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## **Emotion in Motion: Adaptation to Stress and its Dynamics: Literature Review**

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### **ABSTRACT**

Emotions are complex psychological and physiological responses to internal or external stimuli faced by individuals. Individuals who feel emotions will respond to pressure or demands coming from the environment that result in stress. Stress often occurs when individuals feel that the pressure or demands that exist exceed their abilities. The dynamics of emotions in adaptation to stress show a complex and interconnected relationship between emotions, stress, and how individuals deal with them. Emotions, both positive and negative, play a very important role in the process of stress adaptation. This study uses a literature review method that aims to determine and understand the process of emotional dynamics and adaptation to stress experienced by individuals. Based on the results of the article review, it was found that emotional dynamics play an important role in determining how individuals respond to and manage stress and effective emotional regulation is key in the adaptation process. Individuals who are able to manage and express their emotions tend to have better outcomes in dealing with stress. Positive social and environmental support also contribute to an individual's ability to cope better with stress.

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### **INTRODUCTION**

Emotions are complex psychological and physiological responses to internal or external stimuli that an individual encounters. Emotions can involve profound feelings, thoughts, and physical changes in the body, which serve to signal environmental conditions and help individuals adapt to them. Emotions play an important role in decision-making, regulating behavior, and shaping social interactions. The first studies of the stress process in humans showed that individuals experience physiological disturbances and attempt to return to "homeostasis" (Canon, 1929) or so-called body balance (Goldstein & Kopin, 2007). The concept of stress emerged as a threat that requires general adaptation and had the ironic effect of becoming popular with the idea of stress as a ubiquitous phenomenon. This prompted many biomedical researchers to collectively accept this generalized idea.

Emotions occur as a result of the body's physiological response to external stimuli (James & Lange, 1884). Emotions do not arise directly as a reaction to a situation, but occur after the body responds to the stimulus. For example, a person feels afraid after his body feels a rapid heartbeat and cold sweat. As for the research of Canon & Bard (1927) which explains that the body's physiological response and emotional experience occur simultaneously, not as a sequence one by one. According to them, the brain (especially the thalamus) processes stimuli and sends signals to respond to the situation, which causes emotional feelings and physiological responses simultaneously.

In addition, emotions occur through two processes: first, there is a physiological reaction to stimuli, and second, a cognitive assessment that occurs based on social and environmental contexts. This means that emotions are not only influenced by physical reactions, but also by the individual's interpretation of the situation they are facing (Schachter & Singer, 1962). Individuals who feel emotions will respond to pressure or demands that come from the environment that result in stress.

Stress often occurs when individuals feel that the pressure or demands that exist exceed their abilities. Stress can be acute or chronic and has an effect on physical and mental health. Ursin & Olf (1993); Zautra (2003) define stress as uncertainty caused by unexpected events. This disrupts homeostasis, and the level of disruption varies greatly depending on the level of threat to the adjustment triggered by the disruption.

The existence of the General Adaptation Syndrome (GAS) stress theory that identifies three main stages when the body responds to stress, namely the alarm reaction where the body responds to the stressor with increased physiological activity. Then, the resistance stage where the body tries to adjust to the stressor, finally the exhaustion stage that occurs if the stressor lasts too long and the body cannot adapt to the stress.

Lazarus and Folkman (1984) explain that stress is not from external factors but also depends on how individuals assess the situation, this is called transactional theory. Individuals assess situations through cognitive processes called primary appraisal and secondary appraisal.

Based on the definition of emotion and stress described above, there is a relationship between the two and they influence each other. Stress often triggers various emotions, both positive and negative depending on the individual's response to the situation. Conversely, emotions can also affect how a person manages stress. When individuals face stress, emotions such as anxiety, fear, anger, or sadness often arise as a natural response to the

pressure felt. These emotions are signals for individuals to adapt and make decisions related to the situation. For example, anxiety often arises as a response to stress related to uncertainty, while anger can arise when individuals feel threatened or treated unfairly.

Several studies have revealed how emotions play a role in adaptation to stress. For example, research by Folkman and Moskowitz (2000) showed that individuals who use adaptive emotion management strategies (such as optimism or humor) are better able to reduce the negative impact of stress. Meanwhile, research by Carver et al. (1989) found that the use of effective emotion-focused coping can help individuals feel more in control in dealing with stressful situations, even though the stress is still there.

In addition, research by Kohls et al. (2013) found that individuals with good emotion regulation have lower stress levels and recover more quickly from stress than those who are less able to manage their emotions. This research supports the idea that emotional dynamics play a key role in adaptation to stress. The dynamics of emotions in adaptation to stress show a complex and interdependent relationship between emotions, stress, and how individuals deal with them. Emotions, both positive and negative, play a very important role in the process of stress adaptation.

## METHODS

This research design uses a literature review. Descriptions of theories, results, and other research documents obtained from references to be used as a basis for research to develop new ideas from the formulation of the problem and the subject matter studied. This article discusses the dynamics of emotions in adaptation to stress. The search for relevant articles uses Google Scholar and articles from various open access journals. This study describes the results descriptively. The keywords used in the Google Scholar search are "emotions and stress" related to the topic of this study. 5 relevant studies were found. This literature review will analyze the relationship between emotions and stress, how individuals adapt to emotions and stress and how individuals can adapt to them.

## RESULTS AND DISCUSSION

### A. Result

No	Peneliti/Tahun	Judul	Metode	Hasil
1.	Peter Kuppens & Philippe Verduyn/2017	Emotion Dynamics	<i>Systematic overview</i>	Emotional dynamics are not merely complementary to psychological well-being and maladjustment, but may reflect early protective or risk factors for developing mental health problems or distress over a longer period of time.
2.	Alex J. Zautra, Glenn G. Affleck, Howard Tennen, John W. Reich, & Mary C. Davis/2008	Dynamic Approches to Emotions and Stress in Everyday Life: Bolger and Zuckerman Reloaded with Positive as Well as Negative Affects	Qualitative	Although high levels of musculoskeletal pain can be stressful, positive experiences have been shown to be essential for aiding emotion regulation, especially when pain is at its peak. These findings suggest potential clinical and preventive applications through a dynamic model of affect regulation.
3.	Georgia Kouri, Nathalie Meuwly, Marianne Richter, dan Dominik Schoebi/2024	Attachment insecurities, emotion dynamics and stress in intimate relationships during the transition to parenthood	Mixmethod	Stress was more related to negative emotions in individuals with anxious or avoidant attachment, but there was no difference in positive affect. Separate analyses were conducted to ensure that stress did not influence the attachment and delayed emotion outcomes.
4.	Daryl B. O'Connor, Julian F. Thayer, dan Kavita Vedhara/2021	Stress and Health: A Review of Psychobiological Processes	<i>Brief Overview</i>	Stress affects various biological systems and these systems interact with each other to adapt and respond to changing environmental demands that are perceived as stress.

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| 5. | Shelley E. Taylor, Jennifer S. Lerner, Rebecca M. Sage, Barbara J. Lehman, dan Teresa E. Seeman/2004 | Early Environment, Emotions, Responses to Stress, and Health | Mixmethod | This suggests that individuals who lack the emotional and social skills to manage reactions to stressful events tend to experience stronger, more chronic, or recurrent biological responses and are slower to return to normal than those who have better socioemotional skills in managing stress. |
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## B. Discussion

Based on the results of the article review conducted, there are several discussion points such as the dynamics of emotions and stress, the relationship between stress and health, the influence of positive and negative emotions on health, and how to deal with the dynamics of emotions and stress and how to handle them.

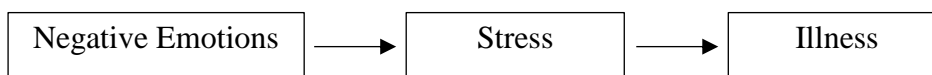
As is known, emotions are complex psychological and physiological reactions to certain situations or stimuli, which include feelings, physical changes, and behavioral expressions (Schulkin, Thompson, & Rosen, 2003). Emotions can be divided into two major categories: positive emotions (such as happiness, gratitude, and satisfaction) and negative emotions (such as anxiety, anger, or fear). Emotions are adaptive mechanisms that help individuals interact with the world and manage their experiences. Meanwhile, stress is the body's response to demands or pressures from the environment, which often involves physiological, cognitive, and emotional changes. Stress can be acute (short-term) or chronic (long-term), and this stress response can vary based on the individual's perception of the situation at hand.

Emotions can be measured through various methods, both subjective and objective. One common way is to use a questionnaire or measurement scale, such as the Positive and Negative Affect Schedule (PANAS; Watson et al., 1988), which assesses the intensity of a person's positive and negative emotions in various situations. In addition, physiological measurements are also used, for example by observing body responses such as heart rate, blood pressure, and stress hormone levels (such as cortisol) which can provide an idea of how the body reacts to the emotions experienced.

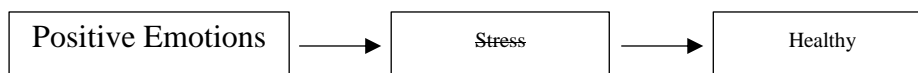
Emotions and stress are already part of one. The dynamics of emotions and stress are very complex. When individuals experience stress, they often feel negative emotions, such as anxiety, fear, or frustration, which further worsen their perception of the situation. Stress accompanied by negative emotions can worsen the body's response, such as increased stress hormones, which actually worsens the stress itself. Conversely, positive emotions can help reduce stress levels by increasing perceptions of self-control and optimism in dealing with problems.

Unmanaged stress can be detrimental to physical and mental health. Chronic stress disrupts bodily functions, increasing the risk of cardiovascular diseases such as hypertension, heart disease, and stroke, and worsening blood vessel health due to high cortisol levels. Stress also lowers the immune system, making the body more susceptible to infection and worsening existing medical conditions, such as diabetes and asthma. Psychologically, long-term stress can lead to anxiety disorders, depression, and PTSD, as well as reducing quality of life and emotional well-being.

Likewise, negative emotions such as anxiety, anger, and sadness can worsen the body's response to stress, for example by increasing muscle tension, sleep disturbances, and digestive problems, which have long-term health implications. Prolonged emotions increase cortisol levels, which damage body tissue and worsen sleep disturbances, worsening physical and mental conditions. In the long term, this can lead to health problems such as obesity, hypertension, and heart disease.



In addition, positive emotions, such as gratitude, happiness, and hope, help reduce the negative impact of stress, increase resilience, and improve well-being. Individuals who frequently experience positive emotions tend to be able to cope with stress healthily, reduce anxiety, and improve problem-solving skills. In addition, positive emotions improve immune system function and reduce the risk of heart disease and high blood pressure.



Understanding the dynamics of emotions in stress has major implications for treatment, especially in psychological therapy. Approaches such as Cognitive-Behavioral Therapy (CBT) help individuals change negative thought patterns and manage stress. In addition, medical treatments, such as antidepressants, and holistic approaches that include exercise, healthy diet, adequate sleep, and social support, are also important in reducing the impact of stress and improving well-being (Kabat-Zinn, 1990).

## CONCLUSION

The dynamics of emotions in adapting to stress are very complex and play an important role in determining how individuals respond to and manage stress. Negative emotions that are not managed well can worsen the impact of stress on health, both physically and mentally. Conversely, positive emotions can help reduce the impact of stress and strengthen an individual's ability to adapt. Therefore, it is important to develop skills in managing

emotions as part of a stress management strategy, in order to improve well-being and prevent more serious health problems. An effective treatment approach should combine psychological therapy, medical therapy, and a holistic approach to achieve optimal results in managing stress.

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