejjani M, et al. Prevalence and correlates of emotion dysregulation among children and adolescents in Lebanon: results from a National Survey. BMC Psychiatry. 2024. 24: 698.
17. Huang H, Wu H, Luo L, Jiao B, Wu Y, et al. The influence of emotion dysregulation and perceived social support on the link between childhood emotional abuse and depressive symptoms in college students: a moderated mediation model. Front Psychiatry. 2025. 16: 1538390.
18. Ogan MA, Monk JK, Thibodeau-Nielsen RB, Vennum A, Soloski K. The role of emotional dysregulation in the association between family-of-origin conflict and romantic relationship maintenance. J Marital Fam Ther. 2024. 50: 28-44.
19. Herd T, Meyer C, Casas B, Kim-Spoon J. Longitudinal associations between changes in peer victimization and emotion dysregulation across adolescence. Emotion. 2024. 24: 1612-1624.
20. DeSantis AJ, Eshelman LR, Messman TL. Emotional Dysregulation, Anger, and Masculinity in Men Who Have Experienced Lifetime Sexual Violence. J Interpers Violence. 2024: 08862605241301790.
21. Minò MV, Vacca A, Litta A, Vetrano M, Perito M, et al. The role of cognitive deficits in emotional dysregulation: a study on a sample of patients from psychiatric rehabilitation communities. Psychiatr Danub. 2024. 36: 424-427.
22. Marques S, Correia-de-Sá T, Guardiano M, Sampaio-Maia B, Ferreira-Gomes J. Emotion dysregulation and depressive symptoms mediate the association between inhibitory control difficulties and aggressive behaviour in children with ADHD. Front Psychiatry. 2024. 15: 1329401.
23. Hernandez ML, Garcia AM, Spiegel JA, Dick AS, Graziano PA. Multimodal assessment of emotion dysregulation in children with and without ADHD and disruptive behavior disorders. J Clin Child Adolesc Psychol. 2024. 53: 444-459.
24. McQuade JD, Taubin D, Mordy AE. Positive emotion dysregulation and social impairments in adolescents with and without ADHD. Res Child Adolesc Psychopathol. 2024. 24: 1-3.
25. Callovini T, Di Nicola M, Pepe M, Crocamo C, Bartoli F, et al. Influence of temperament and emotional dysregulation on depressive symptoms in adults with attention-deficit/hyperactivity disorder: a structural equation modelling analysis. J Psychiatr Res. 2024. 180: 227-233.
26. Northrup JB, Hartman AG, MacKenzie KT, Sivathasan S, Eldeeb S, et al. Emotion dysregulation in autism: severity and correlates in early childhood. Autism Res. 2024. 17: 2662-2675.
27. Ferguson EF, Spackman E, Cai RY, Hardan AY, Uljarević M. Characterizing associations between emotion dysregulation, anxiety, and repetitive behaviors in autistic youth with intellectual disability. Autism Res. 2024. 17: 1810-1817.
28. Restoy D, Oriol-Escudé M, Alonzo-Castillo T, Magán-Maganto M, Canal-Bedia R, et al. Emotion regulation and emotion dysregulation in children and adolescents with autism spectrum disorder: a meta-analysis of evaluation and intervention studies. Clin Psychol Rev. 2024. 109: 102410.
29. Dejavitte RAS, Enes CC, Kim HS, Soares da Silva L, Andrade ALM. Investigating the links between food addiction, emotional dysregulation, impulsivity and quality of life in Brazilian and Canadian college students: a network analysis. J Hum Nutr Diet. 2025. 38: e70006.
30. Mansueto G, Palmieri S, Sassaroli S, Ruggiero GM, Caselli G, et al. Emotion dysregulation in participants with substance use disorders: a metacognitive perspective. J Affect Disord. 2024. 363: 63-71.
31. Gallagher C, Brunelle C. Interpersonal trauma and substance use severity: the serial mediation of emotional intolerance and emotional dysregulation. J Trauma Dissociation. 2024. 25: 379-393.
32. Zengin İspir G, Danışman M, Tulacı RG, Özdel K. Emotion dysregulation and affective temperaments in opioid use disorder: the preliminary results of a prospective study. J Addict Dis. 2023. 41: 196-203.
33. Cavalli JM, Cservenka A. Sex moderates associations between dimensions of emotion dysregulation and problematic cannabis use. J Psychoactive Drugs. 2024. 56: 342-52.
34. Tamminen KA, Bonk D, Milne MJ, Watson JC. Emotion dysregulation, performance concerns, and mental health among Canadian athletes. Sci Rep. 2025. 15: 2962.
35. Herber CLM, Breuninger C, Tuschen-Caffier B. Psychophysiological stress response, emotion dysregulation and sleep parameters as predictors of psychopathology in adolescents and young adults. J Affect Disord. 2025. 375: 331-341.
36. Galin S, Keren H. The predictive potential of heart rate variability for depression. Neuroscience. 2024. 546: 88-103.
37. Mirabile M, Gnatt I, Sharp JL, Mackelprang JL. Shame and emotion dysregulation as pathways to posttraumatic stress symptoms among women with a history of interpersonal trauma. J Interpers Violence. 2024. 39: 1853-1876.

38. Allbaugh LJ, Marinack L, Pickover AM, Powers A, Marshall Lee ED, et al. Understanding emotion dysregulation in PTSD-GAD comorbidity. J Anxiety Disord. 2025. 110: 102985.
39. Sher A, Wootton BM, Paparo J. A preliminary investigation of the mediating roles of self-compassion and emotion dysregulation in the relationship between maladaptive perfectionism and obsessive-compulsive behaviors. J Clin Psychol. 2024. 80: 591-609.
40. Bischof C, Hohensee N, Dietel FA, Doebler P, Klein N, et al. Emotion regulation in obsessive-compulsive disorder: an ecological momentary assessment study. Behav Ther. 2024. 55: 935-949.
41. Mitolo M, D'Adda F, Evangelisti S, Pellegrini L, Gramegna LL, et al. Emotion dysregulation, impulsivity and anger rumination in borderline personality disorder: the role of amygdala and insula. Eur Arch Psychiatry Clin Neurosci. 2024. 274: 109-116.
42. Waite EE, DeFontes C, Weiss NH, Karnedy C, Woods SE, et al. Borderline personality disorder and multidimensional impulsivity: the roles of positive and negative emotion dysregulation. J Affect Disord. 2024. 344: 635-643.
43. Burghart M, Sahm AH, Schmidt S, Bulla J, Mier D. Understanding empathy deficits and emotion dysregulation in psychopathy: the mediating role of alexithymia. PLoS One. 2024. 19: e0301085.
44. Hand LJ, Paterson LM, Lingford-Hughes AR. Re-evaluating our focus in addiction: emotional dysregulation is a critical driver of relapse to drug use. Transl Psychiatry. 2024. 14: 467.
45. Ontiveros N, Wiklund CA, Ohlis A, Ekblom Ö. The role of physical activity in the association between ADHD and emotional dysregulation. J Affect Disord. 2025.
46. Norouzi E, Rezaie L, Bender AM, Khazaie H. Mindfulness plus physical activity reduces emotion dysregulation and insomnia severity among people with major depression. Behav Sleep Med. 2024. 22: 1-13.
47. Kuppelin M, Goetsch A, Choisel R, Isner-Horobeti ME, Goetsch T, et al. An exploratory study of dialectical behaviour therapy for emotional dysregulation and challenging behaviours after acquired brain injury. NeuroRehabilitation. 2024. 55: 77-94.
48. Saccaro LF, Giff A, De Rossi MM, Piguet C. Interventions targeting emotion regulation: an umbrella systematic review. J Psychiatr Res. 2024.
49. Paucsik M, Baeyens C, Tessier D, Shankland R. Reducing emotion dysregulation online in nonclinical population with compassion focused therapy and emotional competencies program: a randomized controlled trial. J Clin Psychol. 2024. 80: 2405-2433.
50. Derntl B, Eber CH, Kogler L, Rehbein E, Sundström-Poromaa I, et al. Estradiol modulates changes in effective connectivity in emotion regulation networks. Psychoneuroendocrinology. 2024. 167: 107103.
51. Greenfield MS, Wang Y, Hamilton JP, Thunberg P, Msghina M. Emotional dysregulation and stimulant medication in adult ADHD. J Psychiatry Neurosci. 2024. 49: E242-251.
52. Clapham R, Brausch A. Internalizing and externalizing symptoms moderate the relationship between emotion dysregulation and suicide ideation in adolescents. Child Psychiatry Hum Dev. 2024. 55: 467-478.
53. Lee JJ, Flouri E, Jackson Y. The role of timing and amount of outdoor play in emotional dysregulation in preschool children. Child Care Health Dev. 2025. 51: e70020.
54. Paulet T, Weiner L. Imagery-based cognitive therapy to reduce emotional dysregulation and mood instability in bipolar disorder: a case-series study. Behav Cogn Psychother. 2025. 53: 1-16.