Managing Workplace Stress
Feasibility Study of Stress Measurement Techniques

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Introduction
• Stress is an integral part of our daily lives
• Stress motivates us
• Stress drives us to succeed
• Stress overwhelms us
• Over stressing employees is bad for the bottom line
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• Leadership needs tools to provide timely information regarding stress in a team
• Methods are available to determine an individual is under stress
• The challenge is to correlate stress indications back to the source of the stress so it can be mitigated

Methods
• Explore current research on various stress measurement techniques
• Stress activates sympathetic component of autonomic nervous system and produces observable results

Results
• Effective stress monitoring must be non-intrusive and continuous
• Non-intrusive ➔ Does not interfere with daily activity
• Continuous ➔ Must have sufficient battery life to operate all day
• Effective stress monitoring must be non-intrusive and continuous
• Achieved good results in field tests
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• Would not be considered portable by current standards

Conclusions
• Sensors embedded in small wearable devices need to have the capability to operate continuously all day
• Will take multiple sensors tracking multiple metrics to unambiguously identify stress
• Current sensors have the capability, but cannot perform continuously all day
• Since sensors can not maintain continuous operation, the current applications do not operate with that approach
• Next generation upgrades to current devices are expected to meet these operational targets
• Stress monitoring will take multiple sensors feeding into a smart phone app to monitor stress in real time
• Apple Watch, Fit Bit, and Oura ring monitor several key biometrics

Literature Cited
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Further Information
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