



A Study on the Effectiveness of Human Resource Training at Ministry of Health, A Case Study of Chipata District in the Eastern Province of Zambia.

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ABSTRACT

Training is the process for providing required skills to the employee for doing the job effectively,

skillfully, and qualitatively. Training of employees is not continuous, but it is periodical and given in specified time. Generally training will be given by an expert or professional in related field or job. Training is required at every stage of work and for every person at work. To keep oneself updated with the fast-changing technologies, concepts, values and environment, training plays a vital role. Training programmes are also necessary in any organisation for improving the quality of work of the employees at all levels. It is also required when a person is moved from one assignment to another of a different nature. Taking into account this context, this unit aims at providing insight into the concept, need and methods of training, also areas of evaluation of training, retraining and dimensions of organisational learning.

Over the past century, training and development in organizations has undergone a remarkable transformation. As the nature of work has changed, training objectives have broadened beyond improving efficiency on simple manual tasks to providing employees with the skills needed to perform complex and dynamic jobs. Once conducted almost exclusively on-the job by supervisors (Kraiger & Ford, 2007), technological advances now allow learning to occur on demand and virtually anywhere and at any time. The role of training and development has also expanded to where today it is viewed as not only a way to enhance individual capabilities but also as a valuable lever for improving team effectiveness and for organizations to gain competitive advantage (Noe, Clarke, & Klein, 2014).

Accomplished of a research requires several things. In this view, the researcher used a number of techniques that were necessary to carry out the research successfully and resourcefully. Sequentially to carry out this research effectively, the researcher used questionnaires; interviews, and observation techniques. Ministry of Health consists of a large number of workers among them we have taken only 50 sampled respondents for the questionnaire.

The Ministry of Health, Chipata, and Eastern province is delivering the effective training and development towards their employees in terms of seasonal and casual workers. They are doing the tremendous job in terms of giving job opportunities to the people of Eastern Province, in a special way to the people of Chipata. Though it was started only few years ago, but it has brought tremendous changes to the society on the whole to the country of Zambia. Through the Ministry of Health program, the small-scale farmers get the subsidiaries to sow the seeds like maize, groundnut, soya beans, and together with the fertilizers and once they get the benefit the farmers have to sell their product to Ministry of Health, the Organisation also will pay the farmers the fair amount for their commodities.

Keywords

- ✓ Ministry of Health
- ✓ Training and Development
- ✓ Technological Advances
- ✓ Skillfully and Quantitatively

INTRODUCTION

Training is the process for providing required skills to the employee for doing the job effectively, skillfully and qualitatively. Training of employees is not continuous, but it is periodical and given in specified time. Generally training will be given by an expert or professional in related field or job. Training is required at every stage of work and for every person at work. To keep one updated with the fast-changing technologies, concepts, values and environment, training plays a vital role.

Training programmes are also necessary in any organisation for improving the quality of work of the employees at all levels. It is also required when a person is moved from one assignment to another of a different nature. Taking into account this context, this unit aims at providing insight into the concept, need and methods of training, also areas of evaluation of training, retraining and dimensions of organisational learning. Training is a process of learning a sequence of programmed behavior. It is the application of knowledge & gives people an awareness of rules & procedures to guide their behavior. It helps in bringing about positive change in the knowledge, skills & attitudes of employees. Training is investment in getting more and better-quality work from your talent.

Thus, training is a process that tries to improve skills or add to the existing level of knowledge so that the employee is better equipped to do his present job or to mould him to be fit for a higher job involving higher responsibilities. It bridges the gap between what the employee has & what the job demands.

BACKGROUND OF THE STUDY

Over the past century, training and development in organizations has undergone a remarkable transformation. As the nature of work has changed, training objectives have broadened beyond improving efficiency on simple manual tasks to providing employees with the skills needed to perform complex and dynamic jobs. Once conducted almost exclusively on-the job by supervisors (Kraiger & Ford, 2007), technological advances now allow learning to occur on demand and virtually anywhere and at any time. The role of training and development has also expanded to where today it is viewed as not only a way to enhance individual capabilities but also as a valuable lever for improving team effectiveness and for organizations to gain competitive advantage (Noe, Clarke, & Klein, 2014).

This transformation has been accompanied by a growing and constantly evolving body of research across a variety of disciplines, including industrial/organizational psychology, military psychology, human factors, and cognitive psychology, which has advanced our understanding of how to design and deliver training and development in organizations (Salas & Cannon-Bowers, 2001). We examine this research evolution with particular attention on research published in the Journal of Applied Psychology (JAP). We also describe particularly important and relevant pieces published in other outlets. Our goal is to highlight what we have learned from training and development research published in JAP in the past 100 years and to provide recommendations about potentially fruitful areas for future research.

The process we used to write this review included several steps. First, we created a database consisting of all articles on training, development, and learning published in JAP. We included articles on mentoring and rater training if they offered insights into the effectiveness of training and development. More comprehensive treatment of these topics can be found in the articles on mentoring and performance appraisal found in this special issue. A list of the JAP articles included in our database, organized by decade, is provided in the online supplemental materials. Next, we used citation analysis and our own judgment to identify key themes and articles. Last, our review of the key articles served as the basis for the citations and article summaries included in each section of the paper. We begin by presenting a timeline of training and development research in JAP and identifying key advances and innovations. We then examine four prominent research themes – training criteria, trainee characteristics, training design and delivery, and the training context – each of which provides unique insight into our evolving understanding of training and development. Finally, we discuss important directions for future research.

METHODOLOGY

Accomplished of a research requires several things. In this view, the researcher used a number of techniques that were necessary to carry out the research successfully and resourcefully. Consequently, the research methodology seeks to elucidate the variety of methods and techniques that the researcher used in order to get suitable information, sampling procedures and data analysis.

SAMPLING DESIGN

➤ Methodology is a vital element for a research since it shows the appropriate ways in which data will be collected. For that reason, the research was conducted at Ministry of Health in Chipata Eastern Province. Sequentially to carry out this research effectively, the researcher used questionnaires; interviews, and observation techniques.

➤ These approaches were engaged in order to find out the effective way of giving training to the employees of the Ministry of Health. The survey was conducted by the use of a self-administered questionnaires which contains open ended questions.

➤ A survey of 50 small and medium enterprises who conduct business in Chipata district.

Area of Study

The research was conducted within the central business place of Chipata City

TARGET POPULATION

➤ The research primarily the Seasonal and Casual Employees of Ministry of Health in Chipata those are involved in Cotton Ginnery, Mealie Meal Production, Oil Production, seedlings department and Field work department.

SAMPLE SIZE

➤Ministry of Health consists of 95workers among them we have taken only 50 Sampled respondents for the questionnaire.

TYPES AND SOURCES OF DATA

➤In order to achieve the objectives of the research, two types of data were collected, that is, primary and secondary data.

PRIMARY DATA

➤Primary sources data was collected using a self-administered questionnaire (Appendix I). The questionnaires contained Closed-ended questions. Questionnaires were distributed to contact persons of the selected businesses.

➤SECONDARY DATA

➤The Secondary data collected constituted reviewing existing literature in form of Published Books and other Researches on the Internet, journals, magazines and any other published materials

SAMPLING TECHNIQUES

➤Convenience sampling was used to collect data from Ministry of Health Employees

STATISTICAL TOOLS USED

➤The data was analyzed mainly by using the percentage method. Preference of the respondents towards the different training Method using ranking method

DATA ANALYSIS

The research yielded the following data:

TABLE NO: 1

GENDER OF RESPONDENTS

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGES
1	MALE	35	70
2	FEMALE	15	30
	TOTAL	50	100%

The above table shows the gender of Employees, 35 out of 50 represented by 70% of respondents being male and 15 represented by 30% of the respondents are female.

TABLE No: 2

AGE GROUP OF RESPONDENTS

S. NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGES
1	20 – 30	13	26
2	31 – 40	8	16
3	41 – 50	19	38
4	Above 51	10	20
	TOTAL	50	100%

The above able shows the age group of Employees, highest number are those in the age group between 41-50 with a 38% and the lowest are in the age group of 31-40 with 16%.

TABLE No: 3**FOR HOW LONG HAVE YOU BEEN WORKING FOR THIS ORGANISATION**

S. NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Less than 1 Year	14	28
2	1-5 Years	35	70
3	5-10 Years	1	2
4	More than 15 Years	0	0
TOTAL		50	100%

The above table shows for how long you have been working for this ORGANISATION. 14 out of 50 represented by 28% are Less than 1 Year working Experience, 35 out of 50 represented by 70% are 1-5 Years working experience Employees and 1 out of 50 represented by 2% are 5-10 Years working experience of Employees.

TABLE No: 4**HOW IS TRAINING HELPFUL FOR COMMUNICATION**

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Keep good relationship	24	48
2	Increases the productivity	21	42
3	Attention the Organizational goal	5	10
TOTAL		50	100%

The majority of respondents in the table above How is training helpful for communication 24 out of 50 represented by 48% are keep good relationship among employees and employers, 21 out of 50 represented by 42% are increases the productivity and 5 out of 50 represented by 10% are attention the Organizational goal.

TABLE No: 5**ARE YOU ACTIVELY INVOLVED IN LEARNING DURING TRAINING PROCESS?**

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	44	88
2	No	6	12
TOTAL		50	100%

The above table shows that 44 out of 50 employees represented by 88% are actively involved in learning during training process, and 6 out of 50 employees represented by 12% not actively involved in learning during training process.

TABLE No: 4.6

DO YOU ACCEPT AND USE NEW CHANGES IN THE TRAINING AND DEVELOPMENTAL PRACTICES?

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	24	48
2	No	26	52
TOTAL		50	100%

The above table shows 24 out of 50 represented by 48% who have accepted and used new changes in the training and developmental practices and 26 out of 50 represented 52% who have not accepted and used new changes in the training and developmental practices.

TABLE No: 7

TRAINING COURSE FACILITATE YOU IN IMPROVING PERSONAL COMPETENCY

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	40	80
2	No	10	20
TOTAL		50	100%

The above table shows 40 out of 50 are training course facilitate employees in improving personal competency represented by 80% 10 out of 50 are not facilitate employees in improving personal competency

TABLE No: 8

TRAINING AND DEVELOPMENTAL PRACTICES FACILITATE THE EMPLOYEES TO GET INFORMATION ABOUT THE JOB OPPORTUNITIES WITHIN THE ORGANISATION

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	32	64
2	No	18	36
TOTAL		50	100%

The above table shows 32 out of 50 employees represented by 64% are training and developmental practices facilitate the employees to get information about the job opportunities within the ORGANISATION and 18 out of 50 employees represented by 36% are not encouraging the employees to get training and developmental practices facilitate the employees to get information about the job opportunities within the ORGANISATION

TABLE No: 4.9

TRAINING PRACTICES HELP YOU TO KNOW ABOUT THEIR INTERESTS AS WELL AS THEIR STRENGTHS AND WEAKNESSES

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	38	76
2	No	12	24
TOTAL		50	100%

The above table shows 38 out of 50 employees represented by 76% said 'yes' for training practices help you to know about their interests as well as their strengths and weaknesses and 12 out of 50 employees represented by 24% said 'No' for training practices help you to know about their interests as well as their strengths and weaknesses.

TABLE No: 4.10

TRAINING FUNCTION HELP THE EMPLOYEES TO ACHIEVE SHORT- AND LONG-TERM CAREER GOALS

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	42	84
2	No	8	16
TOTAL		50	100%

The above table shows the training function help the employees to achieve short- and long-term career goals by employees, 42 out of 50 employees represented by 84% said 'Yes' and 8 out of 50 employees represented by 16% said 'No' to the training function help the employees to achieve short- and long-term career goals.

TABLE No: 4.11

THE MANAGEMENT PREPARE YOU FOR OVERSEAS ASSIGNMENT

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	25	50
2	No	25	50
TOTAL		50	100%

The above table shows 'Yes' to the management prepare you for overseas assignment the ratio is 25 out of 50 represented by 50% and 25 out of 50 said 'No' represented by 50% that the management prepares you for overseas assignment.

TABLE No: 4.12

CHANGES ADOPTED BY THE MANAGEMENT IN TRAINING PRACTICES USEFUL OR NOT

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	33	66
2	No	17	34
TOTAL		50	100%

The above table shows 33 out of 50 employees represented by 66% said that the Changes adopted by the management in training practices useful, and 17 out of 50 represented by 34% said that changes adopted by the management in training practices are not useful.

TABLE No: 4.13

THE TRAINING COURSE HELP YOU TO WORK INDEPENDENTLY AND PRODUCE RESULTS

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	21	42
2	No	29	58
TOTAL		50	100%

The above table shows the training course help you to work independently and produce results. 21 out of 50 Employees represented by 42% said that they said 'Yes', and 29 out of 50 represented by 58% said 'No' to the training course help you to work independently and produce results.

TABLE No: 4.14

TRAINING PROGRAMS HELP YOU TO ACQUIRE NEW SKILLS AND KNOWLEDGE, AND APPLY THEM ON THE JOB

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	24	48
2	No	26	52
TOTAL		50	100%

The above table shows the training programs help you to acquire new skills and knowledge, and apply them on the job. 24 out of 50 employees represented by 48% said 'Yes' to the training programs help you to acquire new skills and knowledge, and apply them on the job and 26 out of 50 represented by 52% said 'No' to the training programs help you to acquire new skills and knowledge, and apply them on the job.

TABLE No: 4.15

THE TRAINING AND DEVELOPMENTAL PROGRAMS ARE HELPFUL FOR YOU IN IDENTIFYING THE ACTIONS NEEDED TO TAKE TO ACHIEVE THE GOAL

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	45	90
2	No	5	10
TOTAL		50	100%

The above table shows the training and developmental programs are helpful for you in identifying the actions needed to take to achieve the goal. 45 out of 50 employees represented by 90% agreed training and developmental plans are helpful and 5 out of 50 employees represented by 10% disagreed that the training and developmental programs are helpful for you in identifying the actions needed to take to achieve the goal

TABLE No: 4.16

THE DESIGNED TRAINING PROGRAM CHANGE YOUR ATTITUDE ABOUT DIVERSITY AND OR TO DEVELOP SKILLS NEEDED TO WORK WITH A DIVERSE WORK FORCE

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	22	44
2	No	28	56
TOTAL		50	100%

The above table shows the designed training program change your attitude about diversity and or to develop skills needed to work with a diverse work force. 22 out of 50 employees represented by 44% said 'Yes' that the designed training program change your attitude about diversity and or to develop skills needed to work with a diverse work force and 28 out of 50 represented by 56% said 'No' that the designed training program change your attitude about diversity and or to develop skills needed to work with a diverse work force.

TABLE No: 4.17

THE TRAINING PROGRAM ENABLE YOU TO EITHER REMAIN IN A TECHNICAL CAREER PATH OR MOVE INTO A MANAGEMENT CAREER PATH

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	10	20
2	No	40	80
TOTAL		50	100%

The above table shows t the training program enable you to either remain in a technical career path or move into a management career path. 10 out of 50 employees represented by 20% said 'Yes' to the training program enable you to either remain in a technical career path or move into a management career path and 40 out of 50 employees represented by 80% said 'No' to the training program enable you to either remain in a technical career path or move into a management career path

TABLE No: 4.18

DO THE TRAINING AND DEVELOPMENTAL PROGRAMS HELP YOU TO TAKE RESPONSIBILITY AND AUTHORITY TO MAKE DECISIONS?

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	32	64
2	No	18	36
TOTAL		50	100%

The above table shows the training and developmental programs help you to take responsibility and authority to make decisions. 32 out of 50 employees represented 64% said 'Yes' to the training and developmental programs help you to take responsibility and authority to make decisions and 18 out of 50 employees represented 36% said 'No' to the training and developmental programs help you to take responsibility and authority to make decisions.

TABLE No: 4.19

DOES THE MANAGEMENT CONDUCT FORMATIVE EVALUATION TO IMPROVE THE TRAINING PROCESS?

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE (%)
1	Yes	35	70
2	No	15	30
TOTAL		50	100%

The above table shows 35 out of 50 employees represented by 70% who answered 'yes' that the management conduct formative evaluation to improve the training process and 15 out of 50 employees represented by 30% who answered 'no' the management conduct formative evaluation to improve the training process.

TABLE No: 4.20

WHAT IS THE IMPORTANCE OF TRAINING?

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE
1	Increase the productivity	21	42
2	Achieving the organizational goals	9	18
3	Achieving the target	4	8
4	To reduce the wastages	16	32
TOTAL		50	100%

The above table shows the importance of Training. 21 out of 50 employees represented by 42% said that the training will increase the productivity, 9 out of 50 employees represented by 18% said that the training will increase the productivity, 4 out of 50 employees represented by 8% said that the training will increase the productivity and 16 out of 50 employees represented by 32% said that the training will increase the productivity.

TABLE No: 4.21

WHAT DO YOU EXPECT FROM THE TRAINING PROGRAM?

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE
1	Theories	8	16
2	Practical Knowledge	31	62
3	Vocational Guidance	9	18
4	Theory cum Practical	2	4
TOTAL		50	100%

The above table shows the expectation from the training program. 8 out of 50 employees represented by 16% said that the expected training program through Theories, 31 out of 50 employees represented by 62% said that the expected training program through practical Knowledge, 9 out of 50 employees represented by 18% said that the expected training program through Vocational Guidance and 2 out of 50 employees represented 4% said that the expected training program through Theory cum practical.

TABLE NO: 4.22

RATE THE QUALITY OF TRAINING THAT YOU RECEIVED FROM THE TRAINING SESSION?

S.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE
1	Very beneficial	30	60
2	Beneficial	8	16
3	Not Beneficial	5	10
4	Un-importance	7	14
TOTAL		50	100%

The above table shows the rate the quality of training that you received from the training session. 30 out of 50 employees represented by 60% said that rate the quality of training that you received from the training session are very beneficial, 8 out of 50 employees represented by 16% said that the rate the quality of training that you received from the training session are beneficial, 5 out of 50 employees represented by 10% said that the rate the quality of training that you received from the training session are not beneficial and 7 out of 50 employees represented 14% said that the rate the quality of training that you received from the training session are un-importance.

FINDINGS

Percentage Analysis

- 70 % of the male employees responded about the effective Training at Ministry of Health.
- 70% of the employees worked from 1-5 Years, it shows that employees wanted to remain with Parrogate for long time.
- 88% of the Employees actively involved in learning during training process.
- 64% of the employees accepted the training and developmental practices facilitate the employees to get information about the job opportunities within the ORGANISATION.
- 76% of employees accepted the training practices help to know their interests as well as their strengths and weaknesses.
- 84% accepted the training function help the employees to achieve short and long term career goals.
- 66% accepted the changes adopted by the management in training practices useful

- 90% of the employees accepted the training and developmental programs are helpful for you in identifying the actions needed to take to achieve the goal.
- 70% of the employees accepted the management conduct formative evaluation to improve the training process.
- 60% of employees accepted the rate the quality of training that conducted by the Organisation's are very useful.

SUGGESTIONS

The Ministry of Health, Chipata, Eastern Province should give equal training, orientation or induction or initiation to all the casual and seasonal Employees.

- The Ministry of Health, Chipata, Eastern Province should monitor the employees, whether they follow the safety and security equipment's during the working hours.
- The Employer has to follow the performance appraisal and assessment time to time
- The Ministry of Health has to follow the discipline and decorum of the employee's time to time
- The Human Resource manager has to give proper training and induction before start the work.
- The Human Resource Manager has to give concern on the effective training to the seasonal workers
- When the ORGANISATION is giving training to the employees, the employee should learn with enthusiasm and with inspiration.
- Check the performance of the workers every quarterly, half yearly, and annually.

CONCLUSION

The Ministry of Health, Chipata, and Eastern province is delivering the effective training and development towards their employees in terms of seasonal and casual workers. They are doing the tremendous job in terms of giving job opportunities to the people of Eastern Province, in a special way to the people of Chipata. Though it was started only few years ago, but it has brought tremendous changes to the society on the whole to the country of Zambia. Through the Ministry of Health ORGANISATION program, the small-scale farmers get the subsidies to sow the seeds like maize, groundnut, soya beans, and together with the fertilizers and once they get the benefit the farmers have to sell their product to Ministry of Health, the ORGANISATION also will pay the farmers the fair amount for their commodities.

REFERENCES

- ✓ Ackerman, P. L. (1992). Predicting individual differences in complex skill acquisition: Dynamics of ability determinants. *Journal of Applied Psychology*, 77(5), 598–614.
- ✓ Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology*, 60, 451–474.
- ✓ Alexander, L. T., Kepner, C. H., & Tregoe, B. B. (1962). The effectiveness of knowledge of results in a military system-training program. *Journal of Applied Psychology*, 46(3), 202–211.
- ✓ Arthur, W. J., Bennett, W. J., Edens, P. S., & Bell, S. T. (2003). Effectiveness of training in organizations: A meta-analysis of design and evaluation features. *Journal of Applied Psychology*, 88(2), 234–245.
- ✓ Anderson, J. R. (1983). *The architecture of cognition*. Cambridge, MA: Harvard University Press.
- ✓ Alliger, G. M., & Katzman, S. (1997). When training affects variability: Beyond the assessment of mean differences in training evaluation. In J. K. Ford (Ed.), *Improving training effectiveness in work organizations* (pp. 223–243). Mahwah, NJ: Erlbaum.
- ✓ Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel Psychology*, 41(1), 63–105.
- ✓ Barbee, J. R., & Keil, E. C. (1973). Experimental techniques of job interview training for the disadvantaged: Videotape feedback, behavior modification, and microcounseling. *Journal of Applied Psychology*, 58(2), 209–213.
- ✓ Barthol, R. P., & Zeigler, M. (1956). Evaluation of a supervisory training program with How Supervise? *Journal of Applied Psychology*, 40(6), 403–405.
- ✓ Campbell, J. P. (1971). Personnel training and development. *Annual Review of Psychology*, 22 565–602.
- ✓ Canter, R. R. J. (1951). A human relations training program. *Journal of Applied Psychology*, 35(1), 38–45.

- ✓ Clark, R. E. (1994). Media will never influence learning. *Educational Technology Research and Development*, 42(2), 21-29.13. Colquitt, J. A., LePine, J. A., & Noe, R. A. (2000). Toward an integrative theory of training motivation: A meta-analytic path analysis of 20 years of research. *Journal of Applied Psychology*, 85(5), 678–707.
- ✓ Debowksi, S., Wood, R. E., & Bandura, A. (2001). Impact of guided exploration and enactive exploration on self-regulatory mechanisms and information acquisition through electronic search. *Journal of Applied Psychology*, 86(6), 1129–1141.
- ✓ DeRue, D. S., & Wellman, N. (2009). Developing leaders via experience: The role of developmental challenge, learning orientation, and feedback availability. *Journal of Applied Psychology*, 94(4), 859–875.
- ✓ Eden, D., & Aviram, A. (1993). Self-efficacy training to speed reemployment: Helping people to help themselves. *Journal of Applied Psychology*, 78(3), 352–360.
- ✓ Ellis, A. P. J., Bell, B. S., Ployhart, R. E., Hollenbeck, J. R., & Ilgen, D. R. (2005). An evaluation of generic teamwork skills training with action teams: Effects on cognitive and skill- based outcomes. *Personnel Psychology*, 58(3), 641-672.
- ✓ Facticeau, J. D., Dobbins, G. H., Russell, J. E., Ladd, R. T., & Kudisch, J. D. (1995). The influence of general perceptions of the training environment on pretraining motivation and perceived training transfer. *Journal of Management*, 21(1), 1-25.
- ✓ Ford, J. K., Kraiger, K., & Merritt, S. M. (2010). An updated review of the multidimensionality of training outcomes: New directions for training evaluation research. In S. W. J. Kozlowski & E. Salas (Eds.), *Learning, training, and development in organizations* (pp. 135-165). New York: Routledge.
- ✓ Gagne, R.M. (1965). *The conditions of learning*. New York: Holt, Rinehart, and Winston.
- ✓ Gilbert, G. M. (1941). "Aptitude" and training: a suggested restandardization of the K-D music test norms. *Journal of Applied Psychology*, 25(3), 326–330.
- ✓ Goldstein, I. L., & Ford, J. K. (2002). *Training in organizations: Needs assessment, development, and evaluation*. Belmont, CA: Wadsworth.
- ✓ Hammerton, M., & Tickner, A. H. (1967). Visual factors affecting transfer of training from a simulated to a real control situation. *Journal of Applied Psychology*, 51(1), 46–49.
- ✓ Kanfer, R., & Ackerman, P. L. (1989). Motivation and cognitive abilities: An integrative/aptitude-treatment interaction approach to skill acquisition. *Journal of Applied Psychology*, 74(4), 657–690.25. Keith, N., & Frese, M. (2005). Self-regulation in error management training: Emotion control and metacognition as mediators of performance effects. *Journal of Applied Psychology*, 90(4), 677–691.
- ✓ Kellogg, W. N. (1946). The learning curve for flying an airplane. *Journal of Applied Psychology*, 30(5), 435–441.
- ✓ Kozlowski, S. W. J., Brown, K. G., Weissbein, D. A., Cannon-Bowers, J. A., & Salas, E. (2000). A multilevel approach to training effectiveness: Enhancing horizontal and vertical transfer. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (pp. 157- 210). San Francisco: CA: Jossey-Bass.
- ✓ Latham, G. P., & Frayne, C. A. (1989). Self-management training for increasing job attendance: A follow-up and a replication. *Journal of Applied Psychology*, 74(3), 411–416.
- ✓ Lawshe, C. H., & Cary, W. (1952). Verbalization and learning a manipulative task. *Journal of Applied Psychology*, 36(1), 44–46.
- ✓ Major, D. A., Turner, J. E., & Fletcher, T. D. (2006). Linking proactive personality and the Big Five to motivation to learn and development activity. *Journal of Applied Psychology*, 91(4), 927–935.
- ✓ McCauley, C. D., Ruderman, M. N., Ohlott, P. J., & Morrow, J. E. (1994). Assessing the developmental components of managerial jobs. *Journal of Applied Psychology*, 79(4), 544–560.
- ✓ Neal, A., Godley, S. T., Kirkpatrick, T., Dewsnap, G., Joung, W., & Hesketh, B. (2006). An examination of learning processes during critical incident training: Implications for the development of adaptable trainees. *Journal of Applied Psychology*, 91(6), 1276–1291.
- ✓ O'Brien, G. E., & Plooi, D. (1977). Comparison of programmed and prose culture training upon attitudes and knowledge. *Journal of Applied Psychology*, 62(4), 499–505.
- ✓ Orvis, K. A., & Leffler, G. P. (2011). Individual and contextual factors: An interactionist approach to understanding employee self-development. *Personality and Individual Differences*, 51(2), 172-177.
- ✓ Payne, S. C., Youngcourt, S. S., & Beaubien, J. M. (2007). A meta-analytic examination of the goal orientation nomological net. *Journal of Applied Psychology*, 92(1), 128–150.36. Ployhart, R. E., & Vandenberg, R. J. (2010). Longitudinal research: The theory, design, and analysis of change. *Journal of Management*, 36, 94-120.
- ✓ Quiñones, M. A. (1995). Pretraining context effects: Training assignment as feedback. *Journal of Applied Psychology*, 80(2), 226–238.

-
- ✓ Reilly, R. R., & Israelski, E. W. (1988). Development and validation of minicourses in the telecommunication industry. *Journal of Applied Psychology*, 73(4), 721–726.
 - ✓ Robertson, I. T., & Downs, S. (1989). Work-sample tests of trainability: A meta-analysis. *Journal of Applied Psychology*, 74(3), 402–410.
 - ✓ Saks, A. M. (1995). Longitudinal field investigation of the moderating and mediating effects of self-efficacy on the relationship between training and newcomer adjustment. *Journal of Applied Psychology*, 80(2), 211–225.
 - ✓ Salas, E., & Cannon-Bowers, J. A. (2001). The science of training: A decade of progress. *Annual Review of Psychology*, 52, 471–499.
 - ✓ Schmidt, A. M., & Ford, J. K. (2003). Learning within a learner control training environment: The interactive effects of goal orientation and metacognitive instruction on learning outcomes. *Personnel Psychology*, 56(2), 405–429.
 - ✓ Smader, R., & Smith, K. U. (1953). Dimensional analysis of motion: VI. The component movements of assembly motions. *Journal of Applied Psychology*, 37(4), 308–314.
 - ✓ Smith, K. U., & Sussman, H. M. (1970). Delayed feedback in steering during learning and transfer of learning. *Journal of Applied Psychology*, 54(4), 334–342.
 - ✓ Tannenbaum, S. I., & Yukl, G. (1992). Training and development in work organizations. *Annual Review of Psychology*, 43, 399–441.
 - ✓ Van Iddekinge, C. H., Ferris, G. R., Perrewé, P. L., Perryman, A. A., Blass, F. R., & Heetderks, T. D. (2009). Effects of selection and training on unit-level performance over time: A latent growth modeling approach. *Journal of Applied Psychology*, 94(4), 829–843.
 - ✓ Von Trebra, P., & Smith, K. U. (1952). The dimensional analysis of motion: IV. Transfer effects and direction of movement. *Journal of Applied Psychology*, 36(5), 348–353.
 - ✓ Wallace, S. R. (1965). Criteria for what? *American Psychologist*, 20, 411–417.
 - ✓ Watson, A. M., Foster Thompson, L., Rudolph, J. V., Whelan, T. J., Behrend, T. S., & Gissel, A. L. (2013). When big brother is watching: Goal orientation shapes reactions to electronic monitoring during online training. *Journal of Applied Psychology*, 98(4), 642–657.
 - ✓ Woodward, P. (1943). An experimental study of transfer of training in motor learning. *Journal of Applied Psychology*, 27(1), 12–32.
 - ✓ Yelon, S., Sheppard, L., Sleight, D., & Ford, J. K. (2004). Intention to transfer: how do autonomous professionals become motivated to use new ideas? *Performance Improvement Quarterly*, 17, 82–103.
 - ✓ Zacker, J., & Bard, M. (1973). Effects of conflict management training on police performance. *Journal of Applied Psychology*, 58(2), 202–208