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# An Assessment of Staff Training and Development Monitoring and Evaluation Mechanisms: A Case Study

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#### **ABSTRACT**

This paper is the result of an empirical study that was conducted to assess the effectiveness of the mechanisms used for monitoring and evaluating staff training and development programmes at the university libraries in Ghana. The study was necessitated by the need to scientifically assess the methods/mechanisms put in place for monitoring and evaluating staff training and development programmes at the university libraries in Ghana in order to make recommendations that will enable the libraries maximised the benefits of training.

The study used the mixed methods research approach, thus a combination of quantitative and qualitative approaches. The mixed methods were applied in data collection analysis and interpretation of the findings of the study. The study also adopted the survey research method.

The findings reveal that even though the majority of the institutions conducted training needs analysis/assessment for library staff, the process was not properly done. The results also indicate that multiple methods were used in identifying the training needs of the library staff of the university libraries in Ghana.

The findings further reveal that not all the institutions followed the Kirkpatrick model or any known training model of monitoring and evaluating reaction, learning, behavior, results and return on investment in training.

The study recommends that, monitoring and evaluation should be done by all the stakeholders namely, trainers, trainees, supervisors, co-workers and managers and the feedback of the evaluation should be shared with the stakeholders to help improve upon future staff training and evaluation programmes.

**Keywords:** Staff training and development, Monitoring and Evaluation, University Libraries, Ghana, Training evaluation, Return on investment in training

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#### 1. INTRODUCTION

According to Sardar (2010: 185) training is increasingly considered to be a key function in helping organisations achieve their goals through their staff, as it is becoming more generally accepted that there is a correlation between organisational success and investment in training and development. In

theory, the organisational pay-off for trained, satisfied and highly motivated employees is improved job performance and higher productivity which leads to a high level of organisational goals attainment. It is therefore very important for individuals and organisations to receive the full benefits of staff training and development programmes (STDP). The benefits of STDP are also evident at several levels for both the individual and the organisation. Effective training can make an individual staff member feel confident in his or her abilities. The feedback an individual staff member receives from competent job performance can also affect a higher level of psychological needs, for example self-esteem. Organisations that invest seriously in the area of STDP usually reap the benefits of an enriched working environment with a higher level of staff retention as well as increased productivity and performance. STDP can be a means of producing organisational change (Sardar 2010: 185).

The training of library staff and the quality of staff are important intangible assets embodied in a library's human capital development. Continuous training of library staff is a significant factor in encouraging innovation and creativity and ensuring that the library is the information starting point for its community of users (Callahan &Watson 1995:380).

The objective of STDP is to ensure that individual staff members and the organisation maximise the benefits of their investment in the training and development programmes. For individuals and organisations to receive the full benefits of training and development activities there is the need to evaluate training in terms of reaction, learning, behaviour change, results and return on investment to determine the added value to the individual staff and the organisation. Many organisations simply evaluate the effectiveness of training interventions based on the initial reaction of participants. Organisations must ensure that STDP are evaluated and staff who benefit from training transfer the newly acquired knowledge, skills, and abilities to the job (Alemna 2001:47; Asiagodo 1989:31-36).

#### 1.1. STATEMENT OF THE PROBLEM

Staff training and development is a process that begins with training needs analysis/assessment, through the identification of appropriate training programmes to the implementation of the training and the process ends with the evaluation of the effectiveness of the training and development programmes. Even though the university libraries in Ghana have been engaging in STDP, these programmes have not been properly and adequately monitored and evaluated to ascertain whether the universities are getting good returns for their investment in training and development activities.

The monitoring and evaluation of STDP is often over looked completely or done with little thought. Monitoring and evaluation should be taken equally serious because the feedback and suggestions from monitoring and evaluation can help to improve upon future training and development programmes. Godzin (1989: 87:92) argued that while no library is rich enough to squander precious money and STDP that are not useful, librarians pay very little attention to the long term results of training programmes. In most cases training is regarded as complete when the workshop was attended. The real text of the

training success is whether or not the trainee is using the knowledge or skills acquired six months after training.

This study was therefore necessitated by the need to scientifically assess the mechanisms put in place for monitoring and evaluating the STDP that have been instituted by the university libraries in Ghana.

#### 1.2. RESEARCH OBJECTIVES

The specific objectives of this study are to;

- Assess the mechanisms for ascertaining training needs of library staff at the university libraries in Ghana.
- Examine and explore the effectiveness of the mechanisms for monitoring and evaluating STDP at the university libraries in Ghana.
- Justify the financial investments in staff training and development programmes for library staff at the universities in Ghana.
- Determine the challenges that hinder monitoring and evaluation of STDP at the university libraries in Ghana.

# 1.3. RESEARCH QUESTIONS

The research questions that guided the study are;

- How effective are the mechanisms put in place for ascertaining training needs of library staff at the universities in Ghana?
- How effective are the mechanisms put in place for monitoring and evaluating STDP for library staff at the universities in Ghana?
- · Do the financial investments made in training library staff result in higher productivity?
- What are the challenges facing monitoring and evaluation of STDP at the university libraries in Ghana?

# 2. LITERATURE REVIEW

# 2.1. Staff training and development programmes in the library environment

Staff development is a process of providing employees with new knowledge, skills and abilities in line with the goals and values of the organisation and in relation to the interests and needs of the employees. Staff development is intended to strengthen the capability of an organisation to perform its mission more effectively and efficiently by encouraging and providing for growth of human resources. It makes the most of the present potential and prepares the individual staff for future responsibilities (Snyder & Sander 1978:145). Staff development in the library environment can therefore be described as a purposive effort intended to strengthen the library's capability to fulfil its mission effectively and efficiently by encouraging and providing for growth of its human resources.

STDP provide opportunities for individual employees to expand their knowledge, skills and experience in a library and information related field. It also enables staff to acquire new ideas, knowledge and

skills, which make them productive to contribute to higher job performance. Staff development activities in libraries cover a broad range of activities designed to provide staff with development opportunities. The activities include orientation for new staff, on-the-job training, mentoring, job rotation, supervision, counselling, coaching, classroom learning, simulation and games, conferences, seminars, workshops, professional meetings, reading, publishing in journals and books, internships, job rotation, sabbatical leave, professional association, exchange programmes and study visits (Osei 1996:31-36).

# 2.2. Effective staff training and development programmes

Rama and Nagurvali (2012:722) describes an effective training programme as one that addresses training needs and deliver training according to training objectives. Training effectiveness refers to the benefits which organisations and trainees receive from training. The benefits to the trainee may include acquisition of new skills or behaviour and the benefits to the organisation may include an increase in productivity and satisfaction of customers.

Training effectiveness also involves the assessment of the extent to which training and development efforts contribute to improved performance and results. Training is said to be effective when the training outcomes match with its objectives. Training programmes should therefore be designed and delivered to meet the needs of both the employees and the organisation. The employees should be able to apply what they learned on the job and this should reflect in reduced cost of production, saved time, improved services, increased customer satisfaction, improved morale, decreased grievances or complaints and improved capabilities to meet future demands and higher productivity. The way to know if there was an improvement is to have these variables that is time, service, morale, and capability before training and after training measured to determine if there was improvement (Kunche et al. 2011:1-3 & Hurque & Vyas 2008:188-204).

# 2.3. Monitoring and Evaluation of STDP

Rossi, Lipsey and Freeman (2004: 431) define monitoring of training as the systematic documentation of aspects of the training programme performance that are indicative of whether the programme is functioning as intended or according to some appropriate standard. Monitoring generally involves assessing performance related to the programme process and outcomes. Monitoring of training is done during the implementation of training and should aim at detecting deficiencies, obstacles and/or make adjustments in a timely manner to enhance the expected results. Monitoring also involves a strict follow-up of what is happening during the implementation. The monitoring indicators systematically collect and report trends with the purpose of informing those in charge. Monitoring also helps to introduce corrections to keep the training programme on course until completion (Rossi, Lipsey & Freeman 2004: 432).

Evaluation of training on the other hand can be described as a systematic process of assessing whether the training is achieving its objectives or not. It involves the collection and analysis of data to determine the effectiveness of a training programme. It is the most essential aspect of the training process (Kunche

et al. 2011: 1-3; Noe 2002; Raab et al. 1991 & Hamblin 1974). Training evaluation is, therefore, a systematic process of collecting information for and about a training activity. This information can be used for decision making and to assess whether training is meeting its objectives. Evaluation is not merely an activity at the end of the training. It should be an on-going process throughout the training. It is further suggested that after the training has been completed management should value its effectiveness because training is an investment. Certo and Certo (2009: 299-302) and Wilkinson and Lewis (2006: 356) argued that training programmes should be evaluated to ascertain the return on investment. Bernthal (2013: 1-5) and Kunche et al. (2011: 2) summarise the reasons for evaluating SDTP:

- Justify the financial investment in STDP.
- Compare the effectiveness of two or more training programmes.
- Meet the requirements set up by professional organisations or government regulations.
- Give feedback to trainees and trainers on outcome performance.
- Determine whether the actual outcomes matched with the expected outcomes.

Cheng and Ho (2001: 22) suggest that a training programme should be designed to include evaluation of its effectiveness. Employee performance is usually one of the crucial measurements emphasised by top management. Employees should therefore be concerned about their productivity and obsolescence of knowledge and skills. Effective training and development activities make them more aligned to career growth.

The reasons for monitoring training and development programmes can be summarised as to:

- Provide accountability.
- Track the implementation of the training programmes.
- Improve upon the programme.
- Establish whether the training programme is meeting its objectives.
- Document good practices and provide a model for workforce development (Rossi, Lipsey & Freeman 2004: 431).

Training evaluation has received extensive acknowledgement as being advantageous and useful, it should, therefore, be done before, during and after training. The use of observation, questionnaire and interview data collection instruments to collect data for training evaluation is recommended. Training evaluation should cover trainees, trainers, as well as the training programmes (Manju & Sureth 2011: 58-70; Fiona & Sharon 2014: 5-6; Kunche et al. 2006: 2). The reviewed literature supports the assertion that monitoring and evaluation of STDP should be an important component of staff training and development policy. The monitoring should be done to ensure that training does not only conform to standards but also meet the objectives set down before the training, while evaluation is done before, during and after the training to ascertain the effectiveness of the training and its impact on the trainee and the organisation.

Monitoring and evaluation should be a continuous process and efforts should be made to use multiple evaluation methods. Monitoring and evaluation should also cover all aspects of training including trainees, trainers and training programmes. There was very limited literature on monitoring and evaluation of STDP in the library environment.

# 2.4. Measuring return on investment in training

Return On Investment (ROI) refers to the process of ascertaining whether the training was worth doing or finding out if the organisation received something of value compared to the cost of providing the training. Monetary value can be put on return on investment in training. The value can be ascertained through increased productivity (Bartel 2000: 503). Measuring return on investment is a very important aspect of any investment. The ultimate aim of training is to improve the quality of staff to enhance their job performance. It is therefore important that the improvement that training brings is measurable so that an effective return on investment can be determined.

The reason for training staff is to enable them to learn new skills and techniques that enable them do their jobs. The effect of training can reflect in the form of staff acquiring new skills and knowledge and abilities to understand their new job roles and application of new technologies to work. It is therefore important for organisations to accurately measure the rate of return on investment in employees' training to guide human capital investment decisions. When the return on training is under estimated it will lead to a low investment in training, whereas if it is over estimated, employers will over invest in training (Bartel 2000: 503). According to Bartel (2000: 503), knowledge of the rate of return on investment in training is not only important to organisations, it is also important to the government and other policy makers who may be interested in allocating government resources to subsidise private investments. The benefits of training, therefore, accrue to the individual staff, organisation, government and the society.

Calculating the employee return on investment is however very complicated and difficult, because of a number of reasons:

- The employees may be sharing the cost and return of training with the organisation.
- A sound return on investment analysis requires data collection on numerous variables, and
  measurement is usually done on many employees at multiple points. Many organisations are not
  equipped to undertake such an effort for the purpose of evaluating training programmes.
- Benefits are very difficult to determine in financial terms (Matalonga & SanFeliu 2008: 42-47).

Some authors argue that training is not an investment, it is simply an expense. An investment implies the adding of capital to an organisation. Calculation of return on investment is effective if the organisation keeps records about employees' job performance and when the cost factors of training are known. Measuring the return on investment in training starts with defining the reasons and goals for the training, determining how much the training will cost and verifying the amount of return. The critical questions to ask include:

- What is the training for?
- · What is the investment in training?
- How is the return measured? (Wilkinson & Lewis 2006: 356).

The investment in training consists of the cost of training and the time spent by the staff on the training and it covers the cost of:

- Course development.
- Instructional materials.
- Equipment/facilities for training.
- Salaries/wages of instructors and staff working directly on the training.
- Loss of productivity due to trainees' attendance (Matalonga & SanFeliu 2008: 42-47).

The return on investment should be noticed in the area of time spent in production, reduction in the cost of producing quality products or services. The benefits of training should include:

- Time savings.
- Increased productivity.
- Improved quality of output.
- Enhanced staff performance (Matalonga & SanFeliu 2008: 42-47).

The return on investment can be calculated when both training benefits and cost can be converted into monetary value. Matalonga and SanFeliu (2008: 42-47) further suggest the processes for calculating return on investment as follows:

- Perform causal analysis and report the results.
- The training department should plan and execute training interventions.
- The results of the training interventions should be communicated in terms of return on investment (Matalonga & SanFeliu 2008: 42-47).

The formula for calculating return on investment is as follows:

$$ROI\% = \frac{\text{Net Programme Benefit (Benefit - Cost)}}{\text{Programme Cost}} \times 100$$
(Matalonga & SanFeliu 2008: 42-47).

To summarise, return on investment analysis allows decision-makers to determine the financial returns from training by comparing net programme – benefits, minus costs. Return on investment is therefore calculated by taking the net benefit of training, multiplying by training cost and multiply by hundred. Return on investment is always expressed as a percentage.

Lockhart and Majal (2012:9) in a study on the effects of library training and development programmes at Cape Peninsula University of Technology, South Africa suggest two ways in which libraries can maximise the return on investment in training as follows:

- Use train-the-trainer strategy where a few staff members are trained and after they have acquired the needed expertise, they are used to facilitate training programmes for their colleagues.
- Staff who participate in conferences, workshops, seminars are required to provide a report within
  two weeks after the event to give feedback and highlight the important knowledge and skills that
  were acquired and these are shared among the entire staff. These strategies can help libraries to
  maximise return on investment in training.

The reviewed literature, however, suggests that most of the university libraries do not measure or calculate the return on investment in training and development. The situation is the same with the university libraries in Ghana that were investigated in this study.

# 2.5. Kirkpatrick evaluation model

The Kirkpatrick's evaluation model was developed by Donald L Kirkpatrick in 1959 and is considered to be the most useful framework in the evaluation of training programmes (Babarah & Root 1992; Rothwell & Sredl 1992: Philips 1991).

The model allows for the measurement of potential effects of training at four levels:

- Participants' reaction to the training.
- Participants' learning as a result of the training.
- Participants' change in behaviour as a result of the training.
- Impact on the organisation as a result of participants change.



Level 1. Reaction evaluation

As illustrated in Figure 2.1 Level 1 measures how participants in a training programme react to the training. Reaction evaluation helps to ascertain the participants' personal reaction to the training or learning experience, for instance the evaluation must find answers to the following questions:

Did the trainees like and enjoyed the training?

- Did they consider the training relevant and was it a good use of their time?
- Did they like the venue, the style, timing, logistics etc.?
- Level of participation,
- Level of efforts required to make the most of the learning (Nickols 2013:5). Reaction evaluation can be done immediately after the training ends.

# Level 2. Learning evaluation.

Learning evaluation refers to the measurement of the increase in knowledge or intellectual capability of the trainees, before and after the training experience. Some of the questions that must be asked include the following:

- Did the trainees learn what was intended to be taught?
- Did the trainees experience what they were intended to experience?
- What is the extent of advancement or change in the trainees after the training? (Nickols 2013:5).

#### Level 3. Behaviour evaluation

Behaviour evaluation refers to the measurement of the extent to which the trainees applied the learning and changed their behaviour. This evaluation is either done immediately after the training or several months after the training, depending on the situation. The questions to ask at this level of evaluation should include:

- Did the trainees put their learning into effect when back on the job?
- Were the relevant skills and knowledge obtained?
- Was there noticeable and measurable change in the activity and performance of the trainees -when they were back on their jobs? (Nickols 2013: 5).

Measurement of behaviour change is less easy to quantify and interpret than reaction and learning evaluation.

# Level 4. Results evaluation

Results evaluation refers to the measurement of the effects of the training on the business or environment resulting from the improved performance of the trainee. The measurement of results is usually done in volumes, values, percentages, timescales, return on investment, and other quantifiable aspects of organisational performance; this could be in terms of the number of complaints, staff turnover, attrition, failure, wastage, quality rating, non-compliance, standards, accreditation and growth. Individual results evaluation is not particularly difficult but results evaluation across the entire organisation is much more challenging. Also, external factors greatly affect organisational and business performance (Nickols 2013: 6).

Kirkpatrick's model has been widely used for evaluating training programmes. It also provides a systematic approach for evaluating the effects of training at various levels. However, the model is not able to provide feedback on the extent to which training and development affects job performance of the trainees. The Kirkpatrick evaluation model provided this study with a framework that helped to

understand the evaluation of training programmes in four key areas namely, reaction, learning, behaviour and results.

# 3. RESEARCH METHODOLOGY

This study made use of a mixed methods approach, a combination of quantitative and qualitative approaches. The mixed methods approach was applied in data collection, data analysis and interpretation of the findings of this study. This approach was deployed for triangular purposes as a means of seeking convergence across qualitative and quantitative approaches. The qualitative approach was used to collect and analyse data from the university librarians and some heads of department while the quantitative approach was used to collect and analyse data from the faculty, library staff and students.

#### 3.1. Data Collection

Data was collected by means of structured and self-administered questionnaires. Different set of questionnaires were used for the various groups namely Library staff, Faculty and Students. Research assistants were hired to distribute the questionnaires and in some cases the questionnaires were mailed to the respondents. The respondents were given a maximum period of ten days to complete and return the questionnaires. The research assistants went back to collect the completed questionnaires. The researchers monitored the distribution and return of completed questionnaires. After receiving the completed questionnaires, the researchers assigned a numerical code to each questionnaire.

The other way of data collection was by means of standardised structured interviews. The interviews for this study were conducted with five university librarians, and ten selected heads of department/section from the five selected institutions. The questions for the university librarians focused on ascertaining information on the background of their respective libraries, the state of training and development policy and training needs analysis/assessment, SDTP, monitoring and evaluation of training programmes, as well as the measurement of return on investment in training.

The researchers used obtrusive techniques to observe the library operations at the circulation desks, reference and electronic support service centres. The researchers also observed the training programmes that were organised for library staff. The unobtrusive observation technique was used at the security check points to observe when staff reported and signed off from work. The turnaround time for serving library users and the time it took to perform assignments given to staff by their superiors were also observed and recorded. The staff appraisal forms and written reports of staff who participated in STDP and the monitoring and evaluation process to determine the effects of training and development on staff work performance was also observed. Most of the observed situations were recorded. Permission was, however, obtained from the heads of department/section before the observation.

# 3.2. Population

This study focused on the library staff at all levels, faculty and student communities of five selected university libraries in Ghana namely the University of Ghana, Methodist University College Ghana,

Central University College and University of Education Winneba and the University of Cape Coast. The five universities were carefully selected to represent both public and private universities in Ghana. As at the time of this study Ghana had 50 universities. A total of 5 (10%) universities were sampled because of logistics and other research constraints. The researchers considered all the various categories of library staff, namely, professional librarians, non-professional librarians as well as support staff.

The first targeted population for this study was the library staff of the five selected university libraries in Ghana namely, University of Ghana, Methodist University College Ghana, Central University College, University of Cape Coast and University of Education Winneba. The total population of the library staff from the libraries was 503. The selection of the five institutions took into consideration the need to have both public and private universities represented; the location or accessibility; and the state of the university libraries amongst others. The selection of the libraries also took into consideration the composition of the library staff which consisted of professional and para professional librarians, as well as administrative and IT staff. The second targeted population was the faculty of the five selected institutions. The total population of this group was 12,417 and the faculty group consisted of professors, associate professors, senior lecturers, lecturers, assistant lecturers, teaching assistants and research fellows.

The third targeted population was the students of the selected institutions which consisted of both post graduates and under graduates. The total population in this group was 126,463. The faculty and students' population were selected because some aspects of this study focuses on assessing the work performance of library staff. Faculty and students being the major library users or beneficiaries of library and information services are capable of assessing the work performance of library staff. The positive assessment of staff performance by faculty and students may suggest that STDP had positive effects.

# 3.3. Sampling

The researchers made use of mixed sampling methods to sample the population for this study. For instance, the stratified random sampling technique was used to divide the population into three strata namely; library staff, faculty and student groups, while the systematic random sampling technique was used to select samples from the various strata. The purposive sampling framework was also used to select some key people from the various strata into the sampled population. According to Denscombe (1998: 12-13) stratified sampling enables every member of the population an equal chance of being selected to the proportion within the population. The advantage of these techniques are that they helped the researcher to maintain some control over the selection of the samples in order to guarantee that the crucial people were covered, and in the proportion that they exist in the wider population. The sample from the selected university libraries represented the larger population. Care was, however, taken to cover different views and feelings of all categories of staff, for example male and female, professional and non-professional, supervisors, as well as the management staff.

# 3.4. Sampling Size

The main factors that determined the sample size for this study were the desire for accuracy and the confidence level. The use of multiple methods research and triangulation were intended to enhance

accuracy. The total population from which samples were taken for this study was 139,383. To achieve a confidence level of 95% and a confidence interval of 0.05, a sample size of about 384 was required. This produced a relative standard error of 5.10%. (Yamane 1967: 886). Given that in administering a survey, there could be a degree of non-returns and to achieve the desired confidence level, the following strategy was adopted. The total sampling size of 860 was chosen based on the staff/student numbers and the composition of the population.

Considering the total population size of the selected five universities, the researchers administered 240 questionnaires at each of the three state owned universities namely University of Ghana, University of Cape Coast and University of Education Winneba and 110 questionnaires were administered at each of the private universities namely Methodist University College Ghana and Central University College. The questionnaire covered the three groups of the population namely faculty, students and library staff. The selection of the appropriate sample size helped the researchers to achieve the desired confidence level of the results.

# 3.5. Data Analysis

The researchers made use of the services of a professional statistician and computer programmes such as Statistical Product and Service Solution (version 16) and Microsoft Excel. Measureable data was reported, coded and analysed using computerised statistical packages. The completed questionnaires were analysed to identify significant relationships between variables. The objective of the statistical analysis was to ascertain information about the relationships between the various variables of STDP. Finally each research question and/or hypothesis was appropriately presented and/or analysed with relevant test statistics or by the use of illustrations. Thematic content analysis technique was used to analyse the qualitative data.

#### 4. FINDINGS AND DISCUSSION

The results of the study are presented in this section.

4.1. Table 1.1: Distribution of respondents by institution

| Faculty         | Students                                            | Library Staff                                                                                | Total                                                                                                                                                                                    |
|-----------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 37(6.8)         | 51(9.4)                                             | 31(5.7)                                                                                      | 119 (22)                                                                                                                                                                                 |
| 30(5.5)         | 48(8.8)                                             | 26(4.8)                                                                                      | 104 (19)                                                                                                                                                                                 |
| 31 <i>(5.7)</i> | 59(10.8)                                            | 28(5.1)                                                                                      | 118 (22)                                                                                                                                                                                 |
| 35(6.4)         | 51(9.4)                                             | 16(2.9)                                                                                      | 102 (19)                                                                                                                                                                                 |
| 31 <i>(5.7)</i> | 53(9.7)                                             | 17(3.1)                                                                                      | 101 (18)                                                                                                                                                                                 |
| 164 <i>(30)</i> | 262(48)                                             | 118(22)                                                                                      | 544 (100)                                                                                                                                                                                |
|                 | 37(6.8)<br>30(5.5)<br>31(5.7)<br>35(6.4)<br>31(5.7) | 37(6.8) 51(9.4)<br>30(5.5) 48(8.8)<br>31(5.7) 59(10.8)<br>35(6.4) 51(9.4)<br>31(5.7) 53(9.7) | 37(6.8)     51(9.4)     31(5.7)       30(5.5)     48(8.8)     26(4.8)       31(5.7)     59(10.8)     28(5.1)       35(6.4)     51(9.4)     16(2.9)       31(5.7)     53(9.7)     17(3.1) |

<sup>\*</sup>Percentage in brackets and italics

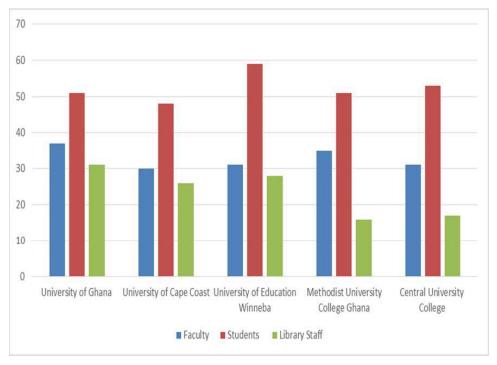


Figure 1.1: Distribution of respondents by institution

The percentage returns from all the five institutions was about the same, the lowest return of (18%) came from Central University College and the highest return of (22%) came from the University of Ghana. The results in Table 1.1 indicate that faculty respondents represented 164 (30%) of the total sample. The researchers received almost an equal number of responses from faculty group respondents from the five institutions. The faculty from the University of Ghana and the Methodist University College Ghana constituted the majority of respondents in this category with slightly more respondents than the rest, while the faculty from the University of Cape Coast were the least in number. This may be attributed to the higher staff population at the University of Ghana.

Students represented 262 (48%) of the total sample out of which those from the University of Education Winneba were the majority whiles those from the University of Cape Coast were the least. Library staff were 118 (22%) of the total sample. Those in the majority among the library staff group were from the University of Ghana and the least from the Methodist University College Ghana.

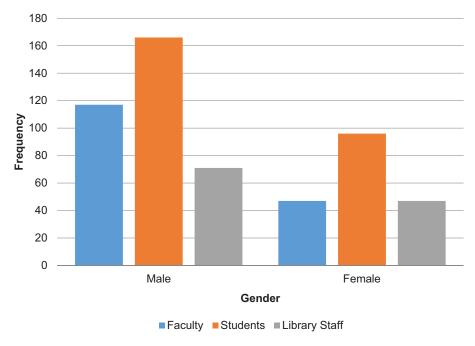


Figure 1.2 Gender distribution of participants by stratum

The results in Figure 1.2 reveal that males dominated in the overall respondents (faculty, library staff and students). The results reflect the gender distribution of workers and students in Ghana where males usually dominate females.

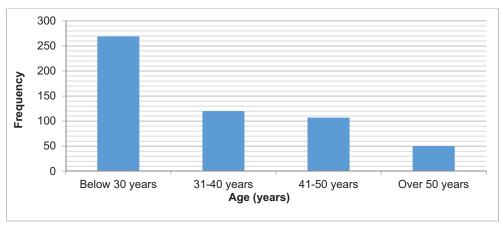


Figure 1.3 Age distribution of participants

The results in Figure 1.3 further reveal the age distribution by stratum which indicates the age distribution of the individual respondent groups.

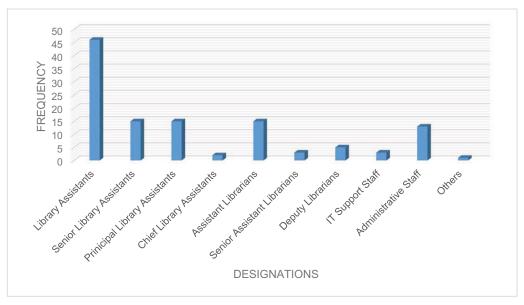


Figure 1.4: Distribution of library staff

Figure 1.4 shows that library staff respondents comprised 46 (39%) library assistants, 15 (13%) senior library assistants, 15 (13%) principal library assistants, 2 (2%) chief library assistants, 15 (13%) assistant librarians, 3 (3%) senior assistant librarians. 5 (4%) deputy librarians, 3 (3%) IT support staff, 13 (11%) administrative staff and 1 (1%) other staff. The results reflect a fair representation of all categories of library staff.

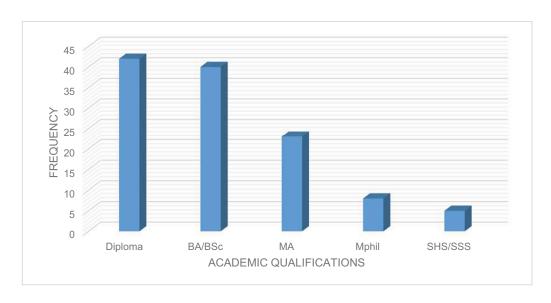


Figure 1.5: Academic qualifications of library staff

The academic qualifications of library staff indicated the following: The highest number of 42 (36%) had a diploma. The next highest 40 (34%) had BA/BSc. In the category of postgraduate degrees, 23 (20%) had a Master of Arts degree and 8 (7%) had MPhil. Only 5 (4%) had SHS/SSS. The results show that the majority of library staff respondents were para professionals and had obtained at least the minimum qualifications to work in their various positions.

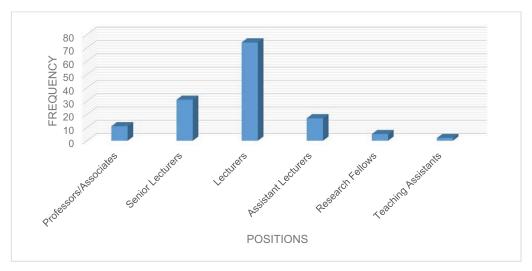


Figure 1.6: Distribution of faculty staff

Figure 1.6 shows the distribution of faculty: 11 (7%) were professors/associates, 31 (19%) were senior lecturers, 74 (45%) were lecturers, 17 (10%) were assistant lecturers, 5 (3%) were research fellows, 2 (15%) were teaching assistants. The "other" category was only 1(1%). The results indicate a fair representation of all the categories of faculty.

#### 4.2. Training needs analysis/assessment

Responses on whether the institutions conducted training needs analysis/assessment are presented in the chart below.

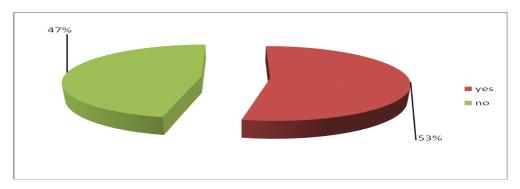


Figure 1.7: Response on use of training needs analysis

Figure 1.7 shows the results on whether or not training needs analysis was carried out by the respective institutions. More than half (53%) of the library staff reported that training needs analysis was conducted in their respective institutions. However, the interview results reveal that the training needs analysis was not properly done in the various institutions.

# 4.2.1. Methods used to conduct training needs analysis

Information on the most used methods in identifying training needs of library staff is presented in Table 1.2.

Table 1.2: The methods used to identify training needs of library staff

| Methods                           | Frequency | Percentage (%) |
|-----------------------------------|-----------|----------------|
| Questionnaire                     | 40        | 33.9           |
| Observation                       | 35        | 29.6           |
| Interview                         | 44        | 37.3           |
| Job description                   | 47        | 39.8           |
| Difficulty analysis               | 1         | 0.8            |
| Problem solving conference        | 22        | 18.6           |
| Appraisal review                  | 52        | 44.1           |
| Drive pattern analysis            | 4         | 3.3            |
| Analysis of organisational policy | 14        | 11.8           |

The results in Table 1.2, shows that the methods often used to identify training needs of library staff included the appraisal review 52 (44.1%), job description 47 (39.8%), interview 44 (37.3%) and questionnaire 40 (33.9%), observation method 35 (29.6%), problem solving method 22 (18.6%). The least used methods included the difficulty analysis method 1 (0.8%), drive pattern analysis method 4 (3.3%) and analysis of organisational policy 14 (11.8%). The results suggest that multiple methods were used in identifying the training needs of library staff of the respective institutions. The interview results also revealed that appraisal review method was the most used to identify training needs of library staff.

# 4.3. Monitoring and evaluation of STDP

Table 1.3: Types of evaluation conducted for STDP

| Observation | Interview                                    | Questionnaire                                                                 | Records analysis                                                                                                                                                          |
|-------------|----------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 38(61.3)    | 13(21.0)                                     | 7(11.3)                                                                       | 4(6.5)                                                                                                                                                                    |
| 40(46.5)    | 27(31.4)                                     | 6(7.0)                                                                        | 13(15.1)                                                                                                                                                                  |
| 57(78.1)    | 4(5.5)                                       | 6(8.2)                                                                        | 6(8.2)                                                                                                                                                                    |
| 27(40.3)    | 9(13.4)                                      | 3(4.5)                                                                        | 28(41.8)                                                                                                                                                                  |
| 33(49.3)    | 8(11.9)                                      | 3(4.5)                                                                        | 23(34.3)                                                                                                                                                                  |
|             | 38(61.3)<br>40(46.5)<br>57(78.1)<br>27(40.3) | 38(61.3) 13(21.0)<br>40(46.5) 27(31.4)<br>57(78.1) 4(5.5)<br>27(40.3) 9(13.4) | 38(61.3)       13(21.0)       7(11.3)         40(46.5)       27(31.4)       6(7.0)         57(78.1)       4(5.5)       6(8.2)         27(40.3)       9(13.4)       3(4.5) |

Results of the study on the type of evaluation conducted by the university libraries reveal the following: reaction 62 (72.8%), learning 86 (72.8%), behaviour 73 (61.8%), results 67 (56.7%) and return on investment 67 (56.7%). The results suggest that multiple evaluation methods were used by the university libraries to evaluate training.

The interview results indicated that data for monitoring and evaluation were collected through the use of questionnaires, interviews, records analysis and observation techniques. The methods of evaluation were based on Kirkpatrick's model of evaluation which included the four levels reaction, learning behaviour and results. However, the interview result reveal that most of the libraries did not have the capacity to evaluate and measure return on investment in training.

Table 1.5: When was the monitoring and evaluation of staff training and development programmes done?

The researchers found out from the library staff respondents when and how often the monitoring and evaluation was done after training. The findings are presented in Table 1.4.

| Monitoring and Evaluation Period          | Yes              | No        |
|-------------------------------------------|------------------|-----------|
| Before and during training                | 39(33.1)         | 79(66.9)  |
| During and after the training             | 65 <i>(55.1)</i> | 53(44.9)  |
| Before and immediately after the training | 38(32.2)         | 80(67.8)  |
| Before, during and after the training     | 18 <i>(15.3)</i> | 100(84.7) |
| Six months after the training             | 1(0.8)           | 117(99.2) |
| One year after the training               | 7(5.9)           | 111(94.1) |
| Continuous monitoring and evaluation      | 35(29.7)         | 83(70.3)  |

Responses on when monitoring and evaluation was done varied. The highest response rate was on monitoring and evaluation being done during and after training 65 (55.1%). The others were before and during training 39 (33.1%), before and immediately after training 38 (32.2%), continuous monitoring and evaluation 35 (29.7%). The least rated monitoring and evaluation periods were before, during and after training 18 (15.3%), one year after training and six months after the training 7 (5.9%) and 1 (08%) respectively.

These results indicate that STDP were not properly monitored in the university libraries in Ghana. Only 18 (15.3%) library respondents indicated that their institutions followed the ideal monitoring and evaluation criteria that is monitoring and evaluation being done before, during and after training. The interview results also revealed that the institutions did not monitor and evaluate training and development programmes effectively. According to the University librarians and Heads of department, the monitoring and evaluation aspect of the training policies were not adhered to. Only a few indicated that their institutions monitored and evaluated training programmes using appropriate methods.

For the institutions that followed the ideal monitoring and evaluation period, the findings indicated that the first level of assessment was done before the training which helped to identify the potential challenges to the execution of the training programme. The second level of assessment was done during the training to make sure that the training programmes were implemented according to what was planned, training objectives were met. The final assessment was done immediately or six months to one year after the training to ascertain the effects of the training on the library staff and institutional work performance.

The findings also reveal that not all of the institutions followed the Kirkpatrick model of monitoring and evaluation. Only two out of five university librarians stated that training in their institutions evaluated reaction, learning, behaviour, results and return on investment.

The implication of this finding is that majority of institutions only attempted to monitor and evaluate STDP. The University librarians indicate that monitoring and evaluation of STDP were not given the needed attention by the various universities studied. The evaluation did not ascertain the extent of transfer of knowledge and skills on work performance.

Monitoring and evaluation of training and development is important as it provides feedback to both the trainee and the sponsoring organisation for the improvement of future training programmes. The findings of this study on monitoring and evaluation of training and development programmes are contrary to the results of the studies of Fiona and Sharon (2014: 5-6); Manju and Sureth (2011: 58-70); Cefai (2009: 42); Kunche et al. (2006: 2); Cheng and Ho (2001:22); Basarab and Root (1992); Philips (1991); Rothwell and Sredl (1992) and Godzins (1989: 87-92). These authors suggest that evaluation of training and development should be done before, during and after training. STDP that are not evaluated run the risk of being ad hoc, lacking direction and occurring in isolation without having any relevance to either the staff or the organisation. Evaluation should therefore be mandatory for every training programme in the university libraries in Ghana.

Table 1.5: Responsibility for monitoring and evaluation of staff training and development programmes

| Monitoring and evaluation responsibility | Yes              | No       |
|------------------------------------------|------------------|----------|
| HR department                            | 60 <i>(50.8)</i> | 58(49.2) |
| Trainers/training institutions           | 38(32.2)         | 80(67.8) |
| Clients (library users)                  | 25(21.2)         | 93(78.8) |
| Immediate supervisors                    | 73(61.9)         | 45(38.1) |
| Colleagues/co workers                    | 25(21.2)         | 93(78.8) |
|                                          |                  |          |

The researchers probed further to know the authorities who were responsible for monitoring and evaluation of STDP. Table 1.5 shows that the authorities responsible for carrying out the monitoring and evaluation of STDP. These included the human resource department 60 (50.8%), trainers/training

institutions 38 (32.2%), clients/library users 25 (21.2%), immediate supervisors 73 (61.9%) and colleagues/co-workers 25 (21.2%).

The interview/observation results also indicated that the human resource managers, trainers or training institutions, library users, immediate supervisors, co-workers and external consultants were responsible for monitoring and evaluation of STDP.

The findings of this study on the authorities responsible for conducting monitoring and evaluation are in agreement with the studies of Fiona and Sharon (2014:5-6); Manju and Sureth (2011: 58-70); Cefa; 2009: 42pp; Kunche et al (2006:2); Cheng and Ho (2001:22). These authors suggest that evaluation of training should be done by trainers, trainees', supervisors, co-workers and managers.

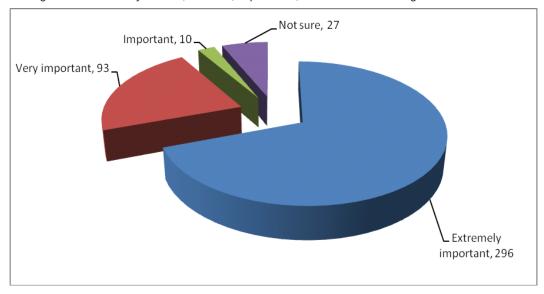


Figure 1.9: Rating the importance of STDP to Library staff

As depicted in Figure 1.8, majority 296 (70%) of the faculty and student respondents rated the importance of STDP to library staff as extremely important. The rest rated the STDP as very important 93 (22%), important 10 (2%), or not sure 27 (6%). The reasons given for the favourable rating of the training programmes for library staff included:

- Enhanced studies and research work
- Helped staff to be abreast with technology.
- Helped the staff to be efficient and effective in the work.
- Enhanced good information retrieval skills.
- · Promoted the development of the library.
- Helped librarians to understand the information needs of the users.

#### 4.4. Return on investment in training

The researchers also wanted to find the respondents views regarding the return on investment in training. 390 (91.5%) of faculty and student respondents' considered training of library staff as a good investment. Only 36 (8.5%) indicated that training of library staff was not a good investment. The researchers probed further to find out the rating of the returns the institutions get from their investment in training. The results also show that the majority 365 (84%) of faculty and student respondents reiterated that their institutions are getting a good return on investment in training. However, 70 (16%) thought otherwise.

# 4.4.1. Calculating return on investment in training

Though most of the participants reported that there was no method of calculating return on investment in training, they indicated that in their view the benefits of training were equal to the investment in training at their respective institutions. The university librarians stated that they did not have the expertise to calculate the return on investment in training.

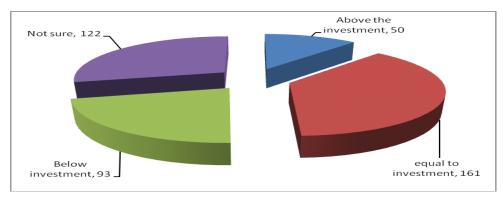


Figure 1.10: Assessment of the performance of library staff in relation to return on investment in training

As shown in Figure 1.10, faculty and student respondents assessed the performance of library staff in relation to the investment made in training. 161 (38%) indicated that the benefits of training were equal to the investment, while 93 (22%) indicated that the benefits of training library staff, compared to investment were low. Only 50 (12%) indicated that the benefits in training library staff compared to the investment were above the investment. As many as 122 (27%) were not sure but this is not surprising because of the difficulties involved in calculating the return on investment in training.

The results reveal that (38%) of faculty and student respondents indicated that their institutions were getting good return on investment in training library staff in their respective institutions.

With regard to the assessment of the mechanisms used for monitoring and evaluating STDP for library staff, the results indicate that the university libraries only attempted to measure the satisfaction with training and development programmes and did not calculate the actual return on investment in training.

This is an issue that needs to be addressed by the library administrators and the university as a whole. It is important for management to be able to know the monetary returns on investment made in training library staff. However, the responses from the faculty and student respondents shows that the quality of services received from library staff was good return on investment made in training and development of library staff of the university libraries in Ghana. All the university librarians and heads of department were also of the view that carefully planned and executed STDP will yield good returns on the investment made in training library staff.

# 5. CONCLUSION/RECOMMENDATIONS

#### 5.1. Conclusion

The results of this study established that only a few of the university libraries followed the ideal processes of monitoring and evaluation that is to evaluate STDP before, during and after training. The interview results revealed that only a few libraries evaluate training before the start of the programme to ascertain the relevance of the training programme, the course content, the level of competence of resource persons/facilitators, training facilities and materials as well as the readiness of the trainees. The evaluation processes of the university libraries in Ghana were designed to assess staff reaction to the training, the knowledge and skills learned by the trainee, the change in behaviour of trainee as well as the effects of the training on the results or work output of the trainee. The researchers observed that the universities did not properly monitor and evaluate transfer of training which is crucial in determining whether training had impacted the library staff's job performance.

The evaluation was however done by all the stakeholders namely library staff, library users, supervisors, heads of department, university librarians and human resource managers to ensure relevant feedback was obtained. The interview results, however, indicate that monitoring and evaluation of STDP were not given the needed attention by the various universities studied.

The results of the study further established that investment in training library staff of the university libraries in Ghana was a good investment. The reasons for the favourable rating include: enhancing studies and research work, helping staff to be abreast with latest technologies, enhancing good information retrieval skills, promoting the development of the library, helping librarians to understand the information needs of the library users and helping staff to be efficient and effective in their work. A significant proportion of the respondents thought that the return on investment in training library staff was equal to the work performance of the library staff in the university libraries in Ghana.

This study therefore concludes that none of the institutions had sufficient mechanisms and systems in place for monitoring and evaluating training especially for calculating the return on investment in training library staff. The fact that only a few respondents indicated that there was good return on investment in training library staff brings to question the need to improve training and development practices of the institutions studied in order to derive the full benefits of training and development. The institutions only

attempted to measure the satisfaction with training and development programmes and did not go to the extent of calculating the actual return on investment in training in monetary terms.

# 5.2. RECOMMENDATIONS

Monitoring and Evaluation of STDP are important components of the training and development process. The monitoring aspect of training should be done by the immediate supervisor, and should aim at detecting deficiencies, obstacles and make adjustments in a timely manner to enhance expected results. The involvement of the immediate supervisor can also help to demonstrate the support and involvement of management in the development of the library staff. It is only through evaluation of training that the institutions can get a feedback on the effectiveness of the STDP. The evaluation of training should therefore consider the trainees' reaction, learning, behaviour, results and more especially the overall return on investment in training.

This study, therefore, recommends that the results of training evaluation should be discussed with all the stakeholders, namely trainees (library staff), trainers or training institutions (resource persons, facilitators and library schools, professional associations or universities/colleges involved in training library staff) and the sponsors of the trainees (employers). The training units of the university libraries in collaboration with the supervisors/managers, university librarians and human resource managers should be responsible for monitoring and evaluation of STDP. The training evaluation should be a collective responsibility.

#### 5.3. FINAL CONCLUSION

In conclusion, the results of this study established that STDP are not adequately funded. Adequate budgetary provisions should be made for STDP in the university libraries in Ghana. This will facilitate successful implementation of STDP.

The train the trainer concept where staff who participate in training and development programmes are asked to train colleagues and or submit a report on the training for the benefit of colleagues, with the aim of reducing the cost of training and maximising the returns on investment in training, should be encouraged by the university libraries in Ghana.

The training and development units of the university libraries in collaboration with the human resource departments should develop the capacity for calculating the return on investment in training in monetary terms. This will go a long way to help in future financial investment in STDP in the university libraries in Ghana.

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