



# EMPLOYMENT OUTCOMES OF SKILLS TRAINING IN SOUTH ASIAN COUNTRIES: AN EVIDENCE SUMMARY

OVERVIEW OF SYSTEMATIC REVIEWS, NOVEMBER, 2017

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**Conflicts of interest**

There were no conflicts of interest in the writing of this report.

**Use of maps**

Maps used in this report serve a purely descriptive purpose. The representation of political boundaries in the maps do not necessarily reflect the position of the Government of UK.

**Contributions**

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**Picture**

[The picture on the cover page has been taken by one of the team members during field visit to Coimbatore for a research project by P. Vigneswara Ilavarasan]

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## CONTENTS

<b>Executive Summary</b> .....	<b>5</b>
About this summary .....	5
Summary.....	5
Approach .....	5
Summary map of evidence .....	6
Outline of evidence.....	8
Summary of results .....	9
Policy implications .....	9
Research gaps.....	10
<b>1 Background</b> .....	<b>11</b>
<b>2 Methods</b> .....	<b>14</b>
<b>3. Results</b> .....	<b>22</b>
<b>4 Discussion and Conclusions</b> .....	<b>31</b>
POLICY IMPLICATIONS .....	33
Research gaps.....	33
<b>5 References</b> .....	<b>33</b>
<b>6 Appendix</b> .....	<b>40</b>
Appendix 1: background .....	37
Appendix 1.1: Authorship of this report .....	38
APPENDIX 2 METHODS .....	39
APPENDIX 2.1 inclusion AND exclusion criteria .....	40
APPENDIX 2.2: search strategy .....	41
APPENDIX 2.3: DATA EXTRACTION TOOLS.....	48
APPENDIX 2.4: Critical Appraisal Tool .....	49
APPENDIX 3.2:CHARACTERISTICS OF INCLUDED STUDIES .....	53
APPENDIX 3.3:DATA EXTRACTION OF FINAL REVIEWS .....	8
APPENDIX 4: MAPPING POLICY IMPLICATIONS WITH THE FINAL SYSTEMATIC REVIEWS.....	27

Abbreviations .....33

## EXECUTIVE SUMMARY

### ABOUT THIS SUMMARY

This evidence brief summarises the findings from a rigorous review conducted by Ilavarasan P.V., Kar A.K., and Aswani, R. (2017), entitled “Employment Outcomes of Skills Training In South Asian Countries: An Evidence Summary”. This is an independent report commissioned by the UK Department for International Development South Asia Research Hub (DFID-SARH) and funded by the Research and Evidence Division in the Department for International Development. This material has been funded by UK aid from the UK Government, however, the views expressed do not necessarily reflect the UK Government’s official policies. The review aims to assess the evidence linking training interventions to employment outcomes in South Asian countries.

### SUMMARY

This evidence summarises 11 systematic reviews focusing on the employment and its related outcomes of training interventions in South Asia. The study has followed the processes of systematic review in searching multiple academic databases and grey literature. The search focused on specific training and employment terms including related words. The EPPI-reviewer software has been used for screening the search results by applying inclusion/exclusion criteria. The 11 systematic reviews have been finalised after scrutinising 5935 results from various sources. Though overall findings indicate that training programmes have a positive impact on employment outcomes, it is difficult to pinpoint particular outcome and its strength in terms of summarised quantifiable effect size across the final reviews due to inadequate reporting. The training interventions seem to help the trainees in employment initiation, sustenance, growth and setting up their own businesses. Although, the primary impact of the training programmes focuses on employment, there are several intermediary outcomes that include positive attitude, skill diversification, motivation and decision making.

### APPROACH

The present evidence summary is important as the national governments in the under developed economies are striving to achieve economic growth by utilising the manpower. The primary question of the summary is:

What types of skills training have shown most impact on employment outcomes in Low and Middle Income countries, particularly in South Asia?

The summary is expected to provide insights on the following:

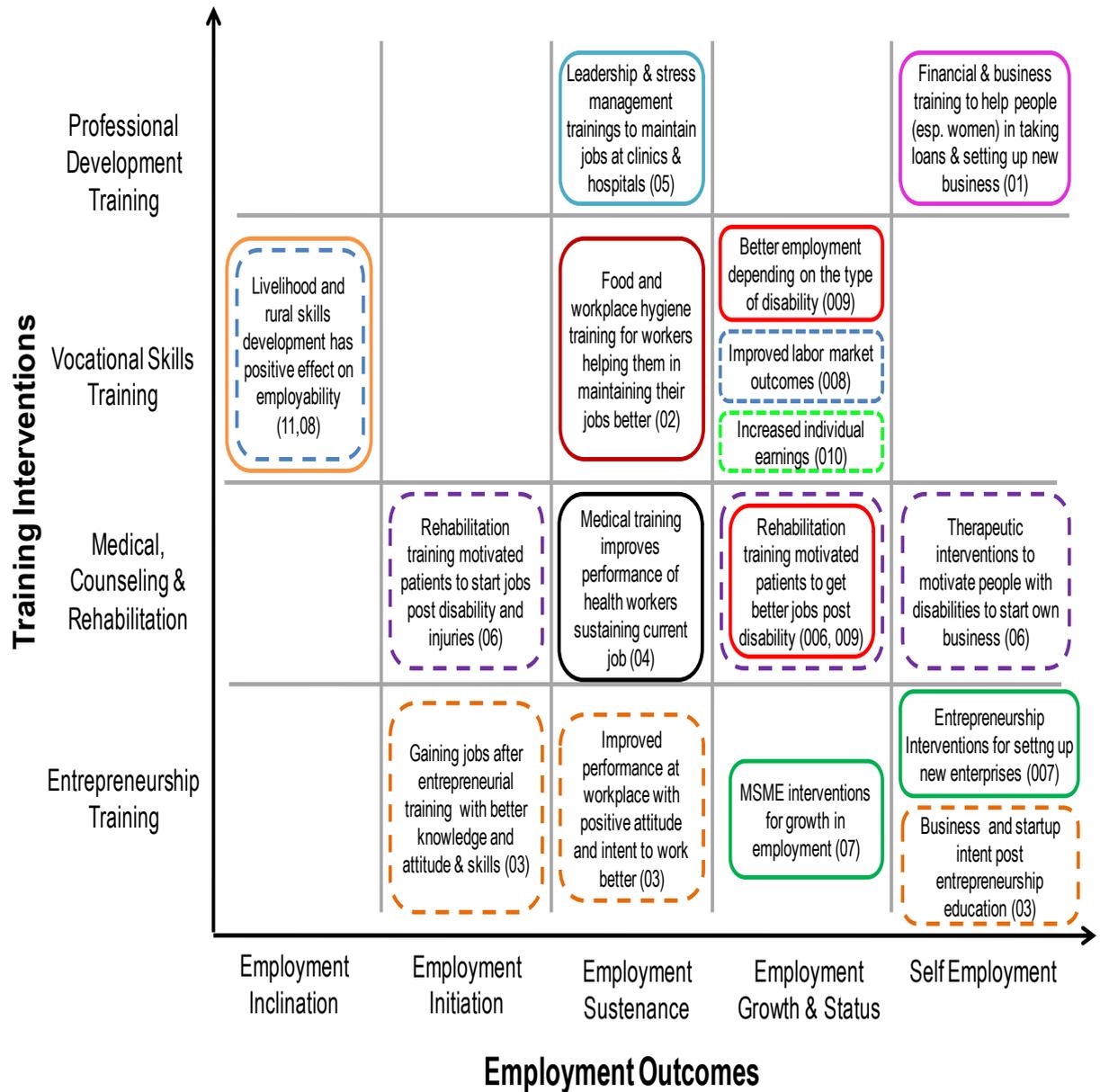
- Who gives the training?

- What are the barriers and enablers for skills training to translate into employment outcomes?
- Is there a differential impact with respect to intensity, specificity and funding of the training?
- In addition to employment outcomes, what are the other outcomes?
- What review level evidence is available on cost-effectiveness of training programmes?

The evidence is based on articles from 40 key resources comprising of academic databases and grey literature. A total of 5935 reviews had been extracted based on the set of finalised keywords surrounding training, employment, focused countries and type of documents. The reviews went through multiples levels of screening including title, abstract, full text and finally a quality assessment check through AMSTAR. The screening was done through the EPPI-reviewer software by two reviewers independently. The final list included in the evidence comprises of 11 systematic reviews surrounding training and their impact on employment outcomes.

#### SUMMARY MAP OF EVIDENCE

In preparation of this evidence summary, the included studies are used to create a mapping of input and output in terms of types of training interventions to the employment outcomes. We have grouped the training interventions into four broad categories: professional development training, vocational skills training, counselling and rehabilitation and entrepreneurship training. The employment outcomes have also been categorised into employment inclination, employment initiation, employment sustenance, employment growth and status and self employment. The key findings from the reviews, presented in the figure below, are mentioned in the relevant matrices. Each review is differentiated with a different colour outlining. For example, red colour border represents review number nine.



The evidence map is indicative of the fact that when it comes to generating an inclination towards employment, livelihood and rural skills development have a positive effect on employment (Tripney et al., 2013; Kluge et al., 2016). Further, training interventions play an important role in the initiation of employment. Rehabilitation training motivated patients to start jobs post disability and injuries (Tripney et al., 2015). Gaining jobs after entrepreneurial training is a lot easier with better knowledge, attitude and skills (Nabi et al., 2017).

Employment sustenance seems to be dominating impact of the training interventions. All the categories of training interventions including entrepreneurship training, medical, counselling and rehabilitation, vocational skills training and professional development training help in sustaining current employment in this summary. Leadership and stress

management trainings play an important role in maintaining jobs at clinics and hospitals (Scott et al., 2016). Food and workplace hygiene training for workers helps them in improving performance at their jobs (Medeiros et al., 2011). Medical training improves knowledge of health workers and sustaining the current job (Nguyen et al., 2013). Improved performance at workplace with a positive attitude and the intent to work better are other outcomes (Nabi et al., 2017).

The employment growth and status is also affected by the interventions. Improved labour market outcomes are observed with vocational skills training (Kluve et al., 2016). Vocational skill training is also known to increase individual earnings (Oketch et al., 2014). Rehabilitation training motivated patients to get better employment post disability (Trenaman et al., 2014; Tripney et al., 2015). Better employment opportunities post training is dependent on the type of disability (Trenaman et al., 2014). Micro, small and medium enterprises (MSMEs) oriented interventions catalysed the growth in employment and better status (Grimm & Paffhausen, 2015).

The self-employed is also one of the important outcomes of the training interventions. Financial and business training helps people (especially women) in taking loans & setting up new businesses (Cho & Honorati, 2014). Therapeutic interventions motivate people with disabilities to start their own business (Tripney et al., 2015). Entrepreneurship interventions enable setting up new enterprises (Grimm & Paffhausen, 2015). Business and startup intent results after entrepreneurship education (Nabi et al., 2017).

Out of the final reviews, it appears that professional and development training seems to have less impact when compared to others. It has impact only in two areas, employment sustenance and self employment. The rest of the interventions have impact on four major outcomes out of five. Vocational skills and training has impact on employment inclination, employment sustenance and employment growth and status. The larger impact is seen in employment growth & status, with three different reviews. Two types of interventions, medical counselling & rehabilitation and entrepreneurship training have impact on all outcomes, except employment inclination. In the order of priority, these two interventions could be taken first. However, action points from medical counselling & rehabilitation should be undertaken cautiously for at least two reasons: systematic reviews are patronised by the medicine related domains than others and are likely to be available for evidence summary, and the amount of disabled people might be lower than other needy population sub groups. The best bet emerges to be entrepreneurship training with its impact on four of the outcomes.

## OUTLINE OF EVIDENCE

This evidence summary of systematic reviews provides insights for policy makers surrounding the impact of training programmes on employment outcomes. There are 11 studies included in this summary focusing on technical and vocational education and training (TVET),

rehabilitation and counselling, personality development (including leadership training, stress management and communication skills training) and entrepreneurship training programmes. The target groups covered in the included studies are diverse including people with disabilities, health workers, women and enterprises as a whole.

During the data extraction and screening process, the studies from year 2000 were considered. The final studies comprise of one study each from 2011 and 2017; two studies each from 2013, 2015 and 2016; and three studies from 2014.

The focus of this evidence is on low and middle income South Asian countries namely: Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka. There were no studies that focused exclusively on these countries. The final systematic reviews comprised of mixed countries. As a whole, the final 11 systematic reviews had synthesized 456 articles. Out of these, there were 78 articles which focused on South Asian Countries. Amongst 78, articles pertaining to India are 36, 16 for Pakistan, 12 for Sri Lanka, 7 for Bangladesh, 5 for Nepal, 1 each for Bhutan and Afghanistan.

The target groups for the training interventions are varied from women, microenterprises and micro finance clients (Cho et al., 2014; Grimm et al., 2015) to hospital and service unit food handlers (Medeiros et al., 2011), health workers (Nguyen et al., 2013), nursing staff, medical students and doctors (Scott et al., 2016). Two studies had focused on people with disabilities and impairments (Tripney et al., 2015; Trenaman et al., 2014). One study (Tripney et al., 2015) focused on slum residents of India. The focus group for some of the studies (Kluve et al., 2016; Oketch et al., 2014) were unclear.

The training interventions are also varied from financial and business skills training, counselling (Cho et al., 2014), to food and workplace hygiene including practical hand washing techniques (Medeiros et al., 2011). Training interventions centered surrounding management and feeding counselling (Nguyen et al., 2013), professional development training including stress management, leadership, communication skills, decision making and teamwork (Scott et al., 2016) are also present. Therapeutic interventions, assistive devices, community based rehabilitation and occupational rehabilitation services (Tripney et al., 2015; Trenaman et al., 2014) are also covered in the studies. Select studies also focused on employment services (Kluve et al., 2016), skills training including vocational counselling (Tripney et al., 2015) and tertiary education (Oketch et al., 2014). Lastly, one study focused each on entrepreneurship education (Nabi et al., 2016) and training in MSMEs (Grimm et al., 2015). Majority of the studies did not report the training providers except for two studies where it was provided by public funded institutions and NGOs.

## SUMMARY OF RESULTS

The impact as a whole seems to be positive and helps the trainees in employment initiation, sustenance, growth and setting up their own businesses. The studies included in this evidence had different employment related outcomes. Although, the primary impact of the training programmes focuses on employment, there are several other outcomes including enhanced

knowledge, positive attitude, skill diversification, change in attitude, behaviour and practices, motivation, career aspirations and better decision making abilities.

*Employment inclination:* When it comes to generating an inclination towards employment, training interventions livelihood and rural skills development have a positive effect. Rehabilitation training motivated patients to start jobs post disability and injuries. Gaining jobs after entrepreneurial training is a lot easier with better knowledge, attitude and skills.

*Employment sustenance:* Under employment sustenance, different categories of training interventions including entrepreneurship training, medical, counselling and rehabilitation, vocational skills training and professional development training are present and help in sustaining current employment. Leadership and stress management trainings play an important role in maintaining jobs at clinics and hospitals. Food and workplace hygiene training for workers helps them in improving performance at their jobs. Medical training improves knowledge of health workers sustaining current job. Improved performance at workplace with positive attitude and intent to work better.

*Employment growth and Status:* The employment growth and status are also affected by various interventions. Improved labour market outcomes are observed with vocational skills training. Vocational skills training is also known to increase individual earnings. Rehabilitation training motivated patients to get better employment post disability. MSME interventions catalysed the growth in employment and better status.

*Self employment:* Financial and business training helps people (especially women) in taking loans and setting up a new business. Therapeutic interventions motivate people with disabilities to start their own business. Entrepreneurship interventions results in setting up new enterprises, and business and startup intent emerges.

## POLICY IMPLICATIONS

In the light of the reviews, following pointers shall be useful for the policy makers:

- The programmes promoting opportunities for self employment and small scale entrepreneurial ventures lead to increases in labour market outcomes along with welfare gains.
- Provision of appropriate combinations of skills, capital, and counselling support based on the target audience's primary constraints is critical for achieving better results.
- The impacts on both labour market and business outcomes are significantly higher for youth making it relevant in developing countries aspiring to provide meaningful opportunities to their young populations.
- The performance of MSMEs can be improved and their size in terms of capital and staff be expanded through formalisation. The formalisation yields positive employment effects. The training interventions focusing on these elements show positive linkages.

- The review is inconclusive about the relative return on investment in primary, secondary and higher education. However, literature suggests that many upper middle income countries have benefited from investment in the full range of educational provisions. Also, forms of pedagogy and curriculum structure in tertiary education are most effective in enhancing productivity in the workplace or civic participation.
- Young people in low and middle income countries (LMICs) gain benefit from TVET interventions.

## RESEARCH GAPS

The evidence summary is based on the systematic reviews. Availability of adequate reviews related to the summary shall be helpful for the policy makers. Future research, especially in the form of systematic reviews should be undertaken to explore the linkage between nature of trainers (either government, private player or others) with different employment outcomes. The reviews can also focus on the nature of policy context (export driven economic development or domestic industry growth) and nature of training interventions. The review is unable to provide insights on barriers and enablers of outcomes of training due to inadequate coverage in the reviews. However future undertakings could address this.

## 1 BACKGROUND

The proposed evidence summary attempts to find what types of skills training have shown impact on employment outcomes in Low and Middle Income countries (LMICs), particularly in South Asia. This review is important for multiple reasons. The national governments in the under developed economies attempt to accomplish economic growth through competing challenges – building physical infrastructure to attract foreign investment, equipping local companies to deal with incoming global competitions, balancing extant economic and social inequalities, and sustaining the democracy. The available manpower, sometimes in abundance, for instance in India, appears to be a solution for most of the above problems (Ansari & Wu, 2013; Cho, Robalino, & Watson, 2016).

A skilled labour pool is attractive to the business enterprises, both domestic and foreign. The increased employment evens out the economic inequalities which in turn bring societal balances. This desired realisation might be hampered by poor or unskilled labour in these economies (Glick, Huang, & Mejia, 2015). Apart from enabling transition of young people into the labour markets, governments also need to deal with job losses because of automation. In a seminal work on automation and its impact on employment, Frey & Osborne (2013) caution that more than half of the jobs in the developing world are to be displaced in coming years. In this case, governments need to tackle the impending unemployment.

Needless to say, national governments have inadequate resources to be spent on competing needs, for instance, building roads vs skilling manpower. There is a need to understand what works in all domains which require investment, especially manpower training and their impact. The outcomes of the proposed summary shall aid the policy makers in this regard.

Exclusive dependence on private firms for skills enhancement is not feasible, as many of them do not want to invest on training without having exclusive rights over the beneficiaries (Glick et al., 2015). With market imperfections, paying for training without collateral security or other supportive lending mechanisms is difficult for the youth to equip or upgrade themselves. Those who are able to equip themselves using informal training mechanisms have problems in signaling their credentials in a formal set up. Training programmes that are customised to meet the local context might address the above problems.

The training programmes are of different types and are expected to impart skills to the participants. The nature of training (Sieben, 2007) can differ by intensity (incidence and duration), specificity (type of training, location & objectives) and funding (shared or self-financed). There are multiple training providers: commercial training private firms, individual private firms on fee sharing mode before jobs, public training institutes with subsidised fees, non-governmental organisations, trade associations and community organisations (Cho et al., 2016; Fullwiler & Meyeraan, 2010). The training focuses on all kinds of people categories – young, old, disadvantaged, mental or terminally ill patients, physically challenged, and school drop outs etc.

Cho et al. (2016) present at least five skills that are needed to strengthen entrepreneurship in the developing world – basic skills, technical skills, business skills, finance and non-cognitive skills. Some other skills like creativity or leadership skills for managers are also available (Subban & Vyas-Doorgapersad, 2014) or farming techniques (Waddington & White, 2014). These skills can be imparted in variety of settings - traditional class room training, workplace training including apprenticeship and on the job training. The training programmes can be exclusively customised for the participants or commoditised mass programmes. It is expected that basic skills are present among the trainees before moving into the advanced skills.

A systematic review (Kluve et al., 2016) found that people who were exposed to a youth employment intervention had better employment outcomes than those who were not. The nature of training programmes or interventions differed significantly between high income and low or middle income countries. Developed world had interventions implemented by the government when compared to small scale or targeted interventions implemented by the non-governmental organisations (NGOs) of the developing world. The impact in terms of employment and earnings is higher in the developing world. Out of the programmes, skills training and entrepreneurship interventions had greater income gain impacts than others. However, the study found greater variability in the results and called for further research.

The design of the programme seems to be affecting the outcomes (Glick et al., 2015). The major factors of success were participant profiling, monitored programme participation and incentives offered to programme participants and service providers. The effect of the programme is also better when the most disadvantaged youth were participants, irrespective of the country income. Gender was not a clear differentiator in the potential outcome of the programmes. Also, there was no linkage between soft skills and employment outcomes. Other characteristics of the training that affect the outcomes when offered the employing firms include (Srimannarayana & Srimannarayana, 2016) number of trainees, training days, training costs, percentage of amount spent on training in payroll, feedback of participants, learning of the participants during training, transfer of learning on the job and satisfaction of line managers on training.

A meta regression analysis of entrepreneurship programmes in the developing world (Duncan & Gray, 1984; Honorati & Cho, 2013) highlighted the contextual environment of the programmes – different trainees benefit from different programmes in different locations. They suggested that vocational training needed to be offered along with other programmes like counselling or financing. An independent business training programme seemed to increase the earnings of the young beneficiaries. Vocational training and access to finance have larger impacts on labour market activity outcomes than other interventions. Higher education among the young participants had improved the business performance. Similar impact of education is observed in other studies as well (Marcotee, 2017). Programmes implemented through NGOs that were closely connected and familiar with beneficiaries had better effects. On the job training leads to less effective outcomes in certain situations (Barron, Berger, Black, Journal, & Spring, 2007).

To our best of knowledge, there is no exclusive evidence summary exists for South Asia on the proposed topic. There are systematic reviews related to the theme of training and its impact in the developing world, with references to South Asia. However their specific focus is different from the proposed one. For instance Glick, Huang, & Mejia (2015) is on private sector oriented employment programmes and implications for youth skills. Honorati & Cho (2013) focuses on the entrepreneurship programmes. Robinson, Okpo, & Mngoma (2015) deals with employment outcomes for workers with HIV. Waddington & White (2014) reviews the impact of farmer field schools.

Tripney et al. (2013) comes closer to the proposed review as it focuses exclusively on the post-basic technical and vocation education training in the developing world, but ignores other types of training. In other reviews (Tripney, Roulstone, Vigurs, Schmidt, & Stewart, 2015), they focus on the disabled people. The existing studies in literature explore the impact of skills training on employment. For instance, Srimannarayana (2016) presents a framework on measuring training impact in India. Staverska (2006) details an impressive summary of interventions to support young workers in Asian region and briefs about the impact in a descriptive manner. There are adequate studies in the developed world (for instance, Heinrich, 2000; Scott, Leritz, & Mumford, 2004) whose insights are useful in designing frameworks to capture the impact.

On the basis of studies found through Google Scholar and Sciencedirect, we are not able to find systematic reviews very closely related to the proposed topic. We are hoping that search strategy and other processes including screening and quality assessment to be followed as per the systematic review process using the keywords in an exhaustive list of databases, would result in studies relevant for the review.

The primary question of the summary shall be:

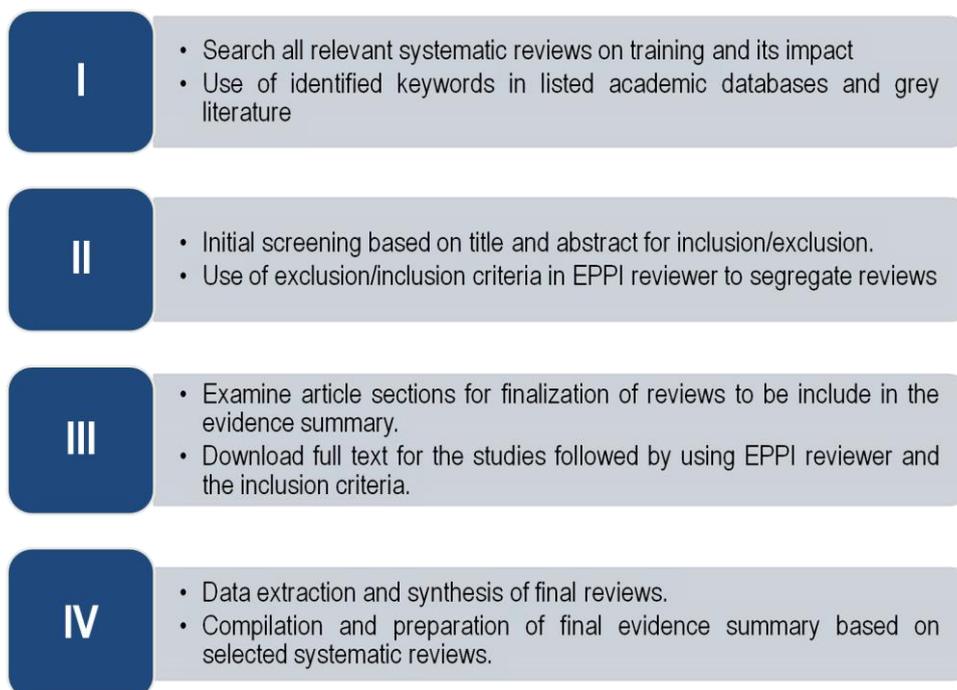
What types of skills training have shown most impact on employment outcomes in Low and Middle Income countries, particularly in South Asia?

The summary is expected to provide insights on the following:

- Who gives the training?
- What are the barriers and enablers for skills training to translate into employment outcomes?
- Is there differential impact with respect to intensity, specificity and funding of the training?
- In addition to employment outcomes, what are the other outcomes?, and
- What review level evidence is available on cost-effectiveness of training programmes?

We had proposed to summarise the systematic reviews of the training programmes and their employment outcomes. In other words, this report is a review of systematic reviews. The Systematic Review is a novel methodology by which all the possible existing studies are found and synthesized (Ilavarasan, 2017). It follows a rigorous replicable process as in the field of medicine (Higgins and Green, 2011).

The entire methodology process is presented in **Error! Reference source not found..**



**Figure 1: Selection of final reviews for evidence summary**

## 2.1 Identification of relevant reviews: search strategy

The search of reviews required for the evidence summary involved multiple stages. In the first stage, all material relevant, even marginally, to the evidence summary are collected from multiple sources, following set of keywords under three broad concepts: population, skills and training; and employment.

Under population, Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka are focused on. Under skills, the following keywords are used: vocational skills, behavioural skills, business skills, employment, employability, vocational skills, technical skills, technical training, soft skills training, skilfulness, ability, aptitude, capacity, talent, expertise, expertness, professionalism, proficiency, competence, efficiency, and know how.

Under training, the keywords used are: training, skills, rehabilitation, (technical and vocational education and training (TVET), teaching, instruction, coaching, tuition, tutoring, education, schooling, learning, lessons, discipline, preparation, grounding, drill, exercise, workout, working out, practice, apprenticeship, and therapy.

Under employment, following are the terms used for searching: employment, employ, job, work, recruit, position, post, occupation, situation, business, profession, vocation, trade, service, entrepreneurship, promotion, career, management, craft, enlistment, employ, engagement, hire, hiring, taking on, recruitment, apprenticeship, and signing up.

In each of the search combinations, 'review' or 'systematic review' is added to limit the results only to the reviews, not the individual empirical studies. Reviews published in 2000 and after, and in English shall be included.

Following databases are searched:

- Joanna Briggs Institute database of SRs - <http://joannabriggslibrary.org/index.php/jbisrir>
- OVID (MEDLINE, EMBASE, PsycINFO)
- PubMed- [www.ncbi.nlm.nih.gov/pubmed](http://www.ncbi.nlm.nih.gov/pubmed)
- CINAHL - <https://www.ebscohost.com/nursing/products/cinahl-databases/cinahl-complete>
- PROSPERO <http://www.crd.york.ac.uk/PROSPERO/>
- ScienceDirect- [www.sciencedirect.com/](http://www.sciencedirect.com/)
- Web of Science- [webofknowledge.com/](http://webofknowledge.com/)
- Sociological Abstracts: <http://www.proquest.com/products-services/socioabs-set-c.html>
- Scopus <http://www.scopus.com/>
- International Bibliography of the Social Sciences (IBSS) <http://www.proquest.com/libraries/academic/databases/ibss-set-c.html>
- Bangladesh Journals Online (BanglaJOL) [www.banglajol.info](http://www.banglajol.info)
- Nepal Journals OnLine (NepJOL) [www.nepjol.info/](http://www.nepjol.info/)
- Research databases related to education, economic and Employment research databases, e.g. IDEAS repec, Labourdoc, Australian Education Index, ERIC
- Regional citation indexes, if any apart from Indian citation index.

- Campbell Systematic Reviews - <https://www.campbellcollaboration.org/campbell-systematic-reviews.html>
- Cochrane Database of Systematic Reviews - <http://www.cochranelibrary.com/cochrane-database-of-systematic-reviews/>
- 3ieimpact Systematic Reviews - <http://www.3ieimpact.org/en/evidence/systematic-reviews/>
- Academic Databases:

ABI/Inform, Annual Reviews, EBSCO Databases, Emerald Management Xtra, IEEE Electronic Library online, JSTOR, Nature, Taylor & Francis, Web of Science, American Economic Association Journals, Cambridge University Press, Oxford Journals, Sage, Wiley, Inderscience, IGI Global, Psychlit, Academic Search Complete

- Grey Literature:

Institutional databases: Infodev, World Bank, DFID’s Research for Development, IDEAS, J-PAL, ELDIS, British Library of Development studies, Millennium challenge, USAid, FAO, UK Theses Ethos, US/Canada Dissertations, SSRN and synthesis reports or studies available in the govt. websites.

## 2.2 Defining relevant review: Inclusion criteria

The summary included the reviews that are published in 2000 and after. Only the reviews written in English are included. We have followed the PICO analysis (Population, Interventions, Comparison, Outcomes and Study design) in including the studies for the review. The inclusion and exclusion criteria are clearly stated surrounding the same.

**Table 1: Inclusion and exclusion criteria used in the study**

Variable	Description
Population	<p><b>Countries:</b></p> <p><b><i>Inclusion criteria:</i></b> Low and middle income countries of the South Asia are included. As per the World Bank, there are seven countries: Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka. Any review that offered specific information about the above seven countries are included.</p> <p><b><i>Exclusion criteria:</i></b> Maldives is excluded due to upper middle income status. Other countries that are not listed above are excluded.</p> <p><b>People:</b></p> <p><b><i>Inclusion criteria:</i></b> All people categories as training recipients are included. Examples include – Rural/urban, gender, income categories, disadvantaged/minorities, special groups, and immigrants etc. Age group above 14 years are included. For</p>

	<p>inclusion, the reviews have contained data or discussion in relation to employment and its closely related outcomes.</p> <p><b>Exclusion criteria:</b> If the trainee is below 14 years old, respective programmes are excluded. Any programme which is undertaken by trainees as part of formal college or polytechnic education is excluded.</p>
Intervention	<p><b>Inclusion criteria:</b> All the training interventions are of post school or higher education period. Training interventions are on the following domains (modified from Cho, Robalino, &amp; Watson, 2016; Kluge et al., 2016): Technical skills, business skills, behavioural, life skills or soft skills training (for instance Communication skills and interpersonal skills etc), and literacy and numeracy. All types of training providers are included (modified from Cho et al., 2016; Tripney et al., 2013): government – social; government – industry; private sector; NGOs / Social entrepreneurs; communities/civil society. Irrespective of mode of training (online, offline), type of delivery (class room, self- learning), funding (sponsored, self), and duration all training interventions are included.</p> <p><b>Exclusion criteria:</b> Reviews focusing on interventions at primary and secondary school level are excluded in the summary.</p>
Outcomes	<p><b>Inclusion criteria:</b> The summary has focused only on the reviews that report employment related outcomes of the individuals as listed below (modified from Tripney et al., 2013):</p> <ul style="list-style-type: none"> <li>• primary outcomes: gaining initial employment; within organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self-employment (starting a new business or expanding one); working hours; and payment levels (i.e., earnings, wages, salary or income);</li> <li>• intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc.); job search skills; career management skills; job performance; employee productivity; job satisfaction.</li> </ul> <p><b>Exclusion criteria:</b> Macro level impact studies are excluded, if there is no bearing on the skills – employment linkage specifically.</p>
Study Designs	<p><b>Inclusion criteria:</b> Any systematic review that focuses on training and employment and its related outcomes are included.</p>

	<p>The systematic reviews that have information on nature of countries, training programs and employment outcomes are included.</p> <p><b>Exclusion criteria:</b></p> <p>Reviews that have not shared search strategy and inclusion criteria are excluded.</p>
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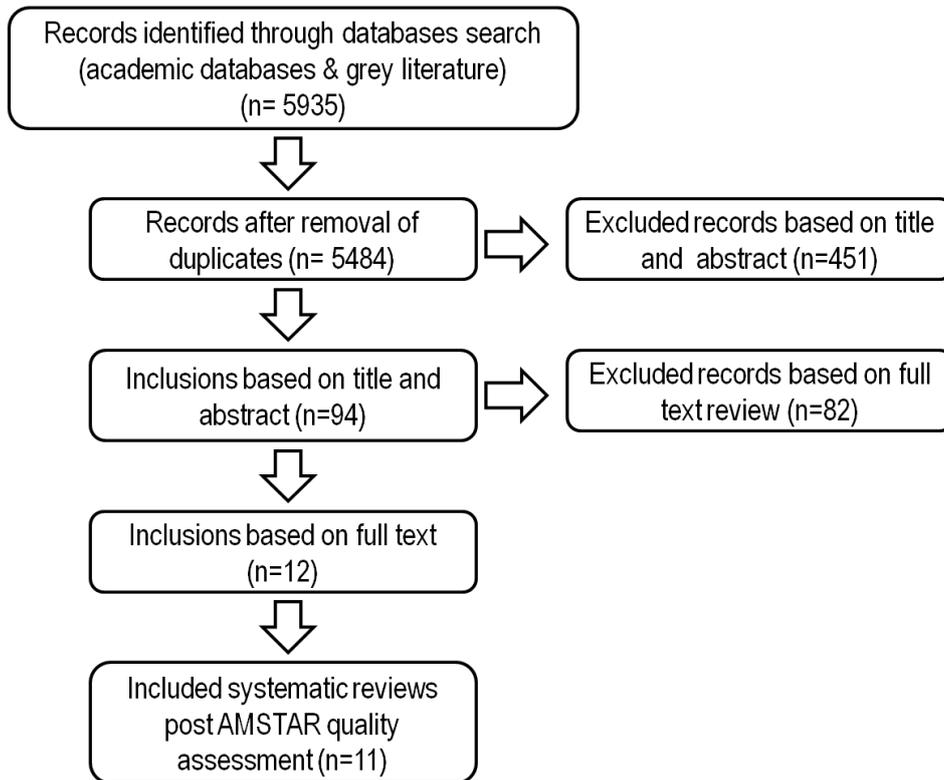
### 2.3 Applying inclusion criteria

After searching above sources using the keywords, the titles of the articles are screened for possible inclusion in the summary. If the titles are not clear enough, abstracts are read. If the abstracts are not there or unclear, rest of the sections in the full review are scrutinised. In the final stage the studies are moved to the final synthesis stage. In each stage, following inclusion/exclusion criteria are used to select the reviews.

- Following low and middle income countries of the South Asia are included- Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka.
- Maldives is excluded due to upper middle income status.
- Any review that offers specific information about the above seven countries are included.
- The studies that focus on trainees above 14 years are included.
- The reviews should contain discussion of the people in relation to employment or closely related outcomes.
- A person who is undergoing a formal college or polytechnic education whose training is part of curriculum is not be included.
- All the training interventions must be post school or higher education period.
- Reviews focusing on interventions at primary and secondary school level are excluded in the summary.
- Training interventions with following domains are included: Technical skills, business skills, behavioural, life skills or soft skills training (for instance communication skills and interpersonal skills etc), and literacy and numeracy.
- All types of training providers are included: government – social; government – industry; private sector; NGOs/Social entrepreneurs; communities/civil society.
- Irrespective of mode of training (online, offline), type of delivery (class room, self-learning), funding (sponsored, self), and duration all training interventions are included.
- Reviews that report employment and its related outcomes of the individuals are included:
  - primary outcomes: gaining initial employment; within organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self-employment (starting a new business or expanding one); working hours; and payment levels (i.e., earnings, wages, salary or income);

- intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc.); job search skills; career management skills; job performance; employee productivity; job satisfaction.
- Macro level impact studies are excluded, if there is no bearing on the skills – employment linkage specifically.

An overview of the inclusions/exclusions after different levels of screening is given below:



**Figure 2: Stages of evidence summary and number of reviews**

#### 2.4. Data extraction

The reviews that meet all inclusion criteria are retained for data extraction. The data is extracted under the following variables/parameters:

- Serial No
- Author
- Title of review
- Publication details
- Year of publication
- Population: reviews of training recipients from Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka; Reviews with people groups - rural/urban, gender, income categories, disadvantaged/minorities, special groups, and immigrants
- Intervention:

Training on the following domains: technical skills, business skills, behavioural, life skills or soft skills training, and literacy and numeracy; training providers: government – social; government – industry; private sector; NGOs/social entrepreneurs; and communities/civil society.

- **Outcomes:**  
primary outcomes: gaining initial employment; within organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self-employment (starting a new business or expanding one); working hours; and payment levels (i.e., earnings, wages, salary or income);  
intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc.); job search skills; career management skills; job performance; employee productivity; job satisfaction.

## **2.5 Data Synthesis**

The data is extracted from the final reviews and are coded under each variable enabling easier comparison and deeper analysis. Two reviewers extracted the data onto the template independently and compare to form a single extracted database after agreement. The agreed data extracted from each review are used for analysis and writing of the evidence summary. The extracted data used for synthesis is presented in Appendix 3.2. While synthesizing the data, the interventions and outcomes are categorised into two different sets. The training interventions are grouped into four broad categories: professional development training, vocational skills training, counselling and rehabilitation and entrepreneurship training. The five groups for employment outcomes are: employment inclination, employment initiation, employment sustenance, employment growth and status, and self employment.

## **2.6 Quality Assessment**

We have used the AMSTRAR checklist<sup>1</sup> to judge the quality of systematic reviews. It contains eleven questions based on which quality of systematic reviews are assessed:

1. Was an 'a priori' design provided?
2. Was there duplicate study selection and data extraction?
3. Was a comprehensive literature search performed?
4. Was the status of publication (i.e. grey literature) used as an inclusion criterion?
5. Was a list of studies (included and excluded) provided?

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<sup>1</sup>[https://amstar.ca/Amstar\\_Checklist.php](https://amstar.ca/Amstar_Checklist.php)

6. Were the characteristics of the included studies provided?
7. Was the scientific quality of the included studies assessed and documented?
8. Was the scientific quality of the included studies used appropriately in formulating conclusions?
9. Were the methods used to combine the findings of studies appropriate?
10. Was the likelihood of publication bias assessed?
11. Was the conflict of interest included?

On the basis of AMSTAR score, reviews are categorised (Sequeira-Byron, Fedorowicz, Jagannath and Sharif, 2011) into high (9-11), medium (5-8) and low (0-4). We included studies that have scored five and above. Two reviewers calculated the score independently.

We have used the EPPI-Reviewer software for applying inclusion and exclusion criteria. Bibliographic records data are imported into the reviewer for screening. Full articles are kept in a separate folder and read for reaching the final set of papers by two independent reviewers. The final set of studies are read thoroughly for synthesising the findings independently without using the reviewer.

### 3. RESULTS

This evidence summary of systematic reviews provides insights for policy makers surrounding the impact of training programmes on employment outcomes. There are 11 reviews in this summary primarily focusing on TVET, rehabilitation and counselling, personality development (including leadership training, stress management and communication skills training) and entrepreneurship training programmes.

The target groups covered in the included studies are diverse including focused studies on people with disabilities, health workers, women and enterprises as a whole.

The first systematic review (Cho & Honorati, 2014) had six broad outcome categories including labour market activities, labour market income, business knowledge and practice, business performance, financial behaviour and attitudes. These categories covered primary as well as intermediate outcomes. The labour market activities included setting up businesses and its expansion, self employment, hours of work and business closing. The labour market income covered household income and assets, profits and salary earnings. The business knowledge and practice component comprised of innovation, access to network and accounting practices. The business performance outcome discussed the business expenses, sales and employee count information. The financial behaviour highlighted the loan and insurance outcomes. Lastly, the attitudes covered outcomes targeting confidence and optimism along with the risk taking and time preferences benefits. The aspects surrounding decision making and incentives in wages were also a part of the outcomes covered in this systematic review .

The primary focus of the second systematic review (Medeiros et al., 2011) is on methodological strategies adopted by food safety training programmes for food service workers. The outcomes are primarily centered on motivating health workers to introspect and perform better at workplace. The primary outcome is maintaining the employment with ongoing training programmes primarily for work place and food hygiene.

The third systematic review (Nabi et al., 2017) focuses on the most common impact indicators related to subjective/personal change: attitude, skills and knowledge, perceived feasibility and entrepreneurial intention. Further, in contrast with the low level indicators the study also highlights the outcomes related to longer term, objective or socio-economic impact of start-ups and venture performance, both typically within 10 years of undertaking the entrepreneurship programme.

The fourth systematic review (Nguyen et al., 2013) highlights the impact of integrated management of childhood illness (IMCI) training in improving skills of the health workers. The review highlights significant improvement when it comes to knowledge of the health workers but also states that the same is rarely affected in the performance of the workers at their workplaces. Further, it stated that the performance does not solely depend on the training intervention provided but also depends on various other factors including frequency and quality of supervision, health worker motivation, presence of additional funding and

partnerships to sustain programmes. The impact on employment is not direct but enhanced knowledge may have impact on sustaining current job .

The next included systematic review (Scott et al., 2016) uses non-technical skills training as the primary intervention which covers the following categories decision making, communication, teamwork, leadership and stress management. The overall impact is primarily centered surrounding the performance of the health workers. The positive impact states that post training they can provide a more safe, effective and patient centric clinical care.

The next systematic review (Tripney et al., 2015) has several intermediate as well as primary outcomes. The intermediate outcomes are surrounding employment, education, attitudes/empowerment, health and quality of life. The other outcomes also included attitudes and behaviours. On the other hand, the primary outcomes focused mainly on employment and income. When it comes to employment, the outcomes focused on initial employment, return to work, formal employment, working hours, job retention, promotion, job role/function changes. In the income category the outcomes included monthly earnings, weekly wages, hourly rate of pay and self-employment profits.

The systematic review by Grimm et al. (2015) focused on impact of interventions relevant to MSMEs on either changes in employment levels in these enterprises or the creation of new enterprises, including becoming self-employed. Most of these impacts (about 60%) relate to employment. The remaining impacts measure business creation and self-employment. The study also provided information regarding the impact on investment, hours worked, productivity, output, sales, revenues and profits.

The next included systematic review (Kluve et al., 2016) analyses the impact of youth employment programmes for improving labour market outcomes. The primary outcome focuses on better employment services and inclination towards employment. The intermediate outcomes target motivation, career aspirations and improved decision making.

The systematic review by Trenman et al. (2014) focuses on rehabilitation training interventions for the disabled. The overall outcomes primarily focus on paid employment, self employment, employment in integrated competitive employment settings, competitive employment in the community earning at least minimum wage; earnings as a result of employment, workplace support, rate of return to work and change in employment status.

The next (Oketch et al., 2014) included studies that target the impact of tertiary education on the development. The developmental impact is categorised into impact on earnings, economic growth, health and nutrition, women empowerment and public services. The impact of specific studies using the countries under focus is on increasing earnings which is positive and but in rural areas there is insignificant impact.

The last review (Tripney et al., 2013) is on the following interventions: technical education, vocational education, vocational training, on the job training and apprenticeship training. The intermediate outcomes are also divided into employment and employability<sup>2</sup>. The employment outcomes target job searches, applications and interviews. The employability outcomes focus on skills (e.g., vocational/technical), qualifications, attitudes to work, career aspirations, work related confidence, work related self-esteem, motivation (e.g., to find work, to secure promotion at work), job search skills, career management skills, job performance, employee productivity and job satisfaction. The long term outcomes/primary impacts focused in the systematic review include gaining initial employment, re-entering employment, obtaining 'better' employment (e.g., through promotion or gaining employment in the formal sector), self-employment (starting a new business or expanding one), working hours and payments (i.e., earnings, wages, salary or income).

The impact as a whole seems to be positive and helps the trainees in employment initiation, sustenance, growth and setting up their own businesses. Although, the primary impact of the training programmes focuses on employment, there are several intermediary outcomes that include positive attitude, skill diversification, motivation and decision making.

Following is the summary of characteristics of included reviews. The characteristics primarily include year of publication, the South Asian countries as focus, research subjects, training interventions, training providers, employment and other outcomes. The summary of the data extracted from the final reviews are presented in Table 2.

#### **Year of publication**

During the data extraction and screening process, the systematic reviews published in 2000 and after, were considered. The final studies comprise of one study each from 2011 and 2017; two studies each from 2013, 2015 and 2016; three studies from 2014.

#### **South Asian countries as focus**

The focus of this evidence is on low and middle income South Asian countries namely: Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka. There were no reviews that focused exclusively on the above said countries. The final eleven systematic reviews had over 456 articles. Out of these, the reviews had a total of 78 studies that focused on the South Asian countries. Amongst the 78 reviews, articles pertaining to India are 36, 16 for Pakistan, 12 for Sri Lanka, 7 for Bangladesh, 5 for Nepal, 1 each for Bhutan and Afghanistan

#### **Research subjects**

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<sup>2</sup> This is the only review that differentiates employment and employability. The employability is 'about having the capability to gain initial employment, maintain employment and obtain new employment if required' (Hillage, J., & Pollard, E. (1998). *Employability: developing a framework for policy analysis*. London: DfEE.).

The target groups considered for the reviews were varied, starting from women, micro-enterprises and micro-finance clients (Cho et al., 2014; Grimm et al., 2015) to hospital and service unit food handlers (Medeiros et al., 2011), health workers (Nguyen et al., 2013), nursing staff, medical students and doctors (Scott et al., 2016). Two studies focused on people with disabilities and impairments (Tripney et al., 2015; Trenaman et al., 2014). Tripney et al. (2015) study focused on slum residents of India. In two of the studies, the target groups were not clearly presented (Kluve et al., 2016; Oketch et al., 2014).

### **Training**

The training interventions are multiple, ranging from financial and business skills training, counselling (Cho et al., 2014), food and workplace hygiene including practical hand washing techniques (Medeiros et al., 2011). Training interventions centered surrounding management and feeding counselling (Nguyen et al., 2013), professional development training including stress management, leadership, communication skills, decision making and teamwork (Scott et al., 2016). Therapeutic interventions, assistive devices, community based rehabilitation and occupational rehabilitation services (Tripney et al., 2015; Trenaman et al., 2014) are also covered in the reviews. Select studies focused on employment services (Kluve et al., 2016), skills training including vocational counselling (Tripney et al., 2015) and tertiary education (Oketch et al., 2014). Lastly, one study focused each on entrepreneurship education (Nabi et al., 2016) and MSMEs training (Grimm et al., 2015).

### **Training providers**

Majority of the studies did not report the training providers except for two studies (Grimm et al., 2015; Medeiros et al., 2011), where it was provided by public funded institutions and NGOs.

### **Employment and related outcomes**

The studies included in this evidence had different employment related outcomes. The impact as a whole seems to be positive and helps the trainees in employment initiation, sustenance, growth and setting up their own businesses. The outcomes are elaborated in the coming section. Apart from the primary employment outcomes, the interventions also had intermediate outcomes including enhanced knowledge, positive attitude, skill diversification, change in attitude, behaviour and practices, motivation, career aspirations and better decision making abilities.

The summary is focusing only on the reviews that report employment and its related outcomes of the individuals as listed below (modified from Tripney et al., 2013): employment outcomes: gaining initial employment; within organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self-employment (starting a new business or expanding one); working hours; and payment levels (i.e., earnings, wages, salary or income); intermediary outcomes: job searches, job

applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc.); job search skills; career management skills; job performance; employee productivity; job satisfaction.

Apart from the primary employment outcomes, the interventions also had intermediate or other outcomes as per identified from the existing literature by Tripney et al. (2013) including enhanced knowledge, positive attitude towards work, skill diversification, change in attitude, behaviour and practices, motivation and career aspirations.

The impact of the studies is summarised below in Table 2.

**Table 2: Intervention and outcomes reported in the final systematic reviews**

<b>c</b>	<b>Review</b>	<b>Population</b>	<b>Intervention</b>	<b>Outcomes</b>	<b>Direction of effect</b>
1.	Cho et al., (2014)	Women SMEs, microenterprise owners, micro finance clients	Financial and business skills training; counselling	Enhanced Knowledge*	Positive
				Self employment specifically business setup and taking loans*	Positive
				Women empowerment*	No evidence
				Labour market activities	No evidence
				Labour market income	No evidence
				Business knowledge and practice	No evidence
				Business Performance	No evidence
				Financial Behaviour	No evidence
				Attitudes	No evidence
2.	Medeiros et al., (2011)	Hospital and Service unit food handlers	Practical hand washing techniques; Food and workplace hygiene	Enhanced Knowledge	Positive
				Change in attitudes, behaviour and practices at the workplace	Positive
				Maintaining employment	Positive
3.	Nabi et al., (2016)	Undergraduate, postgraduate or alumni or unspecified university students. The majority studied entrepreneurship and business or business combination courses	Entrepreneurship education	Enhanced attitude, skills and knowledge	Positive
				Entrepreneurial and business startup intention	Positive
				Better performance	Positive
				Gaining initial employment	Positive
4.	Nguyen et al., (2013)	Health workers	Management, Feeding counselling	Improved Knowledge	Positive
				Employment	No evidence
				Performance	No evidence

5.	Scott et al., (2016)	Residents, Nurses and nursing & medical students, medical students, Doctors	Stress management, leadership, communication skills and teamwork, decision making interventions	Better performance at work place including clinics and hospitals	Positive
				Safe, effective and patient centered clinical care	Positive
6.	Tripney et al., (2015)	People with physical impairments (spinal cord and mobility), multiple impairments, visual impairments	Therapeutic interventions, assistive devices, community based rehabilitation and occupational rehabilitation services	*Paid employment opportunities for people with disabilities	Positive
				*Self employment opportunities	Positive
				*Income	Positive
				Professional social skills	Positive
				Motivation to work	Positive
				Hours worked	Positive
7.	Grimm et al., (2015)	Mostly women, micro enterprises	Training on removing credit constraints in MSMEs including entrepreneurship training	Formalization of processes in enterprises	Positive
				Wage incentives	Positive
				Employment Growth	Positive
				New enterprise formation	Positive
				Productivity of MSMEs	No evidence
				Revenue & Business Expenditures	No evidence
				Business Profits	No evidence
8.	Kluve et al., (2016)	No disaggregated details	Skills training and employment services	Motivation	Positive
				Career aspirations, Inclination towards employment	Positive
				Improved decision making	Positive
				Better employment services	Positive
9.	Trenaman et al., (2014)	People with disabilities, mostly males, few females.	Vocational rehabilitation, functional independence	*Increase in confidence & self esteem	Positive
				*Better employment opportunities	Positive
				*Rejoining the employment after rehabilitation	Positive
				*Workplace support	Positive
				*Change in employment status	Positive

10.	Oketch et al., (2014)	Administrators, faculty and institutions	Tertiary education including technical and vocational training	*Increased individual earnings	Positive
				*Employment in rural areas	No evidence
11.	Tripney et al., (2015)	Adolescent female slum residents in the Indian city of Allahabad; Rural residents (all ages) living in poverty	TVET Trainings: reproductive health training sessions, vocational counselling & vocational skills training	*Motivation	Positive
				*Skill diversification	Positive
				*Career aspirations & inclination towards employment	Positive
				*Rural welfare	No evidence
				*Less hours spent at work	Positive
				*Monthly earnings	Positive

\*Outcomes from specific focus group country studies. The other outcomes are overall outcomes emerging from the entire systematic review.

In preparation of this evidence summary, the included reviews are mapped into inputs and outputs in terms of types of training interventions to the employment outcomes. We have grouped the training interventions into four broad categories: professional development training, vocational skills training, counselling and rehabilitation and entrepreneurship training. The employment outcomes have also been categorised into employment inclination, employment initiation, employment sustenance, employment growth and status and self employment. The summary is presented in Figure 3.

*Employment inclination:* When it comes to generating an inclination towards employment, livelihood and rural skills development has positive effect (Tripney et al., 2013; Kluge et al., 2016). Further, training interventions play an important role when we take employment initiation into consideration. Rehabilitation training motivated patients to start jobs post disability and injuries (Tripney et al., 2015). Gaining jobs after entrepreneurial training is a lot easier with better knowledge, attitude and skills (Nabi et al., 2017).

*Employment Sustenance:* Under employment sustenance, different categories of training interventions including entrepreneurship training, medical, counselling and rehabilitation, vocational skills training and professional development training are present and help in sustaining current employment. Leadership and stress management trainings play an important role in maintaining jobs at clinics and hospitals (Scott et al., 2016). Food and workplace hygiene training for workers helps them in improving performance at their jobs (Medeiros et al., 2011). Medical training improves knowledge of health workers sustaining

current job (Nguyen et al., 2013). Improved performance at workplace with positive attitude and intent to work better (Nabi et al., 2017).

*Employment growth and Status:* The employment growth and status are also affected by various interventions. Improved labour market outcomes are observed with vocational skills training (Kluve et al., 2016). Vocational skills training is also known to increase individual earnings (Oketch et al., 2014). Rehabilitation training motivated patients to get better employment post disability (Trenaman et al., 2014; Tripney et al., 2015). Better employment opportunities post training is dependent on the type of disability as well (Trenaman et al., 2014). MSME interventions catalysed the growth in employment and better status (Grimm & Paffhausen, 2015).

*Self Employment:* Lastly, the training interventions also have an impact on self-employment. Financial and business training helps people (especially women) in taking loans and setting up new businesses (Cho & Honorati, 2014). Therapeutic interventions motivate people with disabilities to start own business (Tripney et al., 2015). Entrepreneurship interventions results in setting up new enterprises (Grimm & Paffhausen, 2015). Business and startup intent emerges after entrepreneurship education (Nabi et al., 2017).

*Entrepreneurship training:* It can be interpreted that entrepreneurship training has an impact on all factors concerning employment except generating an inclination towards paid job. Entrepreneurship is known to help individuals gain initial jobs with better knowledge and skills. It improves performance at workplaces by generating an intent to work better. Further MSME interventions for enterprises and individuals result in long term growth in employment. In addition to this, it generates an intent for setting up new businesses and startups when it comes to self-employment. This is not very surprising as the interventions are focusing on the similar themes.

*Vocational skills training:* It is seen that vocational skills training generates an interest towards working and has an impact on sustaining and growing in the current job. The reviews however do not highlight evidences surrounding employment initiation and self-employment when it comes to this category of training. The primary impact when it comes to generating an intent to work is in the area of livelihood and rural skills development. Further, employment sustenance through vocational training has been beneficial for health workers surrounding food and workplace hygiene as it helps them to maintain their current jobs in a better way. Growth and status change is primarily for labour markets and special people with disabilities to grow and change their jobs by learning new skills.

*Professional development training:* The professional development training including stress management, leadership skills, communication skills has limited impact on employment outcomes as covered by the systematic reviews under consideration. It is known to help health workers in clinics and hospitals to work better in the stressed environments taking better control of critical situations. In addition to this financial and business trainings do help people (especially women) in taking loans and setting up new businesses.

*Medical, counselling and rehabilitation training:* When it comes to training surrounding medical, counselling and rehabilitation, it is noted that these trainings do have positive impacts in several spheres of employment. The reviews highlight that therapeutic and rehabilitation interventions help people with disabilities to gain initial employment post injury, motivate them to grow in the current job and also support in setting up new businesses. Further, medical counselling for health workers also helps them in maintaining their current jobs better.



**Figure 3: Summary of training interventions and employment outcomes**

Notes: Each outside border (colour and pattern) represents one review. For instance, red colour is for review number 09. Purple dotted line is for review number 06.

**What are the barriers and enablers for skills training to translate into employment outcomes?**

The final studies do not report about the barriers and enablers that affect the translation of training into employment outcomes. This is understandable as the reviews are focusing on the

causal relationship between training interventions and different outcomes. Some of the reviews offer possible explanations for differential impact of the interventions. For instance, Grimm and Paffhausen (2015) comment that women face additional constraints in terms of low education and dual burden in translating training outcomes. But these explanations are more of researchers' view points rather than emerging from systematic reviews. An evidence summary is expected to ignore the personal viewpoints while collating the data driven proofs.

### **Is there differential impact with respect to intensity, specificity and funding of the training?**

A detailed disaggregated analysis of differential impact of training programmes is not possible, as there was inadequate information in the selected reviews.

### **What review level evidence is available on cost-effectiveness of training programmes?**

The systematic reviews do not clearly state the cost related details. The reviews do not even report about the nature of trainers, hence estimates about the programmes are not possible. In two cases the training programmes were funded by public funded institutions and NGOs whereas in some cases trainees were charged a part of the training cost.

## **4 DISCUSSION AND CONCLUSIONS**

The evidence summary comprises of 11 systematic reviews focusing on various training interventions and their outcomes surrounding employment. The summary groups the training interventions into four groups namely (i) entrepreneurship training; (ii) medical, counselling and rehabilitation; (iii) vocational skills training; (iv) professional development training. The primary impact that is the impact on employment is also segregated into five groups: (i) employment inclination; (ii) employment initiation; (iii) employment sustenance; (iv) employment growth and status; and lastly (v) self-employment. Each study has specific focus on the type of training resulting in an impact in a single or multiple categories.

The impact as a whole seems to be positive and helps the trainees in employment initiation, sustenance, growth and setting up their own businesses. The studies included in this evidence had different employment related outcomes. Although, the primary impact of the training programmes focuses on employment, there are several other outcomes including enhanced knowledge, positive attitude, skill diversification, change in attitude, behaviour and practices, motivation, career aspirations and better decision making abilities.

Employment inclination: when it comes to generating an inclination towards employment, training interventions livelihood and rural skills development have positive effect. Rehabilitation training motivated patients to start jobs post disability and injuries. Gaining jobs after entrepreneurial training is a lot easier with better knowledge and attitude and skills.

Employment sustenance: under employment sustenance, different categories of training interventions including entrepreneurship training, medical, counselling and rehabilitation,

vocational skills training and professional development training are present and help in sustaining current employment. Leadership and stress management trainings play an important role in maintaining jobs at clinics and hospitals. Food and workplace hygiene training for workers helps them in improving performance at their jobs. Medical training improves knowledge of health workers sustaining current job and improved performance at workplace with positive attitude and intent to work better.

Employment growth and status: the employment growth and status are also affected by various interventions. Improved labour market outcomes are observed with vocational skills training. Vocational skills training is also known to increase individual earnings. Rehabilitation training motivated patients to get better employment post disability. MSME interventions catalysed the growth in employment and better status.

Self employment: financial & business training helps people (especially women) in taking loans and setting up new businesses. Therapeutic interventions motivate people with disabilities to start own business. Entrepreneurship interventions results in setting up new enterprises, businesses and startup intent emerges.

Out of the final reviews, it appears that professional and development training seems to have less impact when compared to others. It has impact only in two areas, employment sustenance and self-employment. Rest of the interventions have impact on four major outcomes out of five. Vocational skills and training has impact on employment inclination, employment sustenance and employment growth and status. The larger impact is seen in employment growth and status, with three different reviews. Two types of interventions, medical counselling and rehabilitation and entrepreneurship training have impact on all outcomes, except employment inclination. In the order of priority, these two interventions should be taken first. However, action points from medical counselling and rehabilitation should be undertaken cautiously at least two reasons: systematic reviews are patronised by the medicine related domains than others and are likely to be available for evidence summary, and the amount of disabled people might be lower than other needy population sub groups. The best bet emerges to be entrepreneurship training with its impact on four of the outcomes.

## POLICY IMPLICATIONS

In the light of the reviews, following pointers shall be useful for the policy makers<sup>3</sup>:

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<sup>3</sup> Rather than listing out suggestions from the perspective or interpretations of the researchers, the suggestions are drawn from the systematic reviews only. As the systematic reviews are based on the published research, the findings or dran conclusions might not fit the desired format of the policy requirements. Unlike natural sciences, quantifying human behavior related outcomes have methodological limitations. The reader of the report may be sensitive about this.

- The programmes promoting opportunities for self-employment and small scale entrepreneurial ventures lead to increases in labour market outcomes along with welfare gains.
- Provision of appropriate combinations of skills, capital, and counselling support based on the target audience's primary constraints is critical for achieving better results.
- The impacts on both labour market and business outcomes are significantly higher for youth making it relevant in developing countries aspiring to provide meaningful opportunities to their young populations.
- The performance of MSMEs can be improved and their size in terms of capital and staff be expanded through formalisation. The formalisation yields positive employment effects. The training interventions focusing on these elements show positive linkages.
- The review is inconclusive about the relative return on investment in primary, secondary and higher education. However, literature suggests that many upper middle income countries have benefited from investment in the full range of educational provisions. Also, forms of pedagogy and curriculum structure in tertiary education are most effective in enhancing productivity in the workplace or civic participation.
- Young people in low and middle income countries (LMICs) gain benefit from TVET interventions.

The mapping of these policy implications with the final Systematic Reviews is available in Appendix 4.

## RESEARCH GAPS

The evidence summary is based on the systematic reviews. Availability of adequate reviews related to the summary shall be helpful for analysis and extracting insights for the policy makers. We do not have adequate systematic reviews that explore the linkage between nature of trainers (either government, private player or others) with different employment outcomes, and the causality is not known. The future reviews should look at this.

The reviews can also focus on the nature of policy context (export driven economic development or domestic industry growth) and nature of training interventions. Even an evidence summary is brought out, contextualisation seems to be difficult without adequate discussion related to macro environments. Future systematic reviews could be brought out in this domain.

The review also envisioned to capture the barriers and enablers that affect the translation of training into employment outcomes. The selected final reviews did not focus on the same. Some of the reviews offer possible explanations which are more of researchers' view points rather than emerging from systematic reviews. Future systematic reviews that focuses

exclusively on the barriers and enablers should be undertaken. In the absence of quantitative studies, a narrative synthesis based systematic reviews should be attempted.

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APPENDIX 1: BACKGROUND

The proposed evidence summary attempts to find what types of skills training have shown impact on employment outcomes in Low and Middle Income countries, particularly in South Asia.

The summary is expected to provide insights on the following:

- Who gives the training?
- What are the barriers and enablers for skills training to translate into employment outcomes?
- Is there differential impact with respect to intensity, specificity and funding of the training?
- In addition to employment outcomes, what are the other outcomes?
- What review level evidence is available on cost-effectiveness of training programmes?

The justification for the summary is already presented in the main part of the report.

## APPENDIX 1.1: AUTHORSHIP OF THIS REPORT

### **Details of Advisory Group membership**

Erwin G A Alampay (Univ of Philipines)  
Dr.Shailendra Kumar Dwivedi (GIZ, India)  
Nilusha Kapugama (StaxInc, Sri Lanka).

### **Details of Review Group membership**

To be provided by the PwC.

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### **Conflicts of interest**

The team members do not have any conflict of interest in conducting this proposed evidence summary preparation.

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## APPENDIX 2 METHODS

The entire process may be divided into four phases:

### Phase I: Search

- Search all relevant systematic reviews on training and its impact
- Use of identified keywords in listed academic databases and grey literature

### Phase II: Screening

- Initial screening based on title and abstract for inclusion/exclusion.
- Use of exclusion/inclusion criteria in EPPI-reviewer to segregate reviews

### Phase III: Selection

- Examine article sections for finalisation of reviews to be include in the evidence summary.
- Download full text for the studies followed by using EPPI-reviewer and the inclusion criteria.

### Phase IV: Extraction

- Data extraction and synthesis of final reviews.
- Compilation and preparation of final evidence summary based on selected systematic reviews.

## APPENDIX 2.1 INCLUSION AND EXCLUSION CRITERIA

The summary included the reviews that are published in 2000 and after. The reviews written only in English are included. We have followed the PICO analysis (Population, Interventions, Comparison, Outcomes and Study design) in including the studies for the review. After searching above sources using the keywords, the titles of the articles are screened for possible inclusion in the summary. If the titles are not clear enough, abstracts are read. If the abstracts are not there or unclear, rest of the sections in the full review are scrutinised. In the final stage the studies are moved to the final synthesis stage. In each stage, inclusion/exclusion criteria are used to select the reviews. Please refer to the report for details.

## APPENDIX 2.2: SEARCH STRATEGY

The search of reviews required for the evidence summary involved multiple stages. In the first stage, all material relevant, even marginally, to the evidence summary are collected from multiple sources, following set of keywords under three broad concepts: population, skills and training; and employment.

Under population, Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka are focused. Under skills, the following keywords are used: vocational skills, behavioural skills, business skills, employment, employability, vocational skills, technical skills, technical training, soft skills training, skillfulness, ability, aptitude, capacity, talent, expertise, expertness, professionalism, proficiency, competence, efficiency, and know how.

Under training, the keywords used are: training, skills, rehabilitation, (technical and vocational education and training (TVET), teaching, instruction, coaching, tuition, tutoring, education, schooling, learning, lessons, discipline, preparation, grounding, drill, exercise, workout, working out, practice, apprenticeship, and therapy.

Under employment, the following terms are used for searching: employment, employ, job, work, recruit, position, post, occupation, situation, business, profession, vocation, trade, service, entrepreneurship, promotion, career, management, craft, enlistment, employ, engagement, hire, hiring, taking on, recruitment, apprenticeship, and signing up.

In each of the search combinations, 'review' or 'systematic review' is added to limit the results only to the reviews, not the individual empirical studies. Reviews published in 2000 and after, and in English shall be included.

Following databases are searched:

- Joanna Briggs Institute database of SRs - <http://joannabriggslibrary.org/index.php/jbisrir>
- OVID (MEDLINE, EMBASE, PsycINFO)
- PubMed- [www.ncbi.nlm.nih.gov/pubmed](http://www.ncbi.nlm.nih.gov/pubmed)
- CINAHL - <https://www.ebscohost.com/nursing/products/cinahl-databases/cinahl-complete>
- PROSPERO <http://www.crd.york.ac.uk/PROSPERO/>
- ScienceDirect- [www.sciencedirect.com/](http://www.sciencedirect.com/)
- Web of Science- [webofknowledge.com/](http://webofknowledge.com/)
- Sociological Abstracts: <http://www.proquest.com/products-services/socioabs-set-c.html>
- Scopus <http://www.scopus.com/>
- International Bibliography of the Social Sciences (IBSS) <http://www.proquest.com/libraries/academic/databases/ibss-set-c.html>
- Bangladesh Journals Online (BanglaJOL) [www.banglajol.info](http://www.banglajol.info)
- Nepal Journals OnLine (NepJOL) [www.nepjol.info/](http://www.nepjol.info/)
- Research databases related to education, economic and Employment research databases, e.g. IDEAS repec, Labourdoc, Australian Education Index, ERIC

- Regional citation indexes, if any apart from Indian citation index.
- Campbell Systematic Reviews - <https://www.campbellcollabouration.org/campbell-systematic-reviews.html>
- Cochrane Database of Systematic Reviews - <http://www.cochranelibrary.com/cochrane-database-of-systematic-reviews/>
- 3ieimpact Systematic Reviews - <http://www.3ieimpact.org/en/evidence/systematic-reviews/>
- Academic Databases:

ABI/Inform, Annual Reviews, EBSCO Databases, Emerald Management Xtra, IEEE Electronic Library online, JSTOR, Nature, Taylor & Francis, Web of Science, American Economic Association Journals, Cambridge University Press, Oxford Journals, Sage, Wiley, Inderscience, IGI Global, Psychlit, Academic Search Complete

- Grey Literature:

Institutional databases: Infodev, World Bank, DFID's Research for Development, IDEAS, J-PAL, ELDIS, British Library of Development studies, Millennium challenge, USAid, FAO, UK Theses Ethos, US/Canada Dissertations, SSRN and synthesis reports or studies available in the govt. websites.

Following are the search strategies used for the selected databases:

#### Web of Science:

In Web of Science, The field tag TS represents the Topic Search which searches for the keyword in Title, Abstract, Author Keywords and Keywords Plus®

To search for an exact phrase, the use of quotation marks has been done.

Example of the search query:

#6	1,642	#4 AND #3 AND #2 AND #1 Refined by: RESEARCH DOMAINS: ( SOCIAL SCIENCES OR ARTS HUMANITIES ) Timespan=2000-2017 Search language=Auto
# 5	2,829	#4 AND #3 AND #2 AND #1 Timespan=2000-2017 Search language=Auto
# 4	2,082,340	TS=(employ* OR job OR worker* OR "paid work*" OR recruit* OR occupation OR profession OR entrepreneur* OR promotion OR career OR enlistment OR engagement OR hire OR hiring OR "taking-on" OR recruit* OR "signing-up")
# 3	11,384,734	TS=("vocational skills" OR "behavioural skills" OR "business skills" OR vocation* OR "technical skills" OR "technical training" OR "soft skills training" OR skill* OR ability OR aptitude OR capacity OR talent OR expertise OR expertness OR profession* OR proficiency OR competence OR efficiency OR "know-how" OR train* OR rehabilitation OR "technical

and vocational education and training" OR TVET OR teaching OR instruct\* OR coaching OR tuition OR tutor\* OR education OR schooling OR learning OR lessons OR discipline OR preparation OR grounding OR exercise OR "working-out" OR practice OR apprenticeship\*)

Timespan=2000-2017

Search language=Auto

# 2 2,034,241 TS=(review OR "data synthesis" OR "evidence synthesis" OR metasyntesis OR meta-synthesis OR "narrative synthesis" OR "qualitative synthesis" OR "quantitative synthesis" OR "realist synthesis" OR "research synthesis" OR "synthesis of evidence" OR "thematic synthesis" OR metaanaly\* OR meta-analy\* OR "systematic map\*" OR "systematic overview\*" OR "systematic review\*" OR "systematically review\*" OR "bibliographic search" OR "database search" OR "electronic search" OR handsearch\* OR "hand search\*" OR "keyword search" OR "literature search" OR "search term\*" OR "article reviews" OR "literature review" OR "overview of reviews" OR "review literature" OR "reviewed the literature" OR "reviews studies" OR "this review" OR "scoping stud\*" OR "overview study" OR "overview of the literature" OR meta-ethnograph\* OR meta-epidemiological OR "data extraction" OR "meta-regression")

Timespan=2000-2017

Search language=Auto

# 1 1,296,036 TS=(Afghanistan\* OR Bangladesh\* OR Bhutan OR India\* OR Nepal\* OR Pakistan\* OR "Sri Lanka" OR "Sri Lankan") OR AD=(Afghanistan\* OR Bangladesh\* OR Bhutan OR India\* OR Nepal\* OR Pakistan\* OR "Sri Lanka" OR "Sri Lankan") OR SO=(Afghanistan\* OR Bangladesh\* OR Bhutan OR India\* OR Nepal\* OR Pakistan\* OR "Sri Lanka" OR "Sri Lankan")

Timespan=2000-2017

Search language=Auto

## ERIC

For ERIC we used the similar search and used the field pub year to select the articles. Further ERIC uses descriptors and the search may be further narrowed down based on these.

Example of Search Query:

((employ OR employment OR employability OR job OR worker OR "paid work" OR occupation OR profession OR entrepreneur OR entrepreneurship OR promotion OR career OR enlistment OR engagement OR hire OR hiring OR "taking-on" OR recruit OR recruiting OR recruitment OR "signing-up") AND("vocational skills" OR "behavioural skills" OR "business skills" OR vocation OR vocational OR "technical skills" OR "technical training" OR "soft skills training" OR skill OR ability OR aptitude OR capacity OR talent OR expertise OR expertness OR profession OR proficiency OR competence OR efficiency OR "know-how" OR train OR trainer OR training OR rehabilitation OR "technical and vocational education and training" OR TVET OR teaching OR instruct OR instructor OR coaching OR tuition OR tutor OR tutoring OR education OR schooling OR learning OR lessons OR discipline OR preparation OR grounding OR exercise OR "working-out" OR practice OR apprenticeship) AND (review OR "data synthesis" OR "evidence synthesis" OR metasyntesis OR meta-synthesis OR "narrative synthesis" OR "qualitative synthesis" OR

"quantitative synthesis" OR "realist synthesis" OR "research synthesis" OR "synthesis of evidence" OR "thematic synthesis" OR metaanalysis OR meta-analysis OR "systematic map" OR "systematic overview" OR "systematic review" OR "systematically review" OR "bibliographic search" OR "database search" OR "electronic search" OR handsearch OR "hand search" OR "keyword search" OR "literature search" OR "search term" OR "article reviews" OR "literature review" OR "overview of reviews" OR "review literature" OR "reviewed the literature" OR "reviews studies" OR "this review" OR "scoping study" OR "overview study" OR "overview of the literature" OR meta-ethnograph OR meta-epidemiological OR "data extraction" OR "meta-regression") AND (Afghanistan OR Bangladesh OR Bhutan OR India OR Nepal OR Pakistan OR "Sri Lanka")) AND (pubyear: 2000 OR pubyear: 2001 OR pubyear: 2002 OR pubyear: 2003 OR pubyear: 2004 OR pubyear: 2005 OR pubyear: 2006 OR pubyear: 2007 OR pubyear: 2008 OR pubyear: 2009 OR pubyear: 2010 OR pubyear: 2011 OR pubyear: 2012 OR pubyear: 2013 OR pubyear: 2014 OR pubyear: 2015 OR pubyear: 2016 OR pubyear: 2017))

((employ OR employment OR employability OR job OR worker OR "paid work" OR occupation OR profession OR entrepreneur OR entrepreneurship OR promotion OR career OR enlistment OR engagement OR hire OR hiring OR "taking-on" OR recruit OR recruiting OR recruitment OR "signing-up") AND ("vocational skills" OR "behavioural skills" OR "business skills" OR vocation OR vocational OR "technical skills" OR "technical training" OR "soft skills training" OR skill OR ability OR aptitude OR capacity OR talent OR expertise OR expertness OR profession OR proficiency OR competence OR efficiency OR "know-how" OR train OR trainer OR training OR rehabilitation OR "technical and vocational education and training" OR TVET OR teaching OR instruct OR instructor OR coaching OR tuition OR tutor OR tutoring OR education OR schooling OR learning OR lessons OR discipline OR preparation OR grounding OR exercise OR "working-out" OR practice OR apprenticeship) AND (review) AND (Afghanistan OR Bangladesh OR Bhutan OR India OR Nepal OR Pakistan OR "Sri Lanka")) AND (pubyear: 2000 OR pubyear: 2001 OR pubyear: 2002 OR pubyear: 2003 OR pubyear: 2004 OR pubyear: 2005 OR pubyear: 2006 OR pubyear: 2007 OR pubyear: 2008 OR pubyear: 2009 OR pubyear: 2010 OR pubyear: 2011 OR pubyear: 2012 OR pubyear: 2013 OR pubyear: 2014 OR pubyear: 2015 OR pubyear: 2016 OR pubyear: 2017))

The screenshot shows the ERIC search interface. At the top left is the ERIC logo. The search bar contains the query: (((employed OR employment OR emj...)). Below the search bar are filters for 'Peer reviewed only' and 'Full text available on ERIC'. The results list shows three items:

- School Counselors' Perceptions of Their Academic Preparedness for Job Activities and Actual Job Activities** by Goodman-Scott, Emily - ProQuest LLC, 2013. Description: The school counseling field has evolved over the years and increasingly clarified school counselors' job roles and activities... Descriptors: School Counselors, Counselor Attitudes, Counselor Training, Theory Practice Relationship.
- Transnational Links of Afghan Madrasas: Implications for the Reform of Religious Education** by Borchgrevinik, Kaja - Prospects: Quarterly Review of Comparative Education, 2013. Description: Described as "terrorist factories", the South Asian madrasas have become the subject of great controversy since September 11, 2001... Descriptors: Islam, Foreign Countries, Religious Education, Terrorism.
- BRAC in Afghanistan: Building South-South Partnerships in Teacher Training** by Islam, Mir Nazmul; Anwar, Arif - Prospects: Quarterly Review of Comparative Education, 2012. Description: Training paraprofessionals such as teachers is one of many significant challenges facing Afghanistan's educational system... Descriptors: Foreign Countries, Developing Nations, Nongovernmental Organizations, Educational Innovation.

Navigation options include 'Notes', 'FAQ', 'Contact Us', 'Save', 'Export', and 'Direct link' buttons for each result.

Figure 1A: Screenshot of search results in ERIC.

((("vocational skills" OR "behavioural skills" OR "business skills" OR employment OR employability OR vocational OR "technical skills" OR "technical training" OR "soft skills training" OR skillfulness OR ability OR aptitude OR capacity OR talent OR expertise OR expertness OR professionalism OR proficiency OR competence OR efficiency OR "know-how" OR Training OR skills OR rehabilitation OR "technical and vocational education and training" OR TVET OR teaching OR instruction OR coaching OR tuition OR tutoring OR education OR schooling OR learning OR lessons OR discipline OR preparation OR grounding OR drill OR exercise OR workout OR "working-out" OR practice OR apprenticeship OR therapy) AND (employment OR employ OR job OR work OR recruit OR position OR post OR occupation OR situation OR business OR profession OR vocation OR trade OR service OR entrepreneurship OR promotion OR career OR management OR craft OR enlistment OR employ OR engagement OR hire OR hiring OR "taking-on" OR recruitment OR apprenticeship OR "signing-up")) AND (Afghanistan OR Bangladesh OR Bhutan OR India OR Nepal OR Pakistan OR "Sri Lanka")) AND (pubyear: 2000 OR pubyear: 2001 OR pubyear: 2002 OR pubyear: 2003 OR pubyear: 2004 OR pubyear: 2005 OR pubyear: 2006 OR pubyear: 2007 OR pubyear: 2008 OR pubyear: 2009 OR pubyear: 2010 OR pubyear: 2011 OR pubyear: 2012 OR pubyear: 2013 OR pubyear: 2014 OR pubyear: 2015 OR pubyear: 2016 OR pubyear: 2017)

The set of descriptors for this search is:

DESCRIPTOR	
<u>Foreign Countries</u>	400
<u>Higher Education</u>	67
<u>Developing Nations</u>	61
<u>Interviews</u>	56
<u>Educational Policy</u>	55
<u>Educational Change</u>	53
<u>Case Studies</u>	47
<u>Teaching Methods</u>	42
<u>Access to Education</u>	41
<u>Gender Differences</u>	40
<u>Females</u>	38
<u>Elementary Secondary Education</u>	37
<u>Global Approach</u>	37
<u>Student Attitudes</u>	35
<u>Program Effectiveness</u>	34
<u>Teacher Attitudes</u>	29
<u>Academic Achievement</u>	28
<u>Distance Education</u>	28
<u>Educational Quality</u>	27
<u>Equal Education</u>	27

<u>Barriers</u>	26
<u>Correlation</u>	26
<u>Comparative Analysis</u>	25
<u>Questionnaires</u>	25
<u>Educational Attainment</u>	24

Other specific descriptors may be included in the search query based on your suggestion using the +descriptor label. And these are the education levels that ERIC mentions with the search:

<b>EDUCATION LEVEL</b>	
<u>Higher Education</u>	143
<u>Postsecondary Education</u>	89
<u>Elementary Secondary Education</u>	54
<u>Secondary Education</u>	42
<u>Elementary Education</u>	41
<u>Adult Education</u>	31
<u>High Schools</u>	17
<u>Early Childhood Education</u>	10
<u>Middle Schools</u>	10
<u>Junior High Schools</u>	8
<u>Grade 4</u>	5
<u>Adult Basic Education</u>	4
<u>Grade 9</u>	4
<u>Two Year Colleges</u>	4
<u>Grade 6</u>	3
<u>Grade 8</u>	3
<u>Intermediate Grades</u>	3
<u>Grade 10</u>	2
<u>Grade 5</u>	2
<u>Grade 7</u>	2
<u>Preschool Education</u>	2
<u>Grade 11</u>	1
<u>Grade 2</u>	1
<u>Grade 3</u>	1

A total of 454 results appeared using the search query:



Collection Thesaurus  
 (((("vocational skills" OR "behavioural Search Advanced Search Tips

Notes FAQ Contact Us

Peer reviewed only  Full text available on ERIC

Showing 1 to 15 of 454 results [Save](#) | [Export](#)

PUBLICATION DATE	
In 2017	12
Since 2016	43
Since 2013 (last 5 years)	152
Since 2008 (last 10 years)	311
Since 1998 (last 20 years)	439

DESCRIPTOR	
Foreign Countries	400
Higher Education	67
Developing Nations	61
Interviews	56
Educational Policy	55
Educational Change	53
Case Studies	47
Teaching Methods	42
Access to Education	41
Gender Differences	40
Females	38
Elementary/Secondary Education	37
Global Approach	37
Student Attitudes	35
Program Effectiveness	34
Teacher Attitudes	29
Academic Achievement	26

**South Asian Families' Access to Special Education and Mental Health Services: Obstacles and Strategies**  
 Pathappillil, Jessy; Bhatt, Hiral; Kabler, Brenda – Communique, 2013

Immigration trends in recent years reveal that the number of students from culturally and linguistically diverse backgrounds is continuing to rise. As the proportion of culturally and linguistically diverse students in the total school population expands, the need for culturally responsive school psychology services will be increasingly magnified...  
 Descriptors: Immigrants, Asian Americans, Student Diversity, Barriers

[Direct Link](#)

**Safeguarding Intangible Cultural Heritage through the Strengthening of National Capacities in Asia and the Pacific, 2011-2014 Project Completion Report**

Favis, Ricardo; Suvanatap, Montakam – UNESCO Bangkok, 2015

The "Convention for the Safeguarding of the Intangible Cultural Heritage" was adopted by the General Conference in October 2003 and entered into force in 2006 after ratification by 30 Member States. To date there are 161 Member States, yet the States Parties to the Convention still need to appreciate better the concepts and mechanisms...  
 Descriptors: Cultural Background, Asian Culture, Capacity Building, Sustainability

[Direct Link](#)

**Literacy Programmes with a Focus on Women to Reduce Gender Disparities: Case Studies from UNESCO Effective Literacy and Numeracy Practices Database (LitBase). <http://www.unesco.org/ui/litbase/>**

Kairies, Jan, Ed. – UNESCO Institute for Lifelong Learning, 2013

Literacy is the foundation of lifelong learning and a crucial element in the universally recognised right to education. However, illiteracy continues to exist as a global challenge, and many individuals still lack the basic literacy skills that are needed to engage in further learning opportunities and for the economic and social development of...  
 Descriptors: Literacy Education, Females, Womens Education, Literacy

[Download full text](#)

**Regional Planning Meeting on Literacy Initiative for Empowerment**

Figure 2A: Screenshot of search results in EPIC - 2

### EBSCO Host

TI ( review OR "data synthesis" OR "evidence synthesis" OR metasyntesis OR meta-synthesis OR "narrative synthesis" OR "qualitative synthesis" OR "quantitative synthesis" OR "realist synthesis" OR "research synthesis" OR "synthesis of evidence" OR "thematic synthesis" OR metaanaly\* OR meta-analy\* OR "systematic map\*" OR "systematic overview\*" OR "systematic review\*" OR "systematically review\*" OR "bibliographic search" OR "database search" OR "electronic search" OR handsearch\* OR "hand search\*" OR "keyword search" OR "literature search" OR "search term\*" OR "article reviews" OR "literature review" OR "overview of reviews" OR "review literature" OR "reviewed the literature" OR "reviews studies" OR "this review" OR "scoping stud\*" OR "overview study" OR "overview of the literature" OR meta-ethnograph\* OR meta-epidemiological OR "data extraction" OR "meta-regression" ) AND TI ( "vocational skills" OR "behavioural skills" OR "business skills" OR vocation\* OR "technical skills" OR "technical training" OR "soft skills training" OR skill\* OR ability OR aptitude OR capacity OR talent OR expertise OR expertness OR profession\* OR proficiency OR competence OR efficiency OR "know-how" OR train\* OR rehabilitation OR "technical and vocational education and training" OR TVET OR teaching OR instruct\* OR coaching OR tuition OR tutor\* OR education OR schooling OR learning OR lessons OR discipline OR preparation OR grounding OR exercise OR "working-out" OR practice OR apprenticeship\* ) AND TI ( employ\* OR job OR worker\* OR "paid work\*" OR recruit\* OR occupation OR profession OR entrepreneur\* OR promotion OR career OR enlistment OR engagement OR hire OR hiring OR "taking-on" OR recruit\* OR "signing-up" ) AND ( Afghanistan\* OR Bangladesh\* OR Bhutan OR India\* OR Nepal\* OR Pakistan\* OR "Sri Lanka" OR "Sri Lankan" ) Limiters - Published Date: 2000101-20171231



## APPENDIX 2.3: DATA EXTRACTION TOOLS

After arriving at the final reviews, data are extracted from each of them. We have used an excel sheet using the following column headings. Each heading corresponds to a particular variable / parameter, as below:

- Serial No
- Author
- Title of review
- Publication details
- Year of publication
- Population: Reviews of training recipients from Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka; Reviews with people groups - Rural / urban, Gender, Income categories, disadvantaged / minorities, special groups, and immigrants
- Intervention:  
Training on the following domains: Technical skills, business skills, Behavioural, life skills or soft skills training, and literacy and numeracy;  
Training providers: government – social; government – industry; private sector; NGOs / Social entrepreneurs; communities / civil society; and
- Outcomes:  
primary outcomes: gaining initial employment; within-organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self-employment (starting a new business or expanding one); working hours; and payment levels (i.e., earnings, wages, salary or income);  
intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc.); job search skills; career management skills; job performance; employee productivity; job satisfaction.

The data are extracted from the final reviews and are coded under each variable enabling easier comparison and deeper analysis. Two reviewers extracted the data onto the template independently and compare to form a single extracted database after agreement. The agreed data extracted from each review are used for analysis and writing of the evidence summary. The detailed characteristics are given in Appendix 3.2 and 3.3.

## APPENDIX 2.4: CRITICAL APPRAISAL TOOL

The AMSTAR quality assessment (Table 1) is performed where each systematic review has to be evaluated based on 11 questions. On the basis of AMSTAR score, reviews can be categorised (Sequeira-Byron, Fedorowicz, Jagannath and Sharif, 2011) into high (9-11), medium (5-8) and low (0-4). Two reviewers have calculated the score independently and corroborated to make a single table (Table 2). The reviews that have scored five and above are included in the summary.

**Table 1A: AMSTAR tool to assess the quality of systematic reviews**

Criteria	Decision
<p><b>1. Was an 'a priori' design provided?</b> The research question and inclusion criteria should be established before the conduct of the review.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't answer <input type="checkbox"/> Not applicable
<p><b>2. Was there duplicate study selection and data extraction?</b> There should be at least two independent data extractors and a consensus procedure for disagreements should be in place.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't answer <input type="checkbox"/> Not applicable
<p><b>3. Was a comprehensive literature search performed?</b> At least two electronic sources should be searched. Key words and/or terms must be stated and where feasible the search strategy should be provided.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't answer <input type="checkbox"/> Not applicable
<p><b>4. Was the status of publication (i.e. grey literature) used as an inclusion criterion?</b> The authors should state that they searched for reports regardless of their publication type. Grey literature should have been included.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't answer <input type="checkbox"/> Not applicable
<p><b>5. Was a list of studies (included and excluded) provided?</b> A list of included studies should have been provided.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't answer <input type="checkbox"/> Not applicable
<p><b>6. Were the characteristics of the included studies provided?</b> In an aggregated form such as a table, data from the original studies should be provided on the parameters relevant for the review. In the absence of table, descriptive analysis of the final studies included in the review should have been presented.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't answer

	<input type="checkbox"/> Not applicable
<p><b>7. Was the scientific quality of the included studies assessed and documented?</b></p> <p>The review should have discussed the quality of studies in terms of methodology (sampling technique, sample size, description of questionnaire, clarity of experimental and control groups etc). The other parameters used in systematic reviews like risk of bias could have been used as well.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't answer <input type="checkbox"/> Not applicable
<p><b>8. Was the scientific quality of the included studies used appropriately in formulating conclusions?</b></p> <p>The results of the methodological rigor and scientific quality should be considered in the analysis and the conclusions of the review, and explicitly stated in formulating recommendations.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't answer <input type="checkbox"/> Not applicable
<p><b>9. Were the methods used to combine the findings of studies appropriate?</b></p> <p>Appropriate methods of meta analysis (for example, pooled effect size and Chi-squared test for homogeneity, I<sup>2</sup>etc. )should have been used.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't answer <input type="checkbox"/> Not applicable
<p><b>10. Was the likelihood of publication bias assessed?</b></p> <p>An assessment of publication bias should include a combination of graphical aids (e.g., funnel plot, other available tests) and/or statistical tests (e.g., Egger regression test, Hedges-Olken).</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't answer <input type="checkbox"/> Not applicable
<p><b>11. Was the conflict of interest included?</b></p> <p>Potential sources of support should be clearly acknowledged in both the systematic review and the included studies.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't answer <input type="checkbox"/> Not applicable

Source: Sequeira-Byron, Fedorowicz, Jagannath and Sharif (2011)

**Table 2A: Quality assessment of the final systematic reviews**

Criteria	Papers											
	1	2	3	4	5	6	7	8	9	10	11	12
1. Was an 'a priori' design provided?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
2. Was there duplicate study selection and data extraction?	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
3. Was a comprehensive literature search performed?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
4. Was the status of publication (i.e. grey literature) used as an inclusion criterion?	Y	N	N	Y	Y	Y	Y	Y	N	Y	Y	N
5. Was a list of studies (included and excluded) provided?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
6. Were the characteristics of the included studies provided?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
7. Was the scientific quality of the included studies assessed and documented?	Y	N	N	Y	Y	Y	N	N	N	Y	Y	N
8. Was the scientific quality of the included studies used appropriately in formulating conclusions?	Y	N	N	Y	Y	Y	N	N	N	Y	Y	N
9. Were the methods used to combine the findings of studies appropriate?	Y	N	N	Y	N	Y	Y	Y	N	N	Y	N
10. Was the likelihood of publication bias assessed?	N	N	N	Y	N	Y	N	Y	N	N	Y	N
11. Was the conflict of interest included?	N	N	N	N	Y	Y	N	N	Y	N	Y	N
<b>Score</b>	<b>8</b>	<b>5</b>	<b>5</b>	<b>10</b>	<b>9</b>	<b>11</b>	<b>7</b>	<b>8</b>	<b>6</b>	<b>8</b>	<b>11</b>	<b>1</b>

Notes: Y – Yes; N – No.

- 1 – Cho et al., (2014)
- 2 – Medeiros et al., (2011)
- 3 – Nabi et al., (2016)
- 4 – Nguyen et al., (2013)
- 5 – Scott et al., (2016)
- 6 – Tripney et al., (2015)
- 7 – Grimm et al., (2015)
- 8 – Kluge et al., (2016)
- 9 – Trenaman et al., (2014)
- 10 – Oketch et al., (2014)
- 11 – Tripney et al., (2013)



## APPENDIX 3.2:CHARACTERISTICS OF INCLUDED REVIEWS

The screening resulted in eleven systematic reviews. The summary is as follows:

The first systematic review (Cho & Honorati, 2014) had six broad outcome categories including labour market activities, labour market income, business knowledge and practice, business performance, financial behaviour and attitudes. These categories covered primary as well as intermediate outcomes. The labour market activities included setting up business and its expansion, self employment, hours of work and business closing. The labour market income covered household income and assets, profits and salary earnings. The business knowledge and practice component comprised of innovation, access to network and accounting practices. The business performance outcome discussed the business expenses, sales and employee count information. The financial behaviour highlighted the loan and insurance outcomes. Lastly, the attitudes covered outcome targeting confidence and optimism along with the risk taking and time preferences benefits. The aspects surrounding decision making and incentives in wages was also a part of the outcome covered in this systematic review.

The primary focus of the second systematic review (Medeiros et al., 2011) is on methodological strategies adopted by food safety training programmes for food service workers. The outcomes are primarily centered on motivating health workers to introspect and perform better at workplace. The primary outcome is maintaining the employment with ongoing training programmes primarily for work place and food hygiene.

The third systematic review (Nabi et al., 2017) focuses on the following outcomes more specifically, the most common impact indicators are related to lower level indicators of subjective/personal change: attitude, skills and knowledge, perceived feasibility and entrepreneurial intention. Further, in contrast with the low level indicators the study also highlights the outcomes in the form of higher level indicators of longer term, objective, or socio-economic impact are much less frequent including start-ups and venture performance, both typically within 10 years of undertaking the entrepreneurship programme.

The fourth systematic review (Nguyen et al., 2013) highlights the impact of integrated management of childhood illness (IMCI) training in improving skills of the health workers. The review highlights significant improvement when it comes to knowledge of the health workers but also states that the same is rarely affected in the performance of the workers at their workplaces. Further, it stated that the performance does not solely depend on the training intervention provided but also depends on various other factors including frequency and quality of supervision, health worker motivation, presence of additional funding and partnerships to sustain programmes. The impact on employment is not direct but enhanced knowledge may have slight impact on sustaining current job .

The next included systematic review (Scott et al., 2016) uses non-technical skills training as the primary intervention which covers the following categories decision making,

communication, teamwork, leadership and stress management. The overall impact is primarily centered surrounding the performance of the healthworkers. The positive impact states that post the training they can provide a more safe, effective and patient centric clinical care.

The next systematic review (Tripney et al., 2015) has several intermediate as well as primary outcomes. The intermediate outcomes are surrounding employment, education, attitudes/empowerment, health and quality of life. The other outcomes also included attitudes and behaviours. The primary outcomes in the other hand focused mainly on employment and income. When it comes to employment, the outcomes focused on initial employment, return to work, formal employment, working hours, job retention, promotion, job role/function changes. In the income category the outcomes included monthly earnings, weekly wages, hourly rate of pay and self-employment profits.

The systematic review by Grimm et al. (2015) focused on impact of interventions relevant to MSMEs on either changes in employment levels in these enterprises or the creation of new enterprises, including becoming self-employed. There are also studies that assess the impact on both outcomes which were then also both used. Most of these impacts (about 60%) relate to employment. The remaining impacts measure business creation and self-employment. The study also provided information regarding the impact on investment, hours worked, productivity, output, sales, revenues and profits. These are the intermediate outcomes of the review.

The next included systematic review (Kluve et al., 2016) analyse the impact of youth employment programmes for improving labour market outcomes. The primary outcome focuses on better employment services and inclination towards employment. The intermediate outcomes target motivation, career aspirations and improved decision making.

The systematic review by Trenman et al. (2014) focuses on rehabilitation training interventions for the disabled. The overall outcomes primarily focus on paid employment, self employment, employment in integrated competitive employment settings, competitive employment in the community earning at least minimum wage; earnings as a result of employment, workplace support, rate of return to work and change in employment status.

The next (Oketch et al., 2014) included studies that target the impact of tertiary education on the development. The development can be again be grouped into impact on earnings, economic growth, health and nutrition, women empowerment and public services. The impact of specific studies using the countries under focus is on increasing earnings which is positive and in rural areas having insignificant impact.

The last review (Tripney et al., 2013) is on the following interventions: technical education, vocational education, vocational training, on the job training and apprenticeship training. The intermediate outcomes are also divided into employment and employability. The employment outcomes target job searches, applications and interviews. On the other, the employability

outcomes focus on skills (e.g., vocational/technical), qualifications, attitudes to work, career aspirations, work related confidence, work-related self-esteem, motivation (e.g., to find work, to secure promotion at work), job search skills, career management skills, job performance, employee productivity and job satisfaction. The long term outcomes/primary impacts focused in the systematic review include gaining initial employment, re-entering employment, obtaining 'better' employment (e.g., through promotion or gaining employment in the formal sector), self-employment (starting a new business or expanding one), working hours and payments (i.e., earnings, wages, salary or income).

The table below summarises the reviews.

**Table 3A: Summary of the included final systematic reviews**

Review	Year	Focused Countries	Research subjects	Training	Training providers	Employment related outcome	Other outcomes
<b>1 – Cho et al., (2014)</b>	2014	Total 37 studies, South Asia - 10 (India 5, Sri Lanka 3, Bangladesh 1, Pakistan 1)	Women SMEs (India), microenterprise owners (Sri Lanka), micro finance clients (Pakistan and Bangladesh)	Financial and business skills training, counselling	Not mentioned in SR	Self employment (business setup and taking loans), Women empowerment	Knowledge
<b>2 – Medeiros et al., (2011)</b>	2011	Total 13 (India - 2)	Hospital and Service unit food handlers	Practical hand washing techniques; Food and workplace hygiene.	Public funded institution	Maintaining employment	Knowledge, attitudes, behaviour and practices at the workplace
<b>3 – Nabi et al., (2016)</b>	2017	Total - 73 (No details on South Asia)	Undergraduate, postgraduate or alumni or unspecified university students. The majority studied entrepreneurship and business or business combination courses	Entrepreneurship education	Not mentioned in SR	Gaining initial employment post higher education	Attitude, Skills and knowledge, Entrepreneurial intention, Business start up, performance.
<b>4 – Nguyen et al., (2013)</b>	2013	Total 26 studies (Bangladesh-1, Pakistan-1)	Health workers	Management, Feeding counselling	Not mentioned	Not related to employment for these studies	Not reported
<b>5 – Scott et al., (2016)</b>	2016	Total - 21, Asia-7 (Afghanistan-1, Sri Lanka-1,	Residents (India and Pakistan), Nurses and nursing & medical students (Nepal),	Stress Management (India and Pakistan), Leadership, Communication Skills and Teamwork (Nepal),	Not mentioned in SR	Better performance at work place (Clinics, hospitals)	Safe, effective and patient centred clinical care

		India-1, Pakistan-1, Nepal-3)	medical students (Sri Lanka), Doctors (Afghanistan)	Communications skills (Sri Lanka), Decision Making (Afghanistan)			
<b>6 – Tripney et al., (2015)</b>	2015	Total - 14 (India-4, Bangladesh-3)	Physical impairments (spinal cord and mobility), multiple impairments, visual impairments	Therapeutic interventions, assistive devices, community based rehabilitation and occupational rehabilitation services	Not mentioned in the systematic review	Self employment, better income, Paid employment for people with disabilities	Not reported
<b>7 – Grimm et al., (2015)</b>	2015	Total - 53 (India-4, Sri-Lanka-5, Pakistan-1)	Mostly women, micro enterprises	Training on removing credit constraints of micro-, small and medium-sized firms including entrepreneurship training.	Not mentioned in the study	Employment Growth; New enterprise formation	Formalization of processes in firms, Wage incentives
<b>8 – Kluge et al., (2016)</b>	2016	Total - 113 (India-3)	No disaggregated details	Skills training and employment services	Livelihoods Training for Adolescent Living, Satya/Pratham programme and BPO recruiting services.	Inclination towards employment, better employment services.	Motivation, career aspirations, decision making
<b>9 – Trenaman et al., (2014)</b>	2014	Total - 14 (India-1)	People with disabilities, 40 males with SCI, 6 females with SCI. No other demographics given.	Vocational rehabilitation, functional independence.	Not reported	Rejoining the employment after rehabilitation	Change in status of employment
<b>10 – Oketch et al., (2014)</b>	2014	Total 66 (India-15, Pakistan-12, Sri Lanka-3,	No details	Tertiary education including technical and vocational training	Not reported	Increased individual earnings but lacks impact in rural areas.	

		Nepal-2, Bangladesh-2)					
<b>11 – Tripney et al., (2013)</b>	2013	Total - 26 (India-1, Bhutan -1 )	1. adolescent (14-19 year old) female slum residents in the Indian city of Allahabad 2. Rural residents (all ages) living in poverty	TVET Trainings: reproductive health training sessions, vocational counselling & vocational training, savings formation information, and follow-up support from a peer educator; tailoring, mehndi, creative painting, dhari, mending and embroidery, candle making, silver ornament and link making, pot decoration, crochet, jute doll making, basic cooking, personal grooming, and fabric painting; carpentry, masonry, plumbing, and house wiring.	NGOs	Inclination towards employment	Motivation, career aspirations, skill diversification

The subsequent table provides a PIO (Population, Intervention and Outcome) analysis of the selected 11 studies. We have tried to focus on the impact from the studies of the countries under focus for this evidence summary. However, in some cases it was not feasible to disaggregate the outcomes based on specific studies.

### APPENDIX 3.3: DATA EXTRACTION OF FINAL REVIEWS

The table in this appendix primary focuses on the outcomes from studies specific to the focus group of this evidence summary.

Serial No	001
Author (s)	Yoonyoung Cho, Maddalena Honorati
Title of review	Entrepreneurship programmes in developing countries: A meta regression analysis
Publication details	Cho, Y., & Honorati, M. (2014). Entrepreneurship programmes in developing countries: A meta regression analysis. <i>Labour Economics</i> , 28, 110-130.
Year of publication	2014
<b>Population</b>	
Reviews of training recipients from Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka	The systematic review comprises of total of 37 articles , reviews from South Asia are 10 (India - 5, Sri Lanka - 3, Bangladesh - 1, Pakistan - 1)
Reviews with people groups - Rural / urban, Gender, Income categories, disadvantaged / minorities, special groups, and immigrants	Low income and Low middle income countries, SMEs (India, Women), microenterprise owners (Sri Lanka), micro finance clients (Pakistan and Bangladesh)
<b>Intervention</b>	
Training on the following domains: Technical skills, business skills, Behavioural, life skills or soft skills training, and literacy and numeracy;	Training on financial and business skills training; Counselling
Training providers: government – social; government – industry; private sector; NGOs / Social entrepreneurs; communities / civil society	The training providers are different for different studies considered in the SR. The same is also not clearly stated in the SR.
<b>Outcomes</b>	

<p>primary outcomes: gaining initial employment; within organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self-employment (starting a new business or expanding one); working hours; and payment levels</p>	<p>Primary outcome from the specific country focused studies: Self employment (business setup and taking loans), Women empowerment.</p>
<p>intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc</p>	<p>Enhanced Knowledge, Business knowledge and practice, Business Performance, Financial Behaviour, Attitudes</p>

**Table 4A: Extracted data from the final systematic reviews**

Serial No	002
Author (s)	Caroline Opolski Medeiros, SuziBarlettoCavalli, ElisabeteSalay, Rossana Pacheco C. Proença
Title of review	Assessment of the methodological strategies adopted by food safety training programmes for food service workers: A systematic review
Publication details	Medeiros, C. O., Cavalli, S. B., Salay, E., &Proença, R. P. C. (2011). Assessment of the methodological strategies adopted by food safety training programmes for food service workers: A systematic review. <i>Food Control</i> , 22(8), 1136-1144.
Year of publication	2011
<b>Population</b>	
Reviews of training recipients from Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka	Total Reviews 13 considered in the systematic review; Reviews relevant to countries specific to our study, India - 2 studies.
Reviews with people groups - Rural / urban, Gender, Income categories, disadvantaged / minorities, special groups, and immigrants	1. The first study focuses on hospital food handlers; 2. The second study focuses on food handlers at service units;
<b>Intervention</b>	
Training on the following domains: Technical skills, business skills, Behavioural, life skills or soft skills training, and literacy and numeracy;	1. The first study focuses on training programme based on the "IOWA model", Audiovisual resources and practical hand washing techniques; 2. The second study is surrounding food and workplace hygiene.
Training providers: government – social; government – industry; private sector; NGOs / Social entrepreneurs; communities / civil society	The second study in the systematic review uses a training program that was based on WHO, and on India's National Institute of Nutrition (NIN) and Health Education Centre.
<b>Outcomes</b>	
primary outcomes: gaining initial employment; within organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self- employment (starting a new business or expanding one); working hours; and payment levels	Maintaining current employment

intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc

Knowledge, Attitudes, behaviour and practices at the workplace

Serial No	003
Author (s)	GhulamNabi, Francisco Liña' N, Alain Fayolle, Norris Krueger, Andreas Walmsley
Title of review	The Impact of Entrepreneurship Education in Higher Education: A Systematic Review and Research Agenda
Publication details	Nabi, G., Liñán, F., Fayolle, A., Krueger, N., &Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. <i>Academy of Management Learning &amp; Education</i> , 16(2), 277-299.
Year of publication	2017
<b>Population</b>	
Reviews of training recipients from Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka	Countries not segregated, Total - 73 studies
Reviews with people groups - Rural / urban, Gender, Income categories, disadvantaged / minorities, special groups, and immigrants	Undergraduate, postgraduate, alumni or unspecified university students. The majority studied entrepreneurship and business or business combination courses.
<b>Intervention</b>	
Training on the following domains: Technical skills, business skills, Behavioural, life skills or soft skills training, and literacy and numeracy;	Entrepreneurship education
Training providers: government – social; government – industry; private sector; NGOs / Social entrepreneurs; communities / civil society	Not mentioned in SR
<b>Outcomes</b>	
Primary outcomes: gaining initial employment; within-organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self- employment (starting a new business or expanding one); working hours; and payment levels	Gaining initial employment post higher education
Intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc	Attitude, Skills and knowledge, Entrepreneurial intention, Business startup, Performance.

Serial No	004
Author (s)	DuyenThi Kim Nguyen, Karen K. Leung, Lynn McIntyre, William A. Ghali, RegSauve
Title of review	Does Integrated Management of Childhood Illness (IMCI) Training Improve the Skills of Health Workers? A Systematic Review and Meta-Analysis
Publication details	Nguyen, D. T. K., Leung, K. K., McIntyre, L., Ghali, W. A., &Sauve, R. (2013). Does integrated management of childhood illness (IMCI) training improve the skills of health workers? A systematic review and meta-analysis. PloS one, 8(6), e66030.
Year of publication	2013
<b>Population</b>	
Reviews of training recipients from Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka	Total 46 articles in systematic review out of which 26 were used for meta analysis, Two articles focused on south asian countries under our consideration (Bangladesh-1, Pakistan-1)
Reviews with people groups - Rural / urban, Gender, Income categories, disadvantaged / minorities, special groups, and immigrants	Health workers
<b>Intervention</b>	
Training on the following domains: Technical skills, business skills, Behavioural, life skills or soft skills training, and literacy and numeracy;	Management, Feeding counselling
Training providers: government – social; government – industry; private sector; NGOs / Social entrepreneurs; communities / civil society	Not mentioned in the SR
<b>Outcomes</b>	
primary outcomes: gaining initial employment; within-organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self- employment (starting a new business or expanding one); working hours; and payment levels	Sustaining current employment

intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc

Improved performance of health workers

Serial No	005
Author (s)	John Scott, DianaliRevera Morales, Andrew McRitchie, Robert Riviello, Douglas Smink& Steven Yule
Title of review	Non-technical skills and health care provision in low- and middle-income countries: a systematic review
Publication details	Scott, J., Revera Morales, D., McRitchie, A., Riviello, R., Smink, D., & Yule, S. (2016). Non-technical skills and health care provision in low-and middle-income countries: a systematic review. <i>Medical education</i> , 50(4), 441-455.
Year of publication	2016
<b>Population</b>	
Reviews of training recipients from Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka	Total - 21 articles in the review, Asia under our consideration -7 (Afghanistan-1, Sri Lanka-1, India-1, Pakistan-1, Nepal-3)
Reviews with people groups - Rural / urban, Gender, Income categories, disadvantaged / minorities, special groups, and immigrants	Residents (India and Pakistan), Nurses and nursing & medical students (Nepal), medical students (Sri Lanka), Doctors (Afghanistan)
<b>Intervention</b>	
Training on the following domains: Technical skills, business skills, Behavioural, life skills or soft skills training, and literacy and numeracy;	Stress Management (India and Pakistan), Leadership, Communication Skills and Teamwork (Nepal), Communications skills (Sri Lanka), Decision Making (Afghanistan)
Training providers: government – social; government – industry; private sector; NGOs / Social entrepreneurs; communities / civil society	Not mentioned in SR
<b>Outcomes</b>	
Primary outcomes: gaining initial employment; within organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self- employment (starting a new business or expanding one); working hours; and payment levels	Better performance at work place (Clinics, hospitals)

intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc

Safe, effective and patient centered clinical care

Serial No	006
Author (s)	Janice Tripney, Alan Roulstone, Carol Vigurs, Nina Hogrebe, Elena Schmidt, Ruth Stewart
Title of review	Interventions to Improve the Labour Market Situation of Adults with Physical and/or Sensory Disabilities in Low- and Middle-Income Countries: A Systematic Review
Publication details	Tripney, J., Roulstone, A., Hogrebe, N., Vigurs, C., Schmidt, E., & Stewart, R. (2015). Interventions to Improve the Labour Market Situation of Adults with Physical and/or Sensory Disabilities in Low-and Middle-Income Countries: A Systematic Review. <i>Campbell Systematic Reviews</i> , 11(20).
Year of publication	2015
<b>Population</b>	
Reviews of training recipients from Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka	Total Studies - 14 articles in the SR, Our focus on 7 articles (India-4, Bangladesh- 3)
Reviews with people groups - Rural / urban, Gender, Income categories, disadvantaged / minorities, special groups, and immigrants	Physical impairments(spinal cord and mobility), multiple impairments, visual impairments
<b>Intervention</b>	
Training on the following domains: Technical skills, business skills, Behavioural, life skills or soft skills training, and literacy and numeracy;	Therapeutic interventions, assistive devices, community based rehabilitation and occupational rehabilitation services
Training providers: government – social; government – industry; private sector; NGOs / Social entrepreneurs; communities / civil society	Not mentioned in the systematic review
<b>Outcomes</b>	
Primary outcomes: gaining initial employment; within-organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self- employment (starting a new business or expanding one); working hours; and payment levels	Self employment, better income, Paid employment for people with disabilities

intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc

Serial No	007
Author (s)	Michael Grimma, Anna Luisa Paffhausen
Title of review	Do interventions targeted at micro-entrepreneurs and small and medium-sized firms create jobs? A systematic review of the evidence for low and middle income countries
Publication details	Grimm, M., &Paffhausen, A. L. (2015). Do interventions targeted at micro-entrepreneurs and small and medium-sized firms create jobs? A systematic review of the evidence for low and middle income countries. <i>Labour Economics</i> , 32, 67-85.
Year of publication	2015
<b>Population</b>	
Reviews of training recipients from Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka	Total - 53 studies, Studies of our focus-10 (India-4, Sri-Lanka-5, Pakistan-1)
Reviews with people groups - Rural / urban, Gender, Income categories, disadvantaged / minorities, special groups, and immigrants	Mostly women, micro enterprises
<b>Intervention</b>	
Training on the following domains: Technical skills, business skills, Behavioural, life skills or soft skills training, and literacy and numeracy;	Training on removing credit constraints of micro-, small and medium-sized firms including entrepreneurship training.
Training providers: government – social; government – industry; private sector; NGOs / Social entrepreneurs; communities / civil society	Not mentioned in the study
<b>Outcomes</b>	
Primary outcomes: gaining initial employment; within organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self- employment (starting a new business or expanding one); working hours; and payment levels	Impact of interventions relevant to MSMEs on changes in employment levels in these enterprises or the creation of new enterprises, including becoming self-employed. Employment Growth

intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc

Formalisation of processes in firms, Wage incentives

Serial No	008
Author (s)	JochenKluve, Susana Puerto, David Robalino, Jose Manuel Romero, FriederikeRother, Jonathan Stöterau, Felix Weidenkaff, Marc Witte
Title of review	Do Youth Employment Programs Improve Labour Market Outcomes? A Systematic Review
Publication details	Kluve, J., Puerto, S., Robalino, D. A., Romero, J. M., Rother, F., Stöterau, J., ...& Witte, M. (2016). Do Youth Employment Programs Improve Labour Market Outcomes? A Systematic Review.
Year of publication	2016
<b>Population</b>	
Reviews of training recipients from Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka	Total- 113 studies, Studies of our focus (India-3)
Reviews with people groups - Rural / urban, gender, income categories, disadvantaged / minorities, special groups, and immigrants	Not clearly available for the studies under our consideration. Gives a summary of all 113 studies.
<b>Intervention</b>	
Training on the following domains: Technical skills, business skills, behavioural, life skills or soft skills training, and literacy and numeracy;	Skills training and employment services
Training providers: government – social; government – industry; private sector; NGOs / Social entrepreneurs; communities / civil society	Livelihoods Training for Adolescent Living, Satya/Pratham programme and BPO recruiting services.
<b>Outcomes</b>	
Primary outcomes: gaining initial employment; within-organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self-employment (starting a new business or expanding one); working hours; and payment levels	Inclination towards employment, better employment services.
intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc	Motivation, career aspirations, decision making

Serial No	009
Author (s)	LM Trenaman, WC Miller, R Escorpizo and the SCIRE Research Team
Title of review	Interventions for improving employment outcomes among individuals with spinal cord injury: A systematic review
Publication details	Trenaman, L. M., Miller, W. C., & Escorpizo, R. (2014). Interventions for improving employment outcomes among individuals with spinal cord injury: a systematic review. <i>Spinal cord</i> , 52(11), 788-794.
Year of publication	2014
<b>Population</b>	
Reviews of training recipients from Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka	Total 14 , 1 Study from India considered in our evidence summary
Reviews with people groups - Rural / urban, gender, income categories, disadvantaged / minorities, special groups, and immigrants	40 males with SCI, 6 females with SCI. No other demographics given.
<b>Intervention</b>	
Training on the following domains: Technical skills, business skills, Behavioural, life skills or soft skills training, and literacy and numeracy;	Vocational rehabilitation, functional independence Participation in the work rehabilitation program with the Center for Rehabilitation of the Paralyzed. Program includes physical conditional, vocational training and work placements.
Training providers: government – social; government – industry; private sector; NGOs / Social entrepreneurs; communities / civil society	Not mentioned in the study
<b>Outcomes</b>	
Primary outcomes: gaining initial employment; within-organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self- employment (starting a new business or expanding one); working hours; and payment levels	Obtaining new employment; 23 individuals returned to work: 18 subjects were employed in a job similar to their pre-injury job; 5 were employed in a different occupation than what they were doing pre-injury. Of the 23 individuals that returned to work, 4 used a wheelchair, and 5 used crutches.

intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc

Confidence, self-esteem, change in status of employment

Serial No	010
Author (s)	Moses Oketch, Tristan McCowan, Rebecca Schendel With MukdarutBangpan, Mayumi Terano, Alison Marston and ShenilaRawal
Title of review	The Impact of Tertiary Education on Development
Publication details	Oketch, M., McCowan, T., &Schendel, R. (2014). The impact of tertiary education on development: A rigorous literature review. <i>London: Department for International Development.</i>
Year of publication	2014
<b>Population</b>	
Reviews of training recipients from Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka	Total 66 studies (Multiple studies from target countries), India-15, Pakistan-12, Sri Lanka-3, Nepal-2, Bangladesh-2.
Reviews with people groups - Rural / urban, Gender, Income categories, disadvantaged / minorities, special groups, and immigrants	
<b>Intervention</b>	
Training on the following domains: Technical skills, business skills, Behavioural, life skills or soft skills training, and literacy and numeracy;	Tertiary education including technical and vocational training
Training providers: government – social; government – industry; private sector; NGOs / Social entrepreneurs; communities / civil society	Not clearly mentioned for the select countries
<b>Outcomes</b>	
Primary outcomes: gaining initial employment; within organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self-employment (starting a new business or expanding one); working hours; and payment levels	Increased individual earnings but lacks impact in rural areas.
intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc	

Serial No	011
Author (s)	Janice Tripney, Jorge Hombrados, Mark Newman, Kimberly Hovish, Chris Brown, KatarzynaSteinka-Fry, Eric Wilkey
Title of review	Technical and Vocational Education and Training (TVET) Interventions to Improve the Employability and Employment of Young People in Low- and Middle-Income Countries: A Systematic Review
Publication details	Tripney, J., Hombrados, J. G., Newman, M., Hovish, K., Brown, C., Steinka-Fry, K. T., & Wilkey, E. (2013). Post-basic technical and vocational education and training (TVET) interventions to improve employability and employment of TVET graduates in low-and middle-income countries: a systematic review. <i>Campbell Systematic Reviews</i> , 9(9).
Year of publication	2013
<b>Population</b>	
Reviews of training recipients from Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka	Total-26, Asia-3 (India-1, Bhutan -1 )
Reviews with people groups - Rural / urban, Gender, Income categories, disadvantaged / minorities, special groups, and immigrants	1. adolescent (14-19 year old) female slum residents in the Indian city of Allahabad 2. Rural residents (all ages) living in poverty
<b>Intervention</b>	

<p>Training on the following domains: Technical skills, business skills, Behavioural, life skills or soft skills training, and literacy and numeracy;</p>	<p>1. Type of TVET programme: multi-component programme offering participants reproductive health training sessions, vocational counselling &amp; vocational training, savings formation information, and follow-up support from a peer educator. The vocational training courses offered was based on the number of girls interested (i.e., the programme followed a supply-driven approach). Courses arranged by the project included tailoring, mehndi, creative painting, dhari, mending and embroidery, candle making, silver ornament and link making, pot decoration, crochet, jute doll making, basic cooking, personal grooming, and fabric painting.</p> <p>2. Type of TVET programme: sequential classroom-based (theoretical) instruction/training plus off-the-job practical demonstration (i.e., at the training institution). The programme provided training in four basic construction skills types: carpentry, masonry, plumbing, and house wiring. In addition, training in hair-dressing was also offered. Implicit that programme was demand-driven. Vocational skills followed by on the job training.</p>
<p>Training providers: government – social; government – industry; private sector; NGOs / Social entrepreneurs; communities / civil society</p>	<p>1. Funded by: Population Council Developed and implemented by: CARE India, one of the largest NGOs working in the country</p> <p>2. Training Funders- Royal Government of Bhutan, Asian Development Bank</p>
<p><b>Outcomes</b></p>	
<p>Primary outcomes: gaining initial employment; within-organisation mobility (moving between roles within the same organisation); maintaining employment (including making transitions between jobs and roles within the same organisation to meet new job requirements); obtaining new employment (employment transitions between organisations); promotion; self-employment (starting a new business or expanding one); working hours; and payment levels</p>	<p>Inclination towards employment, Rural Welfare</p>
<p>intermediary outcomes: job searches, job applications, job interviews; attitudes to work; career aspirations, confidence; self-esteem; motivation (to find employment, secure promotion, etc</p>	<p>Motivation, career aspirations, Skill diversification</p>

APPENDIX 4: MAPPING POLICY IMPLICATIONS WITH THE FINAL SYSTEMATIC REVIEWS

SNO	Policy Implications	Systematic Review	Country	Outcome	Primary Study (India)	Nepal
1	The programmes promoting opportunities for self employment and small scale entrepreneurial ventures lead to increases in labor market outcomes along with welfare gains.	Cho et al., 2014	Women SMEs (India), microenterprise owners (Sri Lanka), micro finance clients (Pakistan and Bangladesh)	Business setup and taking loans for expansion	Banerjee et al., 2009, Field et al., 2010	N/A
		Tripney et al., 2015	Total - 53 (India-4, Sri-Lanka-5, Pakistan-1)	Employment Growth; New enterprise formation	N/A	N/A
		Grimm et al., 2015	(India-4, Sri-Lanka-5, Pakistan-1)	New enterprise formation, Formalisation of processes in enterprises, Employment Growth	Field et al. (2011), Banerjee et al., 2013	N/A
		Nabi et al., 2016	Total - 73 (No details on South Asia)	Gaining initial employment post higher education. Improved Attitude, Skills and knowledge, Entrepreneurial intention, Business start up and performance	N/A	N/A
2	Provision of appropriate combinations of skills, capital, and counselling support based on the target audience's primary constraints is critical for achieving better results.	Tripney et al., 2013	Total - 26 (India-1, Bhutan - 1 )	Inclination towards employment, Motivation, career aspirations, skill diversification	Mensch et al. (2004)	N/A
		Nguyen et al., 2013	Total 26 studies (Bangladesh-1, Pakistan-1)	Improved Knowledge, Employment and Performance at workplace	N/A	N/A

		Scott et al., 2016	Total - 21, Asia-7 (Afghanistan-1, Sri Lanka-1, India-1, Pakistan-1, Nepal- 3)	Better performance at work place (Clinics, hospitals)	Rajan and Bellare, 2011	Shankar et al., 2006; Regmi and Regmi, 2010; Shrestha et al., 2010
3	The impacts on both labour market and business outcomes are significantly higher for youth making it relevant in developing countries aspiring to provide meaningful opportunities to their young populations.	Kluge et al., 2016	Total - 113 (India-3)	Inclination towards employment, improved labour market outcome. Motivation, career aspirations, decision making	Jensen, 2012	<b>N/A</b>
4	The performance of MSMEs can be improved and their size in terms of capital and staff be expanded through formalisation. The formalisation yields positive employment effects. The training interventions focusing on these elements show positive linkages.	Cho et al., 2014	Women SMEs (India), microenterprise owners (Sri Lanka), micro finance clients (Pakistan and Bangladesh)	Business setup and taking loans for expansion	Banerjee and Duflo, 2008, Field et al., 2010	N/A
		Grimm et al., 2015	(India-4, Sri-Lanka-5, Pakistan-1)	Formalisation of processes in firms, Wage incentives	Banerjee et al., 2011	N/A

5	The review is inconclusive about the relative return on investment in primary, secondary and higher education. However, literature suggests that many upper-middle-income countries have benefited from investment in the full range of educational provisions. Also, forms of pedagogy and curriculum structure in tertiary education are most effective in enhancing productivity in the workplace or civic participation.	Oketch et al., 2014	Total 66 (India-15, Pakistan-12, Sri Lanka-3, Nepal-2, Bangladesh-2)	Increased individual earnings	Azam (2010), Azam (2012), Dutta (2006), Frisancho Robles and Krishna (2012)	Dahal, 2010; Truex, 2011
6	Young people in low and middle income countries (LMICs) gain benefit from TVET interventions.	Nabi et al., 2016	Total - 73 (No details on South Asia)	Gaining initial employment post higher education. Improved Attitude, Skills and knowledge, Entrepreneurial intention, Business start up and performance	N/A	N/A
		Kluve et al., 2016	Total - 113 (India-3)	Inclination towards employment, better employment services. Motivation, career aspirations, decision making	Mensch et al., 2004, Maitra and Mani (2014)	N/A

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## ABBREVIATIONS

IIT	-	Indian Institute of Technology
MSMEs	-	Micro, Small and Medium Enterprises
NGOs	-	Non Governmental Organizations
PICO	-	Population, Interventions, Comparison, and Outcomes.
SR	-	Systematic Review
TVET	-	Technical and vocational education and training.