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Factors influencing the transfer of training in internal training programmes: the case of the National University of Science and Technology (NUST) Library

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Abstract

Whereas academic librarians' knowledge, skills, and attitudes (KSAs) need to be constantly updated through training to meet professional demands in the field, such training should be transferred to the job for improved job performance. This study identified factors affecting the transfer of training in internal training programmes at NUST Library. A multi-methods research design was employed. Data were collected by administering questionnaires to trainers and trainees while senior library management was interviewed. Data from 32 responses were presented and analysed using Microsoft Excel software. Trainee characteristics, training design and delivery, the work environment, and trainer characteristics were the major factors that affect training transfer. Although trainees had high cognitive abilities, they were not highly motivated to train and transfer trained KSAs. The training design did not include trainees fully and training content was decided by library management. The work environment lacked relevant equipment and technological infrastructure. Training methods in place were sufficient although the need to utilise a blended learning approach incorporating online tutorials was realised. Trainers were experienced in the delivery of training although their pedagogical, presentation, interpersonal, and communication skills needed honing. The importance of training transfer should be emphasised before, during, and after training. Supply of adequate equipment as well as sending trainers for the training of trainers' courses targeting deficient areas were recommended.

Keywords: *Internal training programmes, training transfer, university libraries, job performance.*

Introduction

The National University of Science and Technology (NUST) Library is geared towards meeting the information needs of students, researchers, and faculty in all university academic faculties through improved services. The library's vision is "to be one of the top-class academic libraries in Zimbabwe, utilising new and emerging technologies in the provision of services and information to the University community". Its mission is "to provide all staff and students with information resources using state-of-the-art tools and methods in support of the University's teaching, learning, and research activities" (NUST Library, 2017). For the above vision and mission to be fulfilled, the library considers continuous staff training and development as a strategic activity. For this reason, the library conducts week-long internal training sessions during vacation periods to update its staff on current trends in Library and Information Science (LIS) and other selected topics (National University of Science and Technology, 2011).

Ideally, such training should enhance knowledge, skills, and attitudes, resulting in an ability to adapt and innovate, self-manage, and improve job performance (Mathis et al., 2016). Similarly, the International Federation of Library Associations (IFLA) guidelines for continuing professional development state that the training provider must make sure that there is evidence of transfer of training. They further stipulate that "since the purpose of continuing professional development is to improve practice, it is important to give attention to how new knowledge or skills are applied in the workplace" (Varlejs et al., 2016 p.44). However, in the context of the NUST Library, although training has been an ongoing activity, there is little evidence to show that such training has transferred to the job. This is reflected by the fact that training sessions on topics such as Subject Guides, Mendeley, and Customer Care, have been conducted repeatedly targeting the same members of staff, without an apparent change in behaviour. The question is: what factors result in some library staff who have attended training not transferring what they have learnt to the job to improve job performance?

The importance of training in academic libraries cannot be over-emphasised as constantly evolving technologies and workplace demands are causing major changes in formal education and professional practice (Hamid & Soroya, 2017). In addition, the rapid pace of technological change in the information society has introduced new scenarios for organisations (Ferreira & Abbad, 2013). In the context of academic libraries, Cobblah and van der Walt, (2017), acknowledge a dramatic increase in the scope of librarians' roles and responsibilities, thus the

need for staff training and development. If such training is timely, relevant, and appropriate it should result in employees performing their tasks effectively and efficiently (Rafiq, et al., 2017; Hamid & Soroya, 2017). However, training researchers and practitioners consistently conclude that the return on many training investments is low, and such investments are often wasted due to poor transfer to the job (Baldwin, 2014).

Purpose of the study

The study investigated the factors that affect the transfer of training at NUST Library, before, during, and after in-house training. This was achieved by answering the following research questions.

Research questions

The following research questions were answered in the study;

- To what extent were library staff involved in training preparatory activities at NUST Library?
- To what extent did training design and delivery affect learning and training transfer at NUST Library?
- What were the effects of the work environment on learning and training transfer at NUST Library?
- To what extent did trainee characteristics affect learning and training transfer at NUST Library?
- What were the trainer characteristics that affected training outcomes at NUST Library?

Literature review

The delivery of high-quality and effective services in libraries hinges on regularly updated, trained, and developed personnel (Raju, 2014; Varlejs, et al., 2016). Cobblah and van der Walt (2017), note that university libraries require librarians in all areas to possess a greater variety of skills to utilise modern information and communication technologies (ICTs) to expand services and provide adequate resources for the university community. Varlejs, et al. (2016:25) state that "helping patrons and community members develop 21st century skills requires staff with 21st-century skills of their own", thus the need to gain such skills.

However, the success of any training endeavour rests on the transfer of training content to the job (Baldwin, et al., 2017).

After training, staff should apply learned skills on the job to avoid skills decay. Broady-Preston and Bell (2001) estimate that within two years of formal library training mid-career stagnation may occur if training requirements are not addressed. Rice-Lively and Racine cited in Shepherd (2010:508) found that "mastering new technologies energised and revitalised stagnating careers, providing motivation to learn and practice new skills". For Vance (2006) timely in-service training provides opportunities to keep abreast with innovations, boost morale, and improve overall job performance.

Although any training programme aims at transferring learning to the job for improved job performance (Wenzel & Cordery, 2014), it has been noted that the amount of training that effectively gets transferred to the job is relatively low given the time and money spent on training. Estimates of 10% of training on average are transferred to the job (Burke and Hutchins, 2007). Burgin and Smith (1994), observe that although libraries devote considerable money to providing continuing education and staff development, there is little "payoff" to continuing education efforts that less than half of all training transfers to the workplace.

This is despite IFLA guidelines for continuing professional development which state that;

> whether it is for a one-time event or an institution's staff development programme, and regardless of whether delivery is face-to-face or electronic, the provider ... makes sure that there is evidence of, ... "transfer of training" from the learning event to application in practice (Varlejs, et al., 2016:12).

Wenzel and Cordery (2014), regard training transfer as one of the most important of the many criteria against which the success of training and development activities can be judged, as it determines whether or not what is learned gets applied on the job. For the transfer to have occurred, learned behaviour must be generalised to the job context and maintained over some time on the job (Baldwin and Ford, 1988). Several factors have been identified as influencing the transfer of training. Various characteristics have been noted to affect the transfer of learning as shown in the conceptual framework shown in Figure 1.

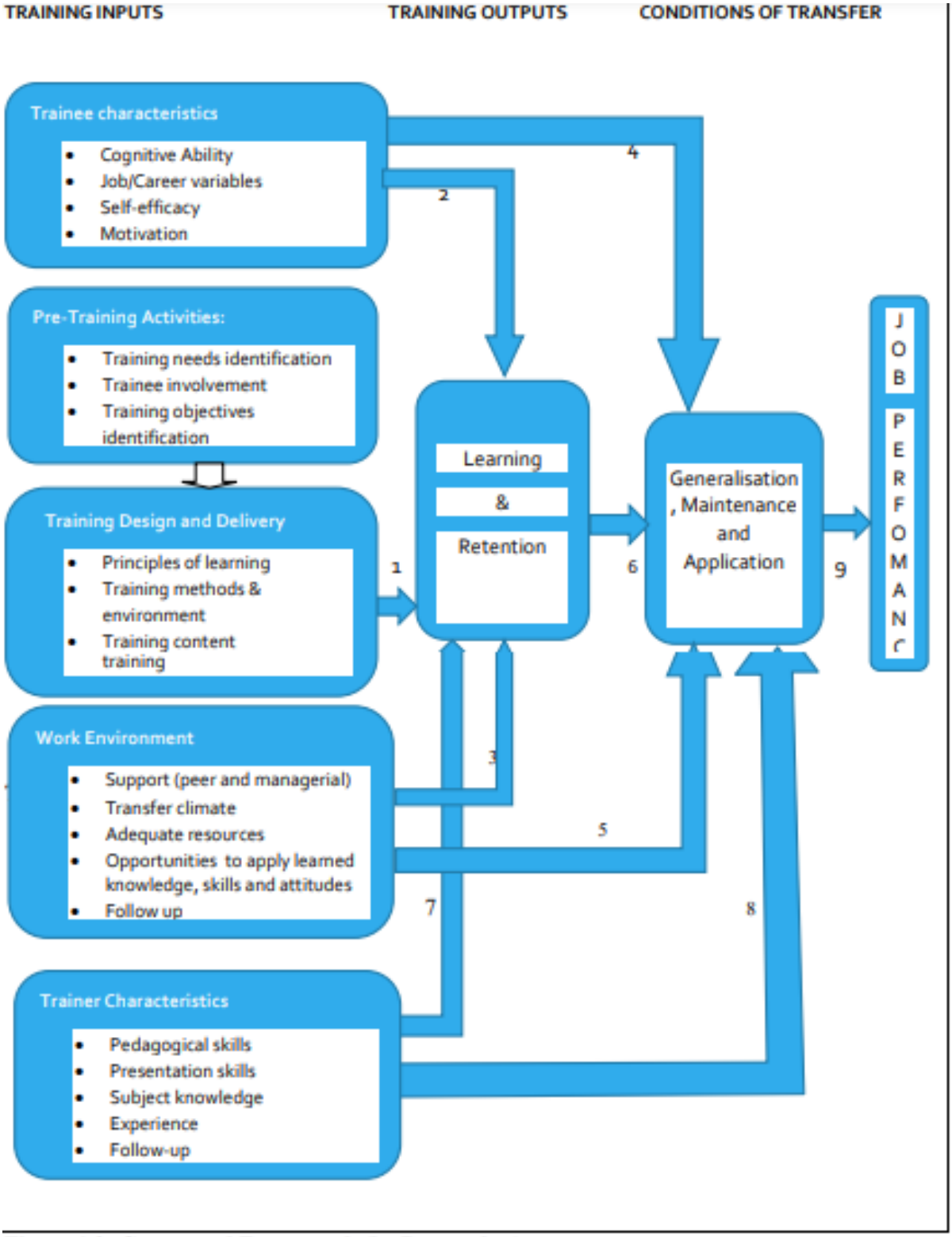

Figure 1 : Conceptual Framework (by Researcher)

As the framework indicates, training outcomes and training-input factors have both direct and indirect effects on conditions of transfer. These effects are specified in terms of eight linkages. Working backwards in the framework, training outcomes of learning and retention are seen as having direct effects on conditions of transfer (linkage 6). For trained skills to transfer, training

material must be learned and retained. Linkages 4 and 5 show that trainee characteristics have a direct effect on transfer regardless of initial learning during the training programme or retention of the material. Ultimately, learning and retention are viewed as directly affected by a training needs assessment, training design, training delivery; trainee characteristics, work environment characteristics, and trainer characteristics (linkages, 1, 2, 3, and 7).

Methodology

This study adopted pragmatism as the research philosophy of choice due to its flexibility to explore a contemporary issue in its natural setting, using multiple methods. This resulted in the use of the case study research strategy to get an in-depth understanding of the phenomenon under investigation. Data sources triangulation was employed as data were collected from three sources of data – the trainees, the trainers, and senior library management thus achieving data comparison and increasing the validity of the study. Due to the heterogeneity of the study population, and the small numbers of people in each of the above groups, a census was done in each stratum. Purposive sampling was done to come up with a sample of 32 in total, with different numbers in the three identified strata. The researcher was aware of the training roles played by each group, thus purposive sampling was found ideal. Data gathering was achieved through the use of two different data collection techniques; questionnaires and interviews. Two questionnaires were used to gather data from the participants; one was administered to trainees who were operational staff in the categories of Chief Library Assistants, Senior Library Assistants, and Technical Assistants. The other questionnaire collected data from trainers who included Assistant Librarians. Senior library management composed of Sub-Librarians, the Deputy Librarian, and the Systems Manager were interviewed to get an in-depth understanding of their views of the factors affecting the transfer of training at the NUST Library. Interviews were recorded, transcribed, and analysed through thematic analysis. Ethical considerations were observed as permission was sought to record interviews and staff participated in the study voluntarily and their anonymity was guaranteed and observed throughout the study. Data from 32 responses were presented and analysed using Microsoft Excel software.

Findings

This section presents the findings of the study. It starts by outlining the demographic characteristics of participants and goes further to answer each research question using data collected using questionnaires and interviews. Tables, graphs, pie charts, and other graphic representations are employed to summarise and organise research findings.

Response Rate

A total of 32 questionnaires were distributed, of which 22 were distributed to trainees and 10 to trainers. By the end of the survey period data had been collected from 4 senior managers through interviews, 9 trainers who completed the trainer's questionnaire and 20 trainees who completed the trainees' questionnaire

Demographic Characteristics of the Study Participants

The first section of both questionnaires aimed to gather demographic data about the study participants. Given below is an analysis of the characteristics of participants by gender, position, highest qualification, position, and the number of years at the NUST library.

Distribution of Study Participants by Gender and Employee Category

Fifteen males and 17 females in different positional categories participated in the study. Four were in the library' top management, comprised of 2 males and 2 female. Eight were middle managers, composed of 5 males and 3 females, and twenty operational staff participated composed of 12 females and 8 males. Figure 2 presents the distribution of study participants by the three main staff categories and gender

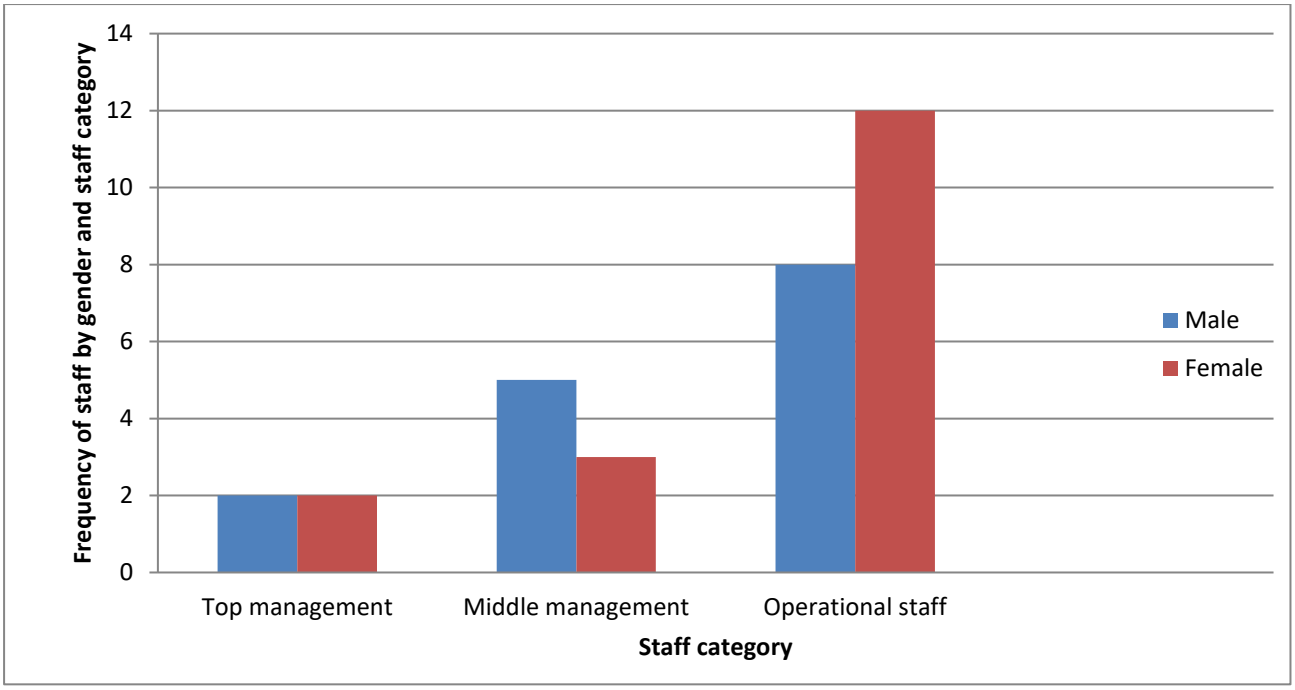

Fig. 2: Distribution of study participants by gender and employee category

Source: Primary Data

Distribution of Study Participants by Position

Different positional categories of library staff participated in the study. Senior Library Assistants formed the majority of trainees (13) who responded to the questionnaire as shown in Figure 3.

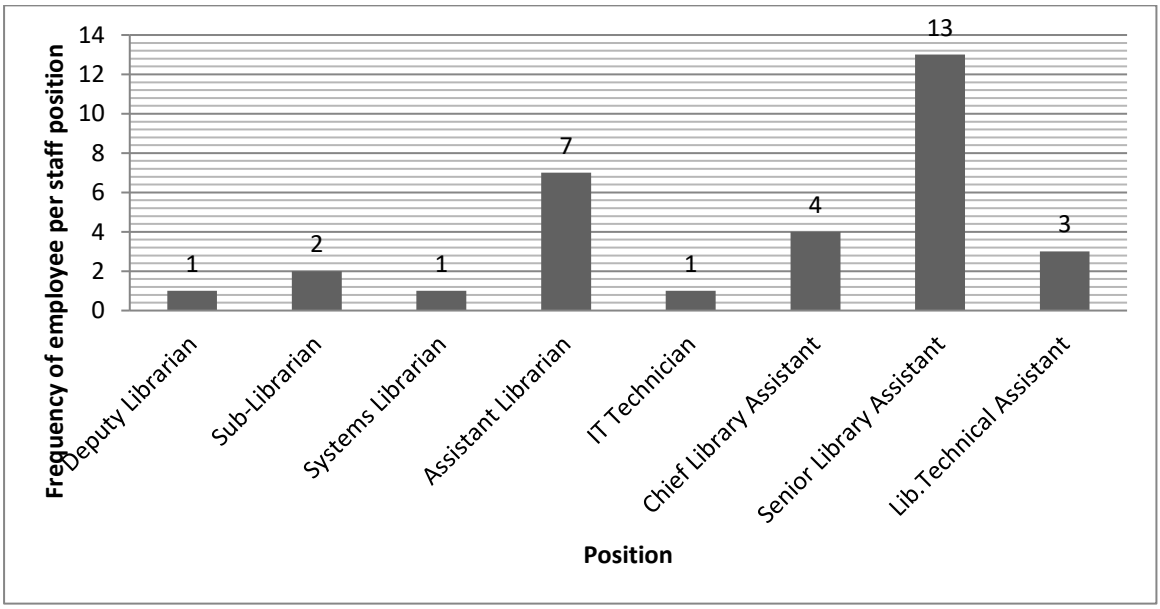

Figure 3: Distribution of Participants by Position

Source: Primary Data

Distribution of Study Participants by Qualifications

The study participants had attained qualifications in Library and Information Science (LIS) as shown in Figure 4. Nine of the participants were holders of a Masters degree in ibrary and Information Science.

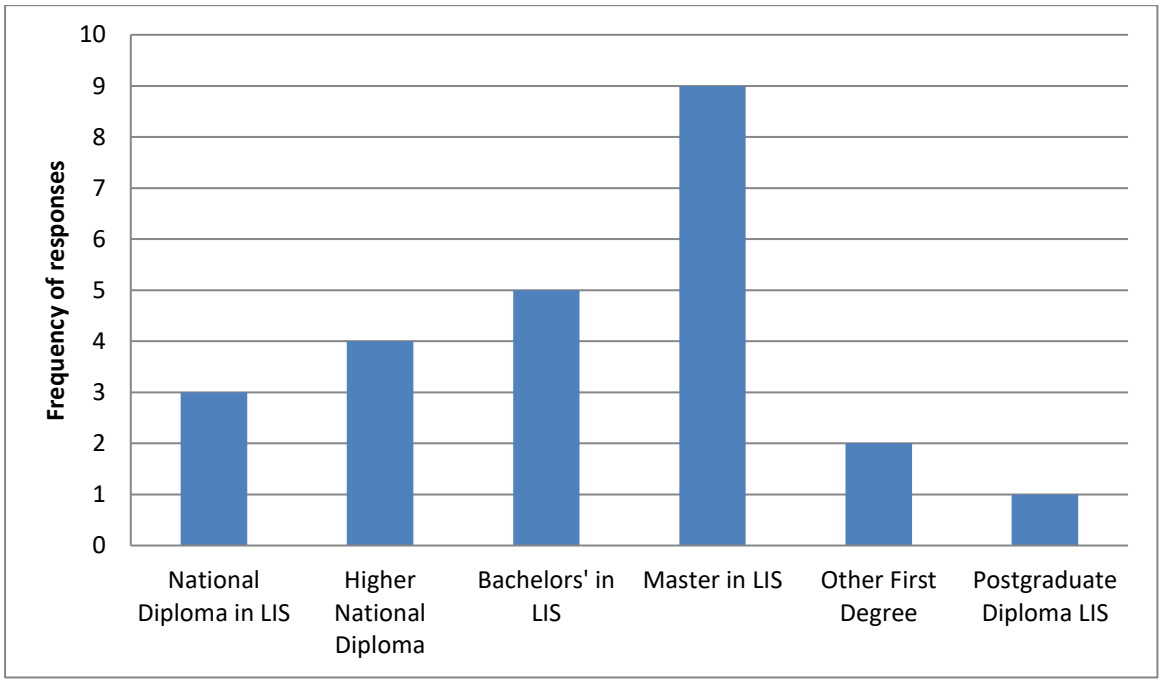

Figure 4: Distribution of study participants by qualifications (N=32)

Source: Primary Data

Distribution of Participants by Length of Service at NUST Library

The length of service of participants ranged from 1-5 years to 20 years and above with an interval of 5 years. It is worth noting that the majority of participants had accumulated between 5 and 15 years of experience at the NUST Library as shown in Table 1, as this has a bearing on training and training transfer.

Table 1: Length of service at NUST Library

Length of service	Frequency (N=32)
1-5 years	1
5-10 years	15

10-15 years	11
15-20 years	1
20 years and above	4
Total	**32**

Source: Primary Data

Level of Involvement of Library Staff in Training Preparatory Activities at NUST Library

Asked whether they were involved in training preparatory activities, 14 of 20 participants disagreed and strongly disagreed, as shown in Figure 5.

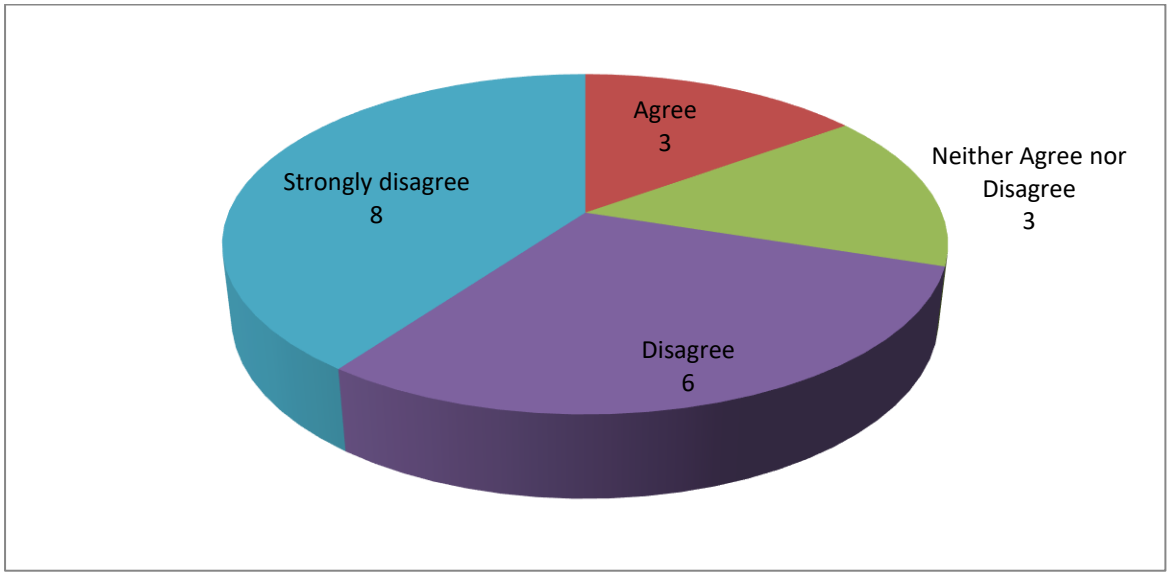

Figure 5: Trainee Involvement in Training Preparatory Activities (N=21)

Source: Primary Data

Trainers' Frequency of Consultation Before Training

To confirm or refute trainees' sentiments and to avoid same-source bias, trainers were asked to rate their frequency of consultation with their subordinates before the commencement of a training session. A Likert-scale with "Never", "Rarely", "Sometimes", "Often" and "Always" response options was used to gather the data. The statement for them to respond to was; "Before commencement of training, I discuss my subordinates' training needs with them". In response

4 said they sometimes discuss their subordinates' training needs, 3 said they always, and said he/she consults often. Figure 5 summarises the responses.

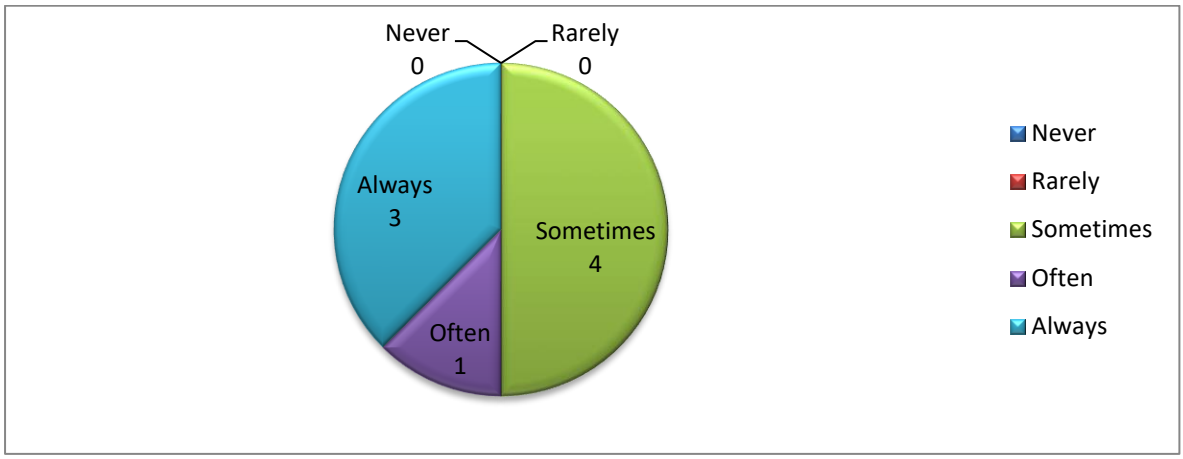

Figure 5: Trainers' Frequency of Consultation with Subordinates Before Training

Source: Primary data

The Extent to which Training Design and Delivery affect Learning and Training Transfer at NUST Library.

The second objective of the study was to find out the extent to which training design and delivery affect learning and training transfer at the NUST Library. This involved investigating the relevance of training content to job requirements, the similarity of the training to the practice environment, the teaching of general and theoretical principles that underlie training content, continued practice of training content after training, and the effectiveness of training methods that are employed at the NUST Library.

As shown in Figure 6, the trainees' opinions on the relevance of the training content to their job requirements were mixed. Four participants stated that the training content was rarely relevant, six regarded it as sometimes relevant, four said it was often relevant, and the remaining six participants viewed the content as always relevant to their job requirements.

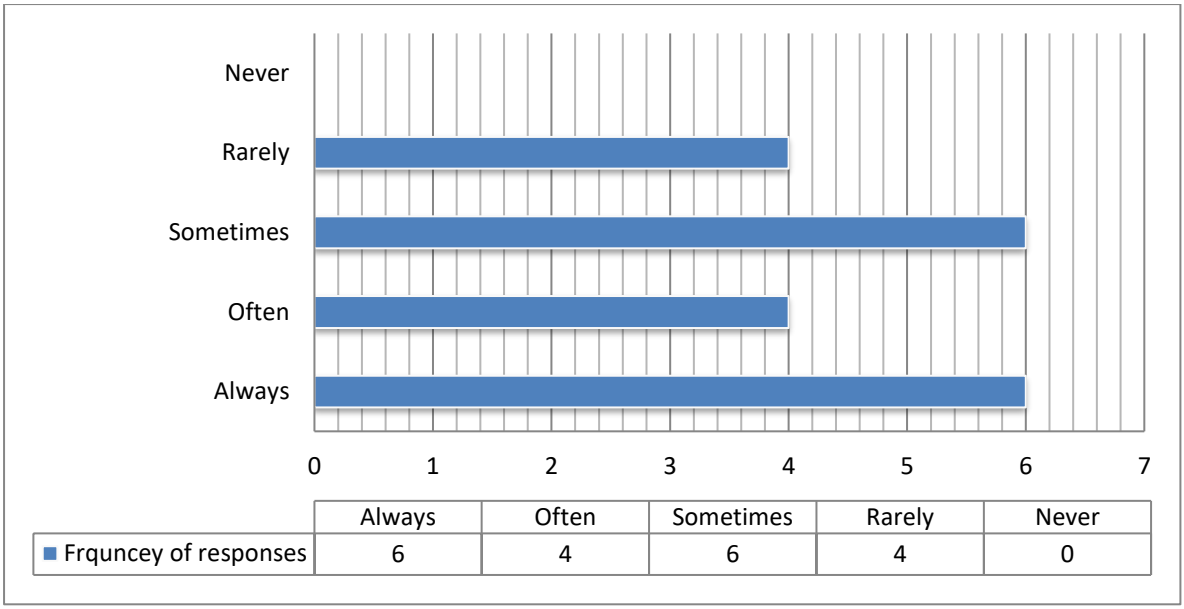

Figure 6: Relevance of Training Content to Job Requirements (N=20)

Source: Primary data

Trainers were asked how they ensure that training content is relevant to the trainees' job requirements. Most respondents said they research current trends in LIS so that they are up-to-date with new developments in the field, which information they claim they use to come up with training content. One respondent said:

> I read a lot. So I get to find out practices in libraries that are more or less the same as the NUST Library. I then take the knowledge gained and scrutinise it. If it applies to the NUST Library, I then find ways of implementing it. I evaluate the performance then see what needs to be adjusted.

The interviews with senior library management revealed that they make an effort to stay informed about developments in the library and information science (LIS) profession. They incorporate this updated content into the training programs they provide for their staff.

However, the responses from some of the trainees indicate a disconnect between the perceptions of the trainers/management and the trainees. One trainee asserted that "most of the training is not relevant or is there an opportunity to apply to work areas." Another trainee claimed that "in most cases, trainers lack the practical experience of the topics they teach and limit their training to theoretical knowledge based on short time researched information." This

suggests that while the trainers and senior management believe they are providing well-researched and relevant training, some of the trainees feel the content is too theoretical and lacks practical application to their actual job duties. Despite this disconnect, the study did find an overall positive factor - that the training environment and the actual work environment are similar. This alignment between the training and practice environments is conducive to effective transfer of the knowledge and skills gained through the training programs.

Effectiveness of training methods

The effectiveness of a training program is strongly tied to the selection of appropriate training methods (Wentling cited in Halim and Ali, 1997). The training methods should be carefully chosen to ensure the program's objectives are successfully achieved. To gauge the effectiveness of the training methods used in this case, the trainees were asked to rate the statement "Training methods that are employed are effective" on a scale of "always", "often", "sometimes", "rarely", and "never".

As shown in Figure 7, the responses were mixed. Four respondents felt the training methods were "rarely" effective. Twelve respondents said the methods were "sometimes" effective. The remaining four trainees viewed the methods as "often" effective. This data suggests there is room for improvement in the selection and delivery of the training methods used. While a slim majority (12 out of 20) found the methods to be only "sometimes" effective, a sizable minority (4 out of 20) thought they were "rarely" effective. Only a small group (4 out of 20) considered the methods to be "often" effective. To enhance the overall effectiveness of the training program, the organizers should closely examine the training methods based on this feedback and make adjustments as needed. Carefully selecting appropriate training approaches is crucial for ensuring the program's objectives are successfully met.

Figure 7 Trainees' Perceptions of the Effectiveness of Training Methods (N=20)

Source: Primary data

The trainers were asked to rate the effectiveness of the training methods used at the NUST Library on a Likert scale ranging from "Extremely effective" to "Not effective at all." As shown in Figure 8, four of the respondents rated the training methods as very effective. Another group of four respondents viewed the methods as moderately effective. Meanwhile, one respondent thought the training methods were not effective at all.

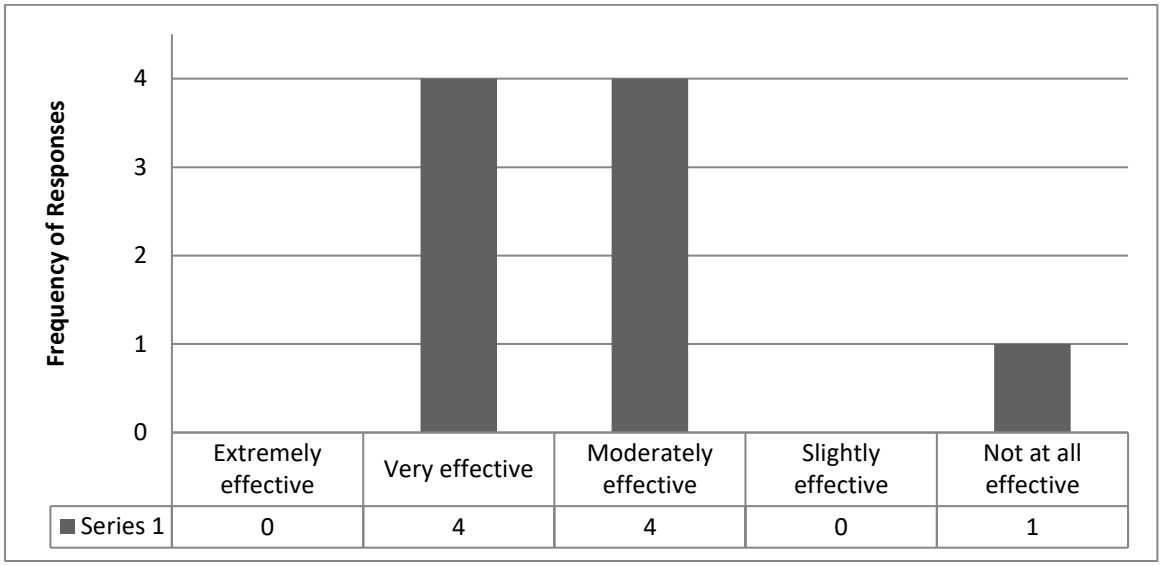

Figure 8: Perceptions of Trainers on Effectiveness of Training Methods (N=9)

Source: Primary data

The senior management at the NUST Library acknowledged that while the current lecture-based training methods seem to be working, there is still room for improvement. One interviewee expressed the view that "the current training methods may be alright but not

adequate." They suggested the need to move beyond the traditional lecture format and incorporate online teaching methods, which would allow staff to engage in self-paced learning. Furthermore, it was recommended that a blended learning approach be adopted, where the traditional lecture method is reinforced by online tutorials. Another interviewee, while contending that the current methods are sufficient, emphasized the importance of considering technological trends when deciding on training approaches. The interviewees also felt that interactive learning methods could be useful, as they allow for the sharing of knowledge among the participants. Overall, the sentiment was that the library should explore ways to enhance the existing training methods to better meet the evolving needs of the staff.

Effects of the Work Environment on Learning and Training Transfer at NUST Library

The work environment included such factors as the adequacy of equipment and technological infrastructure, the learning and knowledge-sharing environment, supervisor support, behavioural modelling, and the opportunity to apply newly acquired knowledge, skills, and attitudes to the job.

Adequacy of Equipment and Technological Infrastructure

Lack of equipment and technological infrastructure was a recurrent theme in both interview and questionnaire responses. One respondent observed that “obsolete equipment and budget constraints are the major stumbling blocks to practice and implement the knowledge and skills acquired from internal training programs”

The study identified a lack of equipment and technological infrastructure as a major drawback to the transfer of training to the job. Staff needs to continuously practice what they could have learned, and this is only possible when adequate equipment is available. The study revealed that training in ICT courses should be followed by a conducive work environment to practice what would have been learned. ICT is a fast-changing field thus availability of IT equipment is a prerequisite. The study revealed that continued practice of learned skills is also hampered

Effects of Supervisor Support on Training Transfer

Opinions were divergent on whether appropriate supervisor help was offered following training. Some trainers were found to have failed to duplicate learned skills, knowledge, and attitudes. However, gained information and abilities were applied in some training courses, such as SubjectsPlus. Under the guidance of a supervisor, teams were formed to develop

subject guides. The lack of follow-up in other taught courses was most likely the main factor for the lack of training transfer.

The Extent to Which Trainee Characteristics Affect Learning and Training Transfer at NUST Library

Cognitive ability, job/career characteristics, self-efficacy, motivation, and perceived usefulness of training were found to influence learning and retention, resulting in generalisation and maintenance, all of which are required for increased job performance. The degree of cognitive ability among participants in the study was found to be high, which correlates with the education of participants as shown in Figure 4. However, trainees' pre-training motivation was regarded as very low, as was their sense of self-efficacy. Motivation to put newly acquired abilities to use was also scored poorly. Career planning and openness to new experiences received excellent ratings. Similarly, the perceived benefit of training was highly evaluated.

Trainer characteristics that affect training outcomes at NUST Library

Pedagogical abilities, presentation skills, topic knowledge, and experience are the trainer attributes identified by the research as influencing learning and retention, training transfer, and job performance. In addition to existing literature, the investigation discovered a widespread dearth of instructional abilities among academic librarians. Furthermore, the study discovered that, although some trainers had extremely adequate presenting abilities, others needed additional training in developing appealing presentations.

In terms of subject expertise, the study discovered that there are certain situations where trainers conduct research on specific topics just for presenting reasons, without a thorough comprehension of the issues. However, the study discovered that trainers had extensive training experience since they had participated in Information Literacy Training in their respective faculties and departments.

Discussion

Previous research has shown the significance of incorporating all stakeholders, including trainees, in the early phases of training design (Cobblah & van der Walt, 2017; Martin, 2010). According to Martin (2010), one of the most crucial questions to ask if a training course is to succeed is, "Have participants been involved in determining the content and design of the

training programme?" The first objective of the study was to determine the extent of engagement of library employees in training preparation activities at the NUST Library. It was shown that half of the trainers "sometimes" consult with their subordinates before the start of training programmes. This was in contrast to replies from senior library management, who stated that trainers always interact with trainees to determine their training requirements.

While trainees were somewhat satisfied with their involvement and dissemination of training information the findings suggest that, despite positive sentiments expressed by senior library management during interviews, library staff were not fully involved in training preparatory activities. Trainees, on the other hand, see such engagement as motivating, an impression echoed by the majority of trainers. Consequently, trainees' pre-training motivation as well as motivation to transfer learned skills, information, and attitudes to the work may suffer as a result of trainees' perceptions that their training requirements are not being met. This is in line with the sentiments expressed by Asare-Bediako, as cited in Cobblah and van der Walt (2017), who suggest that training transfer could be facilitated through collaborative efforts involving three parties, namely, the trainee, the trainer, and the supervisor and that each of them must take some action before, during, and after the training programme.

Training design factors that have been identified in the literature include training objectives and methods, multiple training techniques, opportunities for practice (Ghosh, et al., 2012), conditions of practice, transfer design, instructional techniques, identical elements, stimulus variability, and goal setting (Chauhan, et al., 2017). In the context of this study, trainees were not entirely satisfied with the relevance of training content which they viewed as more theoretical than practical. Trainers and senior library management, however, maintained that they are guided by current trends in the LIS profession to come up with relevant training content. There is however no mention of a systematic training needs assessment having been carried out.

The work environment following training plays a crucial role in determining the success of knowledge transfer. According to Grossman and Salas (2011), even well-designed and effectively delivered training programs may fail to produce positive transfer outcomes if the subsequent work environment does not support the application of learned behaviors. Additionally, Yusof (2011) highlighted in Na-nan et al. (2017) that a supportive work environment encourages the utilization of acquired knowledge and skills. To enhance transfer,

it is beneficial to provide a training environment that closely resembles the actual workplace. This approach, as suggested by Kraiger (2003), allows trainees to gain experience in implementing targeted behaviours within the appropriate setting, increasing the likelihood of successful application on the job. Study findings indicate that the work environment at the NUST Library is not identical to the training environment thus compromising training transfer. Staff do not have adequate equipment such as computers to practice learned skills and knowledge.

Conclusion

The survey reveals that a significant percentage of trainees did not communicate their training requirements to their supervisors. Trainers, who are also supervisors, claimed to "sometimes" discuss training needs with their subordinates. Trainees expressed dissatisfaction with the timely sharing of information on upcoming training activities, although trainers disagreed. However, trainees were generally satisfied with the dissemination of information on the benefits of training. Despite positive attitudes expressed by senior library management, the survey suggests that library workers were not fully engaged in training preparation activities. Trainees viewed such engagement as inspiring, a sentiment shared by most trainers. This lack of engagement may negatively affect trainees' motivation before and after training, as they perceive that their training needs are not being met.

The study shows a lack of agreement among study participants regarding the relevance of training content and its generation. Trainees expressed dissatisfaction with the theoretical nature of the content, desiring more practicality. Trainers and senior library management claimed to follow current trends in the library and information science (LIS) profession to ensure relevance. However, there is no mention of a systematic training needs assessment being conducted. The study also found similarities between the training and practice environments, which is beneficial for the transfer of training. On the other hand, trainees were not entirely satisfied with the training methods employed. Senior management acknowledged the need for improvement by incorporating online tutorials and other ICT-enhanced methods, although they were content with the interactive nature of the current lecture and facilitation style. Furthermore, the lack of adequate equipment hindered opportunities for the continued practice of the trained content.

The study highlights the lack of equipment and technological infrastructure as a major hindrance to the transfer of training to the job. It emphasises that training staff in IT courses without proper IT equipment is a waste of time and resources, as the field evolves rapidly, and skills need to be applied immediately. However, training that focuses on attitude change, such as customer care, can result in on-the-job behavioural changes. The study found differing opinions on the level of post-training support provided by supervisors, but it revealed a lack of trainers modelling the desired behaviour. Follow-up was identified as a significant factor in training transfer, as evidenced by the application of trained knowledge and skills in courses where teams were formed to create subject guides under supervision. In contrast, other training courses lacked follow-up, potentially leading to a lack of training transfer.

The factors that influence learning and retention, leading to improved job performance are cognitive ability, job/career characteristics, self-efficacy, motivation, and perceived usefulness of training. The study found that participants had a high level of cognitive capacity, which aligns with their advanced education in LIS. However, trainees had low pre-training motivation and self-efficacy, as well as poor motivation to apply newly acquired skills. On the other hand, career planning and openness to new experiences received positive ratings. The perceived utility of training was considered very high.

The trainer characteristics that impact learning, retention, transfer of training, and job performance include pedagogical skills, presentation skills, subject knowledge, and experience. The research indicates a general lack of pedagogical skills among academic librarians. While some trainers have satisfactory presentation skills, others require more training to create engaging presentations. The study also found instances where trainers researched specific topics solely for presentation purposes, lacking a deep understanding of the subjects. However, trainers were found to be highly experienced in training, as they also participate in Information Literacy Training within their faculties and departments.

Recommendations

Based on the study results and reviewed literature, the following key recommendations are made:

Supervisors should regularly meet with their subordinates to identify training needs arising from the changing operational environment and organizational strategic direction. This collaborative approach can help reduce resistance and increase motivation for training. Training content and delivery methods should be tailored to job functions and incorporate a blended approach of traditional and online components to enable self-paced learning. A participatory approach to generating training content, with a focus on practical application, is recommended. Opportunities for skill practice and immediate on-the-job application should be provided to prevent skill decay. The library's ICT infrastructure should be upgraded to support the transfer of acquired digital skills. Post-training follow-up, supervisor modelling, and the formation of practice teams with incentives are suggested to reinforce training impact. Efforts to raise pre-training motivation through educating staff on the benefits of training are also recommended. The library should advocate for its trainers to receive postgraduate teaching and learning qualifications, and library schools should strengthen their focus on equipping librarians with pedagogical skills to teach in the digital landscape. Finally, a dedicated "train the trainer" program should be developed to address any gaps in the trainers' capabilities.

References

Baldwin, T., 2014. Preface to "Training Transfer: manager's guid and bibliography". In: R. Wenzel & Cordery, eds. *Training Transfer: manager's guid and bibliography.* Western Australia: Australian Institute of Management, p. iii.

Baldwin, T. & Ford, J., 1988. Transfer of training: a review and direction for future research. *Personnel Psychology,* 41(1), pp. 63-105.

Baldwin, T., Ford, J. & Blume, B., 2017. The state of transfer of training research: moving toward more consumer-centric inquiry. *Human Resource Development Quarterly,* 28(1), pp. 17-24.

Broady-Preston, J. & Bell, S., 2001. Motivating mid-career LIS professionals: the Aberystwyth experience. *New Library World,* 102(10), pp. 372-81.

Burgin, R. & Smith, D., 1994. Ensuring that training pays off: transfer of training in libraries. *The Bottom Line,* 7(1), pp. 22-25.

Burke, L. & Hutchins, H., 2007. Training transfer: an integrative literature review. *Human Resource Development Review,* 6(3), pp. 263-296.

Chauhan, R., Ghosh, P., Rai, A. & Kapoor, S., 2017. Improving transfer of training with transfer design: does the supervisor support moderate the relationship? *Journal of Workplace Learning,* 29(4), pp. 268-285.

Cobblah, M.-A. & van der Walt, T., 2017. Staff training and development and work performance in the university libraries in Ghana. *Information Development,* 33(4), pp. 375-392.

Family Health International, 2005. *Qualitative research methods: a data collector's field guide.* North Carolina: Family Health International.

Ferreira, R. & Abbad, G., 2013. Training needs assessment: where we are and where we should go. *Brazillian Administration Review,* 10(1), pp. 77-99.

Ghosh, P. et al., 2012. Towards more effective training programmes. *Industrial and Commercial Training,* 44(4), pp. 194-202.

Grossman, R. & Salas, E., 2011. The transfer of training: what really matters. *International Journal of Training and Development,* 15(2), pp. 103-120.

Hamid, A. & Soroya, M., 2017. Continuing education for LIS professionals: why. *Library Review,* 66(1/2), pp. 83-89.

Kraiger, K., 2003. *Perspectives on training and development. Handbook of Psychology v. 12. Industrial and organisational psychology.* Hoboken: Wiley.

Marketing Research Association, 2015. *Focus Groups.* [Online]
Available at: http://www.marketingresearch.org/focus-groups
[Accessed 14 September 2016].

Martin, H., 2010. Improving training impact through effective follow-up: techniques and application. *Journal of Management Development,* 29(6), pp. 520-534.

Mathis, R., Jackson, J., Valentine, S. & Meglich, P., 2016. *Human resource management.* London: Cengage.

Na-nan, K., Chaiprasit, K. & Pukkeeree, P., 2017. Influences of workplace environment factors on employees' training transfer. *Industrial and Commercial Training,* 49(6), pp. 303-314.

National University of Science and Technology, 2011. *Vice-Chancellor's Annual Report 2011.* Bulawayo: NUST Information and Public Relations.

NUST Library, 2017. *Library: National University of Science and Technology.* [Online] Available at: library.nust.ac.zw [Accessed 22 March 2017].

NUST, 2014. *National University of Science and Technology Vice Chancellor's Annual Report,* Bulawayo: NUST Department of Communication and Marketing.

Raju, J., 2014. Knowledge and skills for the digital era academic library. *The Journal of Academic Librarianship,* Volume 40, pp. 163-170.

University of Minnesota, 2016. *Human resources management.* Minnesota: Libraries publishing.

Vance, R., 2006. *Employee engagement and commitment.* s.l.:SHRM Foundation.

Varlejs, J., Lewis, V., Schnuer, S. & de Sumar, J., 2016. *IFLA Guidelines for continuing professional development.* s.l.:International Federation of Library Associations and Institutions.

Wenzel, R. & Cordery, J., 2014. *Training transfer research: a managers' guide and bibliography.* Western Australia: Australian Institute of Management.