Citation	Type of application [occupational versus athletic]	Nature of the study [fatigue vs. exhaustion]	Type of task [static versus dynamic tasks]	Methods used	Results reported
Manjarres, J., Narvaez, P., Gasser, K., Percybrooks, W. and Pardo, M., 2020. Physical Workload Tracking Using Human Activity Recognition with Wearable Devices. Sensors, 20(1), p.39.	Athletic	Fatigue, classification of 4+1 (resting) activities	Crunches, Push ups, Squatting, Jogging, Resting	RF (best model), KNN	ACC across all tasks: 0.89
Nardolillo, A.M., Baghdadi, A. and Cavuoto, L.A., 2017, September. Heart rate variability during a simulated assembly task; influence of age and gender. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 61, No. 1, pp. 1853-1857). Sage CA: Los Angeles, CA: SAGE Publications.	Occupational	Fatigue	Part assembly	ANOVA, Descriptive statistics	Change in the amount of heart rate variability over time, younger subjects have higher heart rate variability at rest when compared to older subjects
Baghdadi, A., Maman, Z.S., Lu, L., Cavuoto, L.A. and Megahed, F.M., 2017, September. Effects of task type, task duration, and age on body kinematics and subjective fatigue. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 61, No. 1, pp. 1040-1040). Sage CA: Los Angeles, CA: SAGE Publications.	Occupational	Fatigue	Parts assembly, Supply pickup and insertion, Manual material handling	Repeated Measures ANOVA	Significant variables: time, subjective ratings, time and age interaction to affect RPE, age and task interaction, time and task interaction
Dijkhuis, T.B., Blaauw, F.J., Van Ittersum, M.W., Velthuijsen, H. and Aiello, M., 2018. Personalized physical activity coaching: a machine learning approach. Sensors, 18(2), p.623.	Athletic/Occupational	Fatigue	Walking (counting steps in daily walking)	RF	ACC 0.93 F1-score 0.90
Baghdadi, A., Megahed, F.M., Esfahani, E.T. and Cavuoto, L.A., 2018. A machine learning approach to detect changes in gait parameters following a fatiguing occupational task. Ergonomics, 61(8), pp.1116-1129.	Occupational	Fatigue	Manual material handling	SVM	ACC 0.90
Tsao, L., Ma, L. and Papp, C.T., 2018, July. Using non-invasive wearable sensors to estimate perceived fatigue level in manual material handling tasks. In International Conference on Applied Human Factors and Ergonomics (pp. 65-74). Springer, Cham.	Occupational	Fatigue	Manual material handling (lifting, lowering, turning)	Regression	ACC 0.67 (whole model), 0.80 (individualized model)

Citation	Type of application [occupational versus athletic]	Nature of the study [fatigue vs. exhaustion]	Type of task [static versus dynamic tasks]	Methods used	Results reported
Ameli, S., Naghdy, F., Stirling, D., Naghdy, G., Aghmesheh, M., Anthony, R., McLennan, P. and Peoples, G., 2018. Measurement and Validation of Exercise-Induced Fatigue Through Inertial Motion Analysis. Journal of Engineering and Science in Medical Diagnostics and Therapy, 1(2).	Athletic	Exhaustion	Stair climbing	Clustering with Gaussian mixture model	25% decline in the distance traveled after being fatigued, and 90% variation in the body posture after fatigued
Zhang, L., Diraneyya, M.M., Ryu, J., Haas, C.T. and Abdel-Rahman, E., 2018, August. Assessment of Jerk As a Method of Physical Fatigue Detection. In ASME 2018 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference. American Society of Mechanical Engineers Digital Collection.	Occupational	Fatigue	Bricklaying	t-test	Upper arms and pelvis are the optimal sensor locations for fatigue detection
Ahmad, I. and Kim, J.Y., 2018. Modeling the Multi-Dimensional Phenomenon of Fatiguing by Assessing the Perceived Whole Body Fatigue and Local Muscle Fatigue During Squat Lifting. 산업경영시스템학회지, 41(4), pp.1-8.	Athletic	? Unknown	Squat lifting	Regression	Fatigued ACC: 0.83, Non-fatigued ACC: 0.93
Lee, W., 2018. Occupational Fatigue Prediction for Entry-Level Construction Workers in Material Handling Activities Using Wearable Sensors (Doctoral dissertation).	Occupational	? Unknown	Manual material handling in construction	Stepwise logistic regression	? Unknown
Abdous, M.A., Finco, S. and Visentin, V., 2018, September. Workload evaluation of industrial work: existing methods and practical applications.	Occupational	Fatigue	Pushing, Pulling, Carrying	Descriptive statistics	Levels of the task loads can be estimated with subjective measure
Visentin, V., 2018. Human factors in industrial contexts: fatigue and recovery modelling for manual material handling activities.	Occupational	? Unknown	Manual material handling	? Unknown	? Unknown
Zhang, L., Diraneyya, M.M., Ryu, J., Haas, C.T. and Abdel-Rahman, E.M., 2019. Jerk as an indicator of physical exertion and fatigue. Automation in Construction, 104, pp.120-128.	Occupational	Fatigue	Bricklaying	Descriptive statistics	Jerk is a useful metric for physical fatigue measurement, and it varies based on the experience level of the construction workers

Citation	Type of application [occupational versus athletic]	Nature of the study [fatigue vs. exhaustion]	Type of task [static versus dynamic tasks]	Methods used	Results reported
Rajavenkatanarayanan, A., Kanal, V., Tsiakas, K., Brady, J., Calderon, D., Wylie, G. and Makedon, F., 2019, June. Towards a robot-based multimodal framework to assess the impact of fatigue on user behavior and performance: a pilot study. In Proceedings of the 12th ACM International Conference on PErvasive Technologies Related to Assistive Environments (pp. 493-498).	Neither	Exhaustion (Physical and mental fatigue)	Playing a cognitive game, Creating robot-assisted shoulder flexion	Descriptive statistics	Difference between subjective task difficulty and objective measures
Karvekar, S.B., 2019. Smartphone-based Human Fatigue Detection in an Industrial Environment Using Gait Analysis.	Athletic	Exhaustion	Squatting	SVM	ACC 0.91, 0.76, 0.61 for 2, 3, and 4 defined levels of fatigue
Zhang, L., Diraneyya, M.M., Ryu, J., Haas, C.T. and Abdel-Rahman, E., 2019. Automated Monitoring of Physical Fatigue Using Jerk. In ISARC. Proceedings of the International Symposium on Automation and Robotics in Construction (Vol. 36, pp. 989-997). IAARC Publications.	Occupational	Fatigue	Bricklaying	SVM	ACC 0.94
Baghdadi, A., Cavuoto, L.A., Jones-Farmer, A., Rigdon, S.E., Esfahani, E.T. and Megahed, F.M., 2019. Monitoring worker fatigue using wearable devices: A case study to detect changes in gait parameters. Journal of Quality Technology, pp.1-25.	Occupational	Fatigue	Manual material handling	Multivariate change point, Time series clustering	Existence of 1-3 change points, Several cluster of participants, difference between the fatigue perception and actual physical fatigue
Cavuoto, L. and Megahed, F., 2016, January. Understanding fatigue and the implications for worker safety. In ASSE Professional Development Conference and Exposition. American Society of Safety Engineers.		NA			
Cavuoto, L. and Megahed, F., Understanding Fatigue.		NA			
Schall Jr, M.C., Sesek, R.F. and Cavuoto, L.A., 2018. Barriers to the adoption of wearable sensors in the workplace: A survey of occupational safety and health professionals. Human factors, 60(3), pp.351-362.		NA			

Citation	Type of application [occupational versus athletic]	Nature of the study [fatigue vs. exhaustion]	Type of task [static versus dynamic tasks]	Methods used	Results reported
Tsiakas, K., Papakostas, M., Ford, J.C. and Makedon, F., 2018, September. Towards a task-driven framework for multimodal fatigue analysis during physical and cognitive tasks. In Proceedings of the 5th international Workshop on Sensor-based Activity Recognition and Interaction (pp. 1-3).		NA- they proposed the approach only, no experiment is implemented			
Yu, Y., Yang, X., Li, H., Luo, X., Guo, H. and Fang, Q., 2019. Joint-Level Vision-Based Ergonomic Assessment Tool for Construction Workers. Journal of Construction Engineering and Management, 145(5), p.04019025.	Occupational	NA (ergonomic risk)		Deep learning, Rapid Entire Body Assessment	Ergonomic risk scores: 70%-96%
Zhang, L., 2019. Jerk as a Method of Identifying Physical Fatigue and Skill Level in Construction Work (Master's thesis, University of Waterloo).		NA (thesis, the papers are already included)			
Hosseinian, S.M., Zhu, Y., Mehta, R.K., Erraguntla, M. and Lawley, M.A., 2019. Static and Dynamic Work Activity Classification from a Single Accelerometer: Implications for Ergonomic Assessment of Manual Handling Tasks. IISE Transactions on Occupational Ergonomics and Human Factors, 7(1), pp.59-68.	Occupational	NA (activity classification)	Manual handling	RF, SVM	ACC 0.93–0.98
Maman, Z.S., Lu, L., Megahed, F.M. and Cavuoto, L.A., 2019. PHYSICAL FATIGUE MANAGEMENT. Professional Safety, 64(6), pp.26-27.		NA			
Baghdadi, A., 2019. Application of Inertial Measurement Unit (IMU) in Advanced Human Health and Safety Surveillance: A Data Fusion and Machine Learning Approach (Doctoral dissertation, State University of New York at Buffalo).		NA (thesis, the papers are already included)			
Nardolillo, A.M., 2017. Changes in Heart Rate Variability During a Simulated Assembly Task (Doctoral dissertation, State University of New York at Buffalo).		NA (thesis)			
Tsao, L., Li, L. and Ma, L., 2018. Human work and status evaluation based on wearable sensors in human factors and ergonomics: a review. IEEE transactions on human-machine systems, 49(1), pp.72-84.		NA (Lit review)			

Citation	Type of application [occupational versus athletic]	Nature of the study [fatigue vs. exhaustion]	Type of task [static versus dynamic tasks]	Methods used	Results reported
Dempsey, P.G., Kocher, L.M., Nasarwanji, M.F., Pollard, J.P. and Whitson, A.E., 2018. Emerging ergonomics issues and opportunities in mining. International journal of environmental research and public health, 15(11), p.2449.		NA			
Hwang, S.H., Yun, S., Lee, S.H. and Kang, W.S., Feature Extraction and Data Validation Analysis for Clustering Physical Stability of Trainee.		NA			
Gómez-Carmona, O., Casado-Mansilla, D. and Zubía, J.G., 2018. Health Promotion in Office Environments: A Worker-Centric Approach Driven by the Internet of Things. In Intelligent Environments (Workshops) (pp. 355-363).		NA (review paper)			
Gupta, A., Wilkerson, G.B., Sharda, R. and Colston, M.A., 2019. Who is More Injury-Prone? Prediction and Assessment of Injury Risk. Decision Sciences, 50(2), pp.374-409.		NA (not fatigue)			
Radosavljevic, V., Radosavljevic, S. and Jelic, G., 2019. Ambient intelligence-based smart classroom model. Interactive Learning Environments, pp.1-15.		NA			
Gomez-Carmonaa, O., Casado-Mansillaa, D. and Garcıa-Zubiab, J., 2019. Opportunities and Challenges of Technology-ased Interventions to Increase Health-wareness in the Workplace. Transforming Ergonomics with Personalized Health and Intelligent Workplaces, 25, p.33.		NA (review)			
Ahn, C.R., Lee, S., Sun, C., Jebelli, H., Yang, K. and Choi, B., 2019. Wearable Sensing Technology Applications in Construction Safety and Health. Journal of Construction Engineering and Management, 145(11), p.03119007.		NA (review)			
Benhamida, F.Z., Navarro, J., Gómez-Carmona, O., Casado-Mansilla, D., López-de-Ipiña, D. and Zaballos, A., 2019. SmartWorkplace: A Privacy-based Fog Computing Approach to Boost Energy Efficiency and Wellness in Digital Workplaces.		NA			
Sakhakarmi, S. and Park, J., 2019. Investigation of Tactile Sensory System Configuration for Construction Hazard Perception. Sensors, 19(11), p.2527.		NA			

Citation	Type of application [occupational versus athletic]	Nature of the study [fatigue vs. exhaustion]	Type of task [static versus dynamic tasks]	Methods used	Results reported
O'Sullivan, H., 2019. A usage and motivational model for wearable technology: a users' perspective.		NA			
Baudier, P., Ammi, C. and Lecouteux, A., 2019. Employees' acceptance of the healthcare internet of things: A source of innovation in corporate human resource policies. Journal of Innovation Economics Management, (3), pp.89-111.		NA			
Fischer, D.P.N.M., To Wear Or Not To Wear?.		Not in English			
Kääriäinen, J., 2019. Big datan käyttö työntekijöiden seurannassa ja rekrytoinnissa.		Not in English			
Radosavljević, V., 2019. Model adaptivnog elektronskog obrazovanja u pametnim obrazovnim okruženjima (Doctoral dissertation, Univerzitet u Beogradu-Fakultet organizacionih nauka).		NA			
Hernandez, G., Valles, D., Wierschem, D.C., Koldenhoven, R.M., Koutitas, G., Mendez, F.A., Aslan, S. and Jimenez, J., Machine Learning Techniques for Motion Analysis of Fatigue from Manual Material Handling Operations Using 3D Motion Capture Data.		NA (review)			