

A REVIEW STUDY OF STRESS, HEALTH AND THEIR CORRELATES

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Abstract

Stress is very closely related to physical health and mental health. There are common factors like social support and personality that affect them. Moreover, they are also interlinked as well. In this review, the interrelationship between these factors, stress and health is explored. Overall, the review will highlight the importance of social support and personality to thrive and live a disease-free life for an individual. This study will provide a thorough idea of relationship of these factors with health.

Keywords: Social support, Personality, and Stress, Physical Health, Mental Health

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Introduction

Stress is a common experience that affects both our physical and mental health. According to WHO, stress can be defined as "worry or mental tension" caused by a difficult situation". Stress is a very human response and it prompts us to address difficulties and threats in our lives. Similarly, physical health and mental health can be defined as having no disease and a state of well-being in both body and mind knowing their full potential and a perfectly fit human being going through everyday life peacefully and fruitfully. All of us go through various situations in our day-to-day life that are stress-inducing and put our mental and physical health at risk. The stress that is short-termed can be dealt with easily but when we talk about chronic stress it is long termed and can lead to chronic issues like cardiovascular diseases, obesity, and diabetes as well as mental health issues like anxiety and depression (Cohen et al,2018). Now when we talk about stress, physical and mental health problems factors, like social support, and personality play a very huge role in it. This review is exploring relationship between all these related factors on stress and health.

Stress and Its Correlates

Social support is a key method for coping with Social support provides emotional, stress. cognitive, and instrumental support to people in hard situations in life. A study by Cohen and Wills (1985) concludes that social support can act as a buffer against the negative effects of stress by providing people with emotional, informational, and tangible support when facing stressors. Now it is important to note that not every type of social support is helpful in equal ways in buffering stress. For example, perceived support is more helpful than actual support received. Sharing your worries with close families and friends is much more helpful than sharing them with strangers. Mental disorders like depression and anxiety are very common among university students. According to Wang, Cai, Qian, and Peng (2014) students who have social support have reduced effects of stress and depression. Moreover, social support helps them to gain self-esteem and self-efficacy which helps them to tackle negative emotions. Furthermore. another study conducted bv Alshammari, Piko, and Fitzpatrick (2021) among adolescents where they concluded that social support has a big impact on them, especially from family. They also discussed cultural issues and gender differences and the impact it has on adolescents. The overall impact of social support seems to positively affect individuals of any age. If we talk about chronic illness and social support in families Ell (1996) reported that there are many beneficial effects of support from family members on recovery from the illness. This study also highlights that at this time family members also need adequate social support, especially from health care providers. Another study done by Whitney (2010) that social support plays an important role to promote positive outcomes in college students. This includes satisfaction with life, intelligence, and coping. It reduces negative outcomes like alcohol use and perceived stress.

The relation between personality and stress is bidirectional, which means that they both impact each other. How we deal with stress can depend on the personality and how prolonged one has been stressed have a huge impact on personality. According to Vollrath (2001), the personality of a human can greatly impact how a people experience and cope with stress. For example, individuals who have high neuroticism find stressors more threatening and have a higher level of stress. Neuroticism is a trait that can be characterized by insecurity, anxiety, and emotional instability. These people use emotion-focused strategies while facing stress e.g., escape, distractions, and avoidance. If we talk about individuals who are high in extraversion characterized by assertiveness, enthusiasm, and sociability are better equipped in dealing with stress. They bounce back easily from a difficult time. Furthermore, the individual who is organized, disciplined and responsible, commonly known as the trait of conscientiousness uses a problem-focused strategy in difficult times. It is easy for them to seek help and they directly address the source of stress. Similarly, research by Kardum and Karpic (2001) concluded the same results in stating adolescents that neuroticism and extraversion have a greater impact on coping styles. The study also emphasized that parental divorce, academic failure, and illness all play a role in the development of different coping styles e.g., emotion focused or solution-focused. In another study done by Daimitru and Cozman (2012), the trait of conscientiousness helps people deal best with stress. The researcher also suggests that resilience and optimism are linked to one having the best coping strategies. Komarraju and Karrau (2005) concluded that personality and academic performance are interlinked. They talked about the same personality types doing academically best are good at handling stress that e.g., conscientiousness, extraversion, and openness. They also confirmed that students who try to escape and use distractions to avoid are comparably weak in performance. Escape and distractions are part of neurotic personality as mentioned in the above studies.

Physical Health and Its Correlates

Research conducted by Birmingham, Uchino, Smith, Light, and Sanbonmastu (2009) focused on social ties and cardiovascular reactivity via the stress-buffering hypothesis. With positive relations, they also studied the negative part ties plays, as not all social relations play consistently a positive part. The result showed that relationship positivity was linked with low systolic blood pressure (SBP) for both men and women and on the other hand relation negativity was linked with the increase in diastolic blood pressure in men. So, through this, it was evident that the quality of relations is associated with cardiovascular reactivity during stress. Another study by Hale, Hannum, and Espalege (2005) examined different support domains in a sample of 247 students to know their predictions of physical health perceptions and physical health. The results were consistent and showed that social support has a big impact on physical health. Another study by Miller and DiMatteo (2013) mentioned Diabetes mellitus that needs drastic changes in patients' lifestyles. This study clearly states how family and positive relationships help in buffering the stress of lifelong illness. Furthermore, research by Blazer (1982) who investigated the relationship between social support and mortality in elderly individuals found that it plays a significant role in predicting the mortality elderly. He found individuals who have low levels of social support have a higher level of mortality risk than those who have high levels of social support. The study also found that the quality of social support means emotional, informational, and instrumental support. His finding highlights the importance of social support and how it promotes the health and well-being of elderly individuals. A study by Usta, Yasemin, and Yıldırım (2012) suggested that social support is a very critical component in the care of cancer patients. Studies suggested that social support is associated with better outcomes in cancer patients including improved quality of life, better psychological functioning of patients, and longer survivor rate. It also helps people with cancer to cope with the stress and uncertainty of their illness and provides practical assistance with tasks such as transportation and child care.

There are many studies done on if personality is one of the factors that affect any individual's physical health. A study by Murray and Booth (2015) on personality and physical health examine the relationship between personality traits and physical health they conducted a meta-analysis of 198 studies with over 200,000 participants to investigate the association between personality traits and physical health so the key findings of the study tell that neuroticism and conscientiousness are a consistent predictor of physical health whereas neuroticism was associated with greater risk of developing physical health problem also it is associated with a cardiovascular disease where is the consciousness was associated with good physical health and it also has the low mortality rate they also founded extraversion, openness, and agreeableness has the weaker association with a physical health outcome, so basically the study highlights the importance of personality trait in predicting physical and conscientiousness. Another study done by Woodforde and Merskey (1972) concluded that patients with chronic pain scored higher on a measure of neuroticism and lower on extraversion and agreeableness as compared to healthy controls. Neuroticism is linked with greater pain severity and negative effect in patients whereas, agreeableness and extraversion are linked with better pain coping methods in patients. In another study by Wiebe and Smith (1997), authors talk about the relationship between personality and physical health focusing on the field of psychosomatic medicine. They focused on the evidence of various personality trait and their association with health outcomes including cardiovascular diseases, cancer, and chronic pain. They also talk about linking personality traits such as hostility neuroticism and conscientiousness to physical health outcomes.

Another study by Vollrath, Knoch and Cassano (1999) suggested that personality traits play a significant role in determining health behaviors. Neuroticism is closely linked with higher risky behavior that can lead to the deterioration of health. Another study conducted by Sturmer, Hasselbach, and Amelang (2006) that explore the relationship between personality traits, lifestyle, and the risk of cardiovascular diseases and cancer found that personality traits like neuroticism and consciousness are linked with lifestyle factors that increase the risk of cardiovascular diseases and cancer. For example, people who were high in neuroticism has more likely to smoke and will have diet. and those over high in poor а conscientiousness will likely exercise more regularly and maintain their healthy weight. This study also found that lifestyle factors like smoking and poor diet all are associated with increased risk of cardiovascular diseases and cancer.

Similar research by Captinio (2008) explored the relationship between personality traits and the development of diseases and he argues that certain personality traits like hostility and pessimism and neuroticism are linked with increased risk of diseases of chronic development like cardiovascular dysfunction, diabetes, and cancer. For example, studies have shown that individuals with a high level of hostility are more likely to develop heart disease. The study also discusses the potential mechanism through which personality with me influences disease outcomes. For example, he suggests hostility may lead to chronic inflammation and immune deregulations that increase the risk of cardiovascular disease. He also suggested dad neuroticism may lead to increase stress reactivity and deregulations of the hypothalamic-pituitary-adrenal (HPA) that is linked with mood disorders. Further another study by Martin (2020) suggested personality and longevity are linked. They found an individual who scores high on conscientiousness and extraversion live longer because they hardly get involved in risky behaviors and also, they find it easy to ask for help. These traits help in living longer and handling chronic diseases more than others.

Mental Health and its Correlates

A study by Hyrandi, Taghinasab, and Naveri (2017) was done with over 22000 participants, that examined that it was found that there is a significant positive correlation between social support and mental health. It indicated that high levels of social sports are associated with better mental health. Social support was found to have a stronger effect on mental health compared to information or any kind of tangible support that was given. One another study conducted by Mallincrindant, Wei, and Miefen (2005) examined the relationship between attachment, social support, and psychological distress in university students. They found out that secure attachment leads to more social competency, which in turn leads to more social support that helps in the reduction of psychological distress among students. The study also concluded that it is social support that mediates the relationship between attachment and psychological distress. Furthermore, a study by Dean, Kolody, and Wood (1990) that aimed to find the effect of social support from different sources like family friends, and community organizations on elderly individuals was done and the data of 242 participants were collected. The findings of this study show that social support from family members and friends was significantly related to a lower level of depression in elderly individuals however, social community organization did not show a significant effect on depression. This study also revealed that the quality of social support was more important than the quantity of social support.

Another study done by Steel, Schmidt, and Shultz (2008) suggested that the relationship between personality and subjective well-being is complex and multifaceted and the study should focus on exploring the moderating factor that can impact this relationship. They also highlighted to consider the specific aspect of personality like emotional intelligence and character strength of people that in addition to broad traits of personality can have a stronger effect on subjective well-being. A study by Warner, Morey, Finch, Gunderson, Skodol, Sanislow, Shea, McGlashan, and Grilo (2004) concluded that traits can act as risk factors for developing the mental health disorders like anxiety and depression. Neuroticism can lead to an increased risk of developing depression and anxiety in individuals. The lower level of agreeableness might increase the risk of personality disorders. Overall, the study provides the inside into the longitudinal relationships between personality traits and mental health disorders. According to Capitanio (2008), Individuals with a high level of neuroticism are more likely to develop mood disorders and anxiety than those with a high level of conscientiousness and extraversion. One another study by Komulainen, Meskanen, Lipsanen, Lahti, Jylhä, Melartin, Wichers, Isometsä, and Ekelund (2014) concluded that personality traits have a significant effect on emotional processes in the daily life of an individual. Individuals with certain personality traits like high neuroticism or low extraversion experience more negative emotions that in turn affect their mental health negatively. They find it difficult to regulate their emotions and show greater emotional reactivity to stressors. Another study by Lincoln (2008) suggested that personality traits like neuroticism and extraversion predict mental health outcomes and also negative interaction plays an important role in it. Furthermore, a study by Spinhoven, Elzinga, Hovens, Roelofs, Oppen, Zitman, and Penninx (2011) conclude that both life events and personality traits can predict the course of depression and anxiety and the result suggests that negative life events are stronger predictors in depression and anxiety whereas traits like neuroticism and lower level of extraversion are associated with the greater increase of depression and anxiety over time.

Conclusion

Social support and personality both are key factors in handling stress and both greatly impact our mental and physical health. Social support is a key method to cope with stress as it provides emotional, cognitive, and instrumental support to people who are going through hard situations in life, and similarly, people with traits like conscientiousness and extraversion deal better with stress throughout their life. Also, these people are less likely to engage in any risky behavior that helps them to live a longer and healthy life physically and mentally. They deal better with life than people with traits like neuroticism and low extraversion as these people are prone to engage in risky behavior like smoking, and drugs that can lead to physical illness related to cardiovascular diseases and mental health disorders like anxiety and depression. Also, neurotic personalities tend to have short social circles so it is hard for them to find help in any situation they are facing. Social support plays a major role when people go through a chronic illness like cancer and diabetes etc.

References

- Alshammari, A. S., Pikó, B., & Fitzpatrick, K. M. (2021). Social support and adolescent mental health and well-being among Jordanian students. International Journal of Adolescence and Youth, 26(1), 211–223. https://doi.org/10.1080/02673843.2021.19083 75
- Birmingham, W. C., Uchino, B. N., Smith, T. W., Light, K. C., & Sanbonmatsu, D. M. (2009b). Social ties and cardiovascular function: An examination of relationship positivity and negativity during stress. International Journal of Psychophysiology, 74(2), 114–119.

https://doi.org/10.1016/j.ijpsycho.2009.08.002

- Blazer, D. G. (1982). Social support and mortality in an elderly community population. American Journal of Epidemiology, 115(5), 684–694
- 4. Capitanio, J. P. (2008). Personality and disease. Brain Behavior and Immunity, 22(5), 647–650. https://doi.org/10.1016/j.bbi.2008.02.002
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 98(2), 310–357. https://doi.org/10.1037/0033-2909.98.2.310
- Dean, A., Kolody, B., & Wood, P. A. (1990). Effects of Social Support from Various Sources on Depression in Elderly Persons. Journal of Health and Social Behavior, 31(2), 148. https://doi.org/10.2307/2137169
- 7. Dumitru, V., & Cozman, D. (2012). The relationship between stress and personality factors. HVM Bioflux, 4(1), 34–39.

http://www.hvm.bioflux.com.ro/docs/HVM4. 1.7.pdf

 Ell, K. (1996). Social networks, social support and coping with serious illness: The family connection. Social Science & Medicine, 42(2), 173–183. https://doi.org/10.1016/0277-9536(95)00100-

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- Hale, C. J., Hannum, J. W., & Espelage, D. L. (2005). Social Support and Physical Health: The Importance of Belonging. Journal of American College Health, 53(6), 276–284. https://doi.org/10.3200/jach.53.6.276-284
- Harandi, T. F., Taghinasab, M. M., & Nayeri, T. D. (2017). The correlation of social support with mental health: A meta-analysis. Electronic Physician, 9(9), 5212–5222. https://doi.org/10.19082/5212
- Kardum, I., & Krapić, N. (2001). Personality traits, stressful life events, and coping styles in early adolescence. Personality and Individual Differences, 30(3), 503–515. https://doi.org/10.1016/s0191-8869(00)00041-6
- 12. Komarraju, M., & Karau, S. J. (2005). The relationship between the big five personality traits and academic motivation. Personality and Individual Differences, 39(3), 557–567. https://doi.org/10.1016/j.paid.2005.02.013
- Komulainen, E., Meskanen, K., Lipsanen, J., Lahti, J., Jylhä, P., Melartin, T., Wichers, M., Isometsä, E., & Ekelund, J. (2014). The Effect of Personality on Daily Life Emotional Processes. PLOS ONE, 9(10), e110907. https://doi.org/10.1371/journal.pone.0110907
- Lincoln, K. D. (2008). Personality, Negative Interactions, and Mental Health. Social Service Review, 82(2), 223–252. https://doi.org/10.1086/589462
- Mallinckrodt, B., & Wei, M. (2005). Attachment, Social Competencies, Social Support, and Psychological Distress. Journal of Counseling Psychology, 52(3), 358–367. https://doi.org/10.1037/0022-0167.52.3.358
- Martin, L. R. (2020). Personality and Longevity. The Wiley Encyclopedia of Personality and Individual Differences. John Wiley & Sons Ltd. ISBN:9781119057475
- 17. Miller, T. A., & DiMatteo, M. R. (2013). Importance of family/social support and impact on adherence to diabetic therapy. Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy, 421.

https://doi.org/10.2147/dmso.s36368

18. Murray, A. L., & Booth, T. (2015). Personality and physical health. Current Opinion in Psychology, 5, 50–55. https://doi.org/10.1016/j.copsyc.2015.03.011

- Spinhoven, P., Elzinga, B. M., Hovens, J. E., Roelofs, K., Van Oppen, P., Zitman, F. G., & Penninx, B. W. (2011). Positive and negative life events and personality traits in predicting course of depression and anxiety. Acta Psychiatrica Scandinavica, 124(6), 462–473. https://doi.org/10.1111/j.1600-0447.2011.017 53.x
- 20. Steel, P., Schmidt, J., & Shultz, J. (2008). Refining the relationship between personality and subjective well-being. Psychological Bulletin, 134(1), 138–161. https://doi.org/10.1037/0033-2909.134.1.138
- Stürmer, T., Hasselbach, P., & Amelang, M. (2006). Personality, lifestyle, and risk of cardiovascular disease and cancer: follow-up of population-based cohort. BMJ, 332(7554), 1359.

https://doi.org/10.1136/bmj.38833.479560.80

- Usta, Y. Y. (2012). Importance of Social Support in Cancer Patients. Asian Pacific Journal of Cancer Prevention, 13(8), 3569– 3572.
 https://doi.org/10.7214/anier.2012.12.8.2560
 - https://doi.org/10.7314/apjcp.2012.13.8.3569
- 23. Vollrath, M. E. (2001). Personality and stress. Scandinavian Journal of Psychology, 42(4), 335–347.

https://doi.org/10.1111/1467-9450.00245

- 24. Vollrath, M., Knoch, D., & Cassano, L. (1999). Personality, risky health behaviour, and perceived susceptibility to health risks. European Journal of Personality, 13(1), 39–50. https://doi.org/10.1002/(sici)1099-0984(19990 1/02)13:1
- 25. Wang, X., Cai, L., Qian, J., & Peng, J. (2014). Social support moderates stress effects on depression. International Journal of Mental Health Systems, 8(1). https://doi.org/10.1186/1752-4458-8-41
- Warner, M., Morey, L. C., Finch, J., Gunderson, J. G., Skodol, A. E., Sanislow, C. A., Shea, M. T., McGlashan, T. H., & Grilo, C. M. (2004). The Longitudinal Relationship of Personality Traits and Disorders. Journal of Abnormal Psychology, 113(2), 217–227. https://doi.org/10.1037/0021-843x.113.2.217
- Whitney, C. (2010). Social supports among college students and measures of alcohol use, perceived stress, satisfaction with life, emotional intelligence, and coping. The Journal of Student Wellbeing, 4(1). https://doi.org/10.21913/jsw.v4i1.588
- Wiebe, D. J., & Smith, T. W. (1997). Personality and Health. Elsevier eBooks, 891– 918. https://doi.org/10.1016/b978-012134645-4/50035-4

Eur. Chem. Bull. 2023, 12(Special Issue 5), 2935 - 2940

29. Woodforde, J. M., & Merskey, H. (1972). Personality traits of patients with chronic pain. Journal of Psychosomatic Research, 16(3). https://doi.org/10.1016/0022-3999(72)90040-2