



INTERNATIONAL JOURNAL OF
MODERN EDUCATION
(IJMOE)
www.ijmoe.com



A PILOT STUDY ON THE PERCEPTION OF SPECIAL EDUCATION'S STUDENTS TOWARDS WORK ABILITY AND SUITABILITY JOB PROFILE

Nik Norlaili Jamilah Nik Othman¹, Fathiyah Mohd Kamaruzaman^{2*}, Mohamad Sattar Rasul³

¹ Center of STEM Enculturation, Faculty of Education, Universiti Kebangsaan Malaysia, Malaysia
Email: p121093@siswa.ukm.edu.my

² Center of STEM Enculturation, Faculty of Education, Universiti Kebangsaan Malaysia, Malaysia
Email: fathiyah@ukm.edu.my

³ Center of STEM Enculturation, Faculty of Education, Universiti Kebangsaan Malaysia, Malaysia
Email: drsattar@ukm.edu.my

* Corresponding Author

Article Info:

Article history:

Received date: 10.12.2023
Revised date: 15.01.2024
Accepted date: 19.02.2024
Published date: 12.03.2024

To cite this document:

Othman, N. N. J. N., Kamaruzaman, F. M., & Rasul, M. S. (2024). A Pilot Study on The Perception of Special Education's Students Towards Work Ability and Suitability Job Profile. *International Journal of Modern Education*, 6 (20), 217-228.

DOI: 10.35631/IJMOE.620017

This work is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)



Abstract:

TVET has substantially contributed to the enhancement of students' abilities in the field of special education. In order to ensure the viability of employment proposals for students who will be dealing with learning disabilities students, it is necessary to consider both their capacity to work and the suitability of their skills with the job profile in TVET context. Hence, a pilot study was done to determine the perspectives of students enrolled in special education programmes regarding the suitability of job profiles for individuals with learning disabilities. 31 students enrolled in special education programmes at Universiti Pendidikan Sultan Idris (UPSI) and Universiti Sains Malaysia (USM) were participated in this study. The questionnaire was disseminated via the online distribution method, while the research instrument in this study was derived from prior research. The questionnaire consists of three distinct sections: (i) demographic information, (ii) work ability, and (iii) job profile compatibility. The data was analyzed descriptively and presented in frequency table. The results of this study indicate that the mean value (M=3.71) of work ability is significantly higher. In addition, the result of suitability with the job profile is notably high with the mean value of (M=4.33). This finding illustrates the significance of the individual's ability to perform tasks and the suitability of the job profile in guiding instructional strategies for students with learning disability. This study's findings have the potential to provide practical insights that can enhance Malaysia's special education system. This would ensure that the industry's demand for qualified labour matches the outcomes produced by educational institutions, particularly in the field of special education.

Keywords:

Work Ability, Suitability Of Job Profile, Students With Learning Disability, TVET Education.

Introduction

Work ability perspectives among special education students are the capabilities to perform a job task accordingly to the job description. A better understanding of employers' fears and concerns about work ability can help us to better highlight the resources that people with disabilities can contribute to the workplace and under what circumstances they can be used (Oude Hengel et al., 2023). According to (Lavasani et al., 2015) work ability was found to be associated with core self-evaluation and job satisfaction. Significant differences in work ability levels were found in terms of age, level of education and employment status of the special education students. Work ability is defined as the individual's performance at work, and work ability is best restored by developing work (Martimo, 2018). Work ability can be supported by education support systems, work and retirement legislation, and changes in values and attitudes (Mäkelä & Hirvensalo, 2015). Education is the country's most important asset in producing a competent and highly skilled society to boost the country's economic activity, not excluding students with special needs. This implies that TVET is a type of education given to individuals to develop their creative and manipulative potentials for the benefit of humanity. The goal of education and TVET is to fight ignorance and illiteracy so as to produce competent human resources for economic and social development (Itohan Oviawe, 2017). Therefore, work ability is important as one of the contribution factors to the labour workforce to any other industry.

Through the first goal of SDG1: Eradicating poverty and the fourth goal of SDG4: Quality education can be achieved by empowering technical and vocational education to produce more skilled and semi-skilled workers for all levels of society including those with people with disability. Based on the latest statistics, estimated 1.3 billion number of people with disability has increasing every year of and almost reaches 16% of the total population in the world (Ghebreyesus, 2022). This proves that this group needs to be given the same rights as other normal people. They can also be contributors to the country's economic development if there is an organized and systematic path that can provide opportunities and space for them to be accepted by society.

Indirectly, the job opportunities offered to people with disability can eradicate the problem of poverty as well as improve the quality of living their lives like other normal people. Therefore, adapting the working ability of people with special needs to the job profile of a position in the job market is very important for every individual to understand, especially students of special education programs at public universities (Onell et al., 2023). As prospective graduates who will be faced with the challenge of managing people with special needs, it is necessary to pay serious attention to the issue of compatibility of the job profile offered with the attitude and behaviour as well as the ability to work among individuals with special needs.

In addition to that, knowledge about the job profile in an industry needs to be fully understood so that potential graduates in the field of special education can train students with special needs with the skills required by the industry that are in line with the student's abilities and

capabilities. (Räihä et al., 2021). This is important because there is a report on the graduates of disabilities from TVET 2021 stated that these disabilities graduates cannot survive in the world of work is high (Kementerian Pengajian Tinggi, 2021). According to (Brzykcy et al., 2019) the study supports the report's assertion that people with special needs are only able to maintain a position for a maximum of six months, and they frequently switch jobs, which has a negative impact on their career development. Thus, this study was done to analyzed the perception of special education students from university program towards work ability and suitability of job profile of students with learning disability

Literature Review

The Importance of Work Ability and Suitability Job Profiles for Students with Learning Disabilities (SLD)

Students who are majoring in special education are well known about the job prospects that will be available to them after they graduate. The viability of the lives of persons who have special needs is intricately connected to the level of effort put forward to improve the standard of special education (Louwerse et al., 2021; Von Bonsdorff et al., 2016). This is due to the fact that contemporary society is becoming more capable of accepting the presence of minority groups within the national ecology if they are given the opportunity to do so.

With an understanding of job profiles focused at technical and vocational skills, it is possible to make a more accurate adjustment to the capacities of persons with special needs based on attitudes and behaviors that promote the quality of each job profile that is done (Campo et al., 2021). In general, an industry or company is very concerned with profit and quality efficiency in the workplace. The competencies and behaviors that benefit the organization may be employed optimally (Roelen et al., 2014). As a result, it gives more precise input to the special education system in order to generate a workforce, particularly from underserved groups, to fill employment openings in the industry.

Good collaboration between industry and special education institutions can be established to ensure the sustainability of special education can be achieved in the future (Boman et al., 2020; Kinnunen & Nätti, 2018). The field of special education should be able to provide quality education to all students in order to better understand the criteria of each category of people with special needs which are indeed unique and special (Bethge et al., 2013; Kujanpää et al., 2022). In special education schools, students are separated based on their abilities and disability categories. The category of students with special needs to be separated based on their ability to facilitate the efforts of teaching and learning methods between teachers and students in buffering knowledge and skills.

The categories of vision problems and hearing problems are separated from physical problems and learning problems because their medium of delivery is different and their level of focus is different (Wienert et al., 2017). Therefore, in special education, teachers are encouraged to use various teaching mediums that can be adapted to the level of acceptance of students with special needs (Ćwirlej-Sozańska et al., 2020). Therefore, the job profile for people with special needs also needs to be in line with their level of ability and ability in order to build a good career in the future.

A crystal-clear perception of special education towards the work ability and job compatibility of the job profile gives a more accurate nature of a certain norm or environmental setting of a job (Kainulainen et al., 2023; Rossi et al., 2021; Rubenfire et al., 2009). This contributes to the motivation of students with special needs to continue to cultivate a deep interest in work and thus be willing to face any challenge in today's world of work. A job profile can be considered as a guideline in performing a job (Cimini et al., 2023). There are various positions in the job market, therefore a clear understanding of the job profile of a position will provide suitability and comfort to work for this group of people with special needs.

According to the study (Unsgaard-Tøndel & Nordstoga, 2022) states that autistic students have an attitude that likes to do repetitive work without getting tired, in addition to that, this group is seen to be more thorough in carrying out work in addition to being very punctual. Such an attitude makes employers more interested in offering jobs to them. In addition, their more loyal attitude is greatly appreciated by employers who often experience problems in retaining employees for a long period of time (Jordán De Urríes et al., 2022; Nordstoga et al., 2019). Therefore, with the knowledge of the job profile, special education institutions can do an initial assessment of the tendencies and attitudes that are suitable to be proposed with the job profile that can be implemented by this special group.

The hospitality and food service industry are one of the industries that is seen to be able to open up job opportunities for people with special needs because in that field there is a job profile that requires employees to do the same routine every day throughout the working period (Overland et al., 2008). There is no doubt that more and more food service and hospitality-based courses are being offered in special education schools (Nordstoga et al., 2019). In addition, food service premises also offer job opportunities for people with special needs. According to the training officer, they strongly encourage this group to apply for a job at their premises. Premises also get an advantage by offering jobs to people with special needs. Employers will get a positive impression from their customers' feedback which encourages them to hire employees with special needs instead of hiring foreigners to work.

With comprehensive understanding of this job profile, special education students will be more assured of job opportunities (Fauser et al., 2022; Sundstrup et al., 2014). They are more prepared and understand the duties and responsibilities of a job that needs to be carried out while working (McGonagle et al., 2022). All procedures and during work must be followed and comply with the work norms.

Methodology

This study uses a descriptive survey research design. The target population of this study is special education program students at Universiti Pendidikan Sultan Idris (UPSI) and Universiti Sains Malaysia (USM). A total of 31 special education program students participated in this study by filling out the questionnaire provided. A structured questionnaire was used as a data collection instrument. The questionnaire was adopted from a previous study by (Stewart, 1996). The questionnaire consists of two parts (Part A and Part B). Part A contains participant background information regarding gender, race, program level and knowledge of job profiles. While Part B consists of three domains matching the job profile with the working ability of special education students' programs with students learning disabilities. Five Likert scales were used for each item between 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Not Sure (NS), 4 = Agree (A), 5 = Strongly Agree (SA).

In terms of instrument reliability, Cronbach's alpha was determined to confirm the reliability of the instrument. According to (Kerlinger & Lee, 2000) suggest a minimum sample size for quantitative research is 30 sample. Therefore, in this pilot study, the data obtained, collected and measured the level of reliability using the Cronbach's Alpha Statistical Test in the Statistical Packages for Social Science (SPSS) software version 20.0. This statement is supported by (Mohd Majid, 2005; Pallant, 2010) who states that Cronbach's Alpha value above 0.60 is used to measure the reliability index of a research instrument. For (Sekaran, 1992), a Cronbach Alpha value less than 0.60 is unacceptable, a value between 0.60 to 0.80 is acceptable and a value above 0.80 is considered good and can be used. Therefore, in determining the reliability of the research instrument, the researcher chose to use Cronbach Alpha based on the views (Sekaran, 1992; Mohd Majid 2005; Creswell, 2009 & Pallant, 2010). Table 1 shows the Cronbach Alpha values for the whole and each domain.

Table 1. Reliability index classification

| Indicator | Alpha Cronbach Value |
|------------------|-----------------------------|
| Very high | >0.90 |
| High | 0.7 – 0.89 |
| Moderate | 0.3 – 0.69 |
| Low | <0.30 |

Cronbach Alpha value obtained for the knowledge domain is 0.902 which is above than 0.7. This means that the instrument is reliable. The reliability of this research instrument refers to the stability and internal consistency of the questionnaire (Sekaran, 1992; Creswell, 2009; Pallant, 2010). To measure the internal consistency of a construct, the Cronbach Alpha value should be used as a reference.

The questionnaire was administered to respondents online through a Google form. The link is provided to the student representative for each program of study to be shared across all special education program students. Data was collected between the period May-July 2023. The data obtained was extracted, cleaned and transferred to the Statistical Package for Social Sciences (SPSS) version 20 for analysis. Findings have been presented using the method in the form of a table. In interpreting special education students' knowledge of job profile, the researcher refers to the interpretation of knowledge from as shown in Table 2. Since the options are coded as 1, 2, 3, 4 or 5, it is suggested that the mean score 3.40 can be identified as the expected level of knowledge of job profile knowledge. Interpretation of mean scores as displayed in Table 2 as quoted from Pallant (2010).

Table 2. Mean Score Interpretation

| Mean score | Interpretation |
|-------------------|-----------------------|
| 1.00 – 2.33 | Low |
| 2.24 – 3.67 | Intermediate |
| 3.68 – 5.00 | High |

Result and Discussion

Demography Characteristic

The demographic analysis from the respondents which obtained in this study including of gender, race and level of program in special education program as shown in Table 3. Referring to the data, its revealed that 67.7% of the respondents are female and 32.3% of them are male respondents. Most of respondents are Malay students with 93.5%, Chinese students with 3.2%, Indian students with 3.2%. Majority of the respondents is from degree program (35.5%), doctorate program (23.1%), master degree program (25.8%) diploma (3.2%) and others (3.2%). Data also shows that, 77.4% of the respondents mentioned that they have known about job profile meanwhile 22.6% of the respondents did not know about job profile.

Table 3: Demography Analysis of The Respondents

| Demography characteristic | | |
|----------------------------------|------------------|-----------------------|
| Gender | Frequency | Percentage (%) |
| Male | 10 | 32.3 |
| Female | 21 | 67.7 |
| Total | 31 | 100 |
| Race | Frequency | Percentage |
| Malay | 29 | 93.5 |
| Chinese | 1 | 3.2 |
| Indian | 1 | 3.2 |
| Total | 31 | 100 |
| Level of program | Frequency | Percentage |
| Degree | 11 | 35.5 |
| Doctorate | 10 | 23.1 |
| Master degree | 8 | 25.8 |
| Diploma | 1 | 3.2 |
| Others | 1 | 3.2 |
| Total | 31 | 100 |
| Knowledge of job profile | Frequency | Percentage |
| Yes | 24 | 77.4 |
| No | 7 | 22.6 |
| Total | 31 | 100 |

Students' Work Ability Towards Job Profile

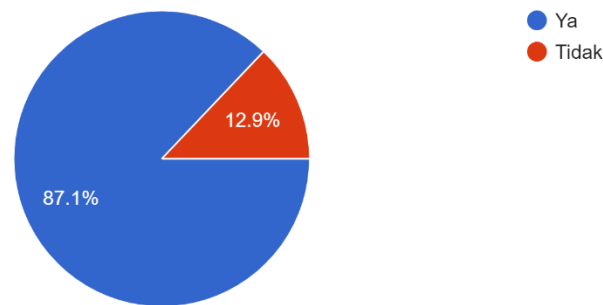
Work ability is an important foundation in shaping students' views and actions towards an issue discussed. Work ability can be gained through psychomotor activities and affective factor throughout the existing experiences as well as new experiences (Rudolph & Zacher, 2021). Each individual has their own strengths and tendencies in understanding a concept and issue based on an individual perspective. Special education program students need to have work ability of job profiles available in the job market (Dukes et al., 2022). Students also need to be proficient in making self-assessments in which the assessment must include the domain of work ability, inclination and interest in the profile of a job. If the student clearly can perform the job

profile, duties and responsibilities, scope of work, procedures involved and a guaranteed career path.

Students have the opportunity to explore job profiles that match their ability to work as well as attitudes and criteria that are in line with the field of work, they are engaged in. Through the findings of Holland (1977) who suggested that humans have six components such as Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (RIASEC) that represent individual criteria with jobs that match the individual (Fernandez et al., 2023). This finding also supported by (Etzet et al., 2023) about the component of characteristic human being that were focusing on vocational occupational.

As a start to the description and interpretation of the data, the results of the analysis show that as many as 87.1% of respondents know about the job profile. While only 12.9% never knew about the job profile. (Figure 1). An item that asks why work ability according to job profiles is needed in the field of special education for students? Among the short answers given by the respondents is that students with special needs need a job profile that suits the abilities and limitations they face, to help them improve their quality of life and help the government and industry provide suitable job opportunities.

Figure 1: Work Ability and Compatibility of The Job Profile Skills



Overall, the data show that students' perceptions of job profiles are comprised of work ability domains. Each mean value for each domain is taken into account. The work ability domain measures six items in identifying the level of work ability among special education program students regarding job profiles. Table 4 shows the data from the work ability domain listed as in the table.

Table 4: Mean Values for Work Ability Domain

| Domain: Work ability of job profile for students in special education program | | |
|---|----------|----------------|
| Statements | Mean (M) | Interpretation |
| The willingness of the MBPKMP to work is greatly influenced by the expectations of individuals. | 4.25 | High |
| I'm sure the MBPKMP is very careful in carrying out the task. | 3.77 | High |
| I'm sure MBPKMP can work well even in the face of pressure from the environment. | 3.38 | Intermediate |

| | | |
|---|-------------|--------------|
| I'm sure the MBPKMP doesn't like interruptions while performing tasks. | 4.16 | High |
| I'm sure MBPKMP can do more than two jobs at the same time. | 3.10 | Intermediate |
| I'm sure the MBPKMP will be able to prepare the assignment according to the deadline. | 3.61 | Intermediate |
| Total | 3.71 | High |

According to Table 4, the mean score for each item is quite high with mean value (M=3.71). The item with the highest mean is the willingness of the MBPKMP to work is greatly influenced by the expectations of individuals. (M=4.25). The item of distraction during their performing work ability (M=4.16) become the second-highest mean value. As indicated by the item's mean value (M=3.77), students with learning difficulties are more focused and meticulous when completing assigned tasks. There are two items with the same mean value for the lowest mean value, which is (M=3.61). Students form special education program indicated that, students with learning disabilities are eager to complete assignments and task. Besides, they are more motivated with high work ability among themselves.

Table 5: Mean Values for Suitability Job Profile

| Domain: Work ability of job profile for students in special education program | | |
|--|-----------------|-----------------------|
| Statements | Mean (M) | Interpretation |
| I'm sure SLD can work if they understand the task and responsibility of some work. | 4.32 | High |
| I'm sure SLD will choose a career based on the skill profile of the job they have. | 4.23 | High |
| I'm sure SLD is more confident to implement task when it has been working for a long time | 4.32 | High |
| I believe that the skills of a job profile that corresponds to the work ability of SLD is essential. | 4.45 | High |
| I'm sure the matching of the job profile with the ability to work MBPKMP greatly affects the job satisfaction. | 4.35 | High |
| Total | 4.33 | High |

According to Table 5, the mean score for each item is high with mean value (M=4.33). The item with the highest mean is (M=4.45), the believe that skills of a job profile which corresponds to the work ability of SLD is essential. The matching of the job profile with the ability to work among SLD has also greatly affects the job satisfaction with the second-highest mean value of (M=4.35). As indicated by the item's mean value of (M=4.32), has shared the same value regarding SLD become more confident to implement task when it has been working for a long time and also SLD can work if they understand the task and responsibility of some work shows third-highest mean value. At last, but not least the mean value of (M=4.23), are the lowest mean shows that SLD will choose a career based on the skill profile of the job they have. Students

form special education program indicated that, students with learning disabilities will not choose the career based on the skill profile of the job they have.

It can be inferred that students enrolled in special education programs possess a comprehensive understanding of the occupational requirements associated with catering to the unique demands and learning difficulties of students requiring special education. This finding aligns with the findings of previous studies (Fadyl et al., 2010; Pak et al., 2023; Selander et al., 2023) which assert that work ability can perform the job profile is crucial in assuring the suitability of the work capabilities of students with learning difficulties. The present outcome diverges from the research conducted by (Budde et al., 2023) wherein it was concluded that awareness of the job profile did not have an impact on the capacity of students with learning difficulties to adapt their new technology skillset.

Conclusion

The present study aimed to assess the degree of capabilities and work ability among students enrolled in special education programs at public universities in Malaysia regarding the idea of job profiles. The results of the study indicate that these students possess a high level of work ability in this particular domain. The findings of this study indicate that students enrolled in special education programs at USM and UPSI possess a high work ability understanding of the significance and necessity of job profiles for individuals with learning disabilities. This understanding enables them to make informed decisions on career choices and select job profiles that align with their capabilities within the professional setting. Based on the comprehensive analysis of the available data, the substantial level of work ability observed instills optimism for the future, as it suggests the potential for individuals with special needs to be embraced and integrated into diverse businesses within Malaysia.

This study presents a favorable perspective on the extent of information possessed by students in special education programs at public institutions regarding job profile skills that align with the employment capabilities of individuals with learning disabilities related to special needs. In order to facilitate future research endeavors, it is recommended that the aforementioned instrument be disseminated among educators who instruct students with learning disabilities. This will enable a comparative analysis of the viewpoints held by prospective special education teachers and those who possess extensive experience in effectively managing special needs cohorts. The ultimate objective of this undertaking is to ascertain the extent to which these perspectives align with the criteria required for securing suitable employment opportunities.

Acknowledgement

We would like to convey our gratitude to Faculty of Education, Universiti Kebangsaan Malaysia for the opportunity to publish this article.

References

- Bethge, M., Gutenbrunner, C., & Neuderth, S. (2013). Work ability index predicts application for disability pension after work-related medical rehabilitation for chronic back pain. *Archives of Physical Medicine and Rehabilitation*, 94(11), 2262–2268. <https://doi.org/10.1016/j.apmr.2013.05.003>
- Boman, T., Kjellberg, A., Danermark, B., & Boman, E. (2020). The need for support and adaptation in the workplace among persons with different types of disabilities and

- reduced work ability. *Scandinavian Journal of Disability Research*, 22(1), 253–264. <https://doi.org/10.16993/sjdr.672>
- Brzykcy, A. Z., Boehm, S. A., & Baldrige, D. C. (2019). Fostering sustainable careers across the lifespan: The role of disability, idiosyncratic deals and perceived work ability. *Journal of Vocational Behavior*, 112, 185–198. <https://doi.org/10.1016/j.jvb.2019.02.001>
- Campo, M., Zadro, J. R., Pappas, E., Monticone, M., Secci, C., Scalzitti, D., Findley, J. L., & Graham, P. L. (2021). The effectiveness of biofeedback for improving pain, disability and work ability in adults with neck pain: A systematic review and meta-analysis. *Musculoskeletal Science and Practice*, 52. <https://doi.org/10.1016/j.msksp.2021.102317>
- Ćwirlej-Sozańska, A., Widelak, M., Wiernasz, M., Wawrzykowska, I., & Turkosz, N. (2020). An assessment of the work ability, disability and quality of life of working people of pre-retirement and retirement age in Poland – A cross-sectional pilot study. *International Journal of Occupational Medicine and Environmental Health*, 34(1), 69–85. <https://doi.org/10.13075/ijom.1896.01591>
- Dukes, L. L., Lator, A. R., Gelbar, N., Madaus, J. W., & Tarconish, E. (2022). A Job Analysis of Accessibility Services Administrators in Higher Education. *Journal Of Postsecondary Education and Disability*, 35(3), 247–259.
- Fadyl, J. K., McPherson, K. M., Schlüter, P. J., & Turner-Stokes, L. (2010). Erratum: Factors contributing to work-ability for injured workers: Literature review and comparison with available measures (Disability and Rehabilitation 32:14 (1173-1183)). *Disability and Rehabilitation*, 32(19), 1619. <https://doi.org/10.3109/09638288.2010.507127>
- Fausser, D., Zeuner, A.-K., Zimmer, J.-M., Golla, A., Schmitt, N., Mau, W., & Bethge, M. (2022). Work ability score as predictor of rehabilitation, disability pensions and death? A German cohort study among employees with back pain. *Work*, 73(2), 719–728. <https://doi.org/10.3233/WOR-210987>
- Ghebreyesus. (2022). *Global report on health equity for persons with disabilities*.
- Hansson, E., Hansson, T., & Jonsson, R. (2006). Predictors for work ability and disability in men and women with low-back or neck problems. *European Spine Journal*, 15(6), 780–793. <https://doi.org/10.1007/s00586-004-0863-5>
- Ilmarinen, J. (2001). Ageing Workers in Finland and in the European Union: Their Situation and the Promotion of their Working Ability, Employability and Employment. The Geneva Papers on Risk and Insurance. Issues and Practice, 26(4), 623–641. <http://www.jstor.org/stable/41952603>
- Itohan Oviawe, J. (2017). Bridging Skill Gap to Meet Technical, Vocational Education and Training School-Workplace Collaboration in the 21 st Century. *International Journal of Vocational Education and Training Research*, 3(1), 7. <https://doi.org/10.11648/j.ijvetr.20170301.12>
- Jordán De Urríes, F. D. B., Sánchez, B., & Verdugo, M. Á. (2022). Assessment of work ability decline in workers with intellectual and developmental disabilities. *Journal of Vocational Rehabilitation*, 57(2), 187–195. <https://doi.org/10.3233/JVR-221209>
- Kainulainen, S., Elovainio, M., Laaksonen, M., Jääskeläinen, T., Rissanen, H., & Koskinen, S. (2023). Self-rated work ability as a risk factor for disability retirement. *European Journal of Public Health*, 33(5), 828–833. <https://doi.org/10.1093/eurpub/ckad121>
- Kinnunen, U., & Nätti, J. (2018). Work ability score and future work ability as predictors of register-based disability pension and long-term sickness absence: A three-year follow-

- up study. *Scandinavian Journal of Public Health*, 46(3), 321–330. <https://doi.org/10.1177/1403494817745190>
- Kujanpää, L., Arffman, R. K., Vaaramo, E., Rossi, H.-R., Laitinen, J., Morin-Papunen, L., Tapanainen, J., Ala-Mursula, L., & Piltonen, T. T. (2022). Women with polycystic ovary syndrome have poorer work ability and higher disability retirement rate at midlife: a Northern Finland Birth Cohort 1966 study. *Yosetsu Gakkai Shi/Journal of the Japan Welding Society*, 187(3), 479–488. <https://doi.org/10.1530/EJE-22-0027>
- Lavasani, S., Wahat, N. W. A., & Ortega, A. (2015). Work ability of employees with disabilities in Malaysia. *Disability, CBR and Inclusive Development*, 26(2), 22–46. <https://doi.org/10.5463/DCID.v26i2.428>
- Louwerse, I., Huysmans, M. A., van Rijssen, H. J., Gielen, C. L. I., van der Beek, A. J., & Anema, J. R. (2021). Use of a Decision Support Tool on Prognosis of Work Ability in Work Disability Assessments: An Experimental Study Among Insurance Physicians. *Journal of Occupational Rehabilitation*, 31(1), 185–196. <https://doi.org/10.1007/s10926-020-09907-w>
- Mäkelä, K., & Hirvensalo, M. (2015). Work Ability of Finnish Physical Education Teachers. *The Physical Educator*. <https://doi.org/10.18666/tpe-2015-v72-i5-6186>
- Martimo, K.-P. (2018). Work disability prevention in Finland: Promoting work ability through occupational health collaboration. In *The Science and Politics of Work Disability Prevention* (pp. 141–157). <https://doi.org/10.4324/9780429443398>
- McGonagle, A. K., Bardwell, T., Flinchum, J., & Kavanagh, K. (2022). Perceived Work Ability: A Constant Comparative Analysis of Workers' Perspectives. *Occupational Health Science*, 6(2), 207–246. <https://doi.org/10.1007/s41542-022-00116-w>
- Nordstoga, A. L., Meisingset, I., Vasseljen, O., Nilsen, T. I. L., & Unsgaard-Tøndel, M. (2019). Longitudinal associations of kinematics and fear-avoidance beliefs with disability, work ability and pain intensity in persons with low back pain. *Musculoskeletal Science and Practice*, 41, 49–54. <https://doi.org/10.1016/j.msksp.2019.03.008>
- Onell, C., Holm, L. W., Bohman, T., Magnusson, C., Lekander, M., & Skillgate, E. (2023). Work ability and psychological distress in a working population: results from the Stockholm Public Health Cohort. *Scandinavian Journal of Public Health*, 51(4), 595–601. <https://doi.org/10.1177/14034948211033692>
- Oude Hengel, K. M., Soeter, M., in der Maur, M., van Oostrom, S. H., Loef, B., & Hooftman, W. E. (2023). Perimenopause: Symptoms, work ability and health among 4010 Dutch workers. *Maturitas*, 176. <https://doi.org/10.1016/j.maturitas.2023.107793>
- Overland, R., Overland, S., Johansen, K. N., & Mykletun, A. (2008). Verifiability of diagnostic categories and work ability in the context of disability pension award: A survey on “gatekeeping” among general practitioners in Norway. *BMC Public Health*, 8. <https://doi.org/10.1186/1471-2458-8-137>
- Pak, K., Kooij, T. A. M., De Lange, A. H., Van den Heuvel, S., & Van Veldhoven, M. J. P. M. (2023). Successful ageing at work: The role of job characteristics in growth trajectories of work ability and motivation to work amongst older workers. *Acta Psychologica*, 239. <https://doi.org/10.1016/j.actpsy.2023.104012>
- Räihä, T., Nerg, I., Jurvelin, H., Conlin, A., Korhonen, M., & Ala-Mursula, L. (2021). Evening chronotype is associated with poor work ability and disability pensions at midlife: A Northern Finland Birth Cohort 1966 Study. *Occupational and Environmental Medicine*, 78(8), 541–547. <https://doi.org/10.1136/oemed-2020-107193>
- Roelen, C. A. M., Van Rhenen, W., Groothoff, J. W., van der Klink, J. J. L., Twisk, J. W. R., & Heymans, M. W. (2014). Work ability as prognostic risk marker of disability pension:

- Single-item work ability score versus multi-item work ability index. *Scandinavian Journal of Work, Environment and Health*, 40(4), 428–431. <https://doi.org/10.5271/sjweh.3428>
- Rossi, H.-R., Uimari, O., Arffman, R., Vaaramo, E., Kujanpää, L., Ala-Mursula, L., & Piltonen, T. T. (2021). The association of endometriosis with work ability and work life participation in late forties and lifelong disability retirement up till age 52: A Northern Finland Birth Cohort 1966 study. *Acta Obstetrica et Gynecologica Scandinavica*, 100(10), 1822–1829. <https://doi.org/10.1111/aogs.14210>
- Rubensfire, M., Lippo, G., Bodini, B. D., Blasi, F., Allegra, L., & Bossone, E. (2009). Evaluating health-related quality of life, work ability, and disability in pulmonary arterial hypertension: An unmet need. *Chest*, 136(2), 597–603. <https://doi.org/10.1378/chest.08-1260>
- Rudolph, C. W., & Zacher, H. (2021). Age Inclusive Human Resource Practices, Age Diversity Climate, and Work Ability: Exploring Between- And Within-Person Indirect Effects. *Work, Aging and Retirement*, 7(4), 387–403. <https://doi.org/10.1093/workar/waaa008>
- Selander, K., Nikunlaakso, R., Korhakangas, E., Sinervo, T., & Laitinen, J. (2023). Association of poor perceived work ability and psychosocial work-related factors in health and social service worker age groups: a cross-sectional study. *BMJ Open*, 13(3). <https://doi.org/10.1136/bmjopen-2022-066506>
- Sundstrup, E., Jakobsen, M. D., Brandt, M., Jay, K., Persson, R., Aagaard, P., & Andersen, L. L. (2014). Workplace strength training prevents deterioration of work ability among workers with chronic pain and work disability: A randomized controlled trial. *Scandinavian Journal of Work, Environment and Health*, 40(3), 244–251. <https://doi.org/10.5271/sjweh.3419>
- Unsgaard-Tøndel, M., & Nordstoga, A. L. (2022). Are Work Demand, Support and Control Associated with Work Ability and Disability during Back Pain Treatment? A Prospective Explorative Study. *International Journal of Environmental Research and Public Health*, 19(6). <https://doi.org/10.3390/ijerph19063154>
- Von Bonsdorff, M. E., Rantanen, T., Törmäkangas, T., Kulmala, J., Hinrichs, T., Seitsamo, J., Nygård, C.-H., Ilmarinen, J., & Von Bonsdorff, M. B. (2016). Midlife work ability and mobility limitation in old age among non-disability and disability retirees - A prospective study. *BMC Public Health*, 16(1). <https://doi.org/10.1186/s12889-016-2846-y>
- Wienert, J., Spanier, K., Radoschewski, F. M., & Bethge, M. (2017). Work ability, effort-reward imbalance and disability pension claims. *Occupational Medicine*, 67(9), 696–702. <https://doi.org/10.1093/occmed/kqx164>