



Rumination As a Transdiagnostic Notion

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ABSTRACT

Transdiagnostic, in other words ‘beyond diagnosis’ is a term that which is generated as an alternative to some negative situations which are caused by diagnostic approach. Transdiagnostic approach is a comprehensive perspective which adopts diagnosis as a tool and crossover rather than the main purpose. Rumination means that repetitive and compulsory thoughts which provokes a lot of negative circumstances. Rumination is seen in many psychopathologic diagnosis as symptom even it is not mentioned as an exact diagnosis in the literature. Some notions like rumination which are not described as exact diagnosis but provide some criterias which are seen as general psychopathologic symptoms qualified as transdiagnostic. The aim of this study is evaluating rumination in the concept of transdiagnostic view by reviewing literature and discussing its advantages. Studies show that ruminations effects on many diagnoses persistence, occurrence and relapse like depression, anxiety, stress, alcohol addiction and substance addiction helps to understand transdiagnostic feature of itself. At the same time, factors like adding a meaning to evaluation of the relationship between diagnoses, occurring important effects on consistence of diagnosis as being mediator role and implicit role provide a view to understand transdiagnostic characteristic of rumination.

The excess of psychological signs, diagnoses, and classifications in psychological science causes some difficulties in both academic and clinical fields. To these difficulties, cases such as stigmatizing people with diagnosis, the inability to identify common processes that cause psychological signs, neglecting people by virtue of over-focusing on classification, the change of diagnoses during the treatment process and the possibility of multiple diagnoses being made to a person can be given as examples (Oğuz and Batmaz, 2020). In order to prohibit such negativities, transdiagnostic approach has been suggested as an alternative to the ‘diagnostic’ approach, with the thought that clients cope with much more than just a diagnosis. (Linton, 2013) In comparison with the diagnostic approach, the transdiagnostic approach has differences such as the belief that a certain psychopathological sign may be involved in more than one diagnosis, the fact that diagnosis is not necessary for every treatment and it has an holistic approach (Mansel et al., 2009).

Rumination

When considering negative psychological states, not only diagnosis-oriented but also concept-oriented thinking will help to clarify psychopathological framework and evaluate it in a qualified way. When negative, repetitive and compulsive thoughts that are effective in the development process of psychopathology are also considered within these concepts, ‘rumination’ is included in the glossary (Yılmaz, 2014). Rumination literally means a repetitive, mostly self-directed thought pattern that associated with stress symptoms that is the result of another psychopathological problem (Johnson et al., 2016). The content of repetitive thoughts consists of the emotions and problems of the people rather than the specific thoughts. On the other side, rumination is

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closely related with negative perception and interpretation; maladaptive thought behaviors such as unhappiness, pessimism, intense self-criticism, impulsivity, addiction, need for approval, and neuroticism. (Nolen-Hoeksema et al., 2008)

Rumination does not only prevents people from finding solutions or taking action, but also increases stress, leads to the continuation of psychopathological signs and further reduces functionality in daily life. Among the effects of rumination that reduce functionality, there are signs such as experiences, and negative thoughts about oneself, bad interpretation of events, constant self-criticism, low problem-solving skills, decreased social support, impaired concentration and increased stress sources (Lyubomirsky and Tkach, 2004).

Evaluating by the frequency of rumination it's been stated that women are diagnosed at higher rates than men; nonetheless, the tendency to ruminative thinking increases with age (Bugay and Erdur-Baker, 2011). It's known that tendency of women to have more rumination especially after puberty increases also the risk of experiencing depression (Shors et al, 2017). On the other hand, there are approaches stating that ruminative thoughts do not make a difference according to gender, but there is a significant relationship between rumination and depression (Johnson & Whisman, 2013).

It's been seen that the possibility of depression and recidivation increases and the age of onset of depression is also earlier in people with rumination (Nolen-Hoeksema et al., 2007; Nolen-Hoeksema et al, 2008). In addition to depression, it's known that rumination also increases the risk of other psychopathological diagnoses such as anxiety, eating disorder, substance dependence, and comorbidity (Johnson et al., 2016). However, although rumination is associated with psychological sign patterns, it is also common in people who do not have any psychological disorder (Yılmaz, 2014). Hence it can be said that rumination can be seen in a psychopathological process, cause this process and it can be seen as independent of any psychopathology.

When the relationship between depressed, and poor state of mind and rumination is evaluated, there are approaches that emphasize the development of ruminative thoughts can be evaluated within the framework of a bidirectional relationship, and there are also approaches that emphasize a process in which depressive mood causes rumination and rumination causes depressive mood again. For example, according to Nolen-Hoeksema's (1991) "Response Style Theory", the development of rumination in the presence of depression is evaluated as the person's repetitive and passive thinking about depressive symptoms. In other words, the rumination in the person is a set of signs that the person is depressed, including the presence, outcome, and meaning of depressive symptoms (Papageorgiou and Wells, 2004). During ruminative thinking, the person constantly asks, "Why can't I start? What is wrong with me? I don't feel like I can overcome them.", far from contributing to the solution process, one repeats negative thoughts in one's mind (Nolen-Hoeksema, 2004). The important difference here is that as depressive symptoms and ruminative thoughts affect each other, rumination and depressive symptoms become permanent and increase the risk of major depression.

In addition to Nolen-Hoeksema's The Response Styles Theory, Martin and Tesser's "Goal Progress Theory" or "Goal Conflict Theory" also provides insight to understand better the development of rumination. According to Martin and Tesser (2006), people tend to think more ruminatively when they have trouble reaching the goal they set, and rumination ends when they reach their goals, make progress in line with the goal or give up on their goals. Therefore, the development of rumination occurs when the person lives through the behavioral inhibition instead of playing an active role as a consequence of the difficult struggle he/she experiences. After then, rumination also leads to other psychopathological diagnoses and mental symptoms (Grierson et al., 2016).

When depression and rumination are evaluated together, it should be considered that not every repetitive negative thought will lead to depression or other psychological problems. Yet research has shown that rumination's specific characteristics cause adverse outcome and other forms of thought, such as self-focus and self-awareness, can also produce constructive results, provide coping skills, make it easier to keep up, and increase psychological well-being (Johnson et al, 2016). In this context, it is reported that when evaluating psychopathologic risks and situations, distinguishing rumination and other repetitive thoughts is of great importance because different thought states produce different results (Trapbell and Campbell, 1999).

Rumination, which is mostly seen as a symptom of depression and considered together with depression in the

transdiagnostic approach, has also been examined within other diagnoses. For example, in a study by Michael et al. (2006), it was seen that rumination plays an important role in determining post-traumatic stress disorder triggers memories of trauma. Moreover, it's known that rumination is seen as sign of depression and anxiety; plays an intermediary role between the two diagnoses and has a significant effect on anxiety (McLaughlin and Nolen-Hoeksma, 2011). Additively, in a research conducted on participants with eating disorders, it was found that people who with rumination were also more likely to have an eating disorder (Eckern et al, 1999). It has been supported by studies that rumination also causes physical problems as it reduces sleep quality and level, has an effect on heart diseases and negatively affects the treatment after heart disease and causes physical problems (Guastella and Mouds, 2007; Radstaak et al., 2011).

Transdiagnostic Approach

Apart from the presence of longstanding and increasingly widespread diagnostic approaches to psychological problems, the function of “transdiagnostic” notion, which has been discussed recently and increasingly agreed by researchers, has also come into question. The transdiagnostic approach aims to gain an unusual understanding of psychological disorders by transcending the boundaries of classical diagnostic classifications and setting aside what the diagnoses indicate. (Dalglesih et al., 2020).

Transdiagnostic approach was primarily seen as an alternative to the diagnostic approach and problems such as stigmatization of diagnostic classification, strict boundaries between diagnoses, and misdiagnosis. On the other hand, there are approaches that find transdiagnostic notion non-functional because it does not evaluate a clear diagnosis, deals with symptoms rather than diseases and does not contain diagnostic information (Fusar-Poli et al., 2019). For example, Dalglish et al. (2020) listed the disadvantages of the transdiagnostic approach as that it is not based on theory, the fact that transdiagnostic notions are mostly based on mental processes that cannot be clearly defined, it throws the diagnoses into the background, renders studies on diagnostic classifications worthless, and makes it difficult to perform targeted treatments.

Although the transdiagnostic notion is evaluated from different perspectives by researchers, it would not be wrong to state that this notion, which is still new to be defined, is accepted and supported by most researchers. Even though the biggest criticism brought to the concept is that it is seen as contrary to the diagnostic classification that is now accepted as the basic for the evaluation of psychological diseases, the transdiagnostic notion provides a great advantage in terms of forming the theoretical transition between diagnoses and looking at it from a general perspective (Harvey et al., 2004). In addition, the transdiagnostic approach makes it possible to evaluate the signs that do not belong to any diagnostic classification but goes together with a certain diagnosis or sign. For this reason, transdiagnostic approach provides a considerable advantage in order to deal with notions such as “rumination” that are not included in the diagnostic classification but are closely related to psychopathological conditions.

Transdiagnostic approach is used in the interpretation process of multivariate diseases as well. For example, it has been an accepted approach by most researchers that the diagnostic classifications that have existed to date are seen as dysfunctional in the evaluation of multisource diseases. (Nolen-Hoeksema and Watkins, 2011). All that and then some, the inconsistent progress of this process hinders the qualified evaluation of other diseases. Transdiagnostic approach on the other hand, intervenes in the interpretation of this process and offers a healthier perspective suitable for the nature of psychopathology. Furthermore, it provides a framework for understanding the comorbidity relationship between diseases. Considering that at least more than half of people with any psychopathological diagnosis have encountered another diagnosis, it would not be wrong to say that the transition between diagnoses is also high and there are no sharp boundaries (Kessler et al., 2005) Transdiagnostic concepts offer a new perspective, by the reason of the fact that they facilitate the prevention of such problems caused by diagnostic classifications. Evaluation transdiagnostic approach provides qualifications in many aspects, especially in diagnoses with high comorbidity rate and in cases where it is seen that some symptoms such as 'rumination' cause flexibility between diagnoses, evaluating with a transdiagnostic approach provides qualifications in many respects.

Rumination and Transdiagnostic Approach

The relationship of rumination with other psychopathological symptoms such as anxiety, depression, and eating disorders has been one of the arguments previously supported by most researchers (Nolen-Hoeksema

et al., 2007). However, the general feature of these studies is that rumination is evaluated directly in relation to certain diagnoses rather than being a sign on its own. Longitudinal and cross-sectional studies conducted by Nolen-Hoeksema et al. in recent years have provided supporting evidence regarding the transdiagnostic nature of rumination and its underlying simultaneous sign (Nolen-Hoeksama, 2011). Additionally, along with the situations such as suppression of thoughts as transdiagnostic concepts, producing solutions and re-evaluation, the inclusion of rumination in cognitive emotion regulation strategies will also contribute significantly to the understanding of most psychopathologies (Aldao and Nolen-Hoeksema, 2010). One of the hypotheses supporting that rumination is a transdiagnostic symptom is that ruminative thinking is a symptom in many diseases such as depression, anxiety, generalized anxiety disorder, and social phobia (Ehring and Watkins, 2008). For example, it is known that rumination is involved in the form of overthinking and repetitive thinking about depressive symptoms in depression seriously affects the level of depression and the risk of hypostrophe (Nolen-Hoeksema, 1991). In generalized anxiety disorder, along with the repetition of negative thoughts about uncontrollable situations is given as an example of rumination, it is also stated that there is a parallel relationship between rumination and anxiety (Yılmaz, 2014). As for in social fobia, rumination is seen as the person's evaluation of their own acceptability in social environments and thinking over and over again about the events in the mind after the events experienced (Kashdan and Roberts, 2007).

The evaluation of rumination, which is seen as a joint sign in most diagnoses, as a transdiagnostic symptom was explained by Watkins as being effective in the onset, persistence, and relapse of multiple diseases and comorbidities (Watkins, 2015). Although it is known to be effective in depression, generalized anxiety disorder, social anxiety and post-traumatic stress disorder, it has been supported by most studies to be associated with substance use, eating disorders and alcohol disorders (Caselli et al., 2010). Excluding the most obvious signs that appear in the first stage in these diseases, it has been seen that rumination is seen as a joint component in explaining the relationships between diseases and provides support in understanding possible relationships (McLaughlin and Nolen-Hoeksema, 2011).

Rumination is also defined as a transdiagnostic concept by researchers because it provides a relationship between most diseases and psychopathological signs and explains the comorbidity situation. Though rumination is directly related to some of the diagnoses, it affects some diagnoses indirectly or may occur as a result of the diagnoses (Ehring and Watkins, 2008). In this context, Harvey et al. (2004) argue that while evaluating the structure of diagnoses, future research is more functional than evaluating the relationship between the transdiagnostic processes of different diagnoses, rather than evaluating absolute diagnostic differences. While discussing the notion of rumination, considering it within this framework, not directly in the context of absolute diagnoses, but within the scope of the transdiagnostic structures of diagnoses will help to understand the transdiagnostic formation of rumination.

Studies on the Transdiagnostic Nature of Rumination

In the model they developed in order to understand the transdiagnostic process in psychopathology, Watkins and Nolen-Hoeksema (2011) divided the variables into two classes: variables that are generally risk factors in the formation of diagnoses and that they are risk factors specifically for certain diseases. In other words, they considered transdiagnostic factors with their more distal and proximal relationship with psychopathological symptoms. At this point, the critical situation for understanding the transdiagnostic structure is the importance of associating the proximal risk factor with psychopathology after associating the distal factor with the proximal risk factor. To elaborate on the distal and proximal risk factors, environmental conditions and biological factors causing psychopathology are stated as distal; factors directly related to the person and balancing the relationship between distal risk factor and sign are stated as proximal (Watkins & Nolen-Hoeksema, 2011).

When rumination is considered in the distal and proximal risk factors model, sexual or emotional abuse, excessively oppressive and neglective parents are included in the context of environmental factors; BDNF Polymorphism is included in the context of biological factors. Rumination occurs as a proximal risk factor when the distal risk factor is accompanied by several possible mechanisms such as neglective and abusive parents causing alertness, stress intolerance, inadequate ability to produce solutions, and feelings of

inadequacy. The presence of rumination as a proximal risk factor causes many diseases within the transdiagnostic process, accompanied by possible mechanisms and mediator factors. In summary, the transdiagnostic nature of rumination is indicated by certain risk factors that cause it to occur before and after it causes other diseases with certain risk factors.

The requirements for accepting a symptom as transdiagnostic can be summarized as follows: to play a mediator role between diagnoses, to have a distal or proximal effect on the formation of certain diagnoses, and to take part in the presence, maintenance and relapse of multiple diagnoses (Caseli et al. 2010; Watkins, 2015; Ehrind and Watkins, 2018). While evaluating the treatment of rumination and repetitive negative thoughts as a transdiagnostic concept, in addition to these criteria Hall et al. suggested that rumination should cause other diagnoses as an implicit factor and that each measurement data of rumination should be closely related to specific signs (Hall et al., 2016).

For this purpose, they focused on two goals in their research: First, to obtain evidence supporting whether the suggested repetitive thoughts cause a single implicit factor, and second, to obtain data to demonstrate that these implicit factors cause psychopathological symptoms. When we look at the previous studies, it was thought that it is highly probable to obtain similar data for this study, since it was seen that rumination was associated with other diagnoses as an implicit factor (Nolen-Hoeksema et al., 2007; Johnson et al., 2016). As a result of the study, both hypotheses were confirmed; they found that the implicit factor was positively related to certain other diagnoses such as depression and anxiety, and rumination as an implicit variable plays a role in the formation of other diagnoses (Hall et al., 2016).

Samtani, in his study examining the transdiagnostic parameters of rumination, aimed to obtain findings regarding the relationship between diagnoses by using a large number of scales (Samtani, 2015). The scales used by Samtani to measure transdiagnostic rumination are as follows: The perseverative thought scale developed by Ehring et al. (2011) and the repetitive thought scale developed by McAvoy et al. (2010). As a result of the examination of the relationship between many diagnoses and rumination, it was seen that the findings mostly focused on depressive rumination and anxiety. Nevertheless, the fact that the transdiagnostic structure of rumination functions in association with depression and anxiety by most studies led the researcher to comment on expanding the transdiagnostic model and further processing the relationship of rumination with other diagnoses that have not been discussed much, such as mood disorder (Samtani, 2015). Observing the transdiagnostic model of rumination in the field of clinical psychology will provide clinicians with extra time and opportunity as they will act by considering the transition between diagnoses.

Unlike other studies, Grierson et al.'s approach to the transdiagnostic model of rumination was carried out by considering them in the context of developmental psychology and cognitive factors (Grierson et al., 2016). In this approach, by discussing cognitive emotion regulation and coping methods in general, they analyzed the developmental course of rumination along with its development and the diagnoses that it was highly associated with, such as anxiety and depression. It has been stated that rumination, which disrupts the subjective well being of individuals, plays a mediating role between gender and the difficulties experienced in the early period (Kessler et al., 2005). Incidentally, it has been observed that rumination plays a mediating role between genetic susceptibility and pathological symptoms caused by genetic susceptibility (Chen and Li, 2013). The mediator effect of rumination in the normative developmental course of rumination in emerging psychopathological conditions, together with developmental, biological and cognitive factors, presented a finding that supports the idea that it is a transdiagnostic notion (Grierson et al., 2016).

Discussion and Conclusion

In general, rumination is a psychopathological symptom consisting of negative content, mostly self-directed and repetitive thought patterns (Johnson et al., 2016). Considering other psychopathological symptoms, rumination is mostly associated with stress, anxiety and depression; it also coincides with the finding that the functionality of people who frequently experience ruminative thoughts decrease in parallel (Lyubomirsky and Tkach, 2004). However, other diagnoses in which anxiety, depression and rumination are common are stated as eating disorders, substance and alcohol addiction, and mood disorders (Caselli et al., 2010).

One of the distinctive features of rumination is that it meets the criteria of transdiagnostic notions and in this context, it is evaluated as transdiagnostic by researchers. The most distinctive feature of a notion to qualify as

transdiagnostic is that it is a common symptom in most diagnoses. Rumination, on the other hand, has been studied by most studies in relation to other diagnoses within the context of transdiagnostics, and it has been found to be a symptom in many diagnoses (Grierson et al., 2016; Samtani, 2015).

One of the other criteria for considering rumination as a transdiagnostic concept is that it plays an active role in the formation, maintenance and relapse of diagnoses. It is also supported by the researchers that there is sufficient evidence that rumination both plays a big role in the diagnosis of the effects of distance and other factors, and has a close and direct effect on the diagnoses (Hall et al., 2015; Watkins and Nolen-Hoeksema, 2011). In addition, rumination is considered as transdiagnostic as it plays a mediator role between diagnoses and can be considered as a joint sign in evaluating the relationships between diagnoses (Caseli et al., 2010; Watkins, 2015).

Some models developed on rumination as a transdiagnostic notion provide support for understanding it as a transdiagnostic notion. For example, Grierson et al. dealt with rumination through cognitive, developmental and biological factors and associated it with each factor (Grierson et al., 2016). On the other hand, Watkins and Nolen-Hoeksema's evaluation of diagnoses by examining rumination with distal and proximal factors in the context of transdiagnostic perspective presented a wide framework (Watkins and Nolen- Hoeksema, 2011).

In summary, the transdiagnostic approach provides support for understanding the symptoms that are not fully characterized as a diagnosis but have an impact on the formation and continuation of most diagnoses. In this context, rumination is not included as a clear diagnosis in diagnostic classifications, but continues to exist as a sign in most diagnoses. Therewithal, the reasons such as providing the transition by acting as a mediator between the diagnoses, having an effect as a mediator among the signs of the diagnoses and being seen as a joint sign have also supported the acceptance of rumination as a transdiagnostic notion.

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References

- Aldao, A., & Nolen-Hoeksema, S. (2010). Specificity of cognitive emotion regulation strategies: a transdiagnostic examination. *Behaviour research and therapy*, 48(10), 974–983. <https://doi.org/10.1016/j.brat.2010.06.002>
- Bugay, A., & Erdur-Baker, Ö. (2011). Ruminasyon düzeyinin toplumsal cinsiyet ve yaşa göre incelenmesi. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 4(36), 191-201.
- Caselli, G., Ferretti, C., Leoni, M., Rebecchi, D., Rovetto, F., & Spada, M. M. (2010). Rumination as a predictor of drinking behaviour in alcohol abusers: a prospective study. *Addiction (Abingdon, England)*, 105(6), 1041–1048. <https://doi.org/10.1111/j.1360-0443.2010.02912.x>
- Chen, J., & Li, X. (2013). Genetic and environmental influences on adolescent rumination and its association with depressive symptoms. *Journal of abnormal child psychology*, 41(8), 1289–1298. <https://doi.org/10.1007/s10802-013-9757-5>
- Dalgleish, T., Black, M., Johnston, D., & Bevan, A. (2020). Transdiagnostic approaches to mental health problems: Current status and future directions. *Journal of consulting and clinical psychology*, 88(3), 179–195. <https://doi.org/10.1037/ccp0000482>
- Eckern, M., Stevens, W., & Mitchell, J. (1999). The relationship between rumination and eating disorders. *The*

- International journal of eating disorders*, 26(4), 414–419. [https://doi.org/10.1002/\(sici\)1098-108x\(199912\)26:4<414::aid-eat7>3.0.co;2-8](https://doi.org/10.1002/(sici)1098-108x(199912)26:4<414::aid-eat7>3.0.co;2-8)
- Ehring, T., & Watkins, E. (2008). Repetitive negative thinking as a transdiagnostic process. *International Journal of Cognitive Psychology*, 1(3), 192-205.
- Ehring, T., Zetsche, U., Weidacker, K., Wahl, K., Schönfeld, S., & Ehlers, A. (2011). The Perseverative Thinking Questionnaire (PTQ): validation of a content-independent measure of repetitive negative thinking. *Journal of behavior therapy and experimental psychiatry*, 42(2), 225–232. <https://doi.org/10.1016/j.jbtep.2010.12.003>
- Fusar-Poli, P., Solmi, M., Brondino, N., Davies, C., Chae, C., Politi, P., Borgwardt, S., Lawrie, S. M., Parnas, J., & McGuire, P. (2019). Transdiagnostic psychiatry: a systematic review. *World psychiatry : official journal of the World Psychiatric Association (WPA)*, 18(2), 192–207. <https://doi.org/10.1002/wps.20631>
- Grierson, A. B., Hickie, I. B., Naismith, S. L., & Scott, J. (2016). The role of rumination in illness trajectories in youth: linking trans-diagnostic processes with clinical staging models. *Psychological medicine*, 46(12), 2467–2484. <https://doi.org/10.1017/S0033291716001392>
- Guastella, A., & Moulds, M. (2007). The impact of rumination on sleep quality following a stressful life event. *Personality and Individual Differences*, 4(6), 1151-1162.
- Hall, K., Shaw, A., & Timpano, K. (2015). Repetitive negative thinking: a transdiagnostic correlate of affective disorders. *Journal of Social and Clinical Psychology*, 35(3), 181-201.
- Harvey, A., Watkins, E., Mansell, W., & Shafran, R. (2004). *Cognitive behavioural processes across psychological disorders: a transdiagnostic approach to research and Treatment*. Oxford: Oxford University Press.
- Johnson, D. P., & Whisman, M. A. (2013). Gender differences in rumination: A meta-analysis. *Personality and individual differences*, 55(4), 367–374. <https://doi.org/10.1016/j.paid.2013.03.019>
- Johnson, D. P., Rhee, S. H., Friedman, N. P., Corley, R. P., Munn-Chernoff, M. A., Hewitt, J. K., & Whisman, M. A. (2016). A Twin Study Examining Rumination as a Transdiagnostic Correlate of Psychopathology. *Clinical psychological science : a journal of the Association for Psychological Science*, 4(6), 971–987. <https://doi.org/10.1177/21677026166638825>
- Kashdan, T. B., & Roberts, J. E. (2007). Social anxiety, depressive symptoms, and post-event rumination: affective consequences and social contextual influences. *Journal of anxiety disorders*, 21(3), 284–301. <https://doi.org/10.1016/j.janxdis.2006.05.009>
- Kessler, R. C., Chiu, W. T., Demler, O., Merikangas, K. R., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of general psychiatry*, 62(6), 617–627. <https://doi.org/10.1001/archpsyc.62.6.617>
- Linton S. J. (2013). A Transdiagnostic Approach to Pain and Emotion. *Journal of applied biobehavioral research*, 18(2), 82–103. <https://doi.org/10.1111/jabr.12007>
- Lyubomirsky, S., & Tkach, C. (2004). The consequences of dysphoric rumination. C. Papageorgiou ve A. Wells (Ed.), *Rumination: Nature, theory, and treatment of negative thinking in depression*. Chichester: John Wiley & Sons.
- Mansel, W., Harvey, A., Watkins, E., & Shafran, R. (2009). Conceptual findings of transdiagnostic approach to CBT. *Journal Of Cognitive Psychotherapy*, 23(1), 6-19.
- Martin, L., & Tesser, A. (2006). Extending the Goal Progress Theory of Rumination: Goal Reevaluation and Growth. In L. J. Sannave E. C. Chang (Ed.), *Judgments over time: The interplay of thoughts, feelings, and behaviors*. Oxford University Press.
- McEvoy, P. M., Mahoney, A. E. J., Moulds, & M. L. (2010). Are worry, rumination, and post-event processing one and the same? Development of the repetitive thinking questionnaire. *Journal of Anxiety Disorders*, 24(5), 509-519.
- McLaughlin, K., & Nolen-Hoeksema, S. (2011). Rumination as a transdiagnostic factor in depression and anxiety. *Behavior research and Therapy*, 49(3), 186-193.
- Micheal, T., Halligan, S., Clark, D.M., & Ehlers, A. (2006). Rumination in Posttraumatic Stress Disorder. *Depression and Anxiety*, 24(5), 307-317.
- Nolen-Hoeksema, S. (1991). Responses to depression and their effects on the duration of depressive episodes.

Journal of Abnormal Psychology, 100, 569–582.

- Nolen-Hoeksema, S. (2004). The response styles theory. C. Papageorgiou ve A. Wells (Ed.), *Rumination: Nature, theory, and treatment of negative thinking in depression*. Chichester: John Wiley & Sons.
- Nolen-Hoeksema, S., & Watkins, E. R. (2011). A heuristic for developing transdiagnostic models of psychopathology explaining multifinality and divergent trajectories. *Perspectives on Psychological Science*, 6, 589- 609.
- Nolen-Hoeksema, S., & Watkins, E. R. (2011). A Heuristic for Developing Transdiagnostic Models of Psychopathology: Explaining Multifinality and Divergent Trajectories. *Perspectives on psychological science : a journal of the Association for Psychological Science*, 6(6), 589–609. <https://doi.org/10.1177/1745691611419672>
- Nolen-Hoeksema, S., Stice, E., Wade, E., & Bohon, C. (2007). Reciprocal relations between rumination and bulimic, substance abuse, and depressive symptoms in female adolescents. *Journal of Abnormal Psychology*, 116, 198–207.
- Nolen-Hoeksema, S., Wisco, B., & Lyubomirsky, S. (2008). Rethinking rumination. *Perspectives on Psychological Science*, 3(5), 400-424.
- Oğuz, G., & Batmaz, S. (2020). Transdiagnostik bilişsel davranışçı yaklaşıma göre psikopatolojik süreçlerin değerlendirilmesi: bilişsel ve davranışçı süreçler ölçeği'nin türkçe sürümünün geçerliliği ve güvenilirliği. *Bilişsel Davranışçı Psikoterapi ve Araştırmalar Dergisi*, 9(3), 173-186.
- Papageorgiou, C., Wells, A. (2004). Nature, Functions, and Beliefs about Depressive Rumination. . C. Papageorgiou ve A. Wells (Ed.), *Rumination: Nature, theory, and treatment of negative thinking in depression*. Chichester: John Wiley & Sons.
- Radstaak, M., Geurts, S. A., Brosschot, J. F., Cillessen, A. H., & Kompier, M. A. (2011). The role of affect and rumination in cardiovascular recovery from stress. *International journal of psychophysiology : official journal of the International Organization of Psychophysiology*, 81(3), 237–244. <https://doi.org/10.1016/j.ijpsycho.2011.06.017>
- Samtani, S., & Moulds, M. L. (2017). Assessing maladaptive repetitive thought in clinical disorders: A critical review of existing measures. *Clinical psychology review*, 53, 14–28. <https://doi.org/10.1016/j.cpr.2017.01.007>
- Shors, T. J., Millon, E. M., Chang, H. Y., Olson, R. L., & Alderman, B. L. (2017). Do sex differences in rumination explain sex differences in depression? *Journal of neuroscience research*, 95(1-2), 711–718. <https://doi.org/10.1002/jnr.23976>
- Trapnell, P., & Campbell, J. (1999). Private self-consciousness and the five-factor model of personality: distinguishing rumination from reflection. *Journal of Personality and Social Psychology*, 76(2), 384-204.
- Watkins, E. (2015). Psychological treatment of depressive rumination. *Current Opinion in Psychology*, 4, 32-36.
- Yılmaz, E. (2014). Endişe ve ruminasyonun kaygı ve depresyon belirtileri üzerindeki rolü. *Türk Psikiyatri Dergisi*, 25, 1-9.