

Title Registration for a Systematic Review: Interventions to Promote the Inclusion of Adults with Physical and Sensory Disabilities in Employment

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TITLE OF THE REVIEW

Interventions to Promote the Inclusion of Adults with Physical and Sensory Disabilities in Employment

BACKGROUND

The problem

Recent estimates suggest that more than one billion people (or about 15% of the world's population) are living with some form of disability, around three quarters of whom live in a developing country (WHO, 2011). Reported disability prevalence rates from around the world vary dramatically. This variation is caused by several factors, including the very different approaches to measuring disability taken by censuses and surveys from around the world, with the situation further complicated by the idea that there is no single correct definition of disability (Mont, 2007). Historically, different models have been developed to define disability. Until relatively recently, disability was viewed as a problem residing solely in the affected individual, and interventions usually included medical rehabilitation and the provision of social assistance. Over recent decades, however, there has been a transition from an individual, medical perspective to a structural, social perspective, often referred to as a shift from a medical model to a social model, in which individuals are viewed as being disabled by society rather than their bodies (Oliver, 1990). Through a long process involving academics, clinicians, and – importantly persons with disabilities, disability is now increasingly understood as "the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (environmental and personal factors)" (WHO, 2001, p. 213).

There is growing evidence that the experience of disability is interwoven with multiple deprivations and disadvantages (Barnes & Mercer, 2003). Across the world, persons with disabilities experience lower educational achievements, lower employment and higher unemployment rates, worse living conditions, poorer health outcomes, and higher poverty rates than people without disabilities (Braitwaite & Mont, 2009; Haveman & Wolfe, 1990; Hoogeveen, 2005; Mitra, Posarac, & Vick, 2011; Peiyun & Livermore, 2008; WHO, 2011; Zaidi & Burchardt, 2005). Whilst disabled people in some societies are increasing their presence in the labour market, it is widely reported that the majority continue to find it hard to access livelihood opportunities and experience lower earnings than non-disabled persons (Contreras, Ruiz-Tagle, Garces, & Azocar, 2006; Mete, 2008; Mitra, 2008; Mitra & Sambamoorthi, 2006; Roulstone, 2011; Roulstone, Gradwell, Price, & Child, 2003). A recent study from the Organisation for Economic Co-operation and Development (OECD) showed that, on average, the employment rate of disabled persons was approximately half that for persons without disability: 44% and 75% respectively

(OECD, 2010). Employment rates for people who are blind or partially sighted are among the lowest, ranging from 50% in some high-income countries to as little as 5% in low-income countries (WHO, 2011; World Blind Union, 2004). People with disabilities have been found to be particularly disadvantaged in competitive, tight labour markets and in contexts where employment support infrastructures are absent (Mitra, 2009).

Research has suggested a number of factors that can influence participation in the labour market for disabled persons, including education deficits, lack of access to financial resources, practical issues (such as lack of transport), disincentives created by disability benefit systems, the inaccessibility of the workplace, and discrimination and prejudice (Goertz, van Lierop, Houkes, & Nijhuis, 2010; Kidd, Sloane, & Ferko, 2000; OECD, 2010). In many low- and middle-income countries (LMICs), poor medical and rehabilitation services, violence, and cultural ostracism are further barriers to employment, and religious or ritualistic practices can converge with economic exclusion to further exclude disabled people (Ingstad & Reynolds-Whyte, 1995; Sena-Martins, 2010). Social attitudes and stigma, including within the family itself, also play an important role in limiting disabled people's opportunities for full participation in economic and social life (World Bank, 2009).

Why it is important to do this review

With an increasing body of evidence showing that persons with disabilities experience worse socioeconomic outcomes and poverty than persons without disabilities, disability is an important development issue. The last two decades have witnessed a dramatic change in the legal and policy responses of many governments and international development agencies. In 2002, for example, the World Bank embarked on mainstreaming disability into Bank operations and analysis (Mont, 2007). Disability is also increasingly understood as a human rights issue. A range of national and international initiatives, most notably the United Nations Convention on the Rights of Persons with Disabilities (CRPD) adopted in 2006, acknowledge the rights of disabled people to full and effective participation in society on an equal basis with others, and stress that progress can be made by addressing the environmental and structural barriers which hinder persons with disabilities in their day-to-day lives. However, whilst the social model or human rights approach to disability has been adopted by most governments and international institutions, translating policy commitments into better lives for disabled people remains a profound social challenge. There is a need for evidence to help facilitate implementation of the CRPD. Building a clearer understanding of which measures are effective at increasing employment amongst disabled people, for whom, and under which circumstances, can provide such an evidence base for policy development and contribute to the development of practical suggestions for meeting this challenge.

OBJECTIVES

This review will systematically identify, appraise, and synthesise evidence from high quality impact evaluations to answer the following review question:

(1) What are the effects of interventions to promote the inclusion of adults with physical and sensory disabilities in employment and related economic activities?

We will extend the review of effectiveness by synthesising relevant data from the included studies to answer the second review question:

(2) What are people's observations, experiences, and views about why these interventions did, or did not, work for them?

EXISTING REVIEWS

There is a growing body of evidence on interventions to increase the participation of people with disabilities in employment. One of the most comprehensive reviews of the literature in this area is that by Waddell, Burton, and Kendall (2008). However, although the authors conducted a systematic search, assessed the strength of the evidence, and included data in evidence tables, they did not examine the impact of interventions using statistical methods of synthesis. Other available systematic reviews are more limited in scope, focusing on specific geographical locations (Bambra, Whithead, & Hamilton, 2004; Clayton et al., 2011; Iemmi et al., 2012), or single aspects of disability/illness: for example, autism (Westbrook et al., 2012), mental illness (Crowther, Marshall, Bond, & Huxley, 2001; Underwood, Thomas, Williams, & Thieba, 2007), and multiple sclerosis (Khan, Ng, & Turner-Stokes, 2009). Whilst some of these reviews use meta-analysis to synthesis evidence from the primary studies, they were limited in their ability to do so because many of the included studies did not use counterfactual methods for estimating impact. Different types of disability, including physical and sensory impairments, are the focus of an ongoing systematic review that measures a broad range of outcomes, including employment (Iemmi et al., 2012). Here, the eligibility criteria limit inclusion to studies employing experimental and quasi-experimental designs to estimate causal effects. The specific focus of their work, however, is on one broad type of intervention: community-based rehabilitation. Furthermore, only studies conducted in developing countries will be reviewed. In sum, whilst some of these systematic reviews provide or will provide some evidence about the effectiveness of programmes to support the inclusion of people with physical and sensory disabilities in employment, clear gaps in the evidence remain.

Taking into account what we already know and policymaker priorities, there is evidently a need to comprehensively assess the full evidence base, using appropriate methods to evaluate the impact of a range of different intervention types supporting inclusion in employment for people with physical and sensory disability, in both developed and developing countries.

INTERVENTION

Vocational rehabilitation interventions, where vocational rehabilitation is defined as whatever helps someone with a disability to enter, return to, maintain, or make progress at work (adapted from Waddell et al., 2008), will be eligible for inclusion in this review.

Within this definition, a wide range of intervention types will be eligible, including (but not limited to): workplace interventions, community-based approaches, vocational education and training, financial initiatives, and adapted/assistive technologies.

The following comparison conditions will be relevant: no intervention, treatment as usual, and alternative intervention.

Micro-finance interventions are outside the scope of this review, as there have been a number of recent evidence syntheses on this topic (e.g., Stewart et al., 2012).

POPULATION

Study participants will have the following characteristics:

- *Geographical location*: Low- or middle-income country.
- Age: Working age adults, defined for this review as individuals aged 16-65 years.
- *Gender*: Male or female.
- *Disability*: Physical and/or sensory disabilities.
- *Employment status*: Study participants may be in work or out of work at time of service receipt. Study samples made up solely of employed or non-employed individuals are eligible, as are those that contain a mix of both.
- *Employment-related experience*: Any prior work experiences, vocational skills or achievements, or level of education.

The International Classification of Functioning, Disability, and Health (ICF), developed by the World Health Organization in 2001, has advanced both the understanding and measurement of disability (WHO, 2001). Using this framework, individuals are classified as having a disability according to a detailed description of their functioning within the following interconnected domains: body structure and functioning, activity limitations, and participation restrictions. Following the ICF,

disability in this review is understood as an umbrella term for impairments, activity limitations and participation restrictions.

There are different sub-categories of disabilities; the focus here is on physical and sensory disabilities.

- Persons with a physical disability refer to those who have an acquired or congenital physical and/or motor impairment that interferes with the structure/development or function of the bones, muscles, joints, and/or central nervous system. Physical characteristics may include: paralysis, altered muscle tone (ranging from loss of muscle mass to uncontrolled muscle contraction), an unsteady gait, loss of or inability to use one or more limbs, difficulty with grossmotor skills (such as walking), or difficulty with fine-motor skills (such as writing). Eligible physical impairments will include, but are not limited to: HIV/AIDS sequelae, leprosy, diabetes, facial disfigurement, amputations, epilepsy, multiple sclerosis (and other demyelinating conditions), respiratory conditions (including asthma), musculoskeletal conditions (including arthritis), and neurological impairments.
- Persons with a sensory disability refer to those who have full or partial loss of
 one or more senses. Impairments to a person's sight, hearing, smell, touch, taste
 and/or spatial awareness may cause them difficulty with communication, grossmotor skills, fine-motor skills, and/or access to information. The most common
 sensory impairments include hearing loss and blindness.

The following exclusions will apply to the review:

- Studies focused solely on people with mental health conditions and/or intellectual impairments—as these have been the focus of recent reviews.
- Studies focused solely on people with short-term or minor health conditions, such as fractured bones or hay fever —as impairment that meets statutory or customary definitions is usually long-standing (e.g., lasting at least one year) and has a substantial impact on a person's ability to do normal daily activities (such as getting dressed).
- Studies focused solely on people with chronic illnesses that predominate in later life (e.g., chronic obstructive pulmonary disease (COPD), cancer, stroke and renal disease)—as this would take the review beyond 'working age.'

We are aware that some authors will have used a medical model of disability as the conceptual framework for their studies. This will add a layer of challenge, but as most articles describe their definitional starting point, our intention is to account for this in the review.

OUTCOMES

Quantitative data relating to employment

- Primary outcomes:
 - Paid employment (e.g., gaining initial employment, re-entering employment, maintaining employment, obtaining 'better quality' employment)
 - o Self-employment (e.g., starting a new business or expanding one)
 - Working hours (e.g., moving from part-time to full-time hours)
 - o Income (e.g., wages, salaries, profits from self0employment)
- Intermediary outcomes, to include but not limited to:
 - Job searches
 - Job applications
 - o Job interviews

Qualitative data (applies to supplementary question only)

Participant observations, experiences and views

STUDY DESIGNS

Study selection criteria

Studies will be included in the review if they meet the following criteria:

- 1. Study published 1990 onwards.
- 2. Study is an impact evaluation of a vocational rehabilitation intervention (broadly defined).
- 3. Study includes participants aged 16-65 years with a physical and/or sensory disability.
- 4. Study measures (quantitatively) one or more employment outcomes (primary and/or intermediary).¹

 $^{^{1}}$ May also include qualitative data; however, studies will only be included if this is additional to the quantitative data.

5. Study uses an experimental or quasi-experimental design as the primary research method. Eligible designs include those in which one of the following is true: (a) participants are randomly assigned (using a process of random allocation, such as a random number generation), (b) a quasi-random method of assignment has been used, (c) participants are non-randomly assigned but matched on pre-tests and/or relevant demographic characteristics (using observables, or propensity scores) and/or according to a cut-off on an ordinal or continuous variable (regression discontinuity design), (d) participants are non-randomly assigned, but statistical methods have been used to control for differences between groups (e.g., using multiple regression analysis or instrumental variables regression), (e) the design attempts to detect whether the intervention has had an effect significantly greater than any underlying trend over time, using observations at multiple time points before and after the intervention (interrupted time-series design), (f) participants receiving an intervention are compared with a similar group from the past who did not (i.e., a historically controlled study), or (g) observations are made on a group of individuals before and after an intervention, but with no control group (singlegroup before-and-after study).

The control or comparison conditions in these studies may include youth receiving no treatment, treatment as usual, or an alternative treatment.

Studies will be excluded if they evaluate a micro-finance intervention (e.g., micro-credit).

Studies will not be excluded by:

- language of publication
- length/frequency of programme delivery, or follow-up.

Method of synthesis

Meta-analysis will be used, where the data permits calculation of effect sizes.

REFERENCES

- Bambra, C., Whithead, M., & Hamilton, V. (2004). Does 'welfare-to-work' work? A systematic review of the effectiveness of the UK's welfare-to-work programmes for people with a disability or chronic illness. *Social Science and Medicine*, 60(9), 1905-1918.
- Barnes, C., & Mercer, G. (2003). Disability. Cambridge: Polity.
- Braitwaite, J., & Mont, D. (2009). Disability and poverty: A survey of the World Bank poverty assessments and implications. *ALTER European Journal of Disability Research*, *3*, 219-232.
- Clayton, S., Bambra, C., Gosling, R., Povall, S., Misso, K., & Whitehead, M. (2011). Assembling the evidence jigsaw: Insights from a systematic review of UK studies of individual-focused return to work initiatives for disabled and long-term ill people. *BMC Public Health*, *11*, 170.
- Contreras, D. G., Ruiz-Tagle, J., Garces, P., & Azocar, I. (2006). *Socio-economic impact of disability in Latin America: Chile and Uruguay*. Santiago: Universidad de Chile, Departemento de Economia.
- Crowther, R. E., Marshall, M., Bond, G. R., & Huxley, P. (2001). Helping people with severe mental illness to obtain work: systematic review. *BMJ*, *322*, 204.
- Goertz, Y., van Lierop, B., Houkes, I., & Nijhuis, F. (2010). Factors related to the employment of visually impaired persons: A systematic literature review. *Journal of Visual Impairment & Blindness*, 104(7), 404-418.
- Haveman, R., & Wolfe, B. (1990). The economic well being of the disabled: 1962–1984. *The Journal of Human Resources*, *25*, 32-54.
- Hoogeveen, J. G. (2005). Measuring welfare for small but vulnerable groups: poverty and disability in Uganda. *Journal of African Economies*, *14*, 603-631.
- Iemmi, V., Kuper, H., Blanchet, K., Kumar, S., Hartley, S., Murthy, G., ... Wormald, R. (2012). Community-based rehabilitation for people with physical and mental disabilities in low and middle income countries. *Campbell Systematic Reviews*. Title registration.
- Ingstad, B., & Reynolds-Whyte, S. (1995). *Disability and Culture*. California: University of California.
- Khan, F., Ng, L., & Turner-Stokes, L. (2009). Effectiveness of vocational rehabilitation intervention on the return to work and employment of persons with multiple sclerosis. *Cochrane Database Syst Rev*, (1), CD007256.

- Kidd, M. P., Sloane, P. J., & Ferko, I. (2000). Disability and the labour market: An analysis of British males. *Journal of Health Economics*, 19, 961-981.
- Mete, C. (Ed.) (2008). *Economic implications of chronic illness and disability in Eastern Europe and the Former Soviet Union*. Washington: World Bank.
- Mitra, S. (2008). The recent decline in the employment of persons with disabilities in South Africa, 1998–2006. *South African Journal of Economics*, *76*, 480-492.
- Mitra, S. (2009). *Disability cash transfers in the context of poverty and unemployment: The case of South Africa*. Fordham Economics Discussion Paper Series dp2009-08, Fordham University, Department of Economics.
- Mitra, S., & Sambamoorthi, U. (2006). Employment of persons with disabilities: Evidence from the National Sample Survey. *Economic and Political Weekly*, *a41*, 199-203.
- Mitra, S., Posarac, A., & Vick, B. (2011). *Disability and poverty in developing countries: A snapshot from the World Health Survey.* SP Discussion Paper No. 1109. World Bank.
- Mont, D. (2007). *Measuring disability prevalence*. SP Discussion Paper No.0706. World Bank.
- Oliver, M. (1990). The politics of disablement. Basingstoke: Macmillan.
- Organisation for Economic Co-operation and Development. (2010). Sickness, disability and work: Breaking the barriers. A synthesis of findings across OECD countries. Paris: OECD.
- Peiyun, S., & Livermore, G. (2008). Long-term poverty and disability among working age adults. *Journal of Disability Policy Studies*, 19, 244-256.
- Roulstone, A. (2011). Disabled people work and employment: A global study. In N., Watson, A., Roulstone, C., Thomas (Eds.). *Routledge handbook of disability studies*. London: Routledge
- Roulstone, A., Gradwell, L., Price, J. & Child, L. (2003). *Thriving and surviving at work: Disabled people's employment strategies.* Bristol: Policy Press.
- Sena-Martins, B. (2010). *Blindness in Mozambique: Cultural experiences of disability*. Paper presented at Disability Studies Conference, Lancaster University, 7-9 September 2010.
- Stewart, R., van Rooyen, C., Korth, M., Chereni, A., Da Silva, N., & De Wet, T. (2012). Do micro-credit, micro-savings and micro-leasing serve as effective financial inclusion interventions enabling poor people, and especially

- women, to engage in meaningful economic opportunities in Lower and Middle Income Countries? London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
- Underwood, L., Thomas, J., Williams, T., & Thieba, A. (2007). The effectiveness of interventions for people with common mental health problems on employment outcomes: a systematic rapid evidence assessment. In: Research Evidence in Education Library. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
- United Nations. (2006). *Convention on the rights of persons with disabilities.* New York: United Nations.
- Waddell, G., Burton, A. K., & Kendall, N. A. S. (2008). *Vocational rehabilitation: What works, for whom, and when*? London: TSO.
- Westbrook, J., Nye, C., Fong, C., Wan, J., Cortopassi, T., & Martin, F. (2012) *Adult employment assistance for persons with autism spectrum disorders: Effects on employment outcomes.* Campbell Systematic Reviews, 5.
- World Bank. (2009). *People with disabilities in India: From commitments to outcomes.* Washington: World Bank.
- World Blind Union. (2004). *Blindness, poverty, and development. WBU external resource paper.* Toronto: WBU.
- World Health Organization. (2001). *International classification of functioning, disability and health (ICF)*. Geneva: World Health Organization.
- World Health Organization. (2011). *World Report on Disability*. New York: WHO and World Bank.
- Zaidi, A., & Burchardt, T. (2005). Comparing incomes when needs differ: Equivalization for the extra costs of disability in the UK. *Review of Income and Wealth*, *51*, 89-114.

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ROLES AND RESPONSIBLIITIES

Team member(s) with overall responsibility for the following areas are listed.

- Content: Janice Tripney will lead on the overall content of the review and take
 responsibility for the integrity of the work as a whole. Alan Roulstone, Michele
 Moore, and Elena Schmidt will provide content area expertise and will lead on
 the conceptualisation of the review question and inclusion/exclusion criteria
 for the review
- Systematic review methods: Janice Tripney, Ruth Stewart

- Statistical analysis: Janice Tripney
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POTENTIAL CONFLICTS OF INTEREST

None

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REQUEST SUPPORT

None

PRELIMINARY TIMEFRAME

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DECLARATION

Authors' responsibilities

By completing this form, you accept responsibility for preparing, maintaining, and updating the review in accordance with Campbell Collaboration policy. The Coordinating Group will provide as much support as possible to assist with the preparation of the review.

A draft protocol must be submitted to the Coordinating Group within one year of title acceptance. If drafts are not submitted before the agreed deadlines, or if we are unable to contact you for an extended period, the Coordinating Group has the right to de-register the title or transfer the title to alternative authors. The Coordinating Group also has the right to de-register or transfer the title if it does not meet the standards of the Coordinating Group and/or the Campbell Collaboration.

You accept responsibility for maintaining the review in light of new evidence, comments and criticisms, and other developments, and updating the review every

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The support of the Coordinating Group in preparing your review is conditional upon your agreement to publish the protocol, finished review and subsequent updates in the Campbell Library. Concurrent publication in other journals is encouraged. However, a Campbell systematic review should be published either before, or at the same time as, its publication in other journals. Authors should not publish Campbell reviews in journals before they are ready for publication in the Campbell Library. Authors should remember to include a statement mentioning the published Campbell review in any non-Campbell publications of the review.

I understand the commitment required to undertake a Campbell review, and agree to publish in the Campbell Library. Signed on behalf of the authors:

Form completed by: Janice Tripney Date: 25/01/2013