



Pessimism moderates negative emotional responses to naturally occurring stress



Dusti R. Jones¹, Barbara J. Lehman^{*}, Julie A. Kirsch, Katherine G. Hennessy

Department of Psychology, Western Washington University, United States

ARTICLE INFO

Article history:

Received 13 September 2015

Revised 1 April 2016

Accepted 4 June 2016

Available online 8 June 2016

Keywords:

Stress

Negative emotion

Rumination

Pessimism

Experience sampling

ABSTRACT

Repeated experiences with stress and negative emotion (NE) can decrease psychological and physical well-being. Ruminating on stressful events can further prolong NE responses, especially for those who are pessimistic. For three days participants ($N = 68$) reported hourly on their current stress, rumination, perceived control, and NE. Tests of mediation conducted using multilevel modeling suggested that rumination mediated same-time reports of stress on NE, and predicted perpetuation of NE over time. Tests of moderated mediation indicated that the pathways from previous stress to rumination, and from rumination to current NE were moderated by pessimism, but not optimism. Perception of control also accounted for some of the variability between concurrent stress and NE, though these associations were not affected by pessimism.

Published by Elsevier Inc.

1. Introduction

Stress experienced during everyday activities evokes negative emotion (NE) that may accumulate over hours, days, and weeks. Repeated episodes of NE increase risk of depression (Wichers et al., 2007). Stress also exacerbates risk of depression in part by promoting and prolonging NE (Wichers et al., 2007, 2009). Both lack of perceived control and the tendency to ruminate during or following stress may be part of the process by which stress promotes NE (Diehl & Hay, 2010; Zoccola, Dickerson, & Lam, 2012). In addition, dispositional characteristics such as optimism or pessimism may ameliorate or strengthen associations among stress, NE, and rumination. We therefore examine whether perceived control accounts for some of the variability between stress and NE and also test the role of within day fluctuations in momentary rumination as a mediator of the stress–NE relationship. Further, we examine the extent to which optimism and pessimism moderate mediated associations, including concurrent and delayed associations between reported stress and momentary NE, stress and rumination, and rumination and NE.

Stress occurs when problem-solving resources are taxed. Routine events such as relationship conflicts, a long workday,

deadlines, or traffic may increase perceived stress. Although these increases in stress may be momentary and transient in nature, they can provoke responses that continue from one hour to the next, even lingering into the next day (Doane & Adam, 2010; Repetti, Wang, & Saxbe, 2011). Momentary stress therefore has a cumulative effect on health (McEwen, 1998; Repetti et al., 2011) and predicts health problems, ranging from the common cold to heart disease and some forms of cancer (Miller & Blackwell, 2006). Momentary stress also elicits NE (Montpetit, Bergeman, Deboeck, Tiberio, & Boker, 2010) eventually leading to increases in allostatic load and promoting risk of physiological and psychological illness (Kamarck, Shiffman, Sutton-Tyrrell, Muldoon, & Tepper, 2012; Lai & Mak, 2009).

Stress and NE exhibit a reciprocal connection. Those experiencing NE prior to a stressful event tend to report greater stress (Montpetit et al., 2010; Verduyn, Delvaux, Van Coillie, Tuerlinckx, & Van Mechelen, 2009). For example, feelings of anxiety prior to the onset of stress may help to extend feelings of anxiety following the stress. If the same individual had been joyful or relaxed prior to the onset of stress, the event might have been evaluated as less stressful. This reciprocal dynamic may help to explain some dispositional differences in emotional experience and the perception of stress. The tendency to ruminate on stress may prolong this reciprocal connection, resulting in the continuation of stress and NE. Alternately, perception of control may mitigate the effect of stress on NE.

^{*} Corresponding author at: Department of Psychology, Western Washington University, 516 High Street, Bellingham, WA 98225, United States.

E-mail address: barbara.lehman@wwu.edu (B.J. Lehman).

¹ Current Address: Department of Biobehavioral Health, The Pennsylvania State University.

1.1. The role of perceived control and rumination

We propose two mechanisms by which stress promotes NE. First, we will examine whether perceived control, or the belief that an individual can affect change in stress or in their response to stress (Folkman, 1984; Taylor & Aspinwall, 1996), accounts for some of the variability between concurrent stress and NE. Second, we will examine momentary rumination, which is the tendency to dwell on stressors or NE (Rozanski & Kubzansky, 2005), as a potential mediator of stress and NE over time.

Perceived control is often associated with perceived stress, and predicts the duration and intensity of stressful events (Folkman, 1984; Ong, Bergeman, & Bisconti, 2005; Taylor & Aspinwall, 1996). Situations in which individuals believe they lack control are more likely to be perceived as stressful (Lanfranchi & Vianello, 2012), and to provoke NE. A classic study by Van Eck, Nicolson, and Berkhof (1998) suggested that high perception of control mitigated the association between daily perceived stress and NE. More recent studies have supported this association, finding that low perceived control is associated with more daily hassles, physiological stress responses, and more NE (Bhanji, Kim, & Delgado, 2016; McIntyre, Korn, & Matsuo, 2008).

Repeated and prolonged rumination may also be an important mechanism through which stress prolongs NE. Events characterized by social evaluative threat have been found to elicit and prolong ruminative thought up to 10 min, 40 min, and even 3–5 days post-stress (Zoccola et al., 2012). Because individuals are driven to maintain a positive social status, rumination is likely elicited as a response to social evaluative threat. Everyday stressful events likely involve some degree of threat (Lehman & Conley, 2010), and rumination may be the primary means by which NE are sustained after the removal of the stressor itself. Using experience sampling methodology, Moberly and Watkins (2008a) found that everyday stress predicted momentary rumination. Time-lagged analyses further indicated that prior stress exacerbated NE through concurrent rumination. These results indicate that rumination is an important mediator of the association between everyday stress and prolonged experiences of NE.

Momentary rumination and perceptions of control are part of the process by which stress prolongs NE. Although most prior research has conceptualized rumination and perceived control as dispositional traits, recent work suggests that these processes can fluctuate across time and situations, and are associated with everyday stress (Diehl & Hay, 2010; Moberly & Watkins, 2008a, 2008b; Ong et al., 2005). In turn, these fluctuations may contribute to the differential duration and intensity of NE proceeding stress. Using experience sampling methodology, Moberly and Watkins (2008a) determined that momentary reports of rumination predicted NE above and beyond trait rumination and trait depression alone. In daily diary studies, the association between stress and NE was stronger on days adults experienced low control compared with high control days (Diehl & Hay, 2010; Ong et al., 2005). These results make it clear that it is appropriate to define rumination and perceived control as event-specific responses, and not only as dispositional traits.

In contrast to rumination, it is unclear whether perceptions of control have a sustained influence on NE. Situational control appraisals are elicited within the context of the immediate stress, therefore the effects on NE may not be as persistent (Folkman, 1984). Although studies examining the relationship between perceived control and NE have found that end of day reports of higher perceived control predicted lower levels of NE (Diehl & Hay, 2010; Ong et al., 2005), a limitation with end of day reports is that NE may produce distorted recollections and appraisals of events because of a potentially long time delay between the occurrence of the event and the report of NE. It is likely that perception of

control is a stronger mediator of concurrent reports of stress and NE, and may not have as long-lasting effects on stress reactivity as rumination. Because of this ambiguity and a desire to limit the scope of the current work, we will only examine concurrent associations among stress, NE, and perceived control, but will examine associations among stress, NE, and rumination both concurrently and over time.

1.2. Optimism and pessimism as moderators

For those who get caught in cycles of stress and rumination, NE may linger over time. For example, NE may spill over from a stressful day at work to the home, where the person may express anger or frustration toward family members. Spillover of NE is not equally observed for everyone, as some dispositional traits may facilitate recovery from negative psychological states more rapidly than others (Repetti et al., 2011). Traits such as optimism, pessimism, or neuroticism may interact with stress to increase or decrease the duration of NE following stress. Repetti et al. (2011) observed that only those men who were high in neuroticism exhibited spillover of NE following stressful workdays. Other research indicates those high in neuroticism experience longer periods of NE (Verduyn et al., 2009), and the recall of negative emotional experiences leads to more NE for those who were more neurotic. These studies suggest stress may prolong NE, resulting in spillover of NE over time. Further, certain dispositional traits or tendencies, such as neuroticism or being high in pessimism, may exacerbate the spillover of NE making it more likely to occur.

Although previous research has evaluated the role of neuroticism in the perpetuation of NE, the present study focused on dispositional differences in optimism and pessimism. Optimists are typically characterized as viewing life in a positive way and expecting positive outcomes, while pessimists generally expect negative outcomes in life (Scheier & Carver, 1985). Those who are more pessimistic may be at greater risk for rumination following perceived stress, and may therefore be especially likely to experience NE that linger over time.

Though rumination prolongs NE, individuals who are more pessimistic or are otherwise predisposed to think more negatively may be especially vulnerable to the negative consequences of rumination. First, individuals who are pessimistic may be more likely to ruminate in response to stress (Criado del Valle & Mateos, 2008). Second, pessimism may prolong NE through rumination. In a longitudinal study, Segerstrom, Evans, and Eisenlohr-Moul (2011) studied trait and state variation in repetitive thoughts and subsequent negative and positive emotions. Content of repetitive thought was categorized as either positively or negatively valenced; trait differences in thought valence moderated the association between state variations of thought valence and emotions. Individuals who tended to think more positively were less likely to experience NE even if they momentarily reported a focus on negative thoughts. This may suggest that the association between rumination and NE is weaker for those high in optimism. Conversely, individuals who tended to think more negatively were more susceptible to experiencing NE, especially if they were reporting more momentary negative thought content, potentially suggesting that the association between rumination and NE is stronger for those high in pessimism.

It is important to note that when using optimism and pessimism scales, particularly the Life Orientation Scale – Revised (LOT-R), optimism can either be examined as a unidimensional or bi-dimensional scale. When this scale is utilized as a unidimensional scale, high scores indicate optimism and low scores indicate pessimism. When used as a bi-dimensional scale, two subscales are used to independently predict optimism and pessimism. A number of studies have examined the dimensionality of optimism and

Download English Version:

<https://daneshyari.com/en/article/5046244>

Download Persian Version:

<https://daneshyari.com/article/5046244>

[Daneshyari.com](https://daneshyari.com)