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The Effect of Emotional Intelligence on Physiological Stress of Managers

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Abstract : One of the central models of emotional intelligence (EI) is that of Mayer and Salovey's, which includes ability to monitor own feelings and emotions and those of others, ability to discriminate different emotions, and to use this information to guide thinking and actions. There is vast amount of previous research where positive links between EI and, for example, leadership successfulness, work outcomes, work wellbeing and organizational climate have been reported. EI has also a role in the effectiveness of work teams, and the effects of EI are especially prominent in jobs requiring emotional labor. Thus, also the organizational context must be taken into account when considering the effects of EI on work outcomes. Based on previous research, it is suggested that EI can also protect managers from the negative consequences of stress. Stress may have many detrimental effects on the manager's performance in essential work tasks. Previous studies have highlighted the effects of stress on, not only health, but also, for example, on cognitive tasks such as decision-making, which is important in managerial work. The motivation for the current study came from the notion that, unfortunately, many stressed individuals may not be aware of the circumstance; periods of stress-induced physiological arousal may be prolonged if there is not enough time for recovery. To tackle this problem, physiological stress levels of managers were collected using recording of heart rate variability (HRV). The goal was to use this data to provide the managers with feedback on their stress levels. The managers could access this feedback using a www-based learning environment. In the learning environment, in addition to the feedback on stress level and other collected data, also developmental tasks were provided. For example, those with high stress levels were sent instructions for mindfulness exercises. The current study focuses on the relation between the measured physiological stress levels and EI of the managers. In a pilot study, 33 managers from various fields wore the Firstbeat Bodyguard HRV measurement devices for three consecutive days and nights. From the collected HRV data periods (minutes) of stress and recovery were detected using dedicated software. The effects of EI on HRV-calculated stress indexes were studied using Linear Mixed Models procedure in SPSS. There was a statistically significant effect of total EI, defined as an average score of Schutte's emotional intelligence test, on the percentage of stress minutes during the whole measurement period (p=.025). More stress minutes were detected on those managers who had lower emotional intelligence. It is suggested, that high EI provided managers with better tools to cope with stress. Managing of own emotions helps the manager in controlling possible negative emotions evoked by, e.g., critical feedback or increasing workload. High EI managers may also be more competent in detecting emotions of others, which would lead to smoother interactions and less conflicts. Given the recent trend to different quantified-self applications, it is suggested that monitoring of bio-signals would prove to be a fruitful direction to further develop new tools for managerial and leadership coaching.

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