

References

- [1] M. Strassnig, J. Signorile, C. Gonzalez, and P. D. Harvey, 'Physical performance and disability in schizophrenia', *Schizophr. Res. Cogn.*, vol. 1, no. 2, pp. 112–121, 2014.
- [2] H. Yoon and S. Kim, 'Development strategy of the alternative format materials for disabled people in Korea', *Aslib Proc.*, vol. 63, no. 4, pp. 380–398, Jul. 2011.
- [3] M. E. Chernew, A. A. Samwick, F. Pan, and B. Shan, 'Declining disability among the elderly disability risk and the value', in *Disability and Spending Growth*, no. January, 2009, pp. 237–248.
- [4] B. Doyle, 'Employment vulnerability and labour law', *Empl. Relations*, vol. 9, no. 5, pp. 20–29, May 1987.
- [5] F. J. Valero-cuevas, N. Smaby, M. Venkadesan, M. Peterson, and T. Wright, 'The strength – dexterity test as a measure of dynamic pinch performance', *J. Biomech.*, vol. 36, pp. 265–270, 2003.
- [6] B. M. de Guimarães, 'Ergonomics and workplace adaptation to people with disabilities', *Work*, vol. 50, no. 4, pp. 607–609, 2015.
- [7] B. Guimarães, L. Bezerra, Barkokébas, Martins, and B. B. Junior, 'Workplace adaptation of people with disabilities in the construction industry', *Procedia Manuf.*, vol. 3, pp. 1832–1837, 2015.
- [8] M. Laabidi *et al.*, 'Learning technologies for people with disabilities', *J. King Saud Univ. – Comput. Inf. Sci.*, vol. 26, no. 1, pp. 29–45, Jan. 2014.
- [9] World Health Organization, 'World Report on Disability', Feb. 2011.
- [10] S. Lindsay and A.-M. DePape, 'Exploring differences in the content of job interviews between youth with and without a physical disability', *PLoS One*, vol. 10, no. 3, pp. 1–16, Mar. 2015.
- [11] A. C. Manolache *et al.*, 'Development of disabled employees from academic environment', *Procedia - Soc. Behav. Sci.*, vol. 142, pp. 71–77, 2014.
- [12] C. F. Chi, J. S. Pan, T. H. Liu, and Y. Jang, 'The development of a hierarchical coding scheme and database of job accommodation for disabled workers', *Int. J. Ind. Ergon.*, vol. 33, no. 5, pp. 429–447, 2004.
- [13] S. Aytac *et al.*, 'Flexible working and employment of people with disabilities at customs brokerage firms in Turkey: A social responsibility project', *Procedia - Soc. Behav. Sci.*, vol. 65, pp. 39–45, 2012.
- [14] A. M. Costa and C. Miralles, 'Job rotation in assembly lines employing disabled workers', *Int. J. Prod. Econ.*, vol. 120, no. 2, pp. 625–632, Aug. 2009.
- [15] R. Newton, M. Ormerod, and P. Thomas, 'Disabled people's experiences in the workplace environment in England', *Equal Oppor. Int.*, vol. 26, no. 6, pp. 610–623, Aug. 2007.
- [16] J. J. Chen and Z. He, 'Using analytic hierarchy process and fuzzy set theory to rate and rank the disability', *Fuzzy Sets Syst.*, vol. 88, pp. 1–22, 1997.

- [17] C. Miralles *et al.*, ‘Advantages of assembly lines in sheltered work centres for disabled. A case study’, *Int. J. Prod. Econ.*, vol. 110, no. 1–2, pp. 187–197, 2007.
- [18] O. Plos, S. Buisine, A. Aoussat, F. Mantelet, and C. Dumas, ‘A Universalist strategy for the design of assistive technology’, *Int. J. Ind. Ergon.*, vol. 42, no. 6, pp. 533–541, Nov. 2012.
- [19] J. C. Granger and B. H. Kleiner, ‘Benefit programmes for disabled employees’, *Equal Oppor. Int.*, vol. 22, no. 3, pp. 10–15, 2014.
- [20] C. Barnes, ‘Disability and employment’, *Pers. Rev.*, vol. 21, no. 6, pp. 55–73, Jun. 1992.
- [21] T. A. Pointer and B. H. Kleiner, ‘Developments concerning accommodation of wheelchair users within the workplace in accordance to the Americans with Disabilities Act’, *Equal Oppor. Int.*, vol. 16, no. 6/7, pp. 44–49, Jun. 1997.
- [22] E. Gris , G. Boisjoly, M. Maguire, and A. El-Geneidy, ‘Elevating access: Comparing accessibility to jobs by public transport for individuals with and without a physical disability’, *Transp. Res. Part A Policy Pract.*, no. xxxx, pp. 0–1, 2018.
- [23] G. O. Vincent-Onabajo and W. S. Malgwi, ‘Attitude of physiotherapy students in Nigeria toward persons with disability’, *Disabil. Health J.*, vol. 8, no. 1, pp. 102–108, Jan. 2015.
- [24] M. Hankova and S. Vavrova, ‘Emotional and social needs of integrated disabled students in secondary school environment’, *Procedia - Soc. Behav. Sci.*, vol. 217, no. 2001, pp. 229–238, Feb. 2016.
- [25] E. L. De Hollander and K. I. Proper, ‘Physical activity levels of adults with various physical disabilities’, *Prev. Med. Reports*, vol. 10, pp. 370–376, 2018.
- [26] S. Uppal, ‘Disability, workplace characteristics and job satisfaction’, *Int. J. Manpow.*, vol. 26, no. 4, pp. 336–349, Jun. 2005.
- [27] A. M. Yusof, M. M. Ali, and A. M. Salleh, ‘Employability of vocational school leavers with disabilities’, *Procedia - Soc. Behav. Sci.*, vol. 112, pp. 1064–1069, Feb. 2014.
- [28] M. D. Warren, ‘The prevalence of disability: measuring and estimating the number and the needs of disabled people in the community’, *Public Health*, vol. 101, pp. 333–341, 1987.
- [29] D. M. Francis and R. Adams, ‘Are we promoting the health of people with physical mobility impairments? A literature review’, *Health Educ.*, vol. 110, no. 2, pp. 135–145, 2010.
- [30] A. Sairam, ‘Developing and Verifying MTM modifiers for tasks performed by individuals with permanent partial disability of the fingers.’, University of Cincinnati, 2008.
- [31] T. Thanem, ‘Embodying disability in diversity management research’, *Equal Oppor. Int.*, vol. 27, no. 7, pp. 581–595, 2008.

- [32] T. Hutchison, 'Archives of disease in annotations: The classification of disability', *Dis. Child.*, vol. 73, pp. 91–99, 1995.
- [33] D. L. Stone and A. Colella, 'A model of factors affecting the treatment of disabled individuals in organizations', *Pers. Rev.*, vol. 21, no. 6, pp. 55–73, Jun. 1992.
- [34] M. K. Jones, 'Disability and the labour market: a review of the empirical evidence', *J. Econ. Stud.*, vol. 35, no. 5, pp. 405–424, Sep. 2008.
- [35] N. N. Sze and K. M. Christensen, 'Access to urban transportation system for individuals with disabilities', *IATSS Res.*, vol. 41, no. 2, pp. 66–73, Jul. 2017.
- [36] J. Hashim *et al.*, 'Access and accessibility audit in commercial complex: effectiveness in respect to People with Disabilities (PWDs)', *Procedia - Soc. Behav. Sci.*, vol. 50, no. July, pp. 452 – 461, 2012.
- [37] C. Biihler, 'Approach to the analysis of user requirements in assistive technology', *Int. J. Ind. Ergon.*, vol. 17, no. 2, pp. 187–192, 1996.
- [38] A. M. Gurrana, P. S. . R. Rao, and R. Dontikurti, 'Solar powered wheel chair: mobility for physically challenged', *Int. J. Curr. Eng. Technol.*, vol. 2, no. 1, pp. 211–214, 2012.
- [39] T. Pohjonen, A. Punakallio, and V. Louhevaara, 'Participatory ergonomics for reducing load and strain in home care work', *Int. J. Ind. Ergon.*, vol. 21, no. 5, pp. 345–352, 1998.
- [40] M. C. Domingo, 'An overview of the internet of things for people with disabilities', *J. Netw. Comput. Appl.*, vol. 35, no. 2, pp. 584–596, 2012.
- [41] V. Calikova, E. Egorov, and E. Razumovskaya, 'About the need of employment of disabled people for regions of the Russian Federation', *Procedia Econ. Financ.*, vol. 15, no. 14, pp. 1029–1032, 2014.
- [42] W. E. E. Field and R. L. L. Tormoehlen, 'Impact of physical handicaps on operators of agricultural equipment', *Appl. Ergon.*, vol. 16, no. 3, pp. 179–182, Sep. 1985.
- [43] A. L. Azlan, R. M. Rashid, A. Latib, M. Rashid, A. L. Azlan, and R. M. Rashid, 'Employment core abilities skills among trainees with physical disabilities in Malaysia', *Procedia - Soc. Behav. Sci.*, vol. 93, no. 2005, pp. 1760–1765, 2013.
- [44] M. Kulkarni and R. Valk, 'Don't ask, don't tell: Two views on human resource practices for people with disabilities', *IIMB Manag. Rev.*, vol. 22, no. 4, pp. 137–146, 2010.
- [45] S. K. Charles and Hogan Neville, 'Dynamics of wrist rotations', *J. Biomech.*, vol. 44, pp. 614–621, 2011.
- [46] Armstrong and Kochhar Dev S., 'Work performance and handicapped persons', in *industrial engineering handbook*, G. Salvendy, Ed. Wiley International Publication, 1982, pp. 1–18.
- [47] B. C. Amick *et al.*, 'Measuring the Impact of Organizational Behaviors on Work Disability Prevention and Management', *J. Organ. Rehabil.*, vol. 10, no. 1, pp. 21–38, 2000.

- [48] A. Subramanian and A. Mital, 'Finger disabilities and higher level tasks - developing and validating MTM multipliers', *Int. J. Ind. Eng. Theory Appl. Pract.*, vol. 16, no. 4, pp. 344–352, 2009.
- [49] M. Saunders, P. Lewis, and A. Thornhill, *Research methods for business students*, 5th ed. 2009.
- [50] I. Buc̃iūnienė and R. Kazlauskaitė, 'Integrating people with disability into the workforce: the case of a retail chain', *Equal. Divers. Incl. An Int. J.*, vol. 29, no. 5, pp. 534–538, 2010.
- [51] M. E. Page and J. Spicer, 'Aids and services for disabled people- getting the message across', no. December, pp. 223–230, 1981.
- [52] L. J. Bonnici, S. L. Maatta, and M. K. Wells, 'patrons with disabilities US national accessibility survey : librarians serving patrons with disabilities', *New Libr. World*, vol. 110, no. 11/12, pp. 512–528, 2011.
- [53] A. Subramanian, 'Developing MTM modifiers for tasks performed by individuals with permanent partial disability of fingers.', University of Cincinnati, 2007.
- [54] J. A. Jacko and H. S. Vitense, 'A review and appraisal of information technologies within a conceptual framework for individuals with disabilities', *online Springer-Verlag 2001*, pp. 56–76, 2001.
- [55] P. R. M. M. Jones, M. Rioux, and M. Rioux, 'Three-dimensional Surface Anthropometry : to the Human Body Applications', *Opt. Lasers Eng.*, vol. 28, no. 2, pp. 89–117, 1997.
- [56] J. Rostron, 'Assessing the physically disabled: Social factors in rehousing', *Public Health*, vol. 92, pp. 246–250, 1978.
- [57] A. Cieza *et al.*, 'Linking health-status measurements to the international classification of functioning, disability and health', *J Rehabil Med*, vol. 34, pp. 205–210, 2002.
- [58] S. Pandey and A. K. Pandey, *Clinical Orthopaedic Diagnosis*. New Delhi Japee Brothers Medical Publishers, 2009.
- [59] F. H. Martini and E. F. Batholamew, *Essentials of Anatomy & Physiology*. Prentice Hall, 2000.
- [60] N. Pollock, S. Baptiste, M. Law, M. A. McColl, A. Opzoomer, and H. Polatajko, 'Occupational performance measures: a review based on the guidelines for the client-centred practice of occupational therapy.', *Can. J. Occup. Ther.*, vol. 57, no. 2, pp. 77–81, 1990.
- [61] L. J. Bonnici, S. L. Maatta, and M. K. Wells, 'US national accessibility survey: librarians serving patrons with disabilities', *New Libr. World*, vol. 110, no. 11/12, pp. 512–528, 2009.
- [62] A. Girdhar, A; Mital, A; Kephart, A; Young, 'Design guidelines for accommodating amputees in the workplace', *J. Occup. Environ. Med.*, vol. 11, no. 2, pp. 99–118, 2001.

- [63] P. Anand and P. Sevak, 'The role of workplace accommodations in the employment of people with disabilities', *J. Labour Policy*, vol. 6, no. 12, p. 20, 2017.
- [64] D. E. Gyi, R. E. Sims, J. M. Porter, R. Marshall, and K. Case, 'Representing older and disabled people in virtual user trials: Data collection methods', *Appl. Ergon.*, vol. 35, no. 5, pp. 443–451, 2004.
- [65] J.-F. Ravaut and V. Boissonnat, 'Boosting disability research in the engineering sciences. The recommendations of the National Observatory for Training, Research and Innovation on Disability (ONFRIH)', *Ann. Phys. Rehabil. Med.*, vol. 54, no. 1, pp. 16–24, Feb. 2011.
- [66] B. Kyei-dompim, 'Technical - vocational institute for the physically disabled: an examination of conflicting design requirements for people with mobility impairments', 2010.
- [67] J. N. Laditka and S. B. Laditka, 'Work disability in the United States, 1968–2015: Prevalence, duration, recovery, and trends', *SSM - Popul. Heal.*, vol. 4, pp. 126–134, 2018.
- [68] P. Skedinger and B. Widerstedt, 'Cream skimming in employment programmes for the disabled? Evidence from Sweden', *Int. J. Manpow.*, vol. 28, no. 8, pp. 694–714, 2007.
- [69] M. Simpson, N. Taylor, J. Padmore, M. Simpson, N. Taylor, and J. Padmore, 'Marketing in supported employment enterprises — Part I: Case studies', *J. Small Bus. Enterp. Dev.*, vol. 8, no. 3, pp. 233–244, 2001.
- [70] G. Ruggeri Stevens and S. Goodwin, "'Learning to work" in small businesses', *Educ. + Train.*, vol. 49, no. 8/9, pp. 745–755, Nov. 2007.
- [71] A. Subramanian and A. Mital, 'Developing MTM modifiers for finger disabilities', *Int. J. Ind. Eng.*, vol. 16, no. 4, pp. 331–343, 2009.
- [72] M. Sanders and McCormick E. J., *Human Factors in Engineering and Design*, 7th ed. Library of Congress Cataloging-in-Publication Data, 1993.
- [73] A. M. Atya, 'The validity of spinal mobility for prediction of functional disability in male patients with low back pain', *J. Adv. Res.*, vol. 4, pp. 43–49, 2013.
- [74] P. Mukhopadhyay *et al.*, 'Estimating upper limb discomfort level due to intermittent isometric pronation torque with various combinations of elbow angles, forearm rotation angles, force and frequency with upper arm at 90° abduction', *Int. J. Ind. Ergon.*, vol. 37, no. 4, pp. 313–325, Apr. 2007.
- [75] R. Hew, H. A. M. M. Daanen, G. Havenith, R. Heus, H. A. M. M. Daanen, and G. Havenith, 'Physiological criteria for functioning of hands in the cold. A review', *Appl. Ergon.*, vol. 26, no. 1, pp. 5–13, 1995.
- [76] J. Hwang, H. Shin, and M.-C. Jung, 'Joint motion pattern classification by cluster analysis of kinematic, demographic, and subjective variables', *Appl. Ergon.*, vol. 44, pp. 636–642, 2013.

- [77] M. J. Chung and M. J. J. Wang, 'The effect of age and gender on joint range of motion of worker population in Taiwan', *Int. J. Ind. Ergon.*, vol. 39, no. 4, pp. 596–600, 2009.
- [78] R. W. Shoenmarklin and W. S. Marras, 'Dynamic capabilities of the wrist joint in industrial workers', *Int. J. Ind. Ergon.*, vol. 11, no. 3, pp. 207–224, Jun. 1993.
- [79] A. Pennathur and A. Mital, 'A Comparison of functional capabilities of individuals with and without simulated finger disabilities: An exploratory study', *J. Occup. Rehabil.*, vol. 9, no. 4, pp. 227–246, 1999.
- [80] S. Dockrell *et al.*, 'An investigation of the reliability of Rapid Upper Limb Assessment (RULA) as a method of assessment of children's computing posture', *Appl. Ergon.*, vol. 43, no. 3, pp. 632–636, May 2012.
- [81] S. Hignett and L. McAtamney, 'Rapid Entire Body Assessment (REBA)', *Appl. Ergon.*, vol. 31, no. 2, pp. 201–205, Apr. 2000.
- [82] I. L. Organisation, *International Labour Organisation*. Geneva ILO, 1992.
- [83] C. L. Brisley and K. Eady, 'Predetermined Motion Time systems', in *Handbook of Industrial Engineering*, G. Salvendy, Ed. 1982, p. 4.5.1 to 4.5.31.
- [84] M. E. Mundel, *Motion and time study*, 5th ed. Prentice Hall of India Private Limited, 5th edition, 2nd Indian edition, 1981.
- [85] R. M. Currie and J. E. Faraday, *Work study*, 4th ed. London Pitman 1977, 1978.
- [86] M. E. Mundel, 'Productivity measurement and improvement', in *Handbook of Industrial Engineering*, G. Salvendy, Ed. 1982.
- [87] R. M. Barnes, *Motion and time study: design and measurement of work*, 6th ed. New York Wiley, 1968.
- [88] G. Salvendy and J. Knight, *Psychomotor Work Capabilities*. New York John Wiley, 1982.
- [89] A. W. Cywar, 'Development and use of standard data', in *Handbook of Industrial Engineering*, G. Salvendy, Ed. 1982.
- [90] H. B. Maynard, *Industrial Engineering Hand book*, 3rd edition. McGRAW HILL, USA, 1971.
- [91] K. Jain and L. Agrawal, *Production Planning Control and Industrial Management*. mesh Chander Khanna, Khanna Publishers, 2B, Nath Market, Delhi, 1980.
- [92] N. Fallentin *et al.*, 'Criteria for classification of posture in repetitive work by observation methods: A review', *Int. J. Ind. Ergon.*, vol. 19, no. 5, pp. 397–411, May 1997.
- [93] H. Cho and J. Park, 'Motion-based method for estimating time required to attach self-adhesive insulators', *Comput. Des.*, vol. 56, pp. 68–87, Nov. 2014.
- [94] R. Ortengren, J. Laring, M. Forsman, R. Kadefors, R. Örtengren, and R. Ortengren, 'MTM-based ergonomic workload analysis', *Int. J. Ind. Ergon.*, vol. 30, no. 3, pp. 135–148, 2002.

- [95] C. R. Mehta and V. K. Tewari, 'Seating discomfort for tractor operators: A critical review', *Int. J. Ind. Ergon.*, vol. 25, no. 6, pp. 661–674, 2000.
- [96] J. Leilanie, D. Prado-lu, J. L. Del Prado-Lu, J. Leilanie, and D. Prado-lu, 'Anthropometric measurement of Filipino manufacturing workers', *Int. J. Ind. Ergon.*, vol. 37, no. 6, pp. 497–503, Jun. 2007.
- [97] M. M. Robertson, Y. Huang, M. J. O. Neill, and L. M. Schleifer, 'Flexible workspace design and ergonomics training : Impacts on the psychosocial work environment , musculoskeletal health , and work effectiveness among knowledge workers', vol. 39, pp. 482–494, 2008.
- [98] C. R. Mehta and V. K. Tewari, 'Seating discomfort for tractor operators--a critical review', *Int. J. Ind. Ergon.*, vol. 25, no. 6, pp. 661–674, 2000.
- [99] M. K. Chung and S. H. Kim, 'Effects of body posture , weight and frequency on time-dependent muscle strengths during dynamic materials handling tasks', *Int. J. Ind. Ergon.*, vol. 18, pp. 153–159, 1996.
- [100] A. Mital and S. Kumar, 'Human muscle strength definitions , measurement , and usage : Part II - The scientific basis (knowledge base) for the guide', *Int. J. Ind. Ergon.*, vol. 22, pp. 123–144, 1998.
- [101] P. Carayon and M. J. Smith, 'Work organization and ergonomics', *Appl. Ergon.*, vol. 31, pp. 649–662, 2000.
- [102] J. A. Hunt, 'Robot kinematics and the Gantry Tau parallel machine', *Ind. Robot An Int. J.*, vol. 34, no. 5, pp. 362–367, Aug. 2007.
- [103] A. Mital and S. Kumar, 'Human muscle strength definitions, measurement, and usage: Part I - Guidelines for the practitioner', *Int. J. Ind. Ergon.*, vol. 22, no. 1–2, pp. 101–121, 1998.
- [104] X. Zhang and T. Buhr, 'Are back and leg muscle strengths determinants of lifting motion strategy? Insight from studying the effects of simulated leg muscle weakness', *Int. J. Ind. Ergon.*, vol. 29, no. 3, pp. 161–169, 2002.
- [105] R. S. Padula, H. Jane, and C. Gil, 'Sagittal trunk movements during load carrying activities : a pilot study', vol. 32, pp. 181–188, 2003.
- [106] P. G. Dempsey and M. M. Ayoub, 'The influence of gender, grasp type, pinch width and wrist position on sustained pinch strength', *Int. J. Ind. Ergon.*, vol. 17, no. 3, pp. 259–273, Mar. 1996.
- [107] N. A. Stanton, 'Hierarchical task analysis: Developments, applications, and extensions', *Appl. Ergon.*, vol. 37, no. 1, pp. 55–79, Jan. 2006.
- [108] D. Roman-Liu and T. Tokarski, 'Upper limb strength in relation to upper limb posture', *Int. J. Ind. Ergon.*, vol. 35, pp. 19–31, 2005.
- [109] M. A. James, 'Use of the Medical Research Council Muscle Strength Grading System in the Upper Extremity', *J. Hand Surg. Am.*, vol. 32, no. 2, pp. 154–156, Feb. 2007.
- [110] P. Kuhlmann, T. Edtmayr, and W. Sihn, 'Methodical approach to increase productivity and reduce lead time in assembly and production-logistic processes', *CIRP J. Manuf. Sci. Technol.*, vol. 4, no. 1, pp. 24–32, 2011.

- [111] C.-F. Kuo and M. Wang, 'Motion generation from MTM semantics', *Comput. Ind.*, vol. 60, no. 5, pp. 339–348, Jun. 2009.
- [112] U. Sekaran, *Research Methods for Business a skill building approach*, Fourth. Pashupati Printers (P) Ltd., 2007.
- [113] I. Etikan and B. I. Journal, 'Comparision of Snowball Sampling and Sequential Sampling Technique', *Biometrics Biostat. Int. J.*, vol. 3, no. 1, pp. 1–2, 2016.
- [114] S. Pheasant, *Bodyspace, Anthropometry, Egonomics and Design*. British Library Cataloguing in Publication Data, 1986.
- [115] M. Kawakami, F. Inoue, T. Ohkubo, and T. Ueno, 'Evaluating elements of the work area in terms of job redesign for older workers', *Int. J. Ind. Ergon.*, vol. 25, no. 5, pp. 525–533, 2000.
- [116] A. Fields, *Method study*. Cassell & company ltd, Aukland, 1969.
- [117] S. Hassan, K. Soltani, M. Yusoff, and M. Bin, 'Disabled Children in Public Playgrounds : A Pilot Study', vol. 36, no. June 2011, pp. 670–676, 2012.
- [118] D. L. Phipps, G. H. Meakin, and P. C. W. Beatty, 'Extending hierarchical task analysis to identify cognitive demands and information design requirements', *Appl. Ergon.*, vol. 42, no. 5, pp. 741–748, 2011.
- [119] E. G. Edholm, *The Biology of work*, First. World University Press, 1967.
- [120] N. L. Black and B. Das, 'A three-dimensional computerized isometric strength measurement system', *Appl. Ergon.*, vol. 38, no. 3, pp. 285–292, 2007.
- [121] A. Finneran and L. O'Sullivan, 'Effects of grip type and wrist posture on forearm EMG activity, endurance time and movement accuracy', *Int. J. Ind. Ergon.*, vol. 43, no. 1, pp. 91–99, Jan. 2013.
- [122] A. Garg, K. Hegmann, and J. Kapellusch, 'Short-cycle overhead work and shoulder girdle muscle fatigue', *Int. J. Ind. Ergon.*, vol. 36, pp. 581–597, 2006.
- [123] A. Catović, Z. Kosovel, E. Catović, and O. Muftić, 'A comparative investigation of the influence of certain arm positions on hand pinch grips in the standing and sitting positions of dentists', *Appl. Ergon.*, vol. 20, no. 2, pp. 109–114, 1989.
- [124] E. Catovic, K. K, and O. Muftić, 'The influence of arm position on the pinch grip strength of female dentists in standing and sitting positions', *Appl. Ergon.*, vol. 22, no. 3, pp. 163–166, 1991.
- [125] A. B. Swanson, I. B. Matev, and G. de Groot, 'The strength of the hand', *Appl. Ergon.*, vol. 3, no. 4, p. 241, Dec. 1972.
- [126] D. Kee and W. Karwowski, 'LUBA : An assessment technique for postural loading on the upper body based on joint motion discomfort and maximum holding time', *Appl. Ergon.*, vol. 32, pp. 357–366, Aug. 2001.
- [127] Y. C. Shih, 'Effect of a splint on measures of sustained grip exertion under different forearm and wrist postures', *Appl. Ergon.*, vol. 36, no. 3, pp. 293–299, 2005.

- [128] C. R. Reid, P. McCauley Bush, W. Karwowski, and S. K. Durrani, 'Occupational postural activity and lower extremity discomfort: A review', *Int. J. Ind. Ergon.*, vol. 40, no. 3, pp. 247–256, May 2010.
- [129] M. I. Alhojailan, 'Thematic analysis: A critical review of its process and evaluation', *West East J. Soc. Sci.*, vol. 1, no. 1, pp. 39–47, 2012.
- [130] M. Maguire and B. Delahunt, 'Doing a Thematic Analysis : A Practical , Step-by-Step Guide for Learning and Teaching Scholars .', vol. 3, no. 3, 2017.
- [131] R. Lueder, 'A proposed RULA for computer users', *Humanics ErgoSystems, Inc*, vol. 24, pp. 91–99, 1996.
- [132] R. Herbert *et al.*, 'Impact of a joint labor-management ergonomics program on upper extremity musculoskeletal symptoms among garment workers', vol. 32, pp. 453–460, 2001.
- [133] B. Bazrgari, A. Shirazi-adl, M. Trottier, and P. Mathieu, 'Computation of trunk equilibrium and stability in free flexion – extension movements at different velocities', vol. 41, pp. 412–421, 2008.
- [134] S. Kumar, Y. Narayan, R. B. Stein, and C. Snijders, 'Muscle fatigue in axial rotation of the trunk', vol. 28, pp. 113–125, 2001.
- [135] A. Toren, 'Muscle activity and range of motion during active trunk rotation in a sitting posture', *Appl. Ergon.*, vol. 32, pp. 583–591, 2001.
- [136] R. S. Sodhi, 'Evaluation of head and neck motion with the hemispherical shell method', *Int. J. Ind. Ergon.*, vol. 25, no. 6, pp. 683–691, Jul. 2000.
- [137] J. C. Davies, G. J. Kemp, S. P. Frostick, and C. E. Dickinson, 'Manual handling injuries and long term disability', vol. 41, pp. 611–625, 2003.
- [138] D. Kee, 'Gender differences in rankings of joint motion stressfulness based on psychophysical scaling', *Int. J. Ind. Ergon.*, vol. 35, no. 5, pp. 461–469, May 2005.
- [139] M. A. Lemay and P. E. Crago, 'A dynamic model for simulating movements of the elbow, forearm, and wrist', *J. Biomech.*, vol. 29, no. 10, pp. 1319–1330, Oct. 1996.
- [140] J. Qin, H. Chen, and J. T. Dennerlein, 'Wrist posture affects hand and forearm muscle stress during tapping', *Appl. Ergon.*, vol. 44, no. 6, pp. 969–976, Nov. 2013.
- [141] E. Tsepis, G. Giakas, G. Vagenas, and A. Georgoulis, 'Frequency content asymmetry of the isokinetic curve between ACL deficient and healthy knee', *J. Biomech.*, vol. 37, no. 6, pp. 857–864, 2004.
- [142] R. R. Torrealba, G. Fernández-López, and J. C. Grieco, 'Towards the development of knee prostheses: review of current researches', *Kybernetes*, vol. 37, no. 9/10, pp. 1561–1576, 2008.
- [143] M. H. Lau and T. J. Armstrong, 'The effect of viewing angle on wrist posture estimation from photographic images using novice raters', *Appl. Ergon.*, vol. 42, no. 5, pp. 634–643, Jul. 2011.

- [144] S. A. Etemad and A. Arya, 'Extracting movement , posture , and temporal style features from human motion', *Biol. Inspired Cogn. Archit.*, vol. 7, pp. 15–25, 2014.
- [145] T. A. R. Schreuders, R. W. Selles, M. E. Roebroek, and H. J. Stam, 'Strength Measurements of the Intrinsic Hand Muscles: A Review of the Development and Evaluation of the Rotterdam Intrinsic Hand Myometer', *J. Hand Ther.*, vol. 19, no. 4, pp. 393–402, 2006.
- [146] Y. M. Nolan, 'Control and communication for physically disabled people, based on vestigial signals from the body', 2005.
- [147] A. Luttmann, M. Jäger, and W. Laurig, 'Electromyographical indication of muscular fatigue in occupational field studies', *Int. J. Ind. Ergon.*, vol. 25, no. 6, pp. 645–660, Jul. 2000.
- [148] S. C. Campbell, P. F. Nolan, R. K. Wharton, and A. W. Train, 'Measurement of forces exerted in the manual handling of small cylindrical objects', *Int. J. Ind. Ergon.*, vol. 25, pp. 349–358, 2000.
- [149] Y. C. Shih and M.-J. J. J. Wang, 'Hand/tool interface effects on human torque capacity', *Int. J. Ind. Ergon.*, vol. 18, no. 2–3, pp. 205–213, Sep. 1996.
- [150] P. Sedgwick, 'Snowball sampling', *BMJ*, vol. 347, no. December, pp. 1–2, 2013.
- [151] I. Ciobanu and P. Lucian, 'The usability pilot study of a mechatronic system for gait rehabilitation', *Procedia Manuf.*, vol. 22, pp. 864–871, 2018.
- [152] K. M. Lewis and P. Hepburn, 'Open card sorting and factor analysis: a usability case study', *Electron. Libr.*, vol. 28, no. 3, pp. 401–416, 2010.
- [153] J. Rowson and A. Yoxall, 'Hold , grasp , clutch or grab : Consumer grip choices during food container opening', *Appl. Ergon.*, vol. 42, no. 5, pp. 627–633, 2011.
- [154] S. Chowdhury, M. Landoni, and G. Forbes, 'Usability and impact of digital libraries: a review', *Online Inf. Rev.*, vol. 30, no. 6, pp. 656–680, 2006.
- [155] H. Xiao, M. Stoecklin-Marois, M. Li, C.-S., and M. S.A., Schenker, 'Cohort study of physical activity and injury among Latino farm workers (2015)', *Am. J. Ind. Med.*, vol. 58, no. 7, pp. 737–745, 2018.
- [156] F. van Nes, T. A. Abma, H. Jonsson, and D. Deeg, 'Language differences in qualitative research: is meaning lost in translation?', *Eur. J. Ageing*, vol. 7, pp. 313–316, 2010.
- [157] B. Doyle, '3 . Disabled workers , employment vulnerability and labour law', 2009.
- [158] J. M. Florence *et al.*, 'Intrarater reliability of manual muscle test (Medical Research Council scale) grades in Duchenne' s muscular dystrophy', *Phys. Ther.*, vol. 72, no. 2, pp. 115–122, 1992.
- [159] E. Borg and G. Borg, 'A demonstration of level-anchored ratio scaling for prediction of grip strength', *Appl. Ergon.*, vol. 44, no. 5, pp. 835–840, 2013.

- [160] R. Ploeg, O. HJGH, and R. J, ‘Measuring muscle strength’, *J. Neurol.*, vol. 231, pp. 200–203, 1984.
- [161] H. Chen, Y. Liu, C. C. Chen, and C. C. Chen, ‘Design and feasibility study of an integrated pointing device apparatus for individuals with spinal cord injury’, vol. 38, pp. 275–283, 2007.
- [162] M. Fagarasanu and S. Kumar, ‘Measurement instruments and data collection : a consideration of constructs and biases in ergonomics research’, vol. 30, pp. 355–369, 2002.
- [163] H. K. G. Punchihewa and D. E. Gyi, ‘Development of a QFD based collaborative design approach to reduce Work-Related Musculoskeletal Disorders (MSDs)’, *Des. Princ. Pract. AN Int. J.*, vol. 3, no. 3, 2010.
- [164] H. K. G. Punchihewa and D. E. Gyi, ‘A collaborative design approach to preventive work-related musculoskeletal disorders’, 2008.
- [165] S. M. Hsiang and C. Chang, ‘The effect of gait speed and load carrying on the reliability of ground reaction forces’, vol. 40, pp. 639–657, 2002.
- [166] Al-Sultan K. and K. M. M, ‘Computational experience on four algorithms for the hard clustering problem’, *Pattern Recognit. Lett.*, vol. 17, pp. 295–308, 1996.
- [167] W. Maseri *et al.*, ‘An improved parameter less data clustering technique based on maximum distance of data and lioyd k-means algorithm’, *Procedia Technol.*, vol. 1, pp. 367–371, 2012.
- [168] V. M. Ciriello, R. V. Maikala, P. G. Dempsey, and N. V. O’Brien, ‘Psychophysically determined forces of dynamic pushing for female industrial workers: Comparison of two apparatuses’, *Appl. Ergon.*, vol. 41, no. 1, pp. 141–145, 2010.