

Training Program Evaluation in the Field of Disability Rehabilitation – A Review of Literature

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Abstract

Training Evaluation is a very important part of any training program conducted by any organization. In spite of the efforts made by the organizations, the evaluation of the effectiveness of training programs remains an area of due concern where lot more thought process and more and more efforts are still needed. The results of this research study shows that a lot of evaluations have been done by various organizations in order to make their programmes more effective by using different types of evaluation methods. Study also shows that Kirkpatrick's model of evaluation (either full or in parts) is widely accepted method of evaluation used by organizations. The present review also shows that not many evaluations have been done for the disability rehabilitation training programmes.

KEYWORDS: Training Evaluation, Disability, Rehabilitation

An overview

Training is the acquisition of knowledge, skills and competencies as a result of the teaching of vocational or practical skills and knowledge that relate to specific useful competencies. Training has specific goals of improving one's capability, capacity, productivity and performance. Training evaluation is defined as the systematic analysis of training to determine whether it has met its business objectives in an effective and efficient way. It involves the assessment of the effectiveness of the training programs. As organizations spend a large amount of money on training, it is therefore important for them to understand the usefulness of the same. Evaluation involves assessing the strengths and weaknesses of programs, policies, personnel, products and organizations to improve their effectiveness (American Evaluation Association). The evaluation of the effectiveness of training programs is critical because without it, organizations have no good way to know whether training pounds are being spent wisely (Mann and Robertson, 1996). Training evaluation is very common activity which most of the organizations are following in a structured or unstructured way (by simply taking verbal feedbacks). In the field of Disability Rehabilitation there is an urgent need to look back on the learning of the trainees as it directly effects on the quality of life of the beneficiaries. Training evaluation is required because it enables improvements in the assessment of training needs. Evaluation data provides answer to "how can we do better next time"? it acts as a feedback on performance of trainers as well as trainees.

Objectives:

The present study is a review of literature related to evaluation of the training programmes in the field of disability rehabilitation with following objectives:

1. To understand the areas of research carried out in connection with training evaluation used by different organizations.
2. To undertake an in depth study on various types of training evaluation studies conducted in the field of disability rehabilitation.

Methodology

This study is based on secondary data. The present review takes stock of the situation as far as evaluation of training programmes is concerned through review of available literature from past 20-30 years. However the review has its own limitations in terms of accessibility to available literature. Research articles from various peer reviewed scholarly journals have been reviewed apart from referring some books on the subject matter. The following were the findings of various studies reviewed:

Review of Literature

McNamara J. R. et. al. (1982) conducted a study on “Multilevel Evaluation of Interpersonal Skill Training in a Federal Agency”. A quasi-experimental design using multiple levels of measurement was used to evaluate the effectiveness of a U.S. General Accounting Office communications training programme. Results from a multivariate analysis of variance indicated that employees who underwent training reported more positive attitudes about communication skills and performed better on knowledge and recognition assessments than did control groups in the study. With the exception of employees’ ability to apply knowledge of communication skills to simulated written problems, the relative amount of change on the measures was not very large. The course and its instructor were rated very favourable by the participants, though certain aspects of the course – such as the evaluation, written exercises and booklets and handouts – were more negatively valued by course participants.

Hattie, Sharpley, and Rogers (1984) concluded through their study that patients treated by para-professional therapists improve more than those treated by professionals. However, this provocative conclusion was based on inappropriate studies and statistical analyses. After omitting problematic studies and organizing the data to permit valid statistics, they found that professional and paraprofessional therapists were generally equal in effectiveness. Their analyses also suggested that professionals may be better for brief treatments and older patients, although these differences were slight. This research evidence does not indicate that paraprofessionals are more effective, but neither does it reveal any substantial superiority for the professionally trained therapist.

Carvalho CA, et. al. (1990) evaluated a 24 hours training course about Human Sexuality, STD's, AIDS, Use of Drug, Educational Strategies using group discussions, drama, A-V material and oral information offered to professionals that work with street kids. Carvalho conducted evaluation of 120 trained professionals but he could not get the desired results of how the training course was important to their work with AIDS Prevention with Street Kids, but the development of the field work identified several difficulties.

Polley R. B. & Eid J. (1990) conducted a case study and evaluation on a Leadership Training on the Bergen Fjord. The study revealed that after working together in teams for a year, 24 Norwegian naval cadets participated in a 4-day exercise. Interpersonal ratings were collected before and after. Performance data were collected in the field. The ratings predicted leader and group effectiveness and the exercise was shown to have substantial effects on team and leadership development.

Roberts A. (1990) was of the view that export training programmes should be systematically evaluated to ensure that the investment in time and money leads to the

result expected. They stated that if valuable time and resources of both training institutions and participants are being devoted to training programmes, an appraisal should be made of the effectiveness of the training. Evaluation can be carried out in a number of different ways depending on the kind of training event, the objectives of the training, type of participants and other factors. Evaluation should be considered an integral part of each training program and an ongoing activity of a training institution. No one evaluation fits all situations, but some general guidelines are applicable to most training evaluation exercises.

Grubb, W. Norton (1995) studied the effectiveness of the following types of job training programs review in United States as mainstream job training (Comprehensive Employment and Training Act and Job Training Partnership Act programs); welfare-to-work; experimental; job training for specific population groups; and specific services. Special attention was paid to the patterns of benefits over time, variability in program effectiveness, and the costs/benefits of job training. The following factors were considered as alternative explanations for the modest effects of job training: small programs yielding small effects; the mistaken strategy of job training; poor quality of job-related training; deep ignorance of good pedagogy; local political interference; low placement rates; "one shot" job training and the links to other programs; labor market factors; special problems of youth programs; and the impossibility of "second-chance" programs.

Clapham, Maria M. (1997) conducted a study for comparing the effectiveness of a complete creativity training program to that of one element of the program, ideational skills training, in increasing creative performance. Participants were 108 undergraduate students who were randomly assigned to one of 3 conditions: creativity training, ideational skills training, and a control group. Participants completed a pre-test and a post-test of divergent thinking, the figural form of the Torrance Tests of Creative Thinking as well as a manipulation check questionnaire. Tests showed that both the creativity training and the ideational skills training had significant positive effects on overall TTCT scores when compared to the control condition. Further analyses revealed that these 2 types of training had differential effects on the various TTCT sub scores.

AbuZeid, et. al. (1998) highlighted that the effectiveness of any educational training programme depends on its continuous monitoring and evaluation. He also highlighted that evaluation helps in identifying the overall performance of trainers and trainees. Immediate feedback with results analysis of the continuous monitoring and evaluation should be available to those involved so that they can take the necessary action to improve matters.

Wong M. M. L. (1998) conducted an evaluation on the employees' retraining programmes in Hong Kong. He stated that Hong Kong has experienced an economic transformation from a manufacturing-based to a service-based economy which has impacted on the demand for manual labor. In 1992, the Employee Retraining Board was set up to provide employees' retraining programs (ERP) for unemployed manual workers. It aimed to help unemployed manual workers to acquire and develop knowledge, skills and abilities so that they can re-enter the labor market. Wong focused on evaluating the effectiveness of ERP from the perspectives of training providers designated by Employee Retraining Board to fulfill the above objective.

The evaluation of the ERP is based on how the various ERP courses can meet the training objectives, assessment of training needs, design of the ERP, course evaluation, and follow-up services conducted by the selected training bodies. The overall effectiveness of ERP was found to be low. The indicators participation rate and job placement rate used by the training bodies tend to provide misleading evaluation results to the ERP.

A non-experimental study was conducted in Sweden by **Håkan Regnér (2002)** used a unique administrative database to evaluate employment training program effects on three samples of Swedish adult males. Alternative non-experimental models suggested both positive and negative relationships between training and annual earnings. The chosen model predicts no effects or significantly negative earnings effects of the training program. One explanation for this result is that some participants may have enrolled in the program not for the purpose of making a human capital investment, but for the purpose of collecting unemployment insurance benefits.

Petersen P.E. & Kwan S. (2004) in their study “Evaluation of community-based oral health promotion and oral disease prevention – WHO recommendations for improved evidence in public health practice” stated that systematic evaluation is an integral part of the organisation and delivery of community oral health care programmes, ensuring the effectiveness of these community-based interventions. In June 2003, the WHO Oral Health Programme at Headquarters organised a two-day workshop to take forward the development and documentation of the evaluation of oral health promotion and oral disease prevention programmes. The aims of the workshop were to: (1) identify common problems and challenges in evaluating community-based oral health interventions; (2) explore developments in the evaluation approaches in public health; (3) share experiences in evaluating oral health intervention programmes implemented at national or community levels in developing and developed countries and (4) develop guidelines for quality evaluation of national and community oral health programmes. Twenty-two invitees from 15 countries attended in addition to WHO staff. During the second day, WHO staff at Headquarters in Geneva discussed aspects of evaluation of public health programmes. Two working groups were formed to discuss agreed topics, and the reports from their deliberations, together with the general discussion, resulted in the presentation of emerging key issues and recommendations. In summary, it was agreed that evaluation of oral health promotion and disease prevention programmes should integrate, whenever possible, with general health programmes. While the design and advantages of RCTs in clinical evaluations are well documented, the relevance of this design in evaluation of community oral disease preventive programmes and oral health promotion programmes are much less clearly defined.

Lechner, Miquel and Wunsch (2004, 2005) reconsider the evidence on the effectiveness of training programmes for the unemployed conducted in East and West Germany in the period 1993-1994 by investigating whether, and if so, how overall policy conclusions depend on the particular choice of the outcome variable. They found that different measures of employment and earnings provide very similar results. In contrast, considering unemployment as an outcome measure shows rather different results as the positive long-run effects on employment are not mirrored by a corresponding decrease in unemployment.

Sharma M. (2004) discussed some viable and practically feasible methods for evaluation of Community Based Rehabilitation (CBR) Programmes in developing countries set up. Different approaches for evaluation of Community Based Rehabilitation (CBR) programmes were analyzed and the results showed that the classical, quantitative paradigm needs to be complemented with viable qualitative methods for evaluation of CBR programmes.

Burke M. J. et. al., (2006) determined the relative effectiveness of different methods of worker safety and health training aimed at improving safety knowledge and performance and reducing negative outcomes (accidents, illness and injuries). Ninety-five quasi-experimental studies were included in the analysis. Three types of intervention methods were distinguished on the basis of learners' participation in the training process; least engaging (lecture, pamphlets, videos), moderately engaging (programmed instruction, feedback interventions) and most engaging (training in behavioral modeling, hands on training). As training methods became more engaging, workers demonstrated greater knowledge acquisition and reductions were seen in accidents, illnesses and injuries. All methods of training produced meaningful behavioral performance improvements. They finally concluded that training involving behavioral modeling, a substantial amount of practice and dialogue is generally more effective than other methods of safety and health training. The present findings challenge the current emphasis on more passive computer-based and distance training methods within the public health workforce.

Sleezer C. M. & Spector M. (2006) conducted a mixed-methods needs assessment or developmental evaluation for the providers and stakeholders of Oklahoma's Community based Organizations (CBOs). The study revealed that implementing and reporting a mixed-methods needs assessment that is based on differing evaluation approaches is complex, challenging and resource intensive. This study will definitely contribute to theory building for mixed-methods evaluation.

Long L. K., DuBois C. Z. & Faley R. H. (2007) tried to identify the trainee's reactions while taking online evaluation. They found through literature studies that the trainee reactions remain the most commonly used measure of training effectiveness. They also tried to propose a model of trainee reactions in online training based upon the theory of reasoned action and the technology acceptance model. Analysis revealed a negative relationship between computer anxiety and pre-training motivation, a positive main effect on perceived effort for both pre-training motivation and trainee reactions, and a positive relationship between trainee's reactions and intent to take future online courses. The model was tested using students participating in online training courses provided by a large landscaping company based in the USA. Analyses provided partial support for the model.

Lerman D. C. & et. al. (2008) evaluated the outcome of a model program that was designed to train current teachers of children with autism. Nine certified special education teachers participated in an intensive 5-day summer training program were taught a relatively large number of specific skills in two areas (preference assessment and direct teaching). The teachers met the mastery criteria for all of the skills during the summer training. Follow-up observations up to 6 months after training suggested that the skills generalized to their classrooms and were maintained for most teachers with brief feedback only.

Wilson K. & Corrall S. (2008) evaluated a national leadership development programme for developing public library managers as leaders. The programme provided a strategic intervention to address a perceived weakness in leadership development within the public library sector in England. Through recent examples from the literature, the theoretical differences between the concepts of management and leadership were discussed and used to inform consideration of the programme's effectiveness. Evaluation methods included participant observation, interviews, focus groups and a questionnaire survey, each administered at various stages of the programme with a representative sample of programme participants. Verbatim quotations from evaluation respondents were included in the analysis. The research revealed that the programme has had a positive impact in enabling and developing leadership capacity within the sector, particularly in terms of developing participants' confidence and other interpersonal traits associated with effective leadership, including creativity and risk taking. Perceived benefits and limitations of the public library context in which the course was delivered have also been identified.

Beck K. V. & Miltenberger R. G. (2009) stated in their study that Child abduction is a serious problem; therefore, it is essential that researchers evaluate the efficacy of commercially available abduction-prevention programs. A multiple baseline design across participants (ages 6 to 8 years) was used to evaluate the effects of a training program, The Safe Side experimenters assessed safety responses in situ in two different situations (knock on the door and interaction by a stranger in public). Results revealed that participants did not demonstrate the safety skills following Safe Side training. All participants subsequently received in situ training (IST) implemented by the parent. Additional assessments and IST were conducted until each participant performed the skills to criterion. All participants demonstrated criterion performance following IST and maintained the skills over time.

Peebles S. A. et. al. (2009) evaluated an educational curriculum meant for mental health providers to assist in mental health care system transformation efforts. As an initial evaluation of educational curriculum effectiveness, the authors examined effects of the training program on recovery-based knowledge and recovery-consistent attitudes. They also compared Medical College of Georgia (MCG) provider knowledge and attitudes to those of a similar group of providers at a neighbouring medical institution who did not receive the intervention and training. Findings generally supported the effectiveness of the intervention in increasing providers' knowledge of recovery and a shift in recovery-supporting attitudes.

Tome E. (2009) analyzed critically the most important methods that are used in the evaluation of human resource development (HRD). The approach was to ask two questions: What are the methods available to define the impact of HRD in the economy? How can we evaluate the evaluations that have been made? There were two main perspectives to evaluate any program, by results (counting occurrences) and by impacts (calculating the differences the investment made in the society). The first type of method does not find the impact of the program, the second type does. The analysis was limited by existing studies on HRD. The results of this study put the evaluation problem in a new perspective. It explained the difference between methodologies (results and impacts) and scientific fields used (public administration, social policy, HRD, KM, IC, microeconomics, HR economics) by the type of person responsible: public administrator, private manager, HRD expert, knowledge manager,

IC expert, micro economist. The differences between the applications of those methodologies based on the type of funding – private, public, external – were also explained.

Van Oostrom, et. al. (2009), conducted a study on “the work disability prevention CIHR strategic training program: program performance after 5 years of implementation”. The Work Disability Prevention (WDP) Canadian Institutes of Health Research (CIHR) Strategic Training Program was developed in 2001 and is a unique program in the world. The main objective of this program is to help future researchers develop transdisciplinary knowledge, skills and attitudes regarding WDP. The purpose of this study was to present a descriptive portrait of the program’s performance over the past 5 years, as well as the trainees’ and alumni’s perspectives on the WDP, CIHR Training Program. Data on the program’s performance were collected from documents in the program records. The trainees’ opinions on the WDP training program were obtained through focus groups and telephone interviews. The data collected were compiled and divided into themes to summarize the qualitative findings pertaining to each question. Results From 2003 to 2007, five successive summer sessions have been offered, involving 44 high-calibre applicants from nine countries, 34 mentors and collaborators, 29 guest speakers and 15 stakeholders. Overall, trainees appreciated the networking, the opportunity to interact with people from different disciplines and countries, the openness, and the international perspective and uniqueness of the program. The least appreciated aspects concerned mainly the e-learning course, evaluations and information on optional courses. The coordination and logistics were judged appropriate and several topics were suggested to improve the program quality. The program implementation went well, with good participation from mentors, speakers and stakeholders; the program was appreciated by the trainees and alumni. This study underscores the importance of the international perspective, the transdisciplinary and the scientific networking established through the program.

Ahmed I. et. al. (2010) conducted a study on training evaluation practices and challenges that are faced by Pakistani organizations. The study sample was 24 organizations from textile composite sector of Pakistan. For the purpose of data collection questionnaire was used. The study findings show that majority of the organizations evaluate their training activities occasionally. The most widely used training evaluation tool is questionnaire. The widely accepted and used model of all organizations is Kirkpatrick model of training evaluation. The biggest challenge faced by organizations is time devotion of training evaluation and determining basis of training evaluation.

Fatima J. & Naseer Ud Din M. (2010) conducted an evaluative study of M.A. Education programs of teacher education at higher education level in Pakistan. Post-graduate teacher’s training institutes in Pakistan grant the Master of Education (MA/M.Ed.), Master of Philosophy (M.Phil.) and Doctor of Philosophy (PhD) post-graduate degrees in the field of education to enhance the careers and accelerate the professional development of educators. It was concluded that the teaching faculty of the MA education program was using a variety of teaching methods according to the nature of objectives, content and students. Evaluation systems for students of the MA education program were found satisfactory. It was recommended that required changes be introduced in admission criteria, curriculum, duration of degree program,

teaching practice, research work, rewards and incentives of existing MA Education Program in Pakistan.

Conclusion: In India with the establishment of Rehabilitation Council of India, a statutory body under Ministry of Social Justice and Empowerment, Government of India, laid the three major objectives of standardizing curriculum, recognizing institutions and registering professionals in the field of Disability Rehabilitation. The Rehabilitation Council of India took up the challenge regarding vast requirement in human resources and also standardization of programmes. RCI has changed the scenario in the last 25 years by introducing standardized training courses in the field of Disability Rehabilitation. So far, the Council has developed 54 programmes under regular mode and 19 programmes under distance mode. It has more than 350 institutes running training courses ranging from diploma, certificate, degree level to post graduation and M.Phil. level till date. Till March 2010 the figure in Central Rehabilitation Register has been raised to more than 50000. But the literature review revealed that no concrete evaluation study has been done for any of these training programmes which is not a very good thing to report. This fact shows that these training programmes are going on since long and no review has been done to make any sought of improvement in these training programmes.

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