

## Mental rumination

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### **Abstract:**

Known as intrusive, uncontrollable, recurrent and repetitive thoughts, rumination received considerable interest over the past two decades, as it is considered as an important cognitive process and is a transdiagnostic symptom which plays a role in the evolution of many psychological disorders. Researchers in Europe, Asia and USA, studied this subject multiple ways and developed theories to explain it, scales to measure it and psychological and cognitive-behavioral therapies to control it.

Noticing the lack of research in the Arabic academic field, this topic aims to review foreign studies that have been led, and try to introduce this topic in Algeria, and give it a status as an independent subject, going through its definition, components, causes and consequences, its relationship with other disorders and therapy.

Key words: Rumination, repetitive thoughts.

## **1. INTRODUCTION**

Over the past two decades, the world has witnessed an increasing interest in psychology and the concepts of mental health, as specializations, research and theories began to give interest to the topic, many individuals became more invested in their mental health as much as they invest in their physical health. One of the main reasons to care about psychopathology is that a poor mental health reduces one's effectiveness as an individual in society. Among the negative psychological phenomena that have increased greatly during the past decades, and which have known a large spread in the whole world, there is depression, The World Health Organization estimates that over 300 million people suffer from depression. The number of depression cases increased by 18% from 2005 to 2015, and the psychological manifestation that is considered a threat to The health, comfort and well-being of the individual in all aspects of life is the psychological stress, nine out of ten individuals are exposed to at least once in their lives. Researchers have found, while studying psychopathologies several overlapping symptoms, the most prominent of them is mental rumination, which has met as a topic by itself a wide interest from researchers in Europe and America, whom began to study it two decades ago, like Nolen-Hoeksema, Croyley, Watkins..However the topic still pretty muc unknown in the Arabic research.

Research on theories of depression has identified rumination in response to depressed mood as risk factors for depressive episodes. (Paparegio, costas, 2016) As it was described, by Ripper in 1977 as "as persistent, recyclic, depressive thinking, is a relatively common response to negative moods, and a salient cognitive feature of dysphoria and major depressive disorder. (Paparegio, costas, 2016)

In their study among 275 undergraduate students about Self-compassion as a moderator of the relationship between rumination, self-reflection and stress, Samaie and Farahani, found that rumination had a significant positive association with stress. (Gh. Samaie, H.A. Farahani, 2011)

As seen above, rumination is considered as a symptom, while some researcher consider it as a personality trait (Alain

Debenedetti, Pierrick Gomez, 2006) and in light of the lack of interest in the subject and the scarcity of local and Arab studies that dealt with it, and based on the aforementioned, we ask the following question: What is rumination?

## **2. Discovering rumination**

### **2.1 Definition of rumination**

Many researchers have studied Rumination, theoretical and empirical wise for the last two decades, and many definitions have been given to it. Research in this area has been dominated by clinical/health psychology, with rumination implicated in the etiology of a number of psychological disorders, e.g., depression and anxiety (Querstret & Cropley, 2012, p5). Martin and Tesser (1996) proposed to define rumination as “a class of conscious thoughts that revolve around a common instrumental theme and that recur in the absence of immediate environmental demands requiring the thoughts, Although the occurrence of these thoughts does not depend on direct cueing by the external environment, indirect cueing by the environment is likely given the high accessibility of goal-related concepts. Although the external environment may maintain any thought through repeated cueing, the maintenance of ruminative thoughts is not dependent upon such cueing” (Martin, & Tesser, 1996, p7). As mentioned, rumination has been linked to many psychological disorders such as depression, in this context Ripper defined it as “a persistent, recyclic, depressive thinking, and a relatively common response to negative moods” (Rippere, 1977) while Nolen-Hoeksema referred to it as “repetitive and passive thinking about symptoms of depression and the possible causes and consequences of these symptoms” (Nolen-Hoeksema, 1991). In another study Nolen-Hoeksema et al described rumination as a mode of responding to distress, one that entails repetitively and passively focusing on the distress as well as its possible causes and consequences. (Nolen-Hoeksema S, Wisco BE, Lyubomirsky, 2008, p 400) Conway et al, suggested that rumination is” repetitive thoughts concerning one’s present distress and the circumstances surrounding the sadness” (Conway et al. 2000, p. 404). Rumination has also been described by Ernst Koster et al; as a process of impaired disengagement, which signifies that prolonged processing of self-referent material is due to an

impairment in the ability to disengage one's attention. (Ernst Koster et al, 2011, p138), while studying the relationship between rumination and Physical Health, Randy A. Sansone, Lori A. Sansone, referred to rumination as a detrimental psychological process characterized by perseverative thinking around negative content that generates emotional discomfort. (Randy A. Sansone, Lori A. Sansone, 2012 ). Going through many researchers' definitions, we propose the following definition, (Rumination is reflection upon thoughts of a negative nature, concerning the past , in the absence of immediate environmental demands).

## **2.2 Components of rumination:**

What was presented by the few theoretical frameworks about rumination, is that it has two main components: sadness and anger.

Sadness rumination revolves around the unfortunate events that happened to the individual, whether he was involved in them or it happened to him against his will,

anger rumination, may take many forms, such as anger directed towards oneself or towards others, which may also take a form of hostility, offensive or oppressed silence. ( Tran, Tanya B, 2012)

anger rumination means feeling the control of negative life situations over a person's thinking, feeling upset, excessive thinking, reprimanding without reason, blaming oneself, feeling uncomfortable, reviewing memories, thinking about the past, recalling fantasies, sometimes wanting to respond to abuse, and not wanting to participate. Social, or doing it reluctantly and without real desire, dealing with life pressures negatively, forming hostile thoughts, dark thoughts, thinking about revenge, feeling degraded, and controlling thoughts of defeat, retreat, introversion and isolation from others. (Douglass, 2013)

## **2.3 Types of rumination:**

While researching the different types of rumination, we encountered many classifications, some classify it as negative and positive rumination, and some differs it as cognitive and emotional rumination. Going thru different studies we have found that emotional rumination refers to negative rumination and Cognitive rumination is referred to as positive, based on the outcomes of ruminative thoughts.

Cognitive and Emotional rumination:

Emotional Rumination: Also known as affective rumination, many researchers have described rumination from the emotional side, like Nolen-Hoeksema and others who reoffered to it as “repetitive thinking process that focuses on one’s distress symptoms where attention is directed on the feelings related to a problem” (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008). Lyubomirsky and her colleagues also found in researches on the effects of rumination, that the emotional form of rumination impairs people’s ability to focus on problem-solving and results in reasoning on negative thoughts about past failures. (Lyubomirsky, Caldwell, & Nolen-Hoeksema, 1998), and has linked affective rumination to negative psychological health outcomes like depression.

Cropley and Zijlstra confirm experiencing negative emotional reactions which manifest themselves in the form of tension, and annoyance, clearly have a negative effect on the individual’s mental health and sanity. (Mark Cropley, Fred R H Zijlstra, 2011, p 10).

Cognitive rumination:

As we’ve seen above, many reasearchs focused on the negative aspects of rumination, whilst thinking about problems and issues isn’t necessarily negative and may have a positive outcome, as formulating an effective solution to one’s persona problems is clearly an important step of the problem-solving process. So rumination might help a person to find solutions to their problems. Segerstrom and colleagues (2003) differentiated betweenadaptive and maladaptive repetitive thinking, where by adaptive repetitive thinking included processing, mental simulation and reflection as types of cognitive coping strategies, and Watkins (2008) reviewed research on constructive and unconstructive repetitive thoughts, which can lead to either unconstructiveconsequences (e.g., depression or anxiety) or to constructive consequences like recovery and anticipatory planning. (Ulla Hamesch and others, 2014, p 05).

So, we conclude by saying that experimental research suggests that there are distinct styles of ruminations, with distinct functional properties, and consequences: a helpful style characterized by concrete, process-

focused and specific thinking, versus an unhelpful, maladaptive style characterized by abstract, evaluative thinking.

### **3. Causes and consequences of rumination**

#### **3.1 Causes of rumination:**

Rumination is a normal process driven by unsolved goals. It is a common response not limited to people with psychological disorders, however it is relatively brief for most people, moreover it can even be helpful in some situations, as a person can develop better plans dealing with future similar situations (Watkins , 2008).

Nolen Hoeksema claims in her response styles theory that rumination is learned in childhood, modeled by parents who themselves had poor coping styles. She also found in one of her numerous studies about rumination that children of depressed parents were more likely to show passive and helpless responses to frustrating situations. In the same research she stated that children may show a ruminative style responses if they are not explicitly taught an active problem solving approach, which happens with intrusive parents who did not allow their children to face their own problems (watkins,2008), in the same pattern, according to spasjovic and alloy 2002, High levels of rumination are linked to overcontrolling parents (Watkins , 2008).Rumination is also associated with physical, sexual and emotional abuse (Conway .....2004) . Furthermore, rumination is one the main consequences of exposure to a traumatic event (Diagnostic and Statistical Manual of Mental Disorders, American Psychiatric Association, 1994). Gerin, Davidson, Christenfeld, Goyal, and Schwartz (2006) explained that prolonged anger may induce ruminative thoughts, and increased autonomic arousal may prolong anger, with these two processes operating as a feed-forward process. (Ottavani, Shapiro, and Fitzgerald, 2010, p2).

Watkins and Hoeksema conceptualize rumination as a habit while others have interpreted it as an avoidance behavior, which is considered dysfunctional, considering that thinking and focusing on the aspects of a traumatic event obstruct the adequate emotional processes to cope with the trauma (Bishop, Ameral, and Palm Reed, 2018). According (Martin and Tesser, 1989, 1996), rumination starts from the interruption of the goal

pursuit process, .While others (Tait and Silver, 1989) see that it's more attributable to the sudden invalidation of one's positive beliefs, and to the weakening that the negative event introduces into the concept of self. (Céline Delfosse, Frédéric Nils, Sophie Lasserre, Bernard Rimé, 2004).

### **3.2Consequences of rumination :**

In many of her researches with others Nolen Hoeksema studied rumination and its effects on one's mood, going through a quite few studies of hers, we found that:

Rumination increases the effects of negative mood on cognition (Nolen Hoeksema & morrow, 1993) , it also has been proved that it intensifies psychopathology by magnifying and prolonging negative mood states, (watkisansroberts 2008), acting as a transdiagnostic mental health vulnerability impacting anxiety, depression, psychosis, insomnia, and impulsive behaviours; several lines of evidence suggest that rumination might mediate the relationship between stressors and psychopathology. Early work on rumination by Nolen-Hoeksema and Morrow in 1991 documented that individuals who engaged in high levels of rumination were more likely to experience symptoms of depression and major depressive episodes following stressful life events, including natural disasters (Amelia Aldao et al. 2014, p3)

It also has been suggested that ruminations impairs the capacity of problem-solving and obstruct motivation (Nolen Hoeksema &Lyombursky 1993), as rumination appears to interfere the problem-solving process, leading to a loss of confidence in one's ability to achieve their goal (Lyubomirsky et al., 1999), ruminators often believe that it will help solve their problems, ironically, ruminative responses to distress have been associated with ever-greater problems and stress. (Papagiorgiou....) moreover patients showing high levels of rumination tend to avoid seeking social support ( NolenHoekseta, 1993), it's also stated that it impairs relationships (Papagiorgiou....)

One of the consequences of rumination is the threats on physical health as it is associated with higher blood pressure, and Heart Rate and increased negative mood (Ottavani, Shapiro, and Fitzgerald, 2010, p3)as it maintains physiological stress responses. (Watkins and Roberts, 2020, p 28)

Rumination also interferes with therapy and limiting the efficacy of psychological and medicinal interventions (Watkins and Roberts 2008). After reviewing of multiple studies on rumination, its causes and consequences, we can sum it up by saying that the main causes of rumination are, childhood trauma, and unattained goals, and that the major consequences of rumination are: prolonged negative mood, stress, depression, impaired problem solving and even physical health problems like high blood pressure.

#### **4. Relationship between rumination and other psychological disorders:**

While reviewing a number of studies about the subject, we noticed that rumination is often linked to stress, depression and worry.

##### **4.1 Rumination and worry:**

Both rumination and worry are forms of repetitive thoughts, Recent efforts to distinguish worry from rumination suggest considerable similarities between the two forms of thought, including among other things: their repetitive nature, negative valence, and relationships to uncertainty. Ultimately, it appears that rumination and worry may resemble one another in terms of form or process, but differ significantly in terms of their content and conscious motives (Nolen-Hoeksema, Vine & Gilbert, 2013, p13), studies have shown that both of them have similar effects on mood, increasing ratings of anxiety and depression, more than that, worry may be triggered by unsolved goals related to threat and focused on the future, when rumination may be triggered by unsolved goals related to self-identity and is more focused on the past. (Watkins, 2016, p33) theories suggest that worry itself may become the topic of rumination, such that individuals ruminate about their tendency of worrying too much (Wells, 1995).

##### **4.2 Rumination and stress:**

Several approaches in stress research assume that rumination prolongs stress-related affective and physiological activation and hence contributes to impair somatic health in the long run, prolonged or repeated stress exposure with sustained arousal appears to result in damaging health effects



(Brosschot, Gerin, & Thayer, 2006); research has suggested that rumination interacts with life stress (Schwartz & Koenig, 1996), in their research about work related rumination, Quetrest and Cropley suggested that If work-related rumination operates to maintain psychophysiological response to work-related stressors once the individual has left work, it is possible this continued activation interferes with recovery processes by negatively impacting sleep(Querstret&Cropley, 2012). One of the consequences associated with rumination is a higher level of stress, although many people ruminate because they believe that it will help solve their problems, ironically, ruminative responses to distress have been associated with ever-greater problems and stress(papagiorgio and wells, 2012). As Nolen-Hoeksema and colleagues have noticed that ruminators (people who ruminate) report an increased stressful event in their lives (Nolen-Hoeksema et al., 1999).

#### **4.3 Rumination and depression**

Most of researches about rumination, confirm that rumination and depression are linked to one another, as in his research about effects of rumination on depression, Sun and his colleagues found that rumination is a cognitive predisposing factor to depression and that the two are positively related. (Sun et al', 2014)

The response styles theory (Nolen-Hoeksema,1991) concluded that rumination was the form most strongly and consistently related to depressive symptoms. According to paparegiou and wells. Rumination may be the engine that keeps depression running chronically (Papparegiou, wells, 2004, p119).

In conclusion, rumination acts as a transdiagnostic symptom that prolongs and maintains, stress, depression and worry and is closely related to.

#### **5.Psychological therapy for rumination**

As mentioned before, rumination leads to many negative consequences causing discomfort in people's life, like thinking about upsetting past mistakes, traumatic events... as rumination is considered as unwanted thoughts, researchers have suggested multiple approaches as a treatment.

### **5.1 Thought stopping**

A behavioural technique used to help a person troubled by recurring uncontrolled thoughts like ruminations and worries (Christine Purdon, 2004) including 4 steps:

Step 1: the patient describes their thoughts about worrying experiences and the therapist suddenly asks him to stop several times.

Step 2: the patient is asked to imagine an unpleasant situation and is then asked to stop. Then the therapist will be able to control the unwanted thoughts.

Step 3: the patient learns to say « stop » out loud to his own thoughts.

Step 4: with efforts and encouragements, the patient learns to produce and then eliminate the unwanted thoughts. (Rodger K. Bufford, 1985)

The thoughts stopping technique is a form of aversion training, even though the technique showed positive results, it also received some criticism.

Studies who searched the effects of thought suppression, like Roemer and Borkovec (1994) found that it leads to enhanced anxiety, Meanwhile, Wegner, Erber, and Zanakos (1993) state that when attempts to suppress stimuli related to a negative mood were balked by a cognitive load, mood state became more negative (Christine purdon, 2004)

### **5.2 In vivo and inoginal exposure**

This technique evolves exposing the ruminator to its negative thoughts, fears, trauma, stressful events... by asking them to think of them without escaping or avoiding, until the anxiety caused by these thoughts decreases by itself. Developed by ( salkovis and westbrook, 1989).

### **5.3 Eye movement desensization rotating (EMDR)**

EMDR consists of a psychotherapy approach that combines relaxation techniques with gradual exposure that helps to resolve the psychological, physical, relational consequences of traumatic and disturbing life experiences, developed by Shapiro in 1987

This method evolves back and forth eye movement while imagining the upsetting situation, supposedly lowering anxiety symptoms, although EMDR is supported by the American psychology association, there is still little research basis on it.

### **5.4 Rumination-Focused Cognitive Behavioral Therapy (RFCBT)**

Rumination-focused cognitive behavioural therapy is a psychotherapeutic treatment targeting rumination. Because rumination plays a major role in the initiation and maintenance of many psychological disorders like depression, targeting rumination with rumination-focused cognitive

behavioral therapy may be more effective in treating disorders and reducing relapse than standard cognitive behavioral therapy. (Watkins, 2015)

Steps included in the RFCBT:

RFCBT views rumination as a learned behavior; the therapy goes on by using journals to record the patient's rumination and avoidance; then the therapist analyses and examines the context and the function of rumination and avoidance; After that, Behavioral experiments are lead to examine the effect of different thought patterns (why vs. how); to Enable the desired behavior by Focusing on the patient's values. (Watkins ,2016)

## **6. CONCLUSION**

The adverse effects of rumination on health and well-being are well documented in the literature. Accumulated stress, depression and other mental disorders has repeatedly been associated with physical and psychological health problems. Attention is now being directed to understanding the role 'Controlling Rumination' plays on health, as it is now becoming more apparent that people need to take care of their health, not only physically, but mentally, and prevent it from the effects of constant rumination consequences.

We started this article by presenting a definition to rumination, its nature and components, how it is a repetitive form of thinking that may be positive or negative depending on the way it is processed. Then we went thru its causes and consequences, explaining how childhood trauma can affect the thinking process of an adult and how it can lead to negative consequences on one's health. After that we tried to understand its relationship with worry, depression and stress and then to finish up we examined the different psychological therapies developed to control the ruminative thinking.

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