

**COMMUNICATION FACTORS AFFECTING TRAINING
EFFECTIVENESS OF BUSINESS ORGANIZATIONS**



Jompon Jeebpinyo

**A Dissertation Submitted in Partial
Fulfillment of the Requirements for the Degree of
Doctor of Philosophy (Communication Arts and Innovation)
The Graduate School of Communication Arts and Management
Innovation
National Institute of Development Administration
2020**

**COMMUNICATION FACTORS AFFECTING TRAINING
EFFECTIVENESS OF BUSINESS ORGANIZATIONS**
Jompon Jeebpinyo
**The Graduate School of Communication Arts and Management
Innovation**

..... Major Advisor
(Professor Yubol Benjarongkij, Ph.D.)

The Examining Committee Approved This Dissertation Submitted in Partial
Fulfillment of the Requirements for the Degree of Doctor of Philosophy
(Communication Arts and Innovation).

..... Committee Chairperson
(Professor Patchanee Cheyjunya)

..... Committee
(Voraparn Eua-arporn, Ph.D.)

..... Committee
(Professor Yubol Benjarongkij, Ph.D.)

..... Dean
(Professor Yubol Benjarongkij, Ph.D.)

_____/_____/_____


ABSTRACT

Title of Dissertation	COMMUNICATION FACTORS AFFECTING TRAINING EFFECTIVENESS OF BUSINESS ORGANIZATIONS
Author	Jompon Jeebpinyo
Degree	Doctor of Philosophy (Communication Arts and Innovation)
Year	2020

The research is aimed for three objectives: 1) To study communication methods of professional trainers in organizing training, 2) to study training communication factors that affect training effectiveness of business organizations, and 3) to test the researcher's developed structural equation model of latent variables, namely professional trainers' qualifications and competence, training environmental management, trainees, and training effectiveness, with empirical data.

Mixed methods of qualitative and quantitative research were conducted. Qualitative methods were to respond to the first and second objective, while quantitative methods to the third objective.

The samples of qualitative research were five professional trainers, five skillful training organizers, and five executives of private organizations in the area of human resource development. For quantitative research, the samples were 520 trainees of in-house training programs with no less than 6 hours.

From the study, it was found that

Professional trainers used 13 communication methods in training and speaking methods: lecture, coaching, narration, conversation, and questioning, were found to be used the most.

Trainers' experience, qualifications, reputation, and design of training or program content; training physical environmental management; trainees' learning motivation and anxiety were found to be communication factors affecting training effectiveness at the highest level, while trainers' communication; training social and psychological environmental management; trainees' perceived self-efficacy and perceived valence of training outcome at the moderate level.

Trainers' qualifications and competence (Trainer) and training environmental management (Management) cannot explain the variance of training effectiveness while trainees (Trainee) can. If the standard deviation of trainees increases by 1, it will yield a .778 increase in the standard deviation of training effectiveness. Accordingly, the developed structural equation model can explain the variance of training effectiveness by 48%



ACKNOWLEDGEMENTS

First of all, I would like to express my appreciation to all organizations and respondents of this study who kindly provided useful knowledge for this study. Without their kind assistance, this research would not have been accomplished as wished.

I also would like to thank the thesis committee, who gave me more exceptional compliments than I expected and, most of all, approved my dissertation. My special thanks are given for my advisor, Emeritus Professor Ubol Benjarongkij, who gave me advice, teaching, and guidelines for conducting research, including recommendations for my ways of life. She thus is like the one who cut the academic birth cord for me and encouraged me to have firm steps.

Deep-hearted thanks for all Jeebpinyo family members, especially my dad, Police Colonel Somsak Jeebpinyo, who kept stimulating me in the distance like rigid arousal, and my mom, Sairung Jeebpinyo, for supporting me behind, including providing all meals and gentle encouragement. I thank my younger sister, Thipchanok Jeebpinyo, for her administrative assistance, kind service as a messenger, and other assistance, and my younger brother, Chatchalerm Jeebpinyo, for reminding me of my timely graduation to further my task responsibilities. Specially, great thanks to my beloved wife, Pitsinee Jarusombat, who always stands by me since our first love until now.

Finally, I thank myself for my endeavor all through over these two years. Thanks for my defiance for doing something I have not ever done. Thanks for my enjoyment of learning from my mistakes. Despite my occasional absence from studying and my return to work; still, I can reach this point in my life.

I hope this research would be beneficial for helping business organizations in Thailand to develop their training effectiveness, more or less.

Jompon Jeebpinyo
August 2020

TABLE OF CONTENTS

	Page
ABSTRACT.....	iii
ACKNOWLEDGEMENTS.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	xi
LIST OF FIGURES.....	xiv
CHAPTER 1 INTRODUCTION.....	1
1.1 Background and Significance of the Problem.....	1
1.2 Research Objectives.....	8
1.3 Research Questions.....	9
1.4 Expected Benefits.....	9
1.5 Operational Definitions.....	9
CHAPTER 2 CONCEPTS, THEORIES AND RELATED STUDIES.....	14
2.1 Concepts, Theories and Related Studies on Communication.....	14
2.1.1 The Definition of Communication and Communication Process.....	14
2.1.2 Types of Communication.....	17
2.1.3 Interpersonal Communication.....	18
2.1.4 Group Communication and Persuasive Communication.....	21
2.1.5 Verbal and Nonverbal Language.....	32
2.1.6 The Influence of a Sender.....	37
2.1.7 Receivers and Message Selection.....	41
2.1.8 Uses and Gratification of Receivers.....	49
2.1.9 Perception of Receivers.....	50
2.2 Concepts, Theories and Related Studies on Learning.....	59
2.2.1 Definitions of Learning.....	59
2.2.2 Types of Learning.....	59

2.2.3 Components of Learning	60
2.2.4 Factors Facilitating and Supporting Learning	61
2.2.5 Obstacles of Learning	63
2.2.6 Concepts and Theories on Adult Learning	64
2.3 Concepts, Theories and Related Studies on Motivation and Learning	
Motivation	67
2.3.1 Definitions of Motivation	67
2.3.2 Causes or the Occurrence of Motivation	68
2.3.3 Types of Motivation	68
2.3.4 The Importance of Motivation	69
2.3.5 Motivation Theories	70
2.3.6 Theories on Learning Motivation	74
2.4 Concepts, Theories and Related Studies on Learning Capability	78
2.4.1 Definitions of Self-Efficacy	78
2.4.2 Self-Efficacy Theory	78
2.4.3 Factors Affecting Self-Efficacy	82
2.4.4 The Measurement of Self-Efficacy	85
2.5 Concepts, Theories, and Related Studies on Perceived Valence of Outcome	86
2.6 Concepts, Theories, and Related Studies on Learning Environment	88
2.6.1 Definitions of Learning Environment	88
2.6.2 Factors supporting a learning environment	89
2.6.3 Components of Working Environment	92
2.7 Concepts, Theories, and Related Studies on Anxiety	93
2.7.1 Definitions of Anxiety	93
2.7.2 Nature of Anxiety	94
2.7.3 Types of Anxiety	94
2.7.4 Levels of Anxiety	96
2.7.5 Consequences of Anxiety	96
2.7.6 Theories on Anxiety and Learning	97

2.8 Concepts, Theories, and Related Studies on Training and Trainers.....	99
2.8.1 Definitions of Training	99
2.8.2 Objectives of the Training	105
2.8.3 Benefits of Training.....	106
2.8.4 Training Process and Evaluation	109
2.8.5 Trainers.....	117
2.8.6 Communication Methods of Trainers.....	122
CHAPTER 3 RESEARCH METHODOLOGY	129
3.1 Research Conceptual Framework.....	129
3.2 Research Hypothesis	130
3.3 Qualitative Research Methodology	130
3.3.1 Population.....	130
3.3.2 Samples	130
3.3.3 Research Instruments	131
3.3.4 Data Collection.....	132
3.3.5 Data Analysis	132
3.4 Quantitative Research Methodology	133
3.4.1 Population.....	133
3.4.2 Samples	133
3.4.3 The Number of Samples.....	133
3.4.4 Research Instrument	133
3.4.5 The Interpretation of Scores	138
3.4.6 The Validation of the Questionnaire	139
3.4.7 Data Collection.....	141
3.4.8 Data Analysis	141
CHAPTER 4 RESEARCH FINDINGS.....	143
4.1 Findings of the Qualitative Rnresearch	143
4.1.1 Communication Methods of Professional Trainers Used in Organizing Training	144

4.1.2 Communication Factors Affecting Training Effectiveness.....	145
4.1.3 Other Findings Besides Research Objectives and Research Hypotheses.....	151
4.2 Findings of the Quantitative Research	153
4.2.1 Symbols Used to Represent the Statistical Values, Variables, and the Meanings of Symbols	153
4.2.2 General Information of the Questionnaire Respondents	154
4.2.3 Professional Trainers' Communication Methods in Organizing Training.....	156
4.2.4 Opinions on Communication Factors Affecting the Training Effectiveness of Business Organizations	158
4.2.5 Correlation Coefficient of Manifest Variables.....	160
4.2.6 KMO and Bartlett's Test of Sphericity	162
4.2.7 Confirmatory Factor Analysis (CFA).....	163
4.2.8 The Analysis of Structural Equation Model.....	167
4.2.9 The Developed Structural Equation Model and the Test of Research Hypothesis	172
CHAPTER 5 SUMMARY AND DISCUSSION	175
5.1 The Findings of the Study	175
5.1.1 Professional Trainers' Communication Methods in Organizing Training.....	175
5.1.2 Communication Factors Affecting Training Effectiveness of Business Organizations.....	177
5.2 Discussion.....	182
5.2.1 The Research Results Found to be Congruent with Theoretical Concepts and Previous Studies	182
5.2.2 The Research Findings that are Incongruent with Theoretical Concepts and Previous Studies	216
5.3 Recommendations for the Development of Training Communication	223
5.4 Recommendations for Further Studies	227
BIBLIOGRAPHY	228
APPENDICES	240

APPENDIX A The Selected Samples Brief Biography241

APPENDIX B Interview: Professional Trainers’ Communication Methods in
Organizing Training258

APPENDIX C Questionnaire.....284

BIOGRAPHY293

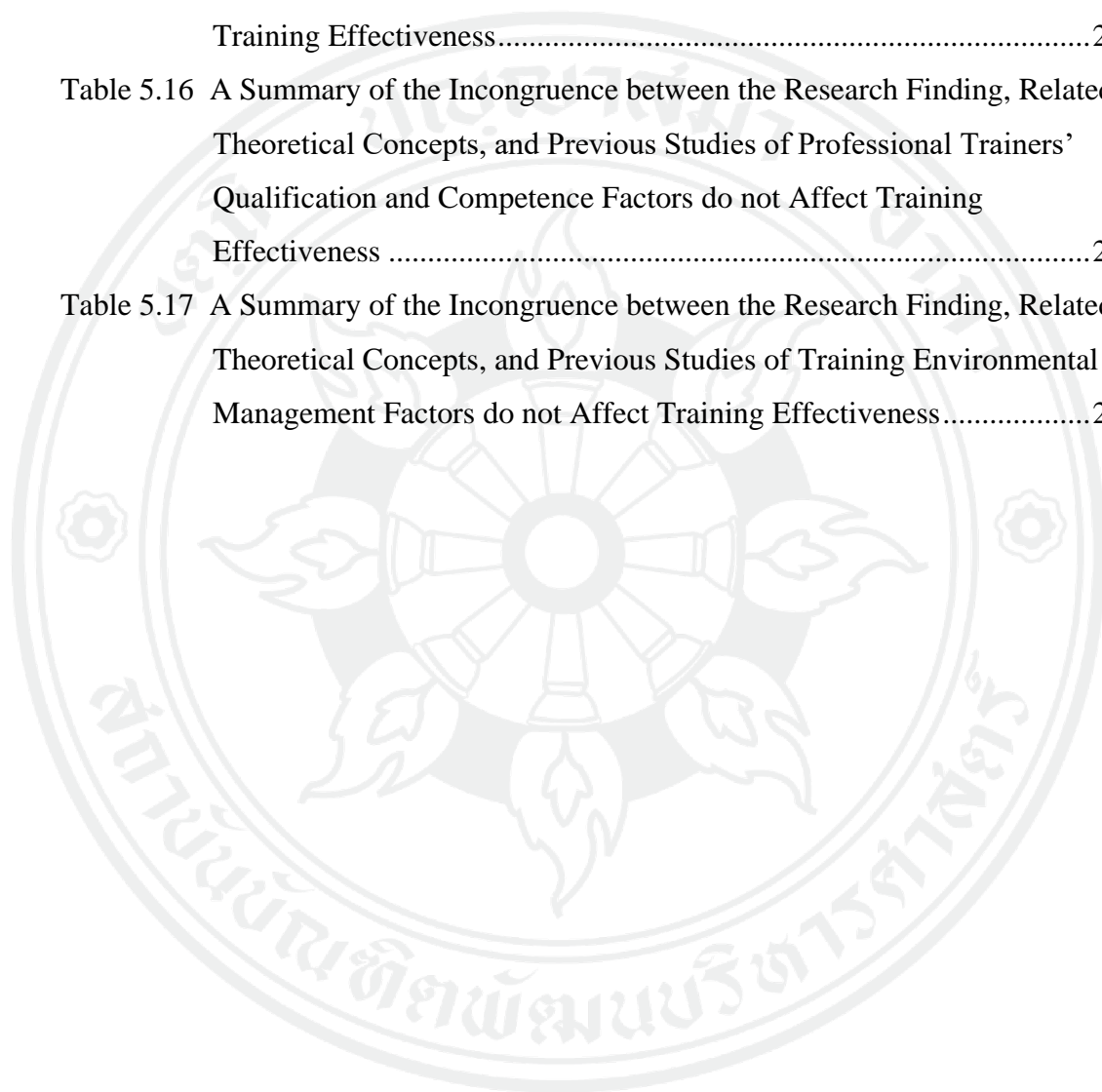


LIST OF TABLES

	Page
Table 2.1 Differences between Education and Training.....	100
Table 3.1 The Congruence Index from the Verification of the Experts	140
Table 3.2 The Overall Reliability of the Verified Questionnaire Tested by Cronbach's Alpha Coefficient.....	141
Table 4.1 A Summary of the Methods for Evaluating the Training Effectiveness of Business Organizations of All Sample Groups.....	152
Table 4.2 Statistical Symbols and Their Meanings	153
Table 4.3 General Information of the Questionnaire Respondents.....	154
Table 4.4 Communication Methods Used by Professional Trainers	157
Table 4.5 Mean and Standard Deviation of All Manifest Variables.....	158
Table 4.6 Correlation Coefficients of Manifest Variables.....	161
Table 4.7 The Value of KMO and Bartlett's Test of Sphericity.....	162
Table 4.8 Correlation Patterns and Statistical Values of Latent Variables in the Structural Equation Model.....	171
Table 4.9 Causal Relationship and Statistical Values of the Latent Variables in the Structural Equation Model.....	172
Table 5.1 A Summary of Professional Trainers' Communication Methods in Organizing Training.....	175
Table 5.2 A Summary of Communication Factors Affecting Training Effectiveness of Business Organizations.....	177
Table 5.3 A Summary of the Congruence between the Research Findings and Theoretical Concepts of a Part of Training Communication is Interpersonal Communication.....	184
Table 5.4 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Professional Trainers use a Variety of Communication Methods in Organizing Training.....	186

Table 5.5	A Summary of the Congruence between the Research Findings and Theoretical Concepts of Professional Trainers Use a Variety of Communication Methods Based on their Roles, Trainees' Learning Capability, and Factors Facilitating Trainees' Learning.....	188
Table 5.6	A Summary of the Congruence between the Research Findings and Theoretical Concepts of Professional Trainers' Speaking Methods must be Convenient and Proper by Considering their Ability in Knowledge Provision, Persuadability, and Ability to Help each Trainee to Develop his or her Perceived Self-Efficacy	190
Table 5.7	A Summary of the Congruence between the Research Findings and Theoretical Concepts of Professional Trainers can Manage their Group Communication through Speaking Methods	192
Table 5.8	A Summary of the Congruence between the Research Findings and Theoretical Concepts of Only Training Communication does not Affect Training Effectiveness	195
Table 5.9	A Summary of the Congruence between the Research Findings and Theoretical Concepts of Trainees can have Selective Reception of Training Message by Themselves, which Affects Training Effectiveness.....	198
Table 5.10	A Summary of the Congruence between the Research Findings and Theoretical Concepts of Trainees are the Important Component in a Training Communication Process and Affect Training Effectiveness ...	200
Table 5.11	A Summary of the Congruence between the Research Findings and Theoretical Concepts of Trainees Determine Benefits and Satisfaction from Training, which Affects Training Effectiveness.....	202
Table 5.12	A Summary of the Congruence between the Research Findings and Theoretical Concepts of Trainees are Adult-Learning Oriented, which Affect Training Effectiveness	204
Table 5.13	A Summary of the Congruence between the Research Findings and Theoretical Concepts of Trainees' Learning Motivation Affects Training Effectiveness	209

Table 5.14 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Trainees' Perceived Self-Efficacy Affects Training Effectiveness.....	213
Table 5.15 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Trainees' Perceived Valence of Outcome Affects Training Effectiveness.....	216
Table 5.16 A Summary of the Incongruence between the Research Finding, Related Theoretical Concepts, and Previous Studies of Professional Trainers' Qualification and Competence Factors do not Affect Training Effectiveness	221
Table 5.17 A Summary of the Incongruence between the Research Finding, Related Theoretical Concepts, and Previous Studies of Training Environmental Management Factors do not Affect Training Effectiveness.....	223



LIST OF FIGURES

	Page
Figure 1.1 Communication Process in Training	6
Figure 1.2 The Model Showing the Movement of Content of Training Techniques ...	7
Figure 1.3 The Model of a Trainer's Communication Elements	8
Figure 2.1 Communication Model of Berlo.....	15
Figure 2.2 Types of Communication	17
Figure 2.3 O'Donnell & Kable's Model of Interpersonal Communication.....	19
Figure 2.4 The Circular Communication Model of Schramm.....	43
Figure 2.5 Communication Model Viewing Receivers as those Determining the Message	44
Figure 2.6 The Model of Uses of Media and Message Content	45
Figure 2.7 Selection Process	47
Figure 2.8 Perception Process.....	50
Figure 2.9 Maslow's Hierarchy of Needs	71
Figure 2.10 Components of Expectancy Theory	73
Figure 2.11 The Relationship between Self-Efficacy and the Expectation of the Outcome.....	79
Figure 2.12 Behaviors and Emotional State Occurring from Self-Efficacy	80
Figure 2.13 The Relationship Between Internal Personal Factor (P), Representative Behavioral Factor (B), and External Environmental Factor (E).....	81
Figure 2.14 The Evolution of the Meanings of Personnel Training	104
Figure 3.1 Research Conceptual Framework.....	129
Figure 4.1 The Analysis of Exploratory Factor Analysis of the Latent Variable (Professional Trainers' Qualifications and Competence)	163
Figure 4.2 The Exploratory Factor Analysis of the Latent Variable (Training Environmental Management).....	164
Figure 4.3 The Exploratory Factor Analysis of the Latent Variable (Trainees).....	165

Figure 4.4 The Exploratory Factor Analysis of the Latent Variable (Training Effectiveness) 166

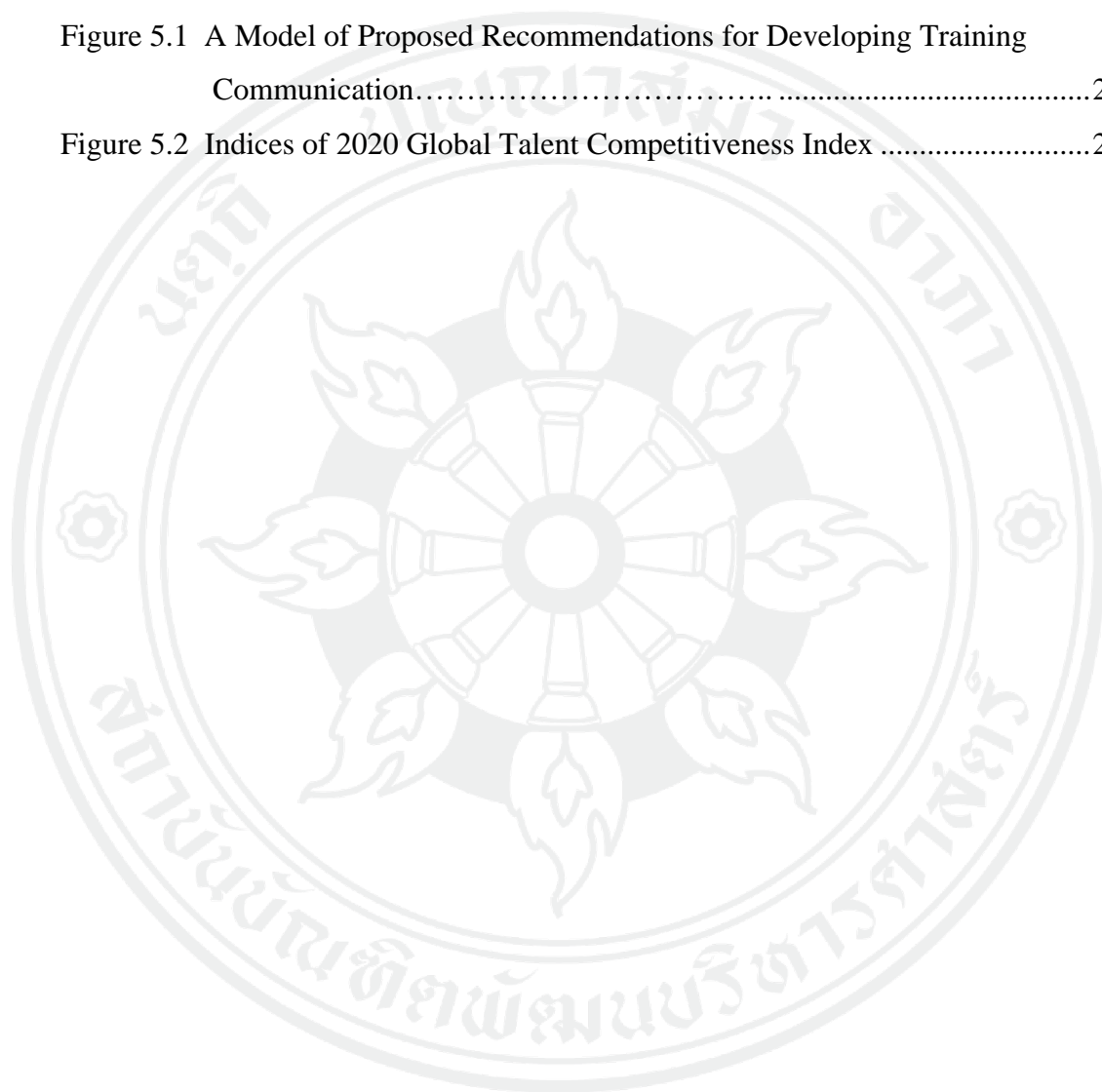
Figure 4.5 The Structural Equation Model (Before Being Adjusted)..... 167

Figure 4.6 The Adjusted Structural Equation Model..... 169

Figure 4.7 The Illustration of the Research Hypothesis Test..... 173

Figure 5.1 A Model of Proposed Recommendations for Developing Training Communication..... 224

Figure 5.2 Indices of 2020 Global Talent Competitiveness Index 226



CHAPTER 1

INTRODUCTION

1.1 Background and Significance of the Problem

Human resources are the most valuable resources of an organization. (Thongsri Kamphu Na Ayutthaya, 1989) states, “people are a worthy treasure,” which means people are beneficial for society. Therefore, they are of great worth to be appropriately fostered in an organization so that they can be stimulated towards effective and continual work performance and output. Scholars in the field have defined the meaning of human resource management or HRD. For instance, (Nadler, 1980) explains, “Human resource management is the way an organization manages its personnel to gain experience and learning for a period, which brings about the development of their bettered working ability and leads them towards behavior modification and growth.” At present, HRD is a significant and required activity that an organization has to conduct to ensure its personnel’s competency suitable for the business operation and organizational success. Okoye and Ezejiolor (2013, p. 267) studied the effect of human resources development on organizational productivity and found that HRD is an indispensable activity for all organizations, either small or large. No business can survive without knowledgeable people, and only quality human resources can make profits for an organization.

As abovementioned, no matter what size an organization is nor what organizational performance is, all need quality personnel, and HRD is a kind of the activities that can respond to the organizational needs. Nowadays, HRD in organizations can be conducted in various ways. From the online survey on the effectiveness of executive coaching in Thailand by Thailand Coaching Society (TCS) between 2010-2011, collected from over 140 executives. It was found that 34% of them were HRD executives, 25% of senior executives, and 23% of top or chief executives. The methods used in HRD were on- the-job training or OJT, coaching,

project assignment, job rotation, acting, workshops and seminars, mentoring, teaching others, observation, training, reading), E-Learning and Self-development. (Kriangsak Niratipatanasai et al., 2012, pp. 144-145)

Still, each method is useful in different ways. For this study it focuses on training only because of four reasons:

1) Government sectors support training. After the economic crisis of Thailand in 1997 and due to dynamic global changes, government sectors could not remain silent but issued several concrete measures to increase the competitive capabilities of private organizations, such as the Skill Development Promotion Act. B.E. 2545 and Skill Development Promotion Act. (No 2) B.E. 2014, aimed to stimulate them towards their skill development, which is classified into pre-employment, skill development, and occupational-shift training. The participating organizations will gain several benefits, i.e., income tax exemption on the percentage of training expenses, assistance granted in providing the practice of training personnel, skill standard testing provider, supervisors, and others as well as on curriculum and equipment development (Skill Development Promotion Act. B.E. 2545 and Skill Development Promotion Act. (No 2) B.E. 2014). Besides, private organizations can get advice and consultation about the skill development from the Department of Skill Development and other benefits as stipulated in the ministerial regulations. On the other hand, if any organization of over 100 employees does not organize personnel training for at least one time per person will be fined by government offices. (Petcharee Rupavichet, 2011, p. 21)

2) Benefits of training. From the study of Petcharee Rupavichet in 2004 (Petcharee Rupavichet, 2011, p. 5) on the development of the working effectiveness of personnel in Thai organizations through training, it was found that training was one of the processes accepted by several organizations. Training can develop or solve the attitudinal and behavioral problems, including increasing personnel's knowledge and skills. The finding accords with the concept of Chuchai Smithikrai, which explains that due to changes and trends of Thai society in the future, personnel training plays an increasing role that affects the growth of the nation, organizations, and personnel themselves. (Chuchai Smithikrai, 2011, p. 4) One of the questions challenges trainers substantially is what kinds of benefits training can

provide. Responding to such an issue, the prior assumption that should be considered is that the benefits depend on the readiness of personnel in creating benefits. Whenever they are ready, then the organizations can gain the following benefits. Moreover, from the study of Bass and Vaughan (1966) based on the Maslow's hierarchical needs, the fifth level is the self-actualization needs, and a part of such demands is career growth. However, to achieve career growth, it depends on how competent a person is, and training as a significant activity can enhance such competency. Hence, it can say that training is an excellent remuneration an organization gives for its workers who consequently will commit their promises for devoting themselves for working in a team. Anderson (1993, p. 13) Moreover, many training scholars propose the benefits of training. For instance, Johnson (1976) and McGehee and Thayer (1961) agree that training can develop knowledge, skills, competency, and attitude of employees, including developing interpersonal relationships for joint working at present and in future. Besides, training can reduce some expenses related to working, i.e., labor, production, and service. Moreover, training helps organizations to catch up with changes and enable an organization's policies and regulations to be implemented smoothly. Training is also found to solve many kinds of problems. As an example, after concentrated training for the hotel staff of the Gleneagles Hotel in England, it was found that the customers' dissatisfaction and complaint decreased. At the same time, the resignation rate also decreased, and the employees' mental breakdown was improved. (Seal & McKenna, 1990). Additionally, Noe (2013, p. 42) views that the investment in training can increase the competitiveness capability for an organization. For instance, increased expenditures on training in the U.S.A., i.e., innovation, teamwork, personal development plans, affected the organization's profitability on every part. Therefore, the organizations like Grant Thornton LLP, Wipro Technologies, Steelcase, Intercontinental Hotels Group, etc. invested their budgets in training to increase their competitive capabilities in all aspects. Examples of their purposes mobilizing their productivity, improving the quality of their customer service, including all outcomes related to their business. Such massive investment in training reflects the benefits these organizations expect to gain from the training. From the abovementioned information, it is evident that training is advantageous in many ways. The benefits of training can be grouped into

two levels: personal interests. Specifically, training can support organizational personnel to gain knowledge, skills, characteristics, attitude, and satisfaction suitable for their working of both present and future time. The second benefit is corporate benefits. It means that after training achieves personal benefits, an organization can also gain benefits from its operation, such as completed business profits as planned, decreased flaws, and business expansion, i.e., starting a new business or the enlargement of old business, etc.

3) Training is an extended development from educational institutions. Niran Chulasup (2004, as cited in Petcharee Rupavichet (2011, p. 22) states that “graduation from an educational institution is not enough for working nowadays.” Such a statement questions the capabilities of new graduate students upon entering the world of actual work. Besides, he expresses his idea about the importance of training. It starts from the first day in an educational institution up to the graduation and the entrance into working life. Since the working environment of each organization is different; thus, it is difficult for any educational institution to produce personnel with the exact qualifications needed by each organization where they work. Correspondingly, when a person comes to work in an organization, training should be provided for him or her regularly to extend the knowledge he or she gains from his or her educational institution and be able to apply it in the actual work. The notion supports the findings from the field study of Petcharee Rupavichet (2011, pp. 22-23) in her research conducted by Research Center for Education and Labor, the Faculty of Education, Chiangmai University with 84 enterprises during 2004-2006. The study found that most enterprises, industries, and companies responded that knowledge and skills fed by educational institutions were insufficient. Neither did it respond well to the actual working of each kind of enterprise. It means that after any organization accepts graduates to work, they have to be trained and taught to get familiarity with the working environment and to get some more skills, i.e., technical and behavioral skills. Besides, since the expectation on each level of working, from the operational level to the executive level, is different. Therefore, the persons an enterprise needs are required to be intelligent, literate, and relatively good at calculation so that they can be trained. In other words, they must have cognitive skills. Thus, educational institutions should recommend or train or provide knowledge for students before their

graduation and entrance into the working world to help them adapt themselves more rapidly and effectively. In short, the experience from educational institutions is not instant ready-to-use knowledge, and graduates still need to be developed further since they start working. It thus indicates that training can fulfill and extend knowledge from educational institutions. Furthermore, training can also solve the problem of national labor shortage, defined as “the situation where an entrepreneur or employer cannot find qualified labor or workers as needed under some certain employment conditions.” (Rattana-apa Subsombat, 2013, p. 27), training can help to reduce the gap of knowledge and skills of working while can solve the labor shortage problem as well.

4) Training business is growing and a major force in the national economic system. At present, some business organizations organize training or become training experts. In the training circle, these organizations are called, “Outsource,” “Organizer,” “Training agency,” or “Training house,” which play an influential role in HRD in organizations. Many private organizations use the service of these training organizations, either entirely or partially, i.e., administration, design, management, etc. (Johnson, 2004, as cited in Noe, 2013, p. 100). Up to now, both numbers and roles of training-specialized organizations providing both in-house and public training services in Thailand have been increasing, especially if including training organizations with consultation services. Since 2010, the growth rate has been 10-20% yearly, with over 2,000 business sectors and organizations and over 5,000,000 trainees per year. The growth of learning and training markets in Thailand has been increasing continually during these years, or in other words, this business is in the upswing stage. From the data of Pan Pho Co., Ltd., the organizer of the Learning Expo in 2010, the company spent higher budgets every year for training and empowerment, or approximately 2,000 baht per person yearly. (“Training and enhanced skills business “Pan Pho” created learning expo 2010,” 2010)

The effectiveness of each training depends on many factors. However, due to the focus of this study, the study aimed to study only the communication dimension since training relates highly to communication. Firstly, from the definition of training as defined by Chalong Mapreeda (2015, p. 1), “training” is “the process of accumulating knowledge, expertise, and competency of an organizational practitioner

or personnel to increase their working ability for present work and to prepare them for future work as well.” However, if defining the term more specifically, training composes of a trainer or someone responsible for transmitting knowledge according to the content of the established curriculum to trainees, which eventually brings about changes in a better way. Thus, when there is a transmitter, a transmission, knowledge content, receivers, and the result of training, it means a communication process occurs during the training. Besides, from applying the communication model or SMCR prototype of Berlo (1960) for analyzing the relationship between communication and training, it shows that training composes of a trainer as a source or sender (S), the content of training program or curriculum as message (M), face-to-face transmission as a channel (C), trainees as receivers (R), and the result of the training as an effect (E). Besides, during training, trainees or receivers can also send feedback to a trainer or a sender all the time, as shown in Figure 1.1

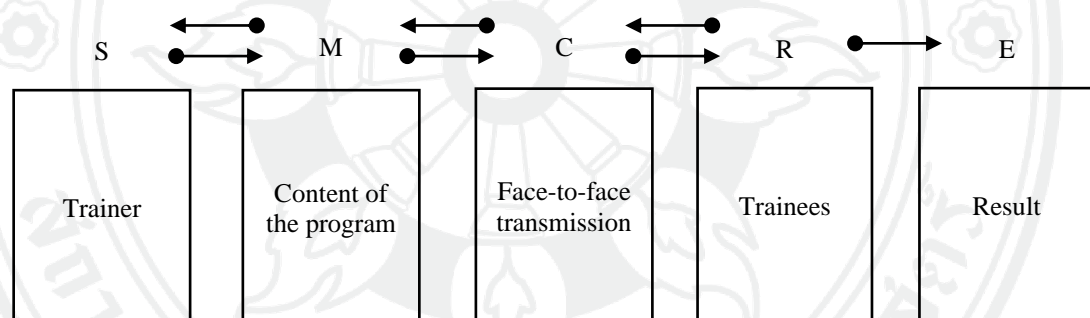


Figure 1.1 Communication Process in Training

Accordingly, if communication is ineffective, training will be weak as well. Several methods can also conduct training, but the most fundamental way is a lecture. It accords with the finding of Duangchan Awwijitrakul (1990), which studied the appropriate training methods for state-enterprise workers by researching and comparing trainers' opinions. The results showed that the most appropriate training method in the cognitive domain was a lecture, which was found to be the leading training method. However, to achieve the consequences as planned, the only address did not yield a genuine answer. Thus, mostly trainers should use integrated communication methods to enhance more effective training. Somkid Bangmo (2008,

pp. 85-94), calls training methods as “training techniques” for transmitting correct and appropriate knowledge, skills, and attitude to make trainees learn the most within the time limit. Similarly, Kajornsak Hannarong (1981, p. 3) defined training techniques as ways for making trainees acquire correct and appropriate knowledge or expertise of something and leading to behavioral changes as determined by the training. From these definitions, training techniques are just methods of tools for acquiring learning. Thus, inappropriate or incongruent training methods with the learning focus (knowledge, expertise, and attitude) or incongruent content often cause a training failure or cannot achieve the goal effectively as planned. The movement of training content is shown in Figure 1.2



Figure 1.2 The Model Showing the Movement of Content of Training Techniques

Kajornsak Hannarong (1981, pp. 4-5) identifies 17 training techniques: lecture, symposium, seminar, panel discussion, debate, dialogue, buzz group, conference, brain-storm, role-play, case study, incident method, exercise, live project, in-basket, management game, and laboratory or sensitivity training. In brief, the training methods of trainers are their communication methods. Such a conclusion is supported by the notion of Pot Petcharaburanin (1978, pp. 43-44) that training methods are correlated highly with communication or training methods must always be conducted in parallel to communication. Thus, without communication, training methods cannot proceed without essential elements, namely, a trainer as a source or sender, media and training used as media and channel, learners as receivers, and content of the training as the message. All the elements are illustrated in Figure 1.3

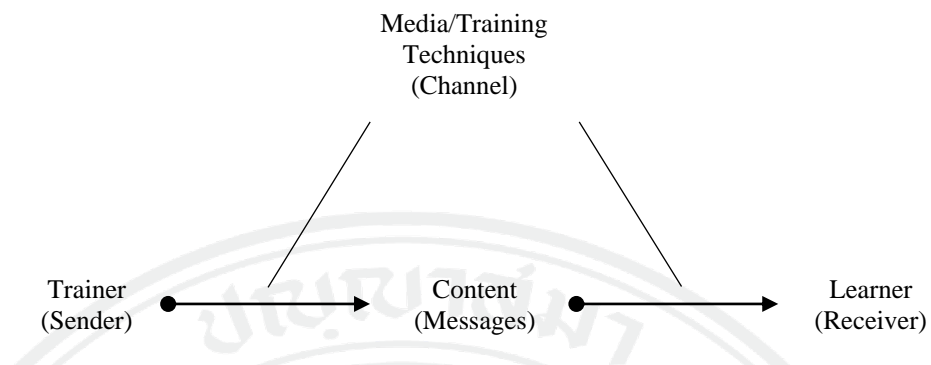


Figure 1.3 The Model of a Trainer's Communication Elements

It is obvious that training is related to communication inevitably; therefore, whether training is valid or not depends on communication as a crucial factor. Accordingly, communication factors are focused in this study whose findings are expected to help upgrade the standard of communication in the training process since practical training is very vital for organizations and their personnel, including the society and country. Consequently, government sectors perceive the importance of training and its extension beyond what is learned and studied from educational institutions. Notably, the growth of the training business has a high impact on the national economic system accordingly.

1.2 Research Objectives

- 1) To study communication methods of professional trainers in organizing training.
- 2) To study communication factors during the training that affect the effectiveness of business training organizations.
- 3) To test the congruence between the developed structural equation model of manifest factors, namely, qualification and competency of professional trainers, environment management during the training, trainees, and the effectiveness of training, and empirical data.

1.3 Research Questions

- 1) How do professional trainers apply communication methods in their training?
- 2) What are communication factors in training that affect the effectiveness of business training organizations?
- 3) Is the structural equation model of manifest factors, i.e., the qualification and competency of professional trainers, environment management for training, trainees, and the effectiveness of training, developed from the study, congruent with the empirical data?

1.4 Expected Benefits

The findings from the study are expected to help to develop communication in organizing training to elevate the effectiveness of training in the future.

1.5 Operational Definitions

- 1) Training. The formal training, both in-house and outsource, for developing organizational personnel, which takes at least 6 hours, requires registration, composes of a trainer, several trainees from the same organization, and has a definite schedule. However, it excludes informal on-the-job coaching or mentoring, i.e., by a supervisor or colleague.
- 2) Professional trainer. A person who is hired or responsible for developing knowledge and skills of organizational personnel periodically, as needed by the hiring organization. He or she has the primary duty of transferring and providing instruction to trainees.
- 3) Training organizations. Business training organizations providing training services for other organizations and being responsible for the entire or partial process of training, i.e., providing trainers, administration, program design, organizers, etc.
- 4) HRD executives in private organizations. Persons assigned by an organization to be responsible for human resource management, which can be conducted by the organization or by hiring a person or outsourcing. They are

executives (chief) in the chain of command, or in the division, department, or line, etc.

5) Qualification and competency of professional trainers. Professional trainers' factors enhancing their effective performance, i.e., qualification, experience, reputation, communication skills, and the ability to design a program or curriculum.

6) Professional trainers' qualifications. Knowledge, expertise needed in the program, graduation level, and field, or area of study of professional trainers.

7) Professional trainers' experience. Accumulated knowledge and practices enhancing professional trainers' competency and expertise. Experience is divided into two kinds: past and direct experience.

8) Past experience. Length of working as a professional trainer or a consultant in an organization in the past, i.e., the number of years, the number of corporate accounts, etc.

9) Direct experience. Graduation and working in the field relating to training, etc.

10) Professional trainers' reputation. Good fame and acceptance by others, gained from past working performance, responsibility, characteristics, and ethics of professional trainers.

11) Professional trainers' communication. The ability of expert trainers to transfer their knowledge to all or some trainees through their verbal language, i.e., words, statements, etc. and nonverbal language or communication without words, i.e., facial expression, body movement, etc. through oral and written communication.

12) Oral Communication. Professional trainers' communication to trainees through words or speech, i.e., lecture, coaching, narration, conversation, questioning, and giving samples.

13) Communication through devices. Professional trainers' communication with trainees through some kinds of communication devices, i.e., presentation programs, images and videos, mobile application, and paper.

14) Presentation programs. Computerized programs used by professional trainers to facilitate their communication to trainees, such as PowerPoint or Keynote program, which is one of the automated programs explicitly used for each training.

15) Images and videos. Moving pictures, professional trainers use for their communication to trainees, probably through PowerPoint and Keynote program, or presenting them separately through other devices.

16) Mobile application. Programs on mobile phones used by professional trainers for facilitating their communication with trainees.

17) Paper. Paper supplementing the training for supporting their communication with trainees, i.e., training handbooks, attached documents, books, etc.

18) Activity communication. Activities used by professional trainers for communicating with trainees. Examples of activities are providing an opportunity for trainees to express their opinions and suggestion, discussion, learning activities, case study, workshops, including role-plays, games, recreational activities, brain-storming exercises, demonstration, and field trips.

19) Learning activities. Activities used by professional trainers to communicate to their trainees, aimed to encourage trainees to do activities together through their practices. Learning activities focus on academic more than recreation purposes.

20) Case study. Activities used by professional trainers to communicate to their trainees, aimed to encourage trainees to do activities together through their collective thinking on the information, either factual or hypothetical, given by professional trainers.

21) Workshops and role-plays. Activities used by professional trainers to communicate to their trainees aimed to encourage trainees to do activities together through their shared practices, based on the information appearing in any kind of media, either factual or hypothetical, given by professional trainers.

22) Games and recreational activities. Activities used by professional trainers to communicate with their trainees aimed to encourage trainees to do activities together through their shared practices. However, Games and recreation activities emphasize recreation more than academic purposes.

23) Brain-storming exercise. Activities used by professional trainers to communicate with their trainees aimed to encourage trainees to do activities together through their shared practices and collective thinking.

24) Demonstration. Activities used by professional trainers to communicate with their trainees aimed to let trainees learn from watching the trainers' practices.

25) Field trip. Activities used by professional trainers to communicate with their trainees aimed to let trainees learn something outside.

26) Training program design. The professional trainers' determination of topics to be learned in each program by considering the content of the program that can respond to the objective of each training effectively, and that can make trainees understand and be able to apply it correctly.

27) Physical environment management. The management of the physical and visible environment, i.e., training rooms, location, equipment, devices, materials, light, sound, ventilation, temperature, etc.

28) Social environment management. The management of an intangible or invisible environment that can stimulate some collective feelings.

29) Psychological environment. The management of an intangible or invisible environment that can stimulate some individualistic feelings.

30) Trainees' learning motivation. The devotion, determination, physical and psychological readiness, willingness, and cooperation of trainees.

31) Trainees' self-efficacy. Trainees' self-perception on their weakness, strength, confidence, and awareness of what and how to be learned.

32) Trainees' perceived valence of the outcome. Trainees' acknowledgement of training necessity, benefits gained for themselves and for their organizations, and expectation towards the results of training.

33) Trainees' anxiety during training. Mental discomfort, stress, fear, irritation, and panic of trainees as a consequence of internal and external pressure that can affect the effectiveness of training, i.e., anxiety on workload, presentation before others, trainers' knowledge and competency, training atmosphere, or others' expectation, etc.

34) Training effectiveness. The results of training gained from the evaluation after the completion of the training, evaluated by trainees' responses or reactions, learning outcomes, behaviors, and working performance after the training.

35) Trainees' response or reaction. Satisfaction, happiness, encouragement, and good feeling a trainer gains from each training.

36) Trainees' learning. Trainees' acquisition of knowledge after each training.

37) Trainees' behaviors. Trainees' development of practices and actions after each training.

38) Trainees' working performance. Trainees' development of working performance after each training.



CHAPTER 2

CONCEPTS, THEORIES AND RELATED STUDIES

The following concepts, theories, and related studies were reviewed and classified into topics for a framework of the study: communication, learning, motivation and learning motivation, learning capabilities, self-efficacy, perceived valence of the outcome, learning environment, anxiety, training, and trainers.

2.1 Concepts, Theories and Related Studies on Communication

2.1.1 The Definition of Communication and Communication Process

Communication is an absolute human activity for a co-existence in society because human beings are social animals who require both verbal and nonverbal interaction to persuade and exchange information and affection between themselves and others towards their goals. In other words, human beings have to communicate, and this makes them different from other animals. Generally, in daily life, human beings spend 10-11 hours on communication, both verbal and nonverbal, i.e., gesture, facial expression, and body movement. For instance, waving a hand or raising arms can communicate some meanings, etc. (Berlo, 1960, as cited in Wirat Apirattanakul, 1993).

Communication comes from “Communis,” which is a Latin word, means “common or commonness,” thus, it signifies the act of leading towards cooperation or some commonalities. The study of communication is, therefore, the study or science of human interaction. (Chitapha Sukplum, 2005, pp. 1-2). Several academicians define the term “communication.”

Royal Institute Dictionary, B.E. 1999, defines “communication” as “the transmission of words, statements, or letters, etc. of one party to another party by some kinds of media.”

Parama Satawetin (1990) defines “communication” as “a process of transmitting a message from one person called a source to another person called a receiver through some kinds of channels.”

Hovland, Janis, and Kelley (1953, as cited in Chitapha Sukplum, 2005, p. 13) define “communication” as “a process in which a person (sender) transmits stimulus (commonly is spoken or oral and written language) to change behaviors of the other (a receiver).

From the definitions mentioned above, it can be summarized that communication is the process in which a source or sender transmits a message via a channel to a receiver, as illustrated by the communication model of D. Berlo as follows: (Berlo, 1960)

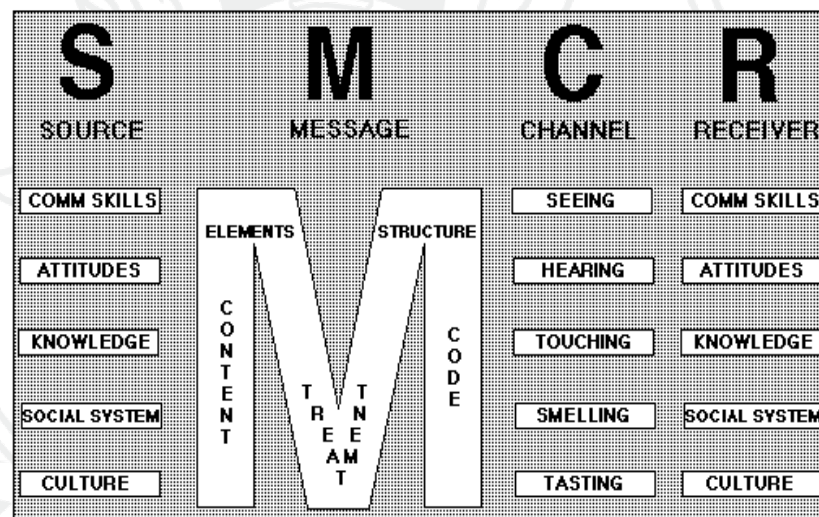


Figure 2.1 Communication Model of Berlo

Source: Berlo, 1960.

Communication elements are as follows: (Berlo, 1960, as cited in Orawan Pilan-o-wad, 2003, pp. 3-9)

1) Source/Sender: When a source or sender starts to communicate to change the other person’s behavior (receiver), four factors, which profoundly influence communication, are encoded:

(1) Communication skills: Communication skills affect people’s interaction. Firstly, communication skills help them to analyze their purpose,

intention, and ability to express it as needed. Secondly, communication skills help to encode some messages to communicate with others. For example, before speaking, words, pronunciation, grammar, and gestures need to be selected. For written language, correct spelling should be checked.

(2) Attitudes: Attitudes are classified into the attitude towards oneself, message, and receiver. The attitude towards oneself can affect communication. As an example, an employee may be inconfident of being promoted to a higher position. Thus, he may mention to a superior about his worry. By doing so, it can make his superior reconsider the promotion. Regarding attitudes towards a receiver, an example is during the meeting; the superiority attitude of the director over others can obstruct others from expressing their opposing opinions.

(3) Knowledge level: Knowledge level is a very influential factor. A sender with immense knowledge tends to communicate with sophisticated words or technical terms that cause misunderstanding or cause a communication failure.

(4) Social system and Culture: What a sender communicates is often influenced by the society and culture to which he or she belongs. i.e. pronouns used by Thai people with a Buddhist monk, the use of nonverbal cues for expressing the modesty of a Thai youth before the older, such as to bend her body when passing by.

2) Receiver. Senders and receivers are very alike, as both can switch their roles as senders and receivers. Therefore, in a communication process, it is difficult to find a starting point (who is a source or a sender) and the destination (who is a receiver) due to the dynamic nature of communication. Thus, both possess the same factors as the aforementioned.

3) Message. The message comprises three elements:

(1) Message code means a classified group of symbols meaningful for certain people, i.e., drawing, dancing, a baby's crying, a dog's barking, etc.

(2) Message content means the presented information, a summary drawn from something or proposed decisions, etc.

(3) Message treatment means the way a sender or source selects and organizes parts of the message to be communicated, including how they are delivered to a

receiver, i.e., personality, style, etc. A person's attitude, knowledge, culture, and social status determine one's message treatment.

4) Channel. In the communication process, a sender necessarily decides what kind of media will be used. Generally, the media selection will be determined by the following: media in possession, budget, a sender's preference, media coverage, media influence, and media's adaptability to respond to a sender's needs and the content of the media. Another criterion for media selection is to classify by learning effectiveness. Under this criterion, communication channels will be considered based on the sender's encoding skills and a receiver's decoding skills. In other words, a sender will find what kind of media enables a receiver to see, hear, taste, smell, and touch what the sender tries to convey the best.

2.1.2 Types of Communication

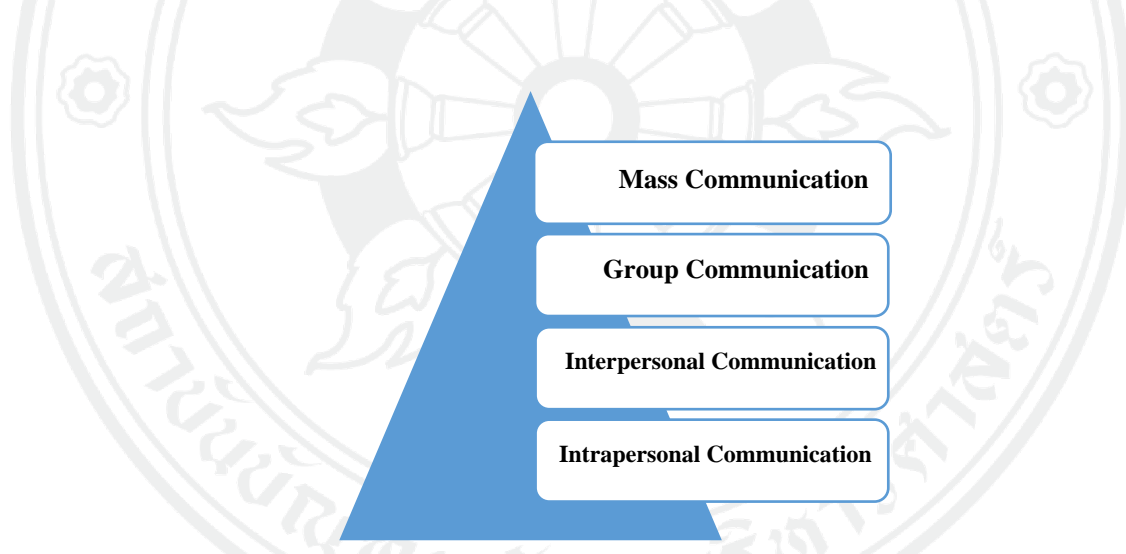


Figure 2.2 Types of Communication

Source: Myers and Myers, 1998.

Communication can be classified into the following levels: (Myers & Myers, 1998, pp. 4-5)

- 1) Intrapersonal communication is the communication occurring in the mind of an individual
- 2) Interpersonal communication is an interaction or information exchange between an individual and other(s).
- 3) Group communication is the exchange of information and interaction among a group of people.
- 4) Mass communication is the communication transmitted widely through some kind of media or device from a sender to receivers covering several areas rapidly and almost simultaneously.

2.1.3 Interpersonal Communication

Excluding intrapersonal communication, all communication levels are communication between or among people. For interpersonal communication, it is influential since people are convenient to communicate to people close to them or their primary group interpersonally more than in a group or through mass media, which is farther. Katz and Lazarsfeld (1955) specify that interpersonal communication, primarily face-to-face, can persuade a receiver to change his or her attitude and comply with cooperating the most. Thus, interpersonal communication is essential, and interpersonal communication skills are crucial for working nowadays. Without them, employees cannot create their performance well. It is also found that a number of scholars define the term “interpersonal communication” widely. Some examples are:

Devito (1995, pp. 19-21) defines “interpersonal communication” as “something people practice every day for learning, coordination, persuasion, entertainment, and assistance with other people.”

Krit Suebson (1989, p. 8) defines “interpersonal communication” as “a face-to-face communication between a sender and a receiver to establish and tighten mutual relationships.”

Chitapha Sukplum (2005, p. 16) defines “interpersonal communication” as “a face-to-face communication between two or more people with some kind of relationships to transmit knowledge, thought, and feeling in the form of verbal and

nonverbal language.” In interpersonal communication, both communicators can switch their roles as a sender and a receiver interchangeably to induce a two-way communication for creating mutual understanding.”

The interpersonal communication model developed by O’Donnell and Kable (1982, as cited in Orawan Pilan-o-wad, 2003, pp. 3-4) as illustrated in Figure 2.3

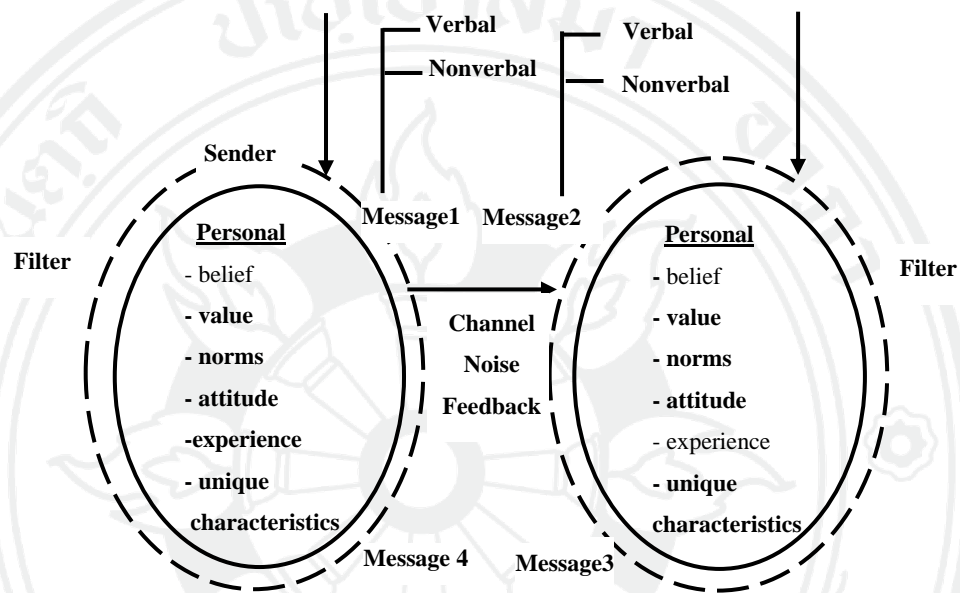


Figure 2.3 O’Donnell & Kable’s Model of Interpersonal Communication

The model presents communication elements: a sender, receiver, message, channel, and feedback. Considering personal components, it illustrates a different field of reference of communicators, namely belief, value, norms, attitude, experience, and individual characteristics, which play a role as a filter influencing a communicator’s selective perception, as a consequence of socialization, bias, benefits, etc.

Varunee Suwannapisit (2000) conducted a study called “Interpersonal Communication in Reinforcing Life Insurance Adoption among Thai People in Bangkok.” She found that interpersonal communication between a life-insurance agent and an insured started with an open-mind stage by establishing intimacy with an insured, offered an insurance program, and close the sale to encourage the insured to buy the insurance. Compliance-gaining techniques that were compatible with the

insured were applied as persuasive strategies. Seven from sixteen methods of compliance gaining were used. The examples of techniques are expertise (Negative) or telling the disadvantages, aversive simulation or telling the consequence if not complying, debt or calling for gratefulness, moral appeal or mentioning about correct things, self-feeling (positive) or creating good feeling towards oneself, altercasting (positive) or anticipating about good future, and altercasting (negative) or anticipating about bad future. Besides, it was found that the insured's attitude towards insurance affected if they would buy insurance. The insured perceived that insurance was beneficial for themselves and their family when unexpected events occurred. They viewed that protection was valuable and thus led them to consider insurance as effective financial planning. As for life-insurance agents, the insured were satisfied with them and had confidence in them. However, regarding the attitude towards insurance agents, the insured perceived insurance agents' inadvertence in their service.

Komwut Chongbunwatana (2005) studied, "Interpersonal Communication between Inquiry Officers and Complainants to Achieve Satisfaction of Complainants at Pathumwan Police Station," and found that the ways the inquiry officers communicated with complainants were classified into six steps: 1) Welcome step. The inquiry officers always started with their greeting first. 2) Filing a complaint step. Polite words, i.e., pronouns, are used and listening to the complainants' problems with empathy. 3) Inquiry step. Stress will be reduced by conversing about personal stories of the complainants. 4) Explanation step. Officers explain the procedure and ask the complainants to sign in a daily report. 5) Farewell step. Officers ensure the complainants that they can follow up the case on the phone, and 6) Report step. Mostly, the Officers seldom reported results of the case. Thus, it was recommended that they should improve their work in this part. It also includes an accident site inspection, more opportunities for the insured to ask questions, an explanation of particular importance of daily reports, a progress report notification, and more use of a caring tone of voice, but avoiding observing for a mistake.

2.1.4 Group Communication and Persuasive Communication

Orawan Pilunowad (1986, as cited in Orawan Pilan-o-wad, 2003, pp. 347-348) defines “group” as a grouping of people interacting with one another with common interest and expression towards something through their mutual influence.” A group occurs when people are together with the same goals and communicate or conduct activities together. They can realize others’ feelings and pay attention to understand those people. It means they are playing their roles as group members to maintain the group. However, it cannot precisely determine the exact size of a group or how many people in a group. Instead, what is relatively significant is the size of a group should not be so large that all members cannot participate or share their ideas or influence one another. Nevertheless, a group does not mean only several people are gathering together, but they gather because of the same goal or same feeling. In general, the indicators of what is a group are 1) common destiny since no matter what will happen to a group, it will affect everybody in a group. 2) similarities, which may be reflected through members’ uniforms, devices, etc. such as bank workers, taxi confederation, motorcycle gangs, etc. 3) proximity. People of the same group usually live in proximity to each other. However, among all three indicators, the last index is the least important. Still, all three indicators indicate the gathering of people into groups aimed to interact and be dependent on one another, including working together (on the same task) and influencing one another.

Besides, Orawan Pilan-o-wad (2003, pp. 348-351, 353-364) proposes two main factors one should consider in group communication:

1) A physical property of the group. The primary tangible property of a group consists of group size and seat arrangement. These two factors cause differences among groups and also affect their group communication.

(1) Group size. Mostly, effective communication is in the form of face-to-face communication, or both senders and receivers can see one another during their interaction. Through this channel, communicators can respond to one another more easily. However, the larger a group is, the fewer group members have a chance to express their ideas. Therefore, the larger a group is, the more difficult persuasion will be. From the study of Hare in 1952 and Slater in 1958, it was found that the larger a group was, the less group satisfaction would be achieved. Slater states that the

most active group size should not exceed five members since it will face less human relations problems. Moreover, in actual working, all members have to work equally instead of only watching others. In a small group, the answering of members' questions can cover the entire group, and this leads to high group satisfaction even though some members may have contradictory opinions against someone's offered ideas. In this case, the group leader must allow sufficient time for conflicting purposes. Especially, a sender or group leader has to communicate to everyone in a group, not only those who agree with him or her. A number of studies point out that the persuadability in a group does not depend on group size. Instead, it depends on the members' perception of how much they can express their ideas. Consequently, in a persuasive communication context, when some conflicts of ideas emerge, a group leader should motivate group members to accept the decision of the group by letting each member have an opportunity to express his or her opinion to reach his or her satisfaction to create an atmosphere of compromising. A group leader should not end the discussion by voting who agrees or does not agree to avoid creating disharmony among members. Besides, only those who agree with the idea will cooperate in what they vote for, while those who do not agree will not assist nor support. If the conflict is too severe, it may lead to opposition. From the study on communication behaviors of Bales and Bergatta in a small group of 3-7 members, it was found that the disadvantages of small groups were that members dared not to express their genuine feeling. For instance, they did not ask when they did not understand the message as they saw other members all understand. Thus, members tend to comply with others' behavior in the group, especially they dared not to reveal their feeling that was different from others'. However, in a large group, the disadvantages were that a sender or group leader had difficulty in controlling others' feelings, and it was more likely for a large group to separate into subgroups since members dared to express their conflicting ideas more openly. To illustrate this, in a group of five members, if one of them disagrees with others, he or she will not dare to express the idea. However, in a group of 25 members, some members may disagree with the proposed views, but they can split into subgroups among members with the same ideas. Thus, this will cause a problem for a sender, especially in an open communication context. In brief, in a large group, the following phenomena and problems tend to occur:

a) A formal leader will be assigned. Members will select their leader or chief; thus, communication will become to be a 2-step flow of communication, i.e., from the executive or top management to an assigned group leader, and from the designated leader to group members. Thus, the transmitted message sometimes may be distorted, either non-intentionally or intentionally. Therefore, communication through a group leader can be both advantageous and disadvantageous.

b) A large group often experiences a clique, disharmony, and some disagreement against the majority of a group. All these problems often occur in a large group. In some cases, a sender may face more dissent against the transmitted message. However, such disagreement is not caused by an ineffective message, but by members' negative attitude towards a sender or group leader.

c) When the size of a group is more extensive, communication patterns will also be affected. When a group becomes more abundant, it is necessary to prepare equipment and conduct formal communication. Accordingly, an opportunity for members to ask questions will decrease. In short, a group size affects the relationship among members in a group, psychological state of members, and persuadability of a sender to receivers.

(2) Spatial arrangement. Another factor that influences group communication is seating or spatial arrangement. Like a long square table in a library, the chairperson will sit at the head of a table. Sitting in that way gives a formal atmosphere, and decreases the intimacy among members. On the other hand, a round table yields better results if the not too formal climate is needed. Members who talk more should be seated nearby the chairperson, either left or right, to decrease the chances of their glances for permission to speak. On the contrary, members who talk less should be seated in front of the chairperson so that the chairperson can ask them for more ideas. However, if they are not ready, the chairperson should not force them to do so. Psychological relations among members thus depends significantly on the spatial and seating arrangement to see one another. Seating in proximity indicates unified relationships and enables members to increase their mutual understanding. Therefore, to work successfully in groups and when cooperation among members is needed, a proper spatial arrangement can facilitate their responses, i.e., to sit facing

one another. Conversely, when separate working is required or when a competition towards increased productivity is needed, distance space or low proximity will be more effective than close space or great proximity. Correspondingly, a communicator should observe appropriate distance among members. If a group is highly cohesive, if a member can be persuaded, successful persuasion may reach all members in a group. However, if a group opposes to the persuader, a technique of low-proximity seating may help to decrease the resistance against the communicator.

(3) Members' Feedback. Feedback means message or information a sender receives from a receiver upon the receipt of his or her message to express the reaction towards the received signal, i.e., smile, frown, absence-mindedness, questions, criticism, shaking feet, etc. There are two types of feedback: immediate and delayed feedback. During face-to-face communication, a communicator will receive immediate feedback from other group members, and such feedback leads the communicator to adjust the message to receivers. Besides, a communicator can also receive delayed feedback later after the communication or after the speech is finished to explore members' opinions on the proposed message or to follow up members' behavior. For a round-table discussion, feedback is enormous, apparent, and immediate; thus, it can facilitate a communicator's persuasion. From the study of Leavitt and Mueller (1951, pp. 401-410), it was found that feedback increased the clarity of the transmitted message and enabled group members to be more confident of what they were doing. Leavitt & Mueller reinstated the importance of time that to make use of feedback, both a sender and a receiver should give time for questioning and answering questions. It was also found that feedback was correlated with group size and spatial or seating arrangement. The larger a group was, the less thoroughly a communicator could monitor members' feedback. Notably, the more scattering a group is, the more difficulty a communicator will find. Thus, a communicator or group leader should scrutinize feedback thoroughly and adjust his or her communication accordingly. Still, some questions are helping to examine members' feedback as follows:

a) What is the goal of communication? Feedback may be less scrutinized for communication that aims to arouse emotion or interest group members

in something but should be more scrutinized if communication is for changing members' behaviors.

b) Do group members agree with a communicator? If members give consent, communication does not necessarily provide details of the message. However, if a communicator or sender wants to change members' behaviors, it is necessary to communicate carefully and adjust to respond to the received feedback.

c) What is feedback from a group? If feedback indicates members' uncertainty or doubt, repeated communication may help to make the situation more transparent.

d) Are members homogeneous or heterogeneous? Members can be different in terms of physical appearance, educational background, occupation, religion, or race. To learn about all these differences can help a sender to understand members' feedback better. For example, X may have a frown, but it does not necessarily mean that he is dissatisfied. The glare may come from intense concentration or deep listening. Y can draw a picture while studying as one of his habits, which does not mean that he does not pay attention to the lecture. Thus, all different feedback should be observed and followed.

2) Psychological property of the group. Psychological factors that affect communication are as follows:

(1) Group satisfaction. In general, group satisfaction is often tied with the concept of "centrality," which means working relationship and intimacy among members in a task. In the study of the communication network of Leavitt, it was found that members in a wheel communication network were the least satisfied with their working group, except members in the middle of the wheel were found to have the highest level of group satisfaction. The other four surrounding members felt that they could not control the performance of the group and received little information about their work performance since the member in the center gave all information. Besides, these four members had a role of answering questions of the member in the center only while they could know very little about the other members' performance. However, it should be noted that group satisfaction is not related to group productivity as it was found a wheel-network communication could yield high

productivity for a short-term group. Still, for a long-term group, members tended to leave the group. From the findings of Leavitt, it can be applied that in each group, there will be a member playing a role as a central person more than others. Thus, in persuasion, a sender should pay great attention to the member as the center of a group no less than other members. Therefore, the measurement of group satisfaction should not come from only a group leader, but also all members of a group.

(2) Group Cohesiveness means the bonding together of group members. The way to measure group cohesiveness is to ask if a group member wants to work in a group any further. In high-cohesive groups, members are eager to work for the group while low-cohesive groups, members have no desire to be in a group anymore. Group cohesiveness depends on several factors. For physical factors, group cohesiveness has a direct relationship with the group size. In a large group, group cohesiveness tends to be relatively low. On the contrary, if the size of a group is not too large, group cohesiveness will be higher since intimacy among members can tighten their relationships. Besides, members in a high-cohesive group tend to have values and behaviors in the same direction, and each member feels “belonging” to the group. However, group cohesiveness is more influential than a sense of belonging as it means a substantial unity of doing a joint mission. Without group cohesiveness, a group will be unstable or easily shaky, even by little pressure. Thus, group cohesiveness affects persuadability. Therefore, if a persuasion to the central member is unsuccessful, persuasion to the entire group will fail. Furthermore, the following findings are found:

a) In a high-cohesive group, there will be a deviation or deviated behaviors of only a couple of members, who keep obstructing group decision-making. In contrast, the majority of the group will have complying practices. Thus, when the majority of members resist any transmitted message, the chance of successful persuasion or communication is low. On the contrary, if most of the members agree with the proposed message, the entire group tends to agree with it because of the group pressure.

b) A high-cohesive group tends to be persuaded more quickly since it is unified.

c) To communicate in a high-cohesive group is different from a low-cohesive group. In a high-cohesive group, communication is immense, and the message is distributed to all members. It means that persuasion tends to be successful because receivers are willing to listen to the proposed message acknowledged, recommended, and distributed widely among members.

d) Members in a high-cohesive group tend to obstruct or object to any adversary message against their group more than those in a low-cohesive group. The way for increasing the degree of group cohesiveness is to increase members' commitment to the group and encourage members to prolong their membership. The primary factor for creating a relationship among members is to respond to members' interpersonal needs, namely, a sense of belonging or inclusion, control, and affection, including mutual satisfaction of needs. If these four factors are the central core for treating new members and for reciprocal treatment, a group will undoubtedly be highly cohesive. Besides these four factors, attractive messages and the reputation of a group can yield morale and motivation, including the devotion of members to a group increasingly. Group members who consider these factors can increase their group cohesiveness and lead to successful persuasion more easily.

(3) Group Conformity Pressure. No explanation of the influence of this factor is better than the experiment of Asch (1951). Asch experimented on one square bar on a piece of paper, called "Stand Card," and three square bars with equal height as the first single one. Then, he asked five subjects sitting in a circle and asked them to judge which bar on the second paper had the same height as the first single one, one by one. Within the group, the experimenter divided the subjects into two groups. The first group composed of four samples who knew what the experimenter needed, and the second group consisting of one single sample who did not know anything. Then, he started with one of the four subjects who were told to give the wrong answer. This experiment tried to find out if the single sample would provide a response from his confidence or comply with the group. It was found that 1/3 or 33% of the subjects gave the wrong answer to comply with the group. Some samples answered right away while some hesitated to answer. Even for those subjects who gave the correct answer differently from the rest of the group, they expressed their

anxiety and worried through their facial expression. Thus, it was concluded that group pressure affected group communication in the following ways:

a) Group members may be pressured to accept the group's opinion. The statement "which bar has the same length as the experiment object?" However, for the statement like "I doubt if I cannot be a good leader," it is an opinion. From another experiment with groups of soldiers, it was found that no soldiers would not accept such a statement if they were questioned in person as it seemed that they insulted their dignity. However, if they were witnessed or told that others in the group admitted that they could not become a good leader, then they would accept like the majority of the group. (Prasarn Malakul Na Ayutthaya, 1973, pp. 162-163) Therefore, group members tend to be pressured to conform to the majority of the group.

b) The tendency to conform with the group often involves a complicated or difficult issue or topic more than a simple or easy one.

c) In the experiment room, subjects who know nothing about an experiment tend to conform with the group majority. However, if any single member is expressing his or her objection, they would take sides with that minority always. Therefore, in a real persuasive context, a sender should know in advance if there will be any objection before asking an agreement from their target receiver(s). Otherwise, the persuasion may fail. However, if it is an urgent matter and a sender wants the group to comply with his opinion, he should let the possible resister to be seated in a location or position that is not focal to attention.

d) The conformity by group pressure does not mean a long-term existence in a group. After the experiment, subjects, who earlier conformed with group majority, might question their action in a group. Consequently, they tended to reverse the decision afterwards. It proves that the transmitted message should require a short-term effect. If not, additional information should be provided to group members to increase their confidence and maintain their decisions accordingly with willingness.

Nevertheless, in persuasion, a communicator or a sender should understand the nature of group conformity. They must know that it is a process that can happen when there are some conflicts. Such conflicts are values, opinions, etc., and they are against some norms that the group or society tries to establish in a group.

Thus, members are willing to abandon their desire or attitude or dare not to support their own opinion and conform to those norms accepted by other group members. Accordingly, there are two types of group conformity: True conformity and expedient conformity. For the former compliance, individuals will have their behaviors and attitude changed by group pressure. However, for the latter, they conform with the norms only verbally while still adhering to their predisposition. As an example, a person wants to vote for Mr. A while other group members will vote for Mr. B, so he might pretend that he will vote for Mr. B like others to avoid being attacked. Moreover, some factors in a group affect a person's conformity:

a) Group Size. Asch (1951) found that generally, group conformity would be increased by the size of a group with some proportional conditions. In a group of two, if one person objects his proposed idea, it is more difficult for group conformity to occur than in a group of three, and two of them oppose his view. Thus, the higher proportion of opinions in a group leads to more group conformity.

b) Unanimity. Group conformity will be higher if the decisions are unanimous than split. Even one single disagreement can reduce group conformity rather significantly.

c) Status. If a person perceives that other members have higher status, group conformity can be formed more easily. On the contrary, group conformity may be low or more difficult to happen if the lower status of other members is perceived.

d) The relationship between an individual and the group. In another experiment, some subjects felt that the group accepted them while some subjects felt that they were alienated from the group. The latter group was found to express higher group conformity than the former one. However, the group conformity under this condition is relatively expedient.

(4) Group Norms means the patterns of group behaviors in the same direction, which are formed and maintained by group pressure. The best well-known experiment on this factor is the experiment of Sherif (1935) where he asked subjects to be in a dark room and stared at a light hanging against the wall. The subjects felt that the light was gradually moving from the location, which is a natural

physical reaction. Then, he asked the subjects how far the light moved. At first, the answers to the subjects in the group varied greatly, but later the answers were gradually less different and showed less distance to almost the real length. This experiment relates with communication in the way that when group members are persuaded to change their opinions, they will firstly discuss widely them. Finally, it will comply with what a sender tries to achieve as members will develop some criteria for their decision-making or norms of reacting to the proposed message in the same way. Therefore, communication is useful in creating, maintaining, and changing rules. During the initial stage of group formation, no specific norms are established, but only the old relationships members have towards one another. Identical or unified behaviors will gradually be formed after a while but requires some members to propose a particular set of actions for a group to conform. Then, other members can also offer new behaviors to the group for consideration. Consequently, the suggestions and proposed behaviors are developed to be group norms. Some members may adhere to them strictly while some may only conform with the rules but do not take them seriously. If a communicator wants to initiate any changes in group norms, he should start with the latter group first. Briefly, group norms indicate how easily a persuasive message can be achieved. If either a sender or the message violates or threatens group norms, it is difficult for such persuasion to be successful.

(5) Group Equilibrium is an internal pressure of a group in maintaining the group's stability and in ensuring the least affected changes. Since a group comprises members of different personalities, to preserve the existence of a group, it means that each member must have a desire to be group affiliates. Still, sometimes a group can face some difficulties, i.e., to produce effective performance, to promote group members, to keep the group's emotional and social stability, to encourage members to adopt new changes, etc. According to the theory of group equilibrium, when confronted with pressure, a group will strive for adjusting itself towards stability or balance as fast as possible. Based on this theory, when a communicator wants to change a group, he or she must frequently communicate since a group cannot change in a short time. On the other hand, a group will change when facing some kinds of increasing pressure. If members have been under pressure for a long time without group equilibrium, there is a tendency that members will leave the

group. Therefore, to induce some changes in a group, a variety of messages have to be prepared. Notably, the higher cohesive a group is, and the more resistance against the proposed word a group will face, the more critical the issue of change must be, and the more prepared a communicator will be. In summary, according to this theory, group equilibrium affects persuasion in a group as follows:

a) A newly formed group tends to have low stability and cohesiveness. However, if any member can lead a group towards equilibrium among group members, his or her message can be more readily accepted.

b) After group formation for a while, a group tends to shut itself from any information that affects group equilibrium. However, a group has to be mobilized by any factor before new information will be accepted.

c) Informal group formation tends to cause some boredom and discourage members. It does not occur because of no group equilibrium but because of a lack of motivation since the initial stage of formation. Hence, this period is the best time for a member to propose any new idea for a group to encourage group members to have unique behaviors and to establish a new equilibrium; thus, persuasion tends to be more successful accordingly. Group equilibrium is what a communicator should learn to understand under what kind of condition the group is so that he or she can prepare an appropriate message to communicate with a group. From the concepts mentioned above, it shows that sometimes persuasive communication in a group can be accomplished comfortably because of some supporting physical and psychological factors. On the contrary, some physical and mental factors can draw some difficulties as well. If a group has good relations among members but disagrees with a sender, a sender has to put more effort into this group.

Pramual Phiratphan (1996) collected the principles for creating influence to gain compliance as follows:

1) The principle of contrast is the portrayal of the reverse image for creating a difference to persuade receivers. For instance, in an election campaign, if public relations have to be conducted for two party leaders, it will give a different feeling if one leader visits people while the other sits and drinks Brandy.

2) Principle of reciprocation. Human beings have an instinct for being grateful. It is an origin of buying votes. People who get things or money are often persuaded to feel thankful to the givers.

3) Principle of rejection and retreat. This principle is like Door-at-the-Face or Door-to-the-Face (DTTF) technique or asking for something which will surely be rejected and then reducing the level of a request until it is accepted.

4) Principle of commitment and consistency. For instance, if a person is addicted to alcohol and smoking, but he declares to the public that he is, and many people hear it. Such a declaration is his promise and commitment, so he must try to act in response to his spoken words.

5) Principle of scarcity. Anything hard to find, i.e., antiques, one single piece, etc. can be used to persuade receivers as something of high value.

6) Principle of social proof. Whatever can make society accept can persuade people to comply with, i.e., If bidding of something has to compete with someone else, such thing will be perceived as valuable and approved by society. Consequently, bidding managers sometimes have to hire someone to play the role of a competitor.

7) Principle of liking. A famous singer like Thongchai McIntai advertises a brand of a color film; this calls receivers to use that brand because they like this singer.

8) Principle of authority. Expertise can enable someone's speaking to be credible, i.e., physicians, engineers, lawyers, and architects, etc.

2.1.5 Verbal and Nonverbal Language

In each training, several topics of communication appear; however, the issue seems the most is verbal and nonverbal language.

1) Verbal Language. Several scholars define the term "verbal language," as follows:

Parama Satawetin (1990, p. 36) defines "verbal language" as communication using spoken or written language as symbols for communication, i.e., speaking and writing Thai or Speaking and writing English, etc.

Luxana Satawetin (1997, p. 21) defines "verbal language" as communication through the use of spoken language or words according to speech

principles. A speaker must know how to use spoken language, which has to be prepared and appropriately selected, to deliver to receivers.

Somprat Ammaphan (1993, as cited in Chitapha Sukplum, 2005, pp. 33-34) defines “verbal language” as the language for conveying meanings through the use of words. Verbal language can be conveyed in two ways: communication with perceived shared meanings and agreement between users of the same language or spoken language and the use of lines or writing for replacing spoken words based on linguistic regularities and oral agreements called “written language.”

Verbal language or spoken words are essential as they are good indicators of a sender’s qualification. Among all principles, Aristotle’s principles of persuasive speaking are widely accepted. (Infante et al., 1997) These principles appeared around 2,000 years ago and can be considered as one of the most critical tools in guiding society. Aristotle states that to persuade people to change by a sender’s intent, a speaker should concern about three main appeals: Ethos, pathos, and logos. (Passawalee Nitikasetsunthorn, 2014, pp. 3-36)

(1) Ethos is a speaker’s or source credibility in the mind of receivers while listening to a speech. Source credibility can be perceived from a speaker’s intelligence, moral character, and goodwill.

(2) Pathos is the ability to put the audience or receivers in the right state of mind by stimulating some underlying human feelings, i.e., love, hatred, anger, etc.

(3) Logos is the ability in reasoning or using proofs as evidence to support a speaker’s speech.

Aristotle’s principles are the starting point for the study of rhetoric and can be considered as a model that emphasizes the importance of a sender very clearly. He mentions the roles of “speakers” or “writers” as a sender in his book, *Rhetoric*, as follows:

As a speech aims to persuade people, speakers or writers must know how the persons they want to persuade to think or feel. It means that they must understand human nature and the ways human beings use reasons, needs, and emotions. They must know what kind of argument should be used for what kind of people. He must concern about how to use words, phrases, and sentences to persuade people as much as possible. (Orawan Pilunowad, 1996, p. 25, as cited in Passawalee Nitikasetsunthorn, 2014, pp. 3-36).

2) Nonverbal language. Nonverbal language may be called by other names, i.e., nonverbal cues, symbols, silent language, etc. Nonverbal language is vital for human communication in combination with verbal language. Nonverbal language is defined by several scholars as follows:

Parama Satawetin (1990, p. 36) defines “nonverbal language” as communication using codes or other symbols for replacing spoken or written words, i.e., smile, body movement, space, etc.

Somprat Ammaphan (1993, as cited in Chitapha Sukplum, 2005, p. 52) defines “nonverbal language” as the body or movement language to convey meanings without words or letters, but through codes, gesture, symbols or signs, i.e., facial expression, body movement, light, and color, etc.

Vipaporn Mapopsuk (2000, pp. 137-138) defines “nonverbal language” as “communication through other symbols that are not words, numbers, etc. For written language, nonverbal language can be classified into three groups: sign or symbol language, body language, and object language.

When we communicate, we will use both verbal and nonverbal language, while we can communicate with nonverbal language without words. Typically, nonverbal language has six functions concerning verbal language: complementing verbal messages, substituting for verbal messages, accenting verbal messages, contradicting verbal messages, repeating verbal messages, and regulating verbal messages. (Devito, 1995, p. 1995) There are many types of verbal language: (Chitapha Sukplum, 2005, pp. 63-79).

(1) Physical appearance is the first thing other people can see in a person: face, size of the figure, complexion color, hair color, etc. Its meaning is

connected to and interpreted by others' experience of what kind of person he or she is, i.e., good looking. Hence, people want to communicate with, not good looking, so people do not want to talk with, or ugly looking, so people want to walk away.

(2) Kinesics/Body movement. Every movement of human beings is meaningful and influential in communication. In social interaction, people will always interpret whatever they see. If what they hear is not following what they know, they tend to believe what they see. Ekman & Friesen (1972, as cited in Chitapha Sukplum, 2005, pp. 65-66) five functions of body movement in conveying meanings:

a) Emblems are the body movement functioning as a substitute for words or phrases, i.e., a signal to mean "O.K.," "please be quiet," "get out," "come in," "very good," etc.

b) Illustrators are the body movement accenting verbal messages to be more explicit, i.e., some gestures to indicate size, direction, and decisions, etc.

c) Affect displays. Most of them are facial expressions to indicate feelings, i.e., anger, sadness, boredom, dissatisfaction, happiness, fright, etc.

d) Regulators are the body movement for controlling or regulating others' communication without saying any words, i.e., a gesture means "please continue. It's funny" or means "I understand or do not understand," etc.

e) Adaptors are the body movement for releasing some feeling or psychological state, i.e., to get rid of the tiredness, stress, stage fright, anxiety, etc.

(3) Facial expression. During communication, a person's facial expression can convey some meanings, which can indicate at least eight human emotions: happiness, surprise, fear, anger, sadness, disgust, humiliation, and attention. However, a facial expression may not a real feeling inside a communicator since, in some situations, it is required in some contexts of a society not to express your actual feeling through your face as it will be perceived as impolite.

(4) Oculesics/Gaze/Eye Contact. Eyes are the window of a heart. If someone is not a professional actor, it is hard to conceal genuine feelings. Eyes are the most sensitive communication channel. Just a back-and-forth glance from head to toe may hurt others' feelings.

(5) Clothes and Artifacts. Clothes do not only keep the body warm and conceal some parts of the body, but can also convey one's feeling, taste, status, social class, education, and manner, etc.

(6) Tactile/Touch/Haptics. The conveyance of meaning or the interpretation of touching depends on the way and occasions one touches the other person as shown in the following equation: Touching point + manner while touching + social context + culture = (interpreted) meaning.

(7) Proxemics/Space. When interacting with other people, people interact with a certain communication distance. The distance will be large or small, depending on the level of mutual relationship. If the relationship is intimate, the communication distance will be smaller or narrower. Hall (1963, as cited in Chitapha Sukplum, 2005, pp. 74-75) flows of human movement and spatial arrangement and found four distances:

a) Intimate distance/Intimate zone ranges from 0-18 inches, which is the most intimate distance in which people will communicate with people they are very intimate, i.e., couples, close friends, etc.

b) Personal distance/Casual-Personal zone ranges from 18 inches to 4 feet, which is the distance with no fawning but for communicating with other people in general subjects.

c) Social distance/Socio-Consultative zone ranges from 4-7 feet, used for non-personal, but business or working purposes. Thus, communication involves no personal relationships or acquaintance and is semi-formal.

d) Public distance/Public zone ranges from 12-25 feet, used for interacting with informal groups. It is considered as the most peripheral area of people, i.e., a distance between people during a conference, etc.

(8) Paralanguage/Vocalic. The tone of voice is meaningful and vital in communication. Words alone contain a full of meanings; however, changes in tone of voice can modify meanings.

(9) Environmental factors are surrounding things that affect people's communication, i.e., when people talk to the same old friend, but in different places, their communication will be different. Besides, the surrounding climate can change communication.

(10) Silence is a kind of communication, i.e., silence for listening, for thinking over, etc. The meaning of “silence” can be an avoidance of striking back or lying, etc.

(11) Olfaction. Scent can convey some kinds of feelings, i.e., fear, excitement, happiness, memory, or stimulating for communication, etc.

2.1.6 The Influence of a Sender

Aristotle introduced the concept of the influence of a sender, especially a source credibility, 2,000 years ago. He says, “A speaker’s characteristics are one of the main influential factors in persuasion, especially when listeners do not know a certain subject, then a speaker will be very influential.” Generally, he believes that there are three kinds of persuasive appeals: (Cooper, 1960)

- 1) Intelligence. A speaker must be intelligent. He has to be wise with sound discretion.
- 2) Goodwill. A speaker must have goodwill for his listeners. He must have good intentions to give good things to his listeners.
- 3) Good character. A speaker must prove that he is decent and moral. He admires justice, bravery, restraint, kindness, helpfulness, liberty, politeness, determination, and good faith.

The concept of Aristotle has been developed continuously but in general, communication scholars agree that source credibility depends on two factors: competence or expertness and trustworthiness. Both elements must be perceived by listeners, not the factors a sender indeed possesses or declares to let others know and accept him. Source credibility is not merely a single characteristic like age or sex, but it is something seen, acknowledged, and believed by receivers. Competence or expertness is a specific characteristic, i.e., ability or expertness related to what a sender involves. Regarding trustworthiness, it is a general characteristic. In other words, the source credibility of a sender varies by topic of each message and is different in each situation. (Orawan Pilan-o-wad, 2003, p. 124). The concept accords with that of Berlo et al. (1969), who state if receivers see that a sender has proper qualifications, it means that a sender has persuadability. It is believed that a sender’s message is less important than his or her personality, which is more potent in

changing receivers' attitudes. On the contrary, if receivers see that a sender is untrustworthy, no matter what message he or she tries to convey, the message will be judged as unreliable either. Typically, receivers will use the following three factors for deciding the source credibility:

1) Safety factor. For this factor, a sender must have the following qualifications: kind, congenial, friendly, agreeable, pleasant, gentle, unselfish, just, forgiving, hospitable, cheerful, ethical, patient, and calm.

2) Qualification factor. This factor emphasizes a sender's knowledge, expertise, and experience. Thus, a sender must be experienced, trained, skillful, authoritative, able, and intelligent.

3) Dynamism factor. The characteristics that indicate dynamism, curiosity, and activeness of a sender are active, emphatic, frank, bold, curious, fast, and energetic.

Pornsit Pattananurak (1982) studied, "Factors Affecting Source Credibility: A Case Study of Peasants' Opinion in Rangsit Area." He found that senders of younger ages have lower source credibility than those of older ages, female than male, and senders in non-uniforms than in uniforms, and an agent having no local officers accompany during the briefing meeting than having local officers. Thus, dressing in uniformed attire, looking old age, being male, and having local officers escort the source represent three characteristics of source credibility. These three qualifications are safety, dynamism, and unity, which is another additional characteristic found in the study of Berlo. The unity factor is the following characteristics: friendliness, no interruption, sociability, kindness, openness, and informality. Later, Berlo combines this factor into the safety factor.

However, Dejphan Pravichai (1988) studied the relationships between the attributes of the agricultural extension officers and the farmers' adoption of Basmati rice in Tambon Sansai, Amphoe Phrao, Chiangmai Province, and found that the officers' trustworthiness, competence, and curiosity

Boondham Mungthong (1983) researched desirable characteristics of agricultural extension officers from farmers in Chom Thong Agricultural Project, Chiangmai province. He found that the farmers needed three helpful features of the officers: 1) punctuality (no default), 2) expertise in agricultural extension (having

rustic experience), and 3) agrarian experience (being trained in agriculture), respectively. Besides, from this study, it was further found that most farmers preferred males aged 30-34 years old the most, while the farmers in the study of Pornsit found to be less important than those three characteristics.

Moreover, from the review of literature, there are other factors related to the influence of a sender (Orawan Pilan-o-wad, 2003, pp. 128-133):

1) Status. Each person has his or her role position in society differently, and each person performs each same role differently. Some tasks may be performed longly, i.e., to function as a teacher and parents, etc. while some positions may occasionally perform such roles, i.e., honorary actors, voters, tourists, etc. In short, whenever people play any roles, their behaviors will be determined by those roles accepted by society. However, what is important is not only a role that a sender or receiver has but is the relationship between the role of a sender and a receiver also. It is called “status” or “prestige” that related to each status. For example, a Prime Minister will have a higher rank or prestige than ministers since he is in a more top position. Different roles that are determined by status also determine source credibility, which can be under these two situations.

(1) The higher a person’s status or prestige, the more credible he or she will be. Therefore, the president of a company will have more influence than ordinary staff or employees.

(2) In some situations, a person may have a high status but has low source credibility, or in other words, he or she may have a low status but has high source credibility. (Bettinghaus, 1980, p. 96)

For the first situation, an example of having high status but low source credibility is Richard Nixon, the former president of the United States of America, and the case of the second situation where a person has low status. Still, high source credibility is a monk without any priest’s rank or title but with intense rigor in a remote village. Such a monk will be respected by villagers and has high persuadability.

2) Time. Hovland et al. (1953) studied on a sender and found “time and message retention,” which is called “Sleeper Effect,” as one exciting factor. They experimented with two groups called Group A and Group B. In Group A, subjects

received a persuasive message from a high credibility source while the subjects of Group B received the same message from a low credibility source. From an instant measurement after the experiment, it was found that 20% of the subjects in Group A had attitudinal change, while only 5% of the subjects in Group B did. Then, a new measurement was conducted again four weeks later, and found that 12% of Group A and 12% of Group B changed their attitude. The phenomenon found in this research can be explained by the concept of “ Sleeper Effect ” that after time passes by, the subjects can remember only the message, not the senders with no matter how high their source credibility is as it disappears by time. On the other hand, the retention of the message remains and can change their attitude.

3) Opinion Leader. Status and role position in society is not the only factor that can explain the influence of a sender in a persuasive context. To illustrate this, in a village, a group of farmers is talking about the establishment of a cooperative rice project. Then, a farmer initiates his idea by saying that “ we should establish it. ” The rest of the group listen and then comply with that farmer. This farmer is called “ an opinion leader, ” in spite of having the identical occupation and status as a farmer like others. Therefore, it is remarkable that an opinion leader is not necessarily a person with a higher social status than other persons being persuaded. He or she may not earn a better job nor a high rank, i.e., a president or a chief of a group. However, his or her opinions are likely to be accepted and can influence others’ attitudes. Hence, source credibility, either from status or from being opinion leaders, is something receivers perceive and acknowledge or must come from the receivers’ perception, not what a sender claims to have.

Berelson et al. (1954) also studied and explained about the characteristics of an opinion leader as follows:

- 1) Be a model of group members or a person whose opinions and suggestions can draw other members to follow.
- 2) Tend to have a higher status than followers.
- 3) Initiate and transmit an idea to others better than others in a group.
- 4) Be exposed to mass media more than others.
- 5) Acquire more knowledge from mass media on a particular subject than others.

6) In an election situation, an opinion leader tends to be interested in an election more than others and acquire more election information than others. Besides, he or she feels involved in an election more than others.

7) Tend to have higher education than other members.

2.1.7 Receivers and Message Selection

Kanjana Kaewthep (2013, pp. 271-272) specifies four components in a communication process: sender, message, channel, and receiver. A receiver has been the component that is paid attention the most for a communication analysis since the early period up to the present. In contrast, there have been changes in analysis approaches, including scholars' views on receivers, which changed in each period to understand each approach in analyzing receivers. The following are various views on receivers in parallel to each method of a communication analysis:

McQuail (1994, as cited in Kanjana Kaewthep, 2013, pp. 271-272) classifies the development of concepts on receivers into four main approaches.

1) Receivers as spectators. This concept is rooted in the concepts of performing arts of folk media, i.e., Likay, Lum Tad (Thai-style antiphon), Nora, etc. The performance comprises players, dancers, or singers (a sender) and the receivers or audience who are in the same place at the same time. The relationship between them is thus group communication with reciprocal feedback (i.e., when the way a Likay actor sings to flirt with an actress pleases the audience, the audience will applaud or give a hail.) At present, in mass media, such as TV or radio, we may still see some of these performances in some programs, i.e., in games shows, comedies, concerts, etc.

2) Receivers as public. These groups of receivers occurred in the printing age and emerged a reading group called, "Reading Public," which means receivers who follow authors' work or printed media seriously and regularly. Notably, in the period of printed media, i.e., newspaper, it was the period in which mass media played an essential role in mobilizing a society. Consequently, groups of readers formed themselves by various criteria, i.e., occupation, income, sex, interest, etc. and played a part in public activities. Thus, they were called "public groups." Therefore, receivers under the definition of public groups mean the formation of receiver groups

after their media exposure to express their roles and power in the public sphere (i.e., political, economic, etc.).

3) Receivers as mass. This concept is based on mass media people. The word “mass” means receivers with some predominant attributes. Namely, they are a big group with a large number of people, but living scatteringly and possibly having no relationships or intimacy among them. They are heterogeneous groups: different sex, ages, occupations, etc., and can be temporary. A mass can occur after media exposure. After the exposure finishes, groups of people will be scattered again.

4) Receivers as a Market. This meaning occurred since mass media has been developed to be a complete business system with high competition. Accordingly, the output of media is perceived as a product or service for sales (either direct or indirect) to a group of audiences who have the buying power or so-called “consumers” or “market,” especially in the present situation where supply overwhelms consumers’ demand. Hence, the direction of media production is determined by the needs of the audience or the market mainly. The most apparent indicator is the concern on the rating of TV programs, etc.

Furthermore, Passawalee Nitikasetunthorn, 2014, pp. 38-42) also emphasizes the importance of receivers in the communication model, which turns to be much more receiver-oriented. Receivers are not perceived as passive audiences affected by a sender’s transmission of the message, but as an active audience who can select exposed information through their filtering process. Besides, they can also determine the message at a certain level. Passawalee Nitikasetunthorn divides the roles of receivers in a communication process as follows:

1) The importance of receivers as participants in a communication process. Communication models at an early age gave importance to receivers as participants in a communication process, which is a two-way process in which receivers can send their feedback to a sender. They included the circular model of Wilbur Schramm, who views receivers not as passive audiences at the end of a communication route. Still, they can decode and interpret the received message to match with their perception. Besides playing a role of a receiver, a receiver can switch his or her role to be a sender by sending his or her encoded message back or sending

feedback to the old sender who is now a receiver. The circular communication model of Schramm is illustrated in Figure 2.4.

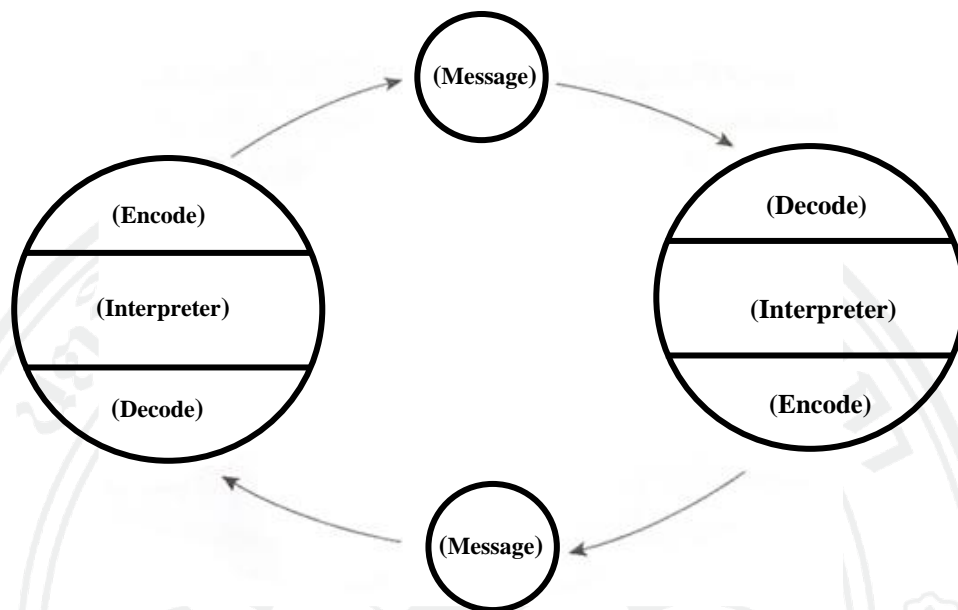


Figure 2.4 The Circular Communication Model of Schramm

Source: Schramm, as cited in Passawalee Nitikasetsunthorn, 2014, p. 39.

This circular communication model reflects the central concept that communication is not a linear one-way process, but is an endless cycle, and communication from a receiver via feedback makes it circular. Thus, this enables a receiver to participate directly in the communication process. Besides, feedback plays two significant roles:

(1) Feedback enhances the effectiveness of communication between a sender and a receiver.

(2) Feedback enables a sender to know how a receiver interprets his or her transmitted message so that he or she can modify the message to achieve the desired goals.

2) The importance of receivers as ones who determine the message. The model defining receivers as persons who determine the message is the model that rejects the concept of Bullet Theory or Hypodermic Needle Theory, which views

mass media functions as message generators in the form of propaganda to persuade receivers. On the contrary, the model focuses the role of mass media as a communicator who reflects or presents events or opinions happening in society to masses of people or receivers. The ideas emerging in society are the feedback of receivers transmitted to mass media as a sender or source, either directly or indirectly. Thus, the model portrays changes in a working paradigm of mass media from the past, as illustrated in Figure 2.5.

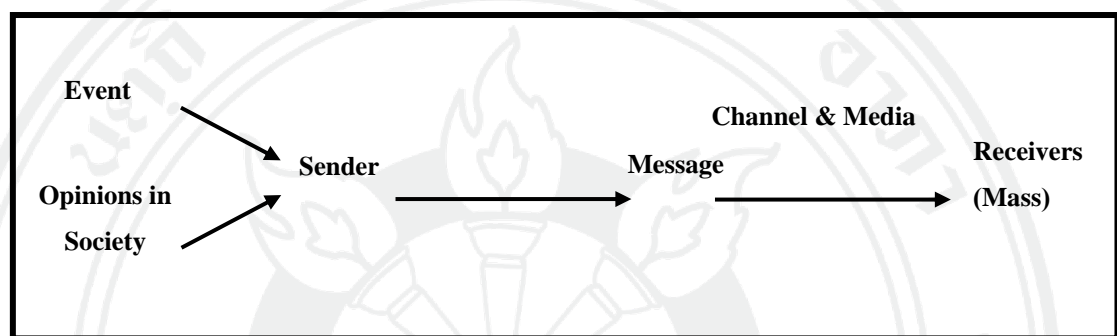


Figure 2.5 Communication Model Viewing Receivers as those Determining the Message

Source: Passawalee Nitikasetsunthorn, 2014, p. 40.

Figure 2.5 presents a new perspective on mass media. Mass media or mass media organizations are a sender (mass media organizations) who do not only produce a message to masses of people. Mass media also transmit some parts of receivers' opinions via their feedback, which is called, "deductive feedback." Feedback is not necessarily immediate and indirect, but it can be delayed feedback, which occurs after the receipt of a message via various kinds of channels, i.e., writing a letter, submitting complaints or opinions to mass media organizations, media criticism by a journalist, or even sales volume or circulation survey. Although deductive feedbacks can indicate views and needs of receivers superficially, they are the starting point of bringing receivers to participate in determining and producing messages to be publicized to the public. Then, they stimulate them to participate in the thinking and production process subsequently. The study of feedback can be in the

form of testing an idea of producing a program to receivers, marketing research for analyzing customers' needs, public hearing, etc. before a message is produced and disseminated to masses of people, etc.

3) The importance of receivers as those who select uses from media and message content. This model was established from communication studies aimed at receivers' applications of media and message content to satisfy their needs and respond to receivers' behavior based on each individual's needs, satisfaction, and interest. Most of the studies were conducted on mass media since, during the period, mass media plays a very significant role in society. The model is illustrated in Figure 2.6

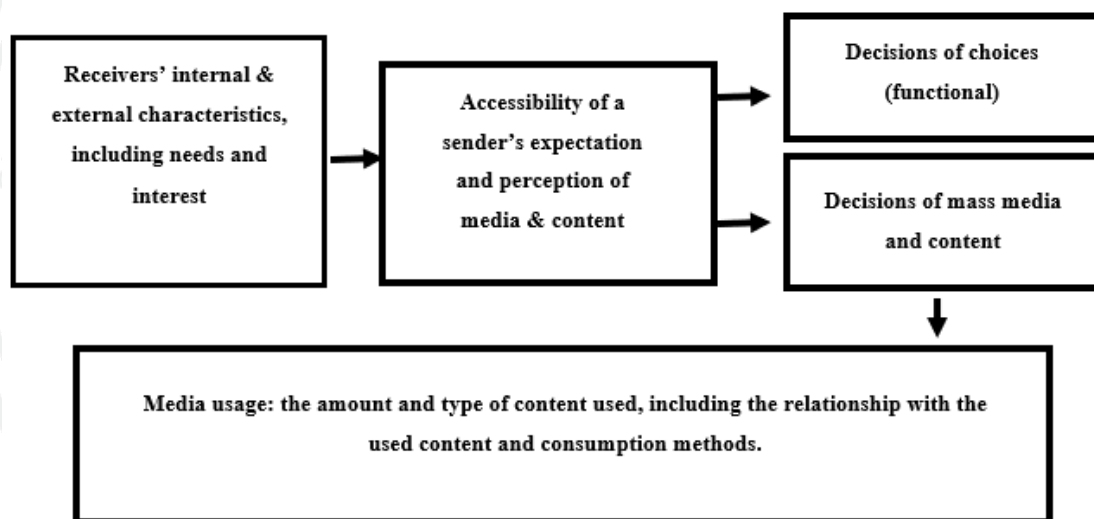


Figure 2.6 The Model of Uses of Media and Message Content

Source: Sawanit Yamaphai and Raweewan Prakobphon, 1994, p. 136, as cited in Passawalee Nitikasetsunthorn, 2014, p. 39.

In this model, receivers can select the transmitted message by considering the following factors: 1) an individual's internal and external particularity, 2) an individual's needs, necessity, and interest, and 3) an individual's expectation and perception on media and content. All these factors will determine if a receiver will choose to use mass media or not since mass media is not the only option. Still, a receiver may have other media or can communicate in different forms that can

function better than mass media, i.e., listening to music or playing sports instead of watching a movie for relaxation.

Thus, receivers are influential in the communication process because of their message selection. Only communication may not be sufficiently effective. The notion accords with the concept of Klapper (1967, p. 49, as cited in Meyapim Somprasong, 1995), who mentions that only communication is not enough to influence a receiver. His concepts can be summarized as follows: 1) Only communication is not a sufficient or vital cause to affect a consumer's cognition. 2) Other variables may support or obstruct the influence of communication. 3) For communication to have a genuine impact on an individual, a commitment of communication and people is needed.

Severin and Tankard (2001, as cited in Pira Jirasophon, 2014, p. 82) compiled psychological theories to illustrate that receivers have quite a complicating process in perceiving and processing received messages. Therefore, it makes the goal of dissemination and persuasion unable to be accomplished easily, even though such messages have already been transmitted or conveyed to receivers. Generally, each receiver tends to be selectively exposed to some information and ignore some information. For example, in the same family, the father may read political news, the mother entertainment news, the son sports news, and the daughter advertising on new mobile phones from the same newspaper, etc. Even if all of the family members are exposed to or interested in the same message, each of them may still have different perspectives and interpretations. The mother might say Singer X played in a concert very beautifully while her kids might say it was slightly old-fashioned and boring. Besides, despite their interpretation in the same direction, each of them might be impressed with each part of the transmitted message differently, and they may have different message retention as well. Accordingly, a sender has to be aware of this and plan to eradicate the choices the receivers may make as many as possible to achieve the intended goal. (Pira Jirasophon, 2014, p. 83). Generally, a selection process comprises the following: (Pira Jirasophon, 2014, p. 82).

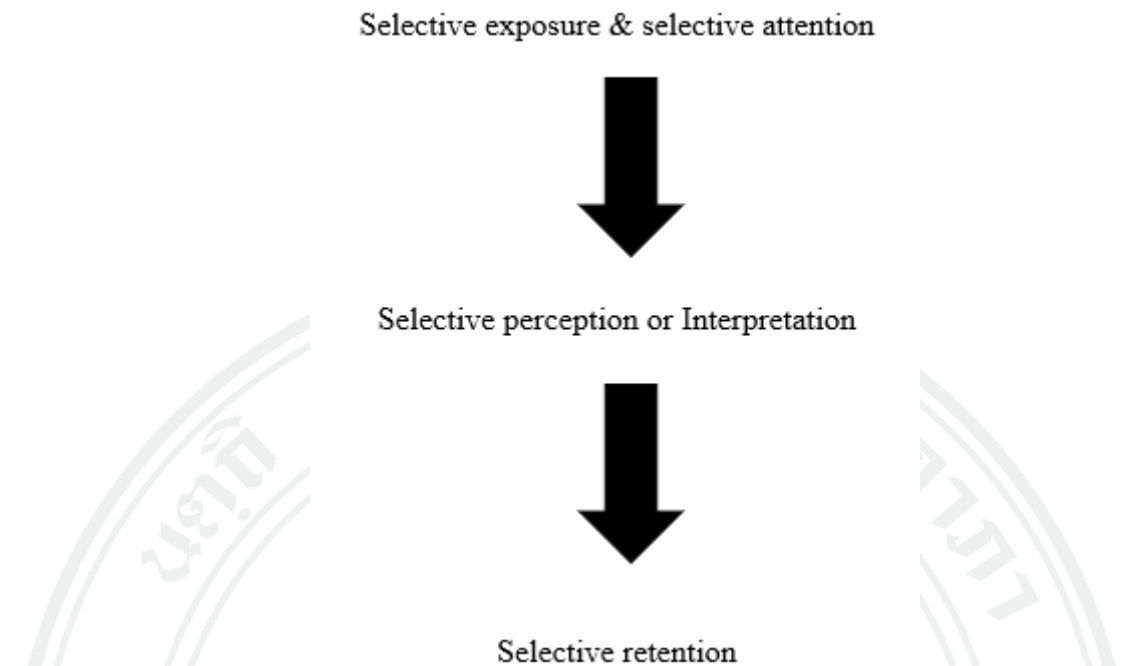


Figure 2.7 Selection Process

In brief, the selection process can be explained as follows:

- 1) The selective exposure means receivers' tendency to expose himself to a piece of message by his interest. Typically, a receiver tries to avoid being exposed to any incongruent message with his or her thoughts and attention.
- 2) Selective perception means the tendency of a receiver to perceive messages based on his or her interest.
- 3) Selective retention means the tendency of a receiver to retain or memorize messages based on his or her interest and readiness in making such a message understood.

Thus, a receiver has to process information upon receiving it. McGuire (1989, as cited in Pira Jirasophon, 2014, p. 83) presents 12 steps of a step-based model according to Information Processing Theory as follows: 1) exposure 2) attention 3) interest/liking 4) comprehension/learning 5) acquisition 6) agreeing/complying 7) memorizing 8) retrieving 9) deciding 10) acting 11) reinforcing 12) consolidation. All these steps can be applied to explain receivers' information exposure, especially

persuasive information, to understand what will happen at each complicating step until it results in practicality.

Additionally, Petty and Cacioppo (1986, as cited in Pira Jirasophon, 2014, p. 83) propose a model to explain possibility in processing and considering persuasive information, called “Elaboration Likelihood Model” (ELM). They describe that there are two ways for processing information: to use the central route or the peripheral route. The central-route information processing is to process the received information thoroughly by considering its data, proofs, evidence widely, and arguments. In contrast, peripheral-route information processing does not view the core content of the message directly but gives more importance to something out of the word, i.e., Is a presentation exciting or impressive? How credible is the source of information? Therefore, the latter does not focus on cognitive processing or thinking as much as the former one.

O’Keefe (1990, as cited in Pira Jirasophon, 2014, p. 83) pinpoints that whether a receiver will process information by the central or peripheral route depends on motivation and knowledge factors, including the ability to lead into such consideration. If a person has a high capacity, the chance of using the central route in considering the information is more likely.

Schema theory is another theory indicating that a receiver’s information processing is predetermined or embedded; therefore, he or she can have an instant reaction towards the processed information based on his or her predisposition. Mass media often influence a part of it. Previously, Graber (1989, as cited in Pira Jirasophon, 2014, p. 84) defines “Schema” as a cognitive structure composing of knowledge about situations and people processed from previous experiences and used to treat the new information at a specific time. For the information processing based on Schema Theory, Fiske and Kinder (1981, pp. 171-190, as cited in Pira Jirasophon, 2014, p. 84) state that people are often cognitive misers and cognitive economy. They always think of something quickly, conveniently, rapidly, and instantly by their old schema in perceiving information from mass media.

Graber (1988, as cited in Pira Jirasophon, 2014, p. 84) finds that human beings have different ways of processing information. For instance, they can connect to the existing schema (such as interpreting a politician based on the image of old politicians

who were tricky and insincere. Also, they can refer to what it used to be before, such as the belief that traffic jams are incurable regarding the problem-solving of all previous governments. Besides, integrating many schemas from different dimensions to one thing (politicians' campaign is the cause of traffic jams in Bangkok, racketeering and unserious implementation of traffic rules of traffic police officers, drivers' lack of driving disciplines, Thai people's value of using a car, economic wastage, etc.) Besides, Graber notes that which schema a receiver uses in his or her media exposure is often influenced by the guidance or leading of mass media. A receiver may be influenced by the media's headline, leading sentence, caption, etc. Mostly, it indicates or gives a hint of which schema or direction a receiver should use or go on certain kinds of information.

2.1.8 Uses and Gratification of Receivers

Kitti Gunpai (2013) presents the assumption of Uses and Gratifications approach, which views that receivers use an active cognitive process in processing information and past experiences, i.e., various types of subscriptions, etc. On the other hand receivers sometimes exert resistance against influence or receivers' resistance against any undesirable influence or learning. It accords with the concept of Bauer (1964, as cited in Kitti Gunpai, 2013) about obstinate audience or readers, audience, or listeners who can control themselves of being unaffected, except what they have chosen. Therefore, the meaning of receivers cannot be diminished to "spectatorship" in a passive way only, but it also connects to mean a selection of some messages specifically. Besides, from this perspective, receivers' behaviors involve their motivation and satisfaction more or less. (Kitti Gunpai, 2013, p. 98)

Moreover, Kanjana Kaewthep (2013, p. 285) views that mostly in their message exposure, receivers intend to search for any information for uses in some ways, i.e., for their occupation, purchase decisions, situation control, readiness for action, etc.

McGuire (1974, as cited in Kitti Gunpai, 2013) explains motivation theory by psychological approach, which bases on the theory of human needs, by starting from distinguishing between cognitive and affective needs.

2.1.9 Perception of Receivers

DeVito (1978, p. 120, as cited in Bussaba Sutheethorn, 2014, p. 4) defines “perception” as a process of selective attention, organization, and interpretation of information or stimulus through sensory organisms: seeing, smelling, tasting, touching, and hearing.

Perception determines human cognition in evaluating people and things surrounding them, including our reaction and expression towards the stimuli. In other words, perception is a process of attaching meanings to stimuli from the past to the present and future. Attention and understanding of the human perceptual process are thus crucial for communication studies. (Bussaba Sutheethorn, 2014, p. 6)

DeVito (2000, p. 39, as cited in Bussaba Sutheethorn, 2014, pp. 7-11) presents a perception process in three significant steps: 1) The stage in which sensory stimulation occurs, 2) sensory stimulation is organized, and 3) sensory stimulation is interpreted or evaluated. Besides, all three perception steps arise so quickly that they seem to be identical or inseparable from step to step.

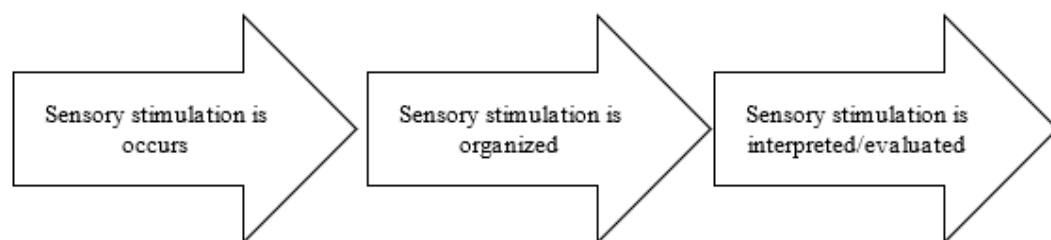


Figure 2.8 Perception Process

1) Sensory stimulation occurs. In this step, the five sensory organs of human beings are stimulated from stimuli they see, hear, smell, taste, or touch. The stimulation is different depending on the limit and competency of the sensory organs of each person. Moreover, to have stimuli stimulate the sensory organism, human beings have a selective perception mechanism that enables them to select or not select something. Information or stimulus through the social perceptual process is thus only a part of all surrounding information and stimuli. Receivers face a process of selective attention, exposure, and perception almost all the time. Because of such a process, for

some advertising spots, some people may be interested in and memorize them while some people seem not to have seen them before or possibly cannot remember them. It depends on each individual's needs towards certain products being advertised, etc.

2) Sensory stimulation is organized. Stimuli passing through the selective perception process will proceed to the step of gathering and organizing information based on each person's criteria. Gestalt psychologists, such as Max Wertheimer, Kurt Koffka, Wolfgang Kohler, etc. propose some rules or principles for gathering or classifying the incoming stimuli to explain human communication behaviors.

(1) Proximity. Anything of close physical distance will be grouped or perceived to be the same group. For example, a husband and wife, or a couple of close friends tend to be perceived as the same group. Thus, when a husband proposes an idea, it is often stereotyped that a wife should have the same purpose, etc.

(2) Similarity. Similar things are classified as the same group. The similarity is various: color, figure, size, or thought. Therefore, Southeast Asians are grouped to have a similar outlook, skin color, hair color, culture, and beliefs.

(3) Continuity. It is found that prior expectations strongly modulate sensory processing and influence our perception of the following stimuli. The use of the principle of continuity in shaping perception is very successful, especially in public relations. Accordingly, organizations often publicize their message, operation report, etc. to create understanding and an excellent organizational image to their target groups continually and regularly. Correspondingly, whenever an organization faces a crisis from rumors, their target groups will not believe in those rumors rapidly. In contrast, they will relatively find talks about an organization that lacks a continuing public relations.

(4) Closure. This principle is based on the assumption that sometimes despite no complete knowledge about something, people can perceive and give meanings to it. Therefore, a creative advertisement presented by images or words is influential in creating imagination on the image of a product or service without necessarily providing all information, etc.

3) Sensory stimulation is interpreted or evaluated. After the information is processed and organized by some principles in the second step, it will

pass to the interpretation and evaluation step. This step depends on the internal factors of each individual, i.e., the experience of certain things, personal needs, value systems, belief, emotion, feeling, etc., and external factors, i.e., environment, situation, etc.

(1) Factors affecting perception in the step of interpretation or evaluation. There have been many studies on other related processes that affect an individual's perception and cause different perceptions and interpretations of the same message or stimulus. At least, such processes affect an individual's perception in 7 ways: (DeVito, 2000, as cited in (Bussaba Sutheethorn, 2014, pp. 8-11).

a) The effect caused by the fact that people tend to attach their beliefs or assumption about people's personalities from their experience to predict what they have not been perceived or experienced in the same direction. Such an effect is the main essence of the theory called "Implicit Personality Theory," in which this effect is called the "Halo Effect." For example, a person may have an experience that physicians he or she knows are good-tempered, kind, and friendly to their patients. This positive experience causes the person to attach this positive feeling and good personalities to others. He or she has never experienced directly, such as he or she will anticipate that this physician should work for all patients equally, sympathize with the poor, and should not avoid paying taxes, etc. This kind of effect can distort people's perception from the fact. For instance, in reality, the physician may fail in his duty or be commercial.

b) The effect caused by the self-fulfilling prophecy. An anticipation can make the effect, as anticipated, occur. For instance, some students lack self-confidence in public speaking and predict that they should not be successful in speaking in front of the class, and because of such anticipation, they fail actually. Therefore, a person's negative self-fulfilling prophecy often causes that person to be excited and forget the content. There will be some listeners both interested and uninterested in what the person says. Still, because of his or her self-fulfilling prophecy in a negative way, he or she selects to perceive only the negative feedback and thinks that none is interested or bored. As a consequence, it makes him or her discouraged and discontinues his or her speaking, so the presentation is less exciting and causes a failure. Therefore, anticipation can create a perception distorted.

c) The effect caused by a selective perception of what one prefers or with what one is satisfied. Since perception is a process of selective exposure, selective interpretation, and selective retention of any message or stimuli that are congruent with an individual's attitude and needs, thus, it may cause an inaccurate perception significantly. The government's ignorance of criticism from mass media is congruent with the concept of selective perception that the government chooses to perceive only favorable opinions of mass media; thus, the government cannot evaluate the actual opinion people have towards them.

d) The effect caused by primacy and recency effect. The result of perception can be an impression; either the first impression called the primacy effect, or the most recent feeling called the recency effect. To illustrate this, if we used to think that our friend is honest and we trust him for a long time. However, one day, we discover that he lies to us about some critical issues. In this case, if we give more importance to his recent lying than his great friendship and great honesty, it means that we tend to emphasize the recency effect. Because of these effects, it can explain why people tend to focus on our first or last behaviors or why we like to remember the first or last paragraph of what we read.

e) The effect caused by cognitive consistency. People like to be or perceive themselves in a balanced state. According to the theory of cognitive consistency, a balanced state or equilibrium can occur when people we like also like us. We also anticipate that people we dislike will dislike us too. We expect that people who are our friends we like will like our friends. While we also predict that our friends will not like our opponents, and our opponents will not like our friends either. All these anticipations are from an internal feeling of each individual.

f) Moreover, according to Balance Theory, we will also anticipate that people we like will have desirable characteristics while our adversaries will not have them. The effect caused by cognitive consistency makes us ignore or distort any received message that is incongruent with our prior predisposition. Still, it makes us perceive selectively only what we like or what possesses our desirable characteristics. It makes us overlook the good points of someone we dislike and the bad points of someone we love as well.

g) The effect caused by stereotyping. A stereotype is an embedded impression a person has on the characteristics of each group of people, i.e., race, ethnicity, religion, occupation, etc. Some examples of stereotypes are the stereotype that a politician is a power seeker, a prostitute wearing a seductive dress is a disgusting and no-pride occupation, etc. Thus, no matter what issue the stereotype is about can be considered as a significant blockage against the accurate perception of important issues. Moreover, stereotyping induces people to use their embedded impression to explain the sub-components of the integral component, which may not be accurate and causes them to be careless and overlook individual differences. For example, T Though most prostitutes are female, wear sexy dresses, like to walk alone at night and sit alone in a club, it does not mean that women in a sexy dressed are drinking alone in a hotel are prostitutes. Nor can people stereotype that a woman walks with a foreigner in some tourism provinces is a prostitute. Because of this stereotype, it endangers a woman who legally marries a foreigner to be treated improperly. Furthermore, because of stereotypes, people also miss some other personal characteristics of a person. For instance, a prostitute may be forced to be so because of some reason. She may be grateful and responsible for her family. These personal characteristics may then be overlooked.

h) The effect caused by attribution concept. Attribution theory is a process of finding reasons to explain and understand an individual's behaviors, either by internal or external reasons. People use the Attribution Theory to explain and interpret the occurring actions rationally if either internal or external factors cause them. In the case of internal factors, blame or compliment may be given depending on a situation. However, in the case of external factors, they will be perceived as uncontrollable force majeure.

From the review as mentioned above of concepts, theories, and research, it can be concluded that communication is a process in which a source or sender transmits a message through some kind of channel to a receiver. During a communication process, the role of a sender and a receiver can be switched. In general, communication is influenced by four factors: 1) communication skills, 2) attitude, 3) level of knowledge, and 4) social and cultural system. Receivers are likely to be influenced by four factors, like senders. For message, it comprises three main

components: 1) message code, 2) message content, and 3) message treatment. For channels, a primary notion is to choose appropriate channels for a sender, message, and a channel. It can be seen that in every level of communication, a communication process comprises a sender, message, a channel, and a receiver, except in intrapersonal communication in which a sender and a receiver are identical. Communication has four levels: 1) intrapersonal communication, 2) interpersonal communication, 3) group communication, and 4) mass communication. Excluding intrapersonal communication, every level of communication all involves interpersonal communication, but the differences are the number of receivers and communication channels.

Interpersonal communication is the level of communication that profoundly influences a receiver since usually people prefer and are more convenient to communicate with someone close to them rather than a group or mass who are farther. By definition, interpersonal communication is face-to-face communication between at least two people who have some mutual relationships to transmit knowledge, thought, and feeling through verbal and nonverbal language to enhance two-way communication and bring about shared meanings and mutual understanding.

For verbal language, it is communication through words, either oral or written, whose meanings are determined by a sender and a receiver for common meanings. To persuade people to change per a sender's intent, a sender should concern about three persuasive appeals: 1) Ethos or source of credibility in the eyes of a receiver, 2) pathos or an ability to arouse a receiver's emotion, and 3) logos or the ability of reasoning and supporting arguments by proofs or evidence. If a speech is aimed to persuade people, a sender has to know a receiver's psychological aspects and cognition. In other words, a sender must understand human nature and the ways people use rationale, their personality, needs, and emotion. A sender must know what kind of arguments should be used for what kind of people.

For nonverbal language, it is communication without words, either through speaking or writing, which is determined by a sender and a receiver towards mutual understanding. Human beings can communicate without words, but cannot communicate without nonverbal language. Kinds of nonverbal language are 1) Physical appearance 2) Kinesics/Body movement 3) Facial expression) 4)

Oculesics/Gaze/Eye Contact 5) Clothes and Artifacts 6) Tactile/Touch/Haptics 7) Proxemics/Space 8) Paralanguage/Vocalic 9) Environment factors 10) Silence, and 11) Olfaction as smell can arouse some feelings.

Group communication means a gathering of people who have a common interest, interact and communicate with one another with some common goals while influencing one another reciprocally. Three indicators can identify groupness: 1) common destiny since the consequences will affect every member in a group, 2) similarity, i.e., dressing or working style, and 3) proximity, i.e., physically close to one another. In general, group communication gives importance to two factors. The first factor is physical factors that compose of three sub-components: group size. The larger a group is, the fewer opportunities members in a group can express their idea. Therefore, the larger a group is, the lower chance the persuasion will be successful. The proper size of a group should not exceed five members. In a large group, there is a tendency to split into subgroups in which members will dare to express their idea more openly. 2) spatial arrangement in a group affects communication climate to be formal or informal, and members' expression accordingly. 3) Members' feedback, which is divided into two kinds: immediate and delayed feedback. If the received feedback is enormous, it will be advantageous for persuasion. Time is also crucial. Both a sender and a receiver should give enough time for questioning and answering. It is found that feedback has a relationship with group size and seating arrangement. The larger a group is the fewer chances a sender can investigate members' feedback thoroughly. The second factor is psychological factors that comprise five sub-components: 1) group satisfaction with an activity a group is doing or has done. 2) Group cohesiveness or members' attachment to a group. Without group cohesiveness, a group can be unstable easily when facing even little pressure. Group cohesiveness affects persuasive communication. 3) Group conformity or members' compliance to accept some opinions. In the case of complicated issues, the number of members complying with them will be higher than simple matters. Besides, in a high-cohesive group where members do not agree with a sender, a sender has to exert a high effort to communicate with this group. 4) Group norms or a group's congruent patterned behaviors, which can occur and be maintained by group pressure. Norms are another indicator that can predict if a sender's persuasion on some issues will be successful

easily. If senders and their messages violate or threaten group norms, such persuasion will face difficulties in achieving the intended goal. 5) Group equilibrium or internal group pressure for maintaining the stability of a group with the least effect. According to the Theory of Group Equilibrium, group equilibrium affects persuasion under the following conditions: 1) When a group is newly formed, the stability of a group is still unpredictable. 2) After group formation for a while, a group will close itself from exposing to any information that will cause an imbalanced state. 3) Informal group formation can often bore and discourage group members.

The influence of a sender partly comes from a sender's source credibility through three primary qualifications: 1) Intelligence, 2) goodwill and 3) good character. Source credibility also depends on another two requirements: competence or expertness and trustworthiness. If a receiver considers that a sender has the right qualifications, it means a sender's possibility to persuade successfully. Mostly, receivers will evaluate a sender's source credibility based on three factors: 1) Safety factors, i.e., kind, friendly, etc. 2) qualification factors, i.e., knowledge, expertise, etc., and 3) dynamism factors, i.e., curiosity, etc. Besides, there are other factors affecting source credibility, such as 1) status or role position in society, 2) time, and 3) opinion leaders. Characteristics of opinion leaders are a model in society with higher status, higher education and knowledge, and being exposed to information and mass media more than others. Opinion leaders tend to pay attention to an election more than others. However, roles in society are not the only factor since the credibility of both a sender and an opinion leader is not the status quo but perceived by receivers.

Regarding the influence in persuading receivers to comply, there are eight rules: 1) Rules of presenting a contradiction or conflict to create a feeling of differences. 2) Rules of compensation or asking for gratitude for what a sender used to do for them. 3) Rules of presenting what is expected to be denied and lowering the degree of a request that should be accepted. 4) Rules of commitment and consistency by letting receivers commit themselves before others, so they have to comply with their promises. 5) Rules of scarcity or the emphasis on the value of something and giving the feeling that they have to compete for ownership. 6) Rules of social acceptance or encouraging receivers to do something that will be socially accepted. 7) Rules of liking or persuading receivers towards some preference. The more

appreciation with something receivers have, the more chances they will comply. 8) Rules of expertness or making receivers confident of a sender's expertise to adhere to the sender.

For the perspectives on receivers, there are four main perspectives divided by their development: A view of receivers as spectators, public, mass, and market. Besides, there have been many communication models giving importance to the roles of receivers. Receivers' roles can be communication participants, message determiners, media and content users. Thus, receivers affect communication enormously, mainly because of their selective perception and exposure. Therefore, there are three main issues a sender should realize: 1) Communication alone is not a single or sufficient factor to create influence over receivers. 2) Other variables or factors are enhancing or obstructing the impact of communication. 3) For ensuring the effect of communication, a commitment of communication and people involved is required.

Concerning message reception behaviors, each receiver tends to expose himself or herself to some messages and ignore some messages. In brief, the steps of the selection process are selective exposure, selective perception, and selective retention. In general, receivers have a complicating information-processing process, i.e., the use of reasoning and proofs or emotion, which depends on their motivation, knowledge, the ability of information processing, which has been predisposed or embedded in the brain or cognition of receivers. Generally, receivers are active and can control themselves not to be influenced or affected, except in what they have chosen towards some uses or benefits.

Receivers' perception of the message is a complex intrapersonal communication that occurs very rapidly through three main steps: 1) Sensory stimulation occurs, 2) sensory stimulation is organized, and 3) sensory stimulation is interpreted or evaluated.

2.2 Concepts, Theories and Related Studies on Learning

2.2.1 Definitions of Learning

In general, learning means a behavioral change caused by each individual's experience that may be acquired formally or informally. Many scholars define learning as follows:

Smith (1982, as cited in Somkid Issarawat, 2000) states that learning is an individual's activity, either formal education or informal learning. Learning involves information, knowledge, or skills acquisition. New attitude, understanding, and value bring about behavioral changes that might be a lifetime. Therefore, learning may be both a process and an outcome.

Somkid Issarawat (2000) defines learning in three groups of meaning:

- 1) Learning is an outcome. Therefore, the meaning of learning in this group covers the growth, understanding, changes, knowledge acquisition, searching, and collection of what has not been known before.
- 2) Learning is an application. After learning new knowledge, learners can apply what they learn for use in a unique situation.
- 3) Learning is a process. Learning in this group means memorization, observation, and practices or trials and errors.

Furthermore, Suwat Wattanawong (2001) defines learning as a behavioral change caused by the receipt of some stimuli, which yields permanent outcome or the acquisition of experiences.

2.2.2 Types of Learning

Gagne et al. (2005) classify learning into five types:

- 1) Learning by using intellectual skills means memorization, thinking practices from necessary to more complex skills.
- 2) Learning by cognitive strategies means the drawing of knowledge, memory, understanding, and old experiences to be used in systematic ways. Learners thus need to have high thinking strategies, including systematic thinking, memorization, and understanding.

3) Learning by the use of information and knowledge. It is learning by information processing of knowledge, analysis, and knowledge and understanding system organization based on the prior knowledge structure of learners.

4) Learning by using motor skills means learning through physical capabilities in doing activities to accumulate expertise and learning.

5) Learning through attitude. It is learning from plenty of experiences by understanding learning methods and ways to enable people around to learn something.

Sucheera Pharaphong (2005) studied “the Learning of Krung Thai Bank (Public Company Limited) Employees in Muang District, Nakhon Ratchasima, and found that most employees expressed their agreement on learning based on an 8-domain organizational learning structure: strategies, culture, system, leadership, critical thinking process, collaborative learning, and business entrepreneurship, at a moderate level. From analyzing each domain, most employees agreed with cooperative learning, cultural learning, and leadership at the high level, followed by process learning, analytical thinking learning, system learning, strategic learning, and business entrepreneurship at a moderate level. Besides, it was found that employees with different sex, age, length of working time, education, division of work, and working position were found to have no different opinions about overall learning.

2.2.3 Components of Learning

Dollard and Miller (1999, as cited in Aree Panmanee, 2003) view that learning composes of the following things:

1) Drive. The drive may occur when the body is imbalanced, i.e., malnutrition, dehydration, no rest, etc. All these conditions will stimulate the body to express behaviors that can adjust the body to a balanced state. There are two types of drive. Some necessities for living stimulate the primary drive. It can be physical needs that coincide with the existence of a person’s life.

(1) Secondary drive happens afterward by social needs, i.e., love, social status, or safety.

(2) A stimulus is what stimulates the body to react to something; thus, it determines the body’s response.

2) The response is a behavior or activity responding to the stimulation of stimulus.

3) Reinforcement is what tightens the relationship between stimulus and response. For instance, when an employee performs well and makes the superior satisfied, the superior will reinforce him by giving a reward so that the employee will keep and continue his excellent working performance.

2.2.4 Factors Facilitating and Supporting Learning

Chiansri Wiwitsiri (1991; Aree Panmanee, 1997, as cited in Thipsuda Chaiyapruk, 2009) summarize factors supporting learning as follows:

1) Motivation is a process in which human needs are responded to and gratified. Motivation is a significant drive that enables social behaviors to achieve a planned goal. Human beings will do or learn anything only when something stimulates them to have a desire to do or to learn so. Learning from motivation and stimulation tends to be more effective than that without any stimulation. If learners have high motivation, they will learn more and better than those without motivation.

2) Needs mean the condition in which individuals are short of or lack something and have a desire to have it or acquire it to cause satisfaction. If it is not responded reasonably, learning and development will be obstructed. Needs are divided into two types:

(1) Biological needs, i.e., food, water, air, etc. They are the needs of living and survival.

(2) Socio-psychological needs or internal needs. It is the needs human beings have when they are physically responded to. Food, water, air, clothes, accommodation, and drugs are fundamental human needs, but they also have social and psychological needs, i.e., acceptance, love, friendship, sympathy, social status, better economic status, etc.

Thus, human needs are endless.

3) Individual differences. Physical, psychological, emotional, and social differences, including age, sex, and intelligence differences, affect the learning of each individual.

4) Readiness. Good physical and mental health increases the need for learning.

(1) Physical health is a factor affecting learning. If a learner is not sick or tired from work, the learning will be more efficient than a learner who is ill or exhausted from hard work.

(2) Emotional readiness is another factor affecting learning. Learners with a stable emotional state tend to learn things more than those with an unstable emotional state or with high anxiety. When learners are mentally disturbed, all the thought and memory will direct to what is embedded in their minds. They will not devote themselves to what they should remember and learn.

5) Culture. Learning requires background or values. While what determines history are values and culture, while culture also determines the behaviors of people in a society. Thus, people from different cultures will have different learning.

Santima Srisungsuwan (1997) studied, “Self-Learning Development towards Learning Organizations: A Case Study of Sukhothai Thammathirat Open University” and found that there were several supporting factors for learning. For instance, the university organized some welfare to encourage employees to learn so individuals could search for knowledge from both personal and material sources, including from technology that facilitated their learning. The physical and academic environment were also organized to facilitate their learning. Furthermore, employees could enhance their learning from collaborative working and university activities. Nevertheless, some obstacles were also found, i.e., individualistic culture, bureaucratic management style, and segmented-development principles and thinking methods. Besides, the limitation of Thai people’s self-learning development partly came from the ways they were socialized in each phase of life, i.e., nurturing parenting, Thai education systems, etc.

Piyaporn Khongchan (2003) studied, “Personal Factors and Organizational Climate Influencing Self-Learning of Private Organizations’ Employees.” She found that the self-learning of male and female employees was different. Besides, the self-learning of employees of different ages was different. At the same time, it was found that employees graduated with a master’s degree or higher were self-taught more than

employees with lower education level. Also, employees perceiving organizational climate at a high level had more self-learning than those viewing it at a low level. However, age was found to have no positive relationship with self-learning. Therefore, personal variables: the education level and the perceived organizational climate, influence self-learning.

Kangwan Yodwisitsak et al. (2004) studied “Factors Enhancing Learning towards Operation Development: A Case Study of Acer Computer Co., Ltd.,” as a Thai subsidiary of Acer Inc. (Taiwan) that could operate successfully in Thailand. It was found that four groups of factors affected the success of the company: dynamic organizational structure, the motivational power of persuading others, human resources development, and corporate culture with an emphasis on trust and collaboration. All groups of factors were found to have positive relationships. Besides, from the study, it indicated that in developing knowledge for employees, executives did not always have to specify topics and methods of learning. Still, they should point out the benefits of their common goals mainly.

Regarding human resource development plans, the company should have both short-term plans for working and long-term strategies for preparing employees towards their growth. Besides, to spread out knowledge in an organization effectively, the company should create and support values of trust. For the issue of motivation, which is a critical component in developing a learning process in an organization, the company should concern about an individual’s goal and encourage employees towards leadership by stimulating them to have regular self-development. Nevertheless, they also have to aware of job designs and organizational structure for supporting their employees’ learning.

2.2.5 Obstacles of Learning

From the research of Santima Srisungsuwan (1997), obstacles of learning might occur because of the following three factors:

- 1) Personal factors. Careless and indulgent people often do not spend time inquiring about knowledge in a useful way. Therefore, these people lack curiosity for learning and are vulnerable, expressed through their behaviors, i.e., waiting for luck, relying on external forces, etc., especially sacred or holy things.

2) Social and belief factors. Some people misbelieve in karmic principles, which are the essence of Buddhism, such as a belief that people will be happy or suffer depending on their Karma from the last life. Another example is a belief “what human beings are facing comes from the power of the Mighty rather than from their action.” Moreover, a patronage system can be harmful if misused, i.e., helping people without criteria, by violating rules, or unfairly. It makes the weak wait for others’ assistance and can discourage people who are not treated fairly.

3) Educational systems. Thai society values “power,” and emphasizes the roles of “teaching” and “preaching” rather than “learning” and “growth.” (Pravej Wasi, 1987, as cited in Santima Srisungsuwan, 1997). It is believed that the concept of preaching focuses on instruction that limits the growth potential and causes discomfort and conflict since human beings are not objects. On the contrary, the human brain has the potential to learn and grow endlessly.

2.2.6 Concepts and Theories on Adult Learning

Knowles (1978, as cited in Suwat Wattanawong, 2004) summarizes fundamental theories of modern adult learning as follows:

1) Needs and Interests. Adults can be motivated towards learning if it responds to their needs and interest accumulated from past experiences. Thus, it is better to start with their needs and interest properly, especially in organizing any learning activities.

2) Life situation. Adult learning will be successful if the learning or training is adult-centered. Thus, to organize learning content, an instructor should focus on all cases involving adults’ life, not on general content like teaching in a formal classroom.

3) Analysis of experience. Experience is counted as the most valuable learning source for adults. Thus, the main principle of adult learning is to analyze the experiences of each adult thoroughly and select which parts of the experiences should be applied in learning or training for use.

4) Self-directing. The needs embedded deeply in adults are the need to be able to lead themselves. Therefore, teachers or lecturers should be in a mutual

inquiry process with learners rather than transmitting their teaching and being only a knowledge media to evaluate if learners follow their instruction or not.

5) Individual difference. Individual differences will be increasing when each person is older. Therefore, in teaching adult education or training, good preparation should be done, i.e., proper learning or training style, appropriate time and place, etc. Another important thing is the learning ability of an adult at a different range of age, especially by each adult's pace of learning.

Suwat Wattanawong (2004) gives a concept that learning in a specific situation may be more or better than another case since different components are supporting and enhancing adult learning towards effectiveness. Such factors are related highly with adult learning and training as follows:

- 1) Motivation to learn: People can learn well if they want to learn such things.
- 2) The learning environment has to be convenient and suitable, including giving a feeling of trust and respect.
- 3) Learning styles are various.
- 4) Old knowledge and experience should be valued.
- 5) Learning content and activities
- 6) Realistic problems that can be solved through learning.
- 7) Cognitive and physical participation in organizing learning activities.
- 8) Sufficient time for learning, especially for learning new information, new skills, and attitudinal changes.
- 9) Opportunity in practicing until gaining desirable outcome or being able to apply knowledge for use.
- 10) Opportunity to express learning potential and capability until learners can see their progress that can be accomplished.
- 11) Self-confidence in their knowledge rather than being told by others
- 12) Acceptance of new idea and behaviors when learners accept their group membership and communicate their common expectation and roles

Furthermore, Suwat Wattanawong (2004) also mentions about the nature of adult learning as follows:

1) Adults want to know the reasons and necessities. For adult learning, adults want to see the effect of learning on them, i.e., what kind of benefits they will gain or what they will lose if they do not learn or are trained in specific topics. Learning can occur only when something is meaningful for a learner. Therefore, trainers or instructors have to choose content that responds to their trainees' needs the most.

2) Adult learning should be self-directing. Adults will choose to keep or acquire only the knowledge they need. Training should be persuasive or guidance, focusing on participation, analytical thinking, and self-conclusion. Besides, trainers or instructors should inform learners about the objective and goal of a program or curriculum. The training or learning content should be organized orderly from simple to difficult subjects to facilitate their understanding more efficiently.

3) Adults have experiences and accumulated knowledge and skills. Experiences are what each person has differently. Accordingly, an activity should be organized by concerning individual differences, especially by using experiential techniques, i.e., group discussion, experiment, conversation for experiential exchange, problem-solving exercises, case studies, etc.

4) Adult learning tends to focus on daily life, either task or problem-solving. Learners will be more willing and attentive if what to be learned can better their working or help to solve their problems. A learning or training program should be designed towards practical application that learners can apply to use by themselves.

5) Adults can learn well in a relaxing climate. For instance, proper lighting and temperature, appropriate seating for enhancing interaction among learners and a trainer or instructor. The environment of learning should improve the acceptance of opinion differences, mutual respect, freedom of expression, and familiarity, etc.

Furthermore, adulthood also affects persuasion. From the study of Marple (1933) and Janis and Rife (1959), they concluded that persuasion was more difficult by the increased ages of people being persuaded. Besides, another study found that young people tended to be idealistic and optimistic but have a less stable mental state

than adults or the older. In contrast, the older tended to be more obstinate and cautious than young people.

In this part, concepts, theories, and related studies on learning are summarized. Learning means a process of an individual's behavioral change through some kinds of stimuli to induce some idea, knowledge, or skills towards new ones by either formal or informal learning. Learning is divided into five categories: learning by intellectual capability, by cognitive strategies, by information and knowledge, by motor skill, and attitude. What brings about fundamental learning comprises 1) drive, i.e., primary drive and secondary drive, 2) stimulus, 3) response, and 4) reinforcement. Factors supporting learning are 1) motivation, 2) needs, 3) individual differences, 4) readiness: physical, emotional, and mental, and 5) culture while the obstacles of learning are three domains: personal, social and belief, and educational system.

Nevertheless, adults and children have different patterns of learning, so one same method cannot be used to arouse knowledge. Adults focus on the expected benefits, realistic or actual experience, and self-directing. Besides, it is harder to persuade adults who need to be respected, and there are individual differences among adults. Thus, adulthood affects persuasion. Persuasion will be harder by increasing age. While young people are idealistic and optimistic, they have less stable mental state than adults who are more obstinate and cautious than young people.

2.3 Concepts, Theories and Related Studies on Motivation and Learning

Motivation

2.3.1 Definitions of Motivation

Several scholars have defined "motivation."

Robbins (1993) defines "motivation" as "willingness to use utmost effort to accomplish the goals of an organization under the condition that such an effort can create satisfaction as wished."

Moorhead and Griffin (1995) define "motivation" as "a group of drive enabling a person to behave desirably," while Hellriegel (2001) states that motivation is a drive towards a person or drive within a person influencing the person to have specific behaviors towards his or her desired goal.

Berelson and Steiner (1964, as cited in Sathit Wongsawan, 1982) state that motivation is an internal state that reinforces stimulates, or mobilizes a person to behave in a way or direction towards his or her intended goal.

Somyot Naveekarn (2000) defines “motivation” as the power that initiates, regulates, and supports an individual’s behavior and action. It is a psychological process aimed to direct an individual’s functioning. Besides, he adds three primary characteristics of motivation: effort, continuity, and direction.

2.3.2 Causes or the Occurrence of Motivation

Motivation occurs from a person’s needs and drive, which influences a person to express or have some kind of behavior. Sometimes, the expected behaviors may be the same, but they are different despite being caused by the same drive. It is because of two reasons:

- 1) Internal needs, i.e., biological or physiological needs, such as the need for food, water, clothes, and medicine, etc.
- 2) External needs. Most of the external needs are caused by social influence, i.e., the need for success, power, relationships with others, etc. (Aree Panmanee, 1997).

2.3.3 Types of Motivation

Hilgard (1962, as cited in Preeyaporn Wonganutrarot, 1996) divides motivation into three types:

- 1) Physiological motives or motives for living are motivation that is caused by biological needs or physiological drive, i.e. hunger, thirst, sexual drive, the needs for air, relaxation, etc.
- 2) Social motives mean motivation caused by social needs and learning from interacting with all surroundings, i.e. people, status, values, culture, politics, religions, love, warmth, acceptance, success, reputation, etc.
- 3) Ego-Integration motives mean motivation caused by the needs for success, self-esteem, innovative invention, fame and honor.

Moreover, considering by expressive behaviors, motivation is divided into two types:

1) Intrinsic motivation means a person perceives values of doing something with willingness. It is motivation coming from within a person, i.e. attitude, opinion, interest, determination, value perception, satisfaction, needs, etc. These things influence a person's behaviors rather permanently. It drives a person to express himself or herself without expecting any reward or external reinforcement since it is a person's intended behavior. It is believed that if this kind of motivation occurs to anyone, it can induce the best learning. Accordingly, executives or supervisors should establish this kind of motivation for their subordinates as much as possible.

2) Extrinsic motivation means a person expresses his or her behavior because of some stimulation from external forces to get some compensation and rewards, or to avoid undesirable consequences. Examples of this kind of motivation are all kinds of reinforcement, i.e. compliments, salary, bonus, reputation, and admiration, etc. However, it cannot influence behaviors permanently because people will behave to respond to these motivations, especially when they need them. The examples of the influence of extrinsic motivation on behaviors are a worker's works for getting compensation or a salary, or a worker may express their diligence only for his superior to see so that he will reward him, etc.

2.3.4 The Importance of Motivation

For the importance of motivation, Siriwan Sereerat (1996) states that usually, working performance requires three factors: ability, environment, and motivation. If a worker is capable and is supported by the organizational climate and sufficient motivation, the worker can work to accomplish the organizational goals. However, if any of the three factors is missing, his or her work will get problems. Nevertheless, if workers lack knowledge and capability, executives can develop their capacity through training and mentoring. If the working environment is not pleasant, they can also improve it. However, if they have no motivation, executives will get difficulties in solving this problem since workers' behaviors are complex, and it is hard for managers to analyze why such workers are not motivated and how to change their actions. It is challenging, so managers must realize the importance of motivation and its impact on their subordinates' working performance and learning.

Moreover, motivation is vital in many ways. It helps to encourage each worker to perform his or her work wholeheartedly for the organization. Besides, it helps to enhance morale and encouragement for workers, strengthen loyalty to the organization, increase harmony among workers, regulate working performance to go smoothly, establish trust and accountability, enhance a sense of safety and stability, promote growth for workers, induce creativity for working, and increase the organizational effectiveness and efficiency.

2.3.5 Motivation Theories

1) Maslow's Hierarchy of Needs Theory. Maslow (1954, as cited in Boonman Thanasuppawat, 1994) assumes whether an organization can accomplish its goal or not depends on the collaboration of all personnel. Such collaboration can occur only when top management understands the needs of their staff and choose the right motivation to respond to their needs. Maslow establishes three hypotheses about needs:

- (1) People always have needs endlessly. When a person's need is satisfied, his other needs will be called for indefinitely.
- (2) The needs that are met will not be motivations for any further behaviors. Only the needs that are not satisfied can motivate to affect people's behaviors.
- (3) The needs of people are in sequence according to their importance. When the need at the bottom is responded, people will look for a higher need.

Maslow's hierarchy of needs is illustrated in Figure 2.9

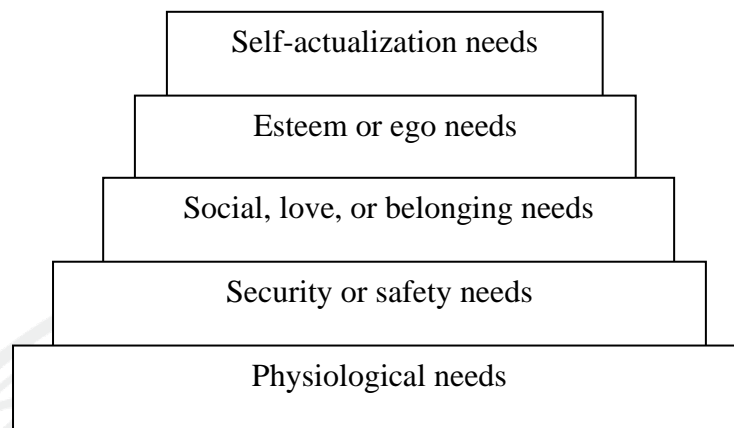


Figure 2.9 Maslow's Hierarchy of Needs

Source: Boonman Thanasuppawat, 1994.

a) Physiological needs are the fundamental human needs, i.e., the needs for food, water, air, accommodation, medicine, and clothes, etc., which are considered as necessities of life. If the needs of this step are not responded to or satisfied, people will not have the needs at the second step.

b) Security or safety needs are the needs of protecting oneself from all dangers, including economic status and working stability, i.e., the needs for welfare, nursing, working facilities, etc.

c) Social, love, or belonging needs are the needs for belonging to a group or a society, for being accepted and for friendship from friends, family, relatives. They are social needs.

d) Esteem or ego needs are the needs of being respected, which are divided into two types. Examples of respect from general people, i.e., receiving attention, being admired or honored, etc. 2) A respect of oneself, i.e., the needs for achievement, independence, self-confidence, freedom, etc. Typically, the success of general people will be measured by their working performance, i.e., being promoted, receiving benefits from their work, etc.

e) Self-actualization needs are the needs at the highest step that are desired by each individual, i.e., being the top management of an organization, being eminent in a particular way, etc.

Maslow views that the needs of all five levels or steps are essential for human beings in each situation differently. Any needs that are not responded can be a drive to stimulate some desirable behaviors. However, once the needs are satisfied, they will not be motivators any more. Instead, the needs of the higher level or step will function as a stimulator towards further behaviors. He believes that all human beings will seek ways to satisfy their needs hierarchically until the highest needs or self-actualization needs are satisfied. None will be pleased with fundamental needs only. (Pimolchan Namwat, 1997). Maslow's concept is very useful for executives in creating motivations for stimulating their subordinate's behaviors. Thus, top management should always follow the changes in their subordinates' needs to know which needs are influential at that time and try to respond to their needs accordingly.

2) Vroom's expectancy theory. Vroom indicates whether people will be motivated to put their effort towards needed goals or not depends on three factors: Effort and working performance expectancy, performance and outcome expectancy, and valence of outcome or rewards to be received expectancy. (Bartol et al., 1998, as cited in Wirote Sarnrattana, 2008).

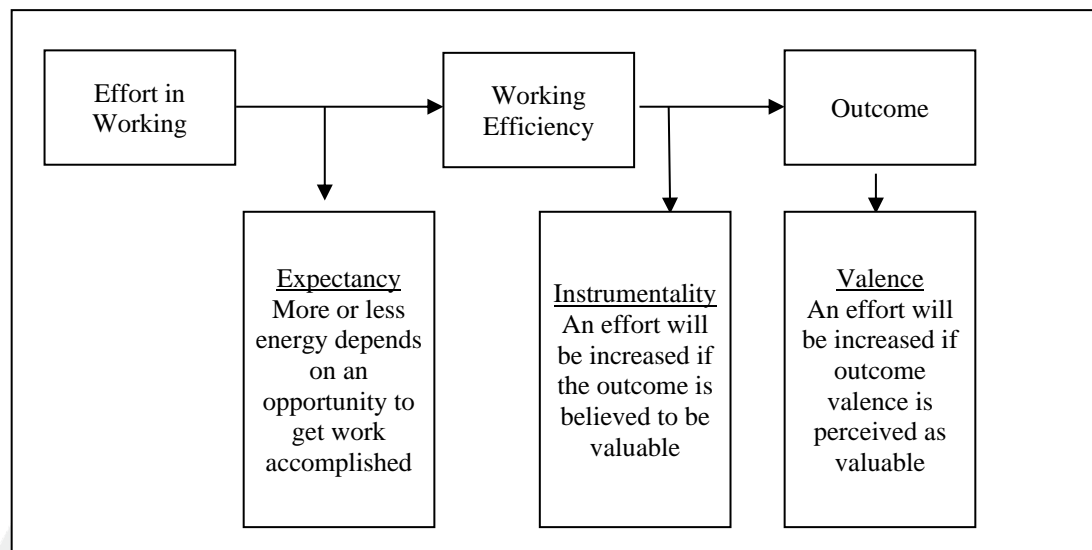
(1) Effort-Performance expectancy or EP. When any person exerts his or her effort in working on something, the person tends to evaluate his or her capability and the level of possibility to accomplish that work. When executives or leaders want to persuade their subordinates to work devotedly and thoroughly, they need to assure their subordinates' competence and make them feel confident that if they try their best, it will bring about a desirable outcome.

(2) Performance-Outcome expectancy or PO is an evaluation of the possibility that if work is accomplished, what kind of reward will be received. Usually, rewards have two categories:

a) Extrinsic reward is a reward given by others, i.e., bonuses, promotions, etc.

b) Intrinsic reward is a reward occurring within oneself, i.e., pride in the success, etc. In some cases, a negative outcome is also counted, i.e., a waste of time, reduced time for a family due to too much devotion to work, etc.

c) Valence of outcomes. Once employees are assured of a desirable outcome as a consequence of their contribution, they will consider if such an



outcome is valuable for themselves. Thus, persuasion will be successful if persons perceive the valence of a result at a high level.

Besides, this concept further explains that motivation can occur when all three components: expectancy, instrumentality, and valence, are perceived with high expectation value or confidence. However, if any of the three components is perceived at the low level, motivation will not occur, as shown in Figure 2.10

Source: Wirot Sarnrattana, 2008.

Vroom explains his expectancy theory by the following formula:

$$\text{Motivation} = \text{Expectancy} \times \text{Valence}$$

From the above formula, it explains that the level of motivation correlates with the level of a person's needs towards something possible. Deriving from such formula, fundamental principles of this theory are:

(1) Internal factors (needs) and external factors (environment) affect an individual's behavior, and such behavior comes from the individual's own decision.

Figure 2.10 Components of Expectancy Theory

(2) People are different in their needs, desire, and goals.

(3) People can choose to behave in specific ways by their perceived sequel or consequence of that behavior.

(4) For motivation to occur, it requires the combination of two major components: expectancy and valence of the outcome.

Nuntiya Chumchuay (1999, as cited in Thipsuda Chaiyapruk, 2009) studied “Administrative Ability and Motivation That Influence the Performance of the Head of the Social Medicine Department, Center Hospitals and General Hospitals,” and found that administrative ability and motivation were correlated with the productive outcome of the head of the Social Medicine Department. Besides, motivation affected their performance.

Mallika Chulathammat (2001) studied, “Administrative and Supporting Factors Affecting Work Motivation: A Case Study of Government Officials in Legal Matters.” She found that most officials viewed that the factors affected their work motivations were the work assignment or work delegation that was suitable for their knowledge, competence, interest, and expertness, which resulted in their confidence and trust towards their superiors. Besides, it was found that controlling and supporting factors influenced their work motivation.

Prasong Uthai, Nattharat Somnam, and Sombat Teekasap (2008, as cited in Thipsuda Chaiyapruk, 2009) studied, “Creating Incentives for Academic Development of Teachers in Private Educational Institutions Cooperatives in Bangkok, Western, and Perimeter Area” and found that teachers in private educational institutions had different motivation towards academic development. The most important motivation was acceptance, followed by the promotion towards administrative positions, academic title, compensation, position transfer, lay-off, and no increased salary, respectively. Sex and social status of teachers had no relationship with teachers’ opinion on motivation towards academic development.

2.3.6 Theories on Learning Motivation

Blanchard and Thacker (2004) define “learning motivation” as a desire to apply learned knowledge and skills for working towards a desired goal with devotion, both physical and psychological. Motivation is a significant component of learning. Learning proficiency depends on competency and motivation. If anyone has the

motivation to learn something, such learning will be proficient. In general, learning motivation composes of the following:

1) Curiosity is an essential factor affecting learning. It is internal motivation that arouses a desire to gain new experiences or to learn new things, including willingness to solve the occurring problems. Therefore, curiosity is an arousal for learning.

2) Self-efficacy. When a person is of his competence in dealing with some behaviors to reach the desired goal. It depends on his self-efficacy and expectation of the consequent outcome. It is found that self-efficacy plays significant roles in learning. If a person perceives himself or herself as capable, he or she will perceive value of himself or herself. This internal motivation thus brings about increased effort.

3) Attitude is the relations between feeling, belief or perception, and a tendency to express responsive behaviors towards some direction. Attitude can cover an action, cognition, and an inclination of a person towards exposed information positively or negatively.

4) Need is a significant component of motivation that stimulates a person to express behaviors. Under the imbalanced state, it causes a drive to push a person to do something to create a balance for himself or herself, i.e., tiredness stimulates a need to sleep, a rest, or climate change, including a shift of movement, i.e., watching a movie or listening to music. Another sample is when a girl is abandoned, she will look for love, others' attention, etc.; thus, there is a drive to push her to do something to gain respect and care. Therefore, needs are very influential on human behaviors. In other words, it can say that what stimulates people to do something towards their goal is a human need. However, human beings have several needs and several kinds of needs. In general, basic human needs can be classified into three categories:

(1) Physical needs are the needs of the human body, i.e., having food, breathing, defecating, movement, rest, sexual desire, etc. Physical needs lead people to act to respond to such needs. This kind of need is also called "biological motives."

(2) Social or Psychological needs are the needs learned from society, i.e., love, stability and safety, social acceptance, freedom, accomplishment, or social status, etc. This kind of need enables human beings to perform towards their destination quickly. Sometimes, it is called “social motives.”

(3) Competence is another internal motivation or the need to interact with the environment since birth and to adapt oneself consistently.

5) External motivators are some drives out of a person or a person’s condition stimulated by external factors to make one focus on one’s destiny; thus, it leads one to change or to act in specific ways. Examples of external motivators are:

(1) Goal and expectation. People with a clear purpose are easily stimulated to act or do something, i.e., the target of an intern is to pass his or her probation, so he or she will try working hard or fully to get a permanent job.

(2) Knowledge about growth or advancement. People who know in advance how they can get promoted will have a higher motivation to do something.

(3) Personality. Personality can give an impression and enables people to be motivated to conduct some behaviors to get a good idea, i.e., teachers should possess some academic accountability. At the same time, governors or managers should have leadership qualifications, etc.

(4) Other motivators. There are plenty of things that can motivate people to have some kinds of behaviors, i.e., rewards, punishment, compliments, criticism, contest, competition, tests, etc. Some of them are considered as a tool leading to the occurrence of some behaviors.

Yaowalux Parnploy (2000) studied, “Factors Predicting Learning and Self-Development Behaviors in Organizations” and found that employees with a high level of learning and self-development behaviors had a higher level of perceived working success than those with a lower level. Besides, it was found that the variables that affected learning and self-development behaviors the most were employees’ readiness for learning and support from their organization for their learning.

In the study of Geraldine (1993), he compared the readiness for self-learning between two groups: professional nurses operating at Accident Building and Hospital Wards of the Surgical Pathology Department and found that nurses of both groups had the level of self-learning above average. Their self-learning had a positive

relationship with their workplace, age, numbers of working years, and education level.

Eddie and Danny (2001) studied the influence of learning motivation and transferred on attitude towards work and occupation.” He found that occupational attachment had a positive relationship with learning motivation and transfer, but had no correlation between participation in work and learning motivation and transfer.

Ayres (2005) studied factors related to learning motivation and transfer of nursing students and found that occupational attachment and support from colleagues was correlated with learning motivation.

From the review of concepts, theories, and related studies on motivation and learning motivation, it can be concluded that motivation means an internal state of people stimulated by stimuli, leading to the expression or non-expression of behaviors to respond to what people need. However, different responses are partly influenced by motivation, which can be divided into internal and external motivation. Internal motivation means internal state stimulated within a person, i.e., needs, satisfaction, preference, etc. Mostly, it is the pressure within oneself, while external motivation is stimulated by external factors, i.e., money, reputation, compliments, etc. Mostly, it is pressure from society. According to Maslow’s hierarchy of needs, three main assumptions can be concluded: 1) people always have needs endlessly. 2) The satisfied needs will no longer be a motivator towards further behaviors. 3) People’s needs are hierarchical by their importance. For Vroom’s Expectancy Theory, it can be summarized that people’s motivation depends on three components: 1) Expectancy, 2) instrumentality and 3) valence of outcome or the rewards expected to be received. Nevertheless, motivation can occur only when these three components are at a high level; however, if any component is low, motivation will not happen.

Learning motivation is the desire to use knowledge and skills that have been learned to work towards the target goal. Learning motivation comprises 1) curiosity, 2) self-efficacy, 3) attitude, 4) needs, both physical and social or psychological, 5) competence, 7) external motivators, i.e., goad, growth, personality, other motivators, such as rewards, punishment, etc. Therefore, motivation is the foundation of learning motivation, and both have almost identical components.

2.4 Concepts, Theories and Related Studies on Learning Capability

2.4.1 Definitions of Self-Efficacy

Bandura (2000) defines “perceived self-efficacy” or “self-efficacy” as “an individual’s belief that he or she can do something successfully as wished.” People can decide to do something only when they believe that they can do it successfully. Besides, self-efficacy helps to develop working performance and is a fundamental factor encouraging people to put an effort and work hard to achieve their intended goals.

Cook and Hunsaker (2001) define it as “the perception of one’s own competence or ability to operate each kind of work successfully. Self-efficacy is crucial and influential for work since it gives positive feeling towards oneself and concerned environment.

Judge et al. (2001) define “self-efficacy” as the perception of one’s own competence. It is an expectation on one’s ability to face a situation towards accomplishment. People with high self-efficacy tend to have better work performance, like to choose challenging work, have an effort and diligence to confront with problems.

Schultz and Schultz (2001) define it as “an individual’s belief about successful work performance, which is a feeling about the effectiveness and capability in handling things as needed in his or her life.

McShane et al. (2003) define it as “an individual’s belief that he or she is capable and has guidelines to reach a goal effectively.

2.4.2 Self-Efficacy Theory

1) Self-efficacy theory. In the initial period, Bandura (1977) proposed the concept of “efficacy expectation,” defined as the expectation involving one’s specific competence. The expectation is related to one’s efficacy in a particular way, and such expectation determines the expression and behaviors. Later, Bandura changed from “efficacy expectation” to perceived self-efficacy,” which means the judgment of a person about his or her competence in handling and accomplishing his goal. Bandura believes that self-efficacy affects an individual’s act. In other words,

two people might have similar competence but can be expressed in different qualities. Likewise, two subjects may have a similar capability but show it with varying quality. Even for the same person, if he or she has different self-efficacy in different situations. Bandura views that people's competence is not static but flexible by circumstances. Therefore, what can determine the effectiveness of the expression depends on their self-efficacy in each situation. In other words, if one perceives one's competence, one will express such ability. People who view themselves to be competent tend to be patient, diligent, determined, and successful. The relationship between self-efficacy and expectation of the outcome is shown in Figure 2.11

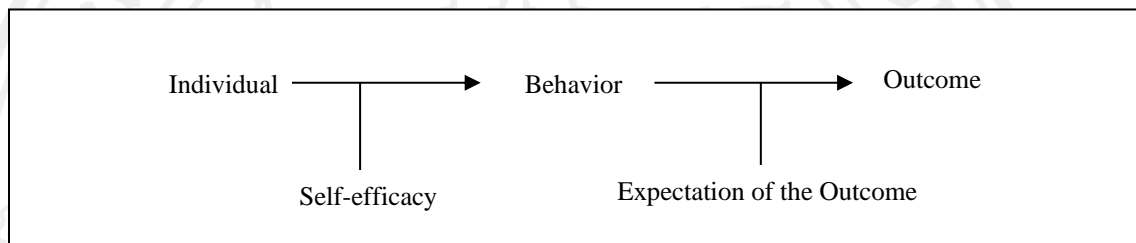


Figure 2.11 The Relationship between Self-Efficacy and the Expectation of the Outcome

Source: Bandura, 1977.

From Figure 2.11, it can be concluded that whether an individual will have any behaviors depends on two main factors: self-efficacy and the expectation of the outcome to be received after such actions or acts. Therefore, if a sender wants a receiver to have behaviors as wished, he or she will not only encourage the receiver to have an expectation, but he or she must also believe that the receiver can act or behave so. Thus, the behaviors and emotional state occurring from self-efficacy and the expectation of the consequent outcome can be at a different level, as shown in Figure 2.12.

		Expectation of the Ensuing Results	
		Disagree	Satisfied
Self-efficacy	High		
	Low	No Interest Avoid Doing	Feeling Worthless Discouraged, No Action
		High	Low

Figure 2.12 Behaviors and Emotional State Occurring from Self-Efficacy

Source: Bandura, 1977.

Figure 2.12 illustrates the relationship between self-efficacy and the expectation of the ensuing results, which affects behaviors. It shows that any person who has high trust in his or her competence and expects to receive functional consequences from his or her act tends to get success and increased self-esteem. On the contrary, if a person has low self-efficacy and plans to get adverse effects from any action or behavior tends not to perform those behaviors. It is because a person with high self-efficacy tends to have a high expectation of positive consequences while that with low self-efficacy tends to have a low or moderate level of expectation of the result as well.

2) Social cognitive theory. Bandura studied and developed this theory from Social Learning Theory in 1962. Later in 1986, Bandura broadened the Social Learning Theory and renamed it to be “Social Cognitive Theory.” Bandura believes that people’s behaviors do not only occur and change by environmental factors, but also internal factors within people. Therefore, causes or occurrence of behaviors come from the interaction between three components: internal personal factor (P), representative behavioral factor (B), and external environmental factor (E) as illustrated in Figure 2.13

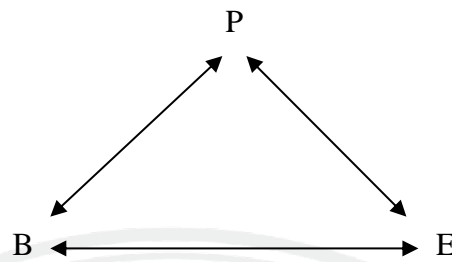


Figure 2.13 The Relationship Between Internal Personal Factor (P), Representative Behavioral Factor (B), and External Environmental Factor (E)

Source: Bandura, 1977.

These three factors are systematically sequential and influence one another. Thus, an individual's behaviors are influenced by the external environment and internal personal factors, i.e., thought, feeling, belief, expectation, etc. Self-efficacy will determine how individuals will behave. At the same time, internal personal factors are also influenced by their expressed behaviors and external environmental factors. Correspondingly, if the environment changes, behaviors will be changed as well. Such connectivity is a causal relationship. In other words, if any factor changes, it will cause changes to the other two factors. Based on such assumptions, Bandura's Social Cognitive Theory emphasizes three main concepts:

- 1) Learning by observation is the learning from consideration as a prototype, which can transmit ideas and expressions at the same time. Thus, most people can learn about social phenomena via media.
- 2) The concept of self-regulatory comes from the belief that human beings can do something to regulate their thinking, feelings, and action.
- 3) The concept of self-efficacy is based on the assumption that an individual can decide on his or her capability and express some behaviors to accomplish the intended goals. Thus, when individuals evaluate that they are capable of doing something, and such a thing does not exceed their capability, they will choose to conduct such behaviors.

2.4.3 Factors Affecting Self-Efficacy

Bandura (1986) states that four factors influence the development of self-efficacy:

1) Performance attainment or enactive mastery experience. Bandura views that past achievement is the most influential factor of self-efficacy since success comes from persons' actions directly. Such success satisfies them and increases their self-efficacy. Under an awkward situation, they will try harder to do something to reach their goal.

2) Vicarious experience. The observation of others' behaviors, primarily those similar to them, influences self-efficacy because when people witness others' success, it stimulates them to increase their self-efficacy. On the other hand, people who see others' failure tend to have lower self-efficacy and reduce their effort to do something.

3) Verbal persuasion is speech that enhances self-efficacy. Persuasive speaking is a secure method and used widely in stimulating people to assure that they are capable of doing something. Especially if they can be persuaded to experience the success directly by themselves or called "enactive mastery experience," it will even increase their self-efficacy.

4) Physiological and emotional arousal can affect self-efficacy more or less differently. People who can easily be stimulated often express their stress, anxiety, excitement, and fear; thus, they cannot perform their task or activity well and feel frustrated. Consequently, their self-efficacy is lower. Therefore, to regulate or control one's emotions not to be too easily stimulated is essential, especially since some situations are unavoidable.

Wallapa Sabaiying (1999) studied the relationship between goal-setting factors, self-efficacy, and personality in affecting work performance of direct vendors, and found that self-efficacy was correlated with working performance. Moreover, when nature and working experience were added in the study, it was found that working experience had an indirect relationship with the quality of work performance through the subjects' self-efficacy. Furthermore, personality was found to have an indirect relationship with the volume or quantity of work performance through the

subjects' self-efficacy. However, personality was found to have no relationship with self-efficacy.

Rungthip Chotayundorn (2001) studied, "The Relationship between Organizational Climate, Self-Efficacy, and Self-Development of Employees of Electronic Components Manufacturing Companies." She found that the employees evaluated organizational climate at a moderate level, had self-efficacy at a moderate level and had self-development at a moderate level as well. It was also found that employees with different age, education level, marital status, and work position had self-development differently. Similarly, employees with a different working period had self-development individually. Besides, it was found that their self-efficacy had a positive relationship with self-development, while the organizational climate as a whole also had a positive relationship with self-development. Furthermore, it was found that self-efficacy on the part of creating their and others' positive feeling, evaluation of self-efficacy, and organizational climate related to the adoption of techniques and knowledge in the organization were found to be indicators of self-development.

Besides, Bandura (1986, as cited in Kannika Sukcharee, 2005) further specifies the influence of self-efficacy on people as follows:

- 1) Choice behavior. Self-efficacy influences the selection of options for action under certain circumstances. In people's daily life, they have to make decisions all the time what kind of behaviors they should perform, how and how long they should perform such actions. People who have low self-efficacy will often avoid any task or experiences that, they believe, exceed their capabilities. Thus, this makes them lack self-confidence and close an opportunity for developing themselves. On the contrary, people with high self-efficacy will choose to have challenging work and have the motivation to develop themselves towards higher growth.

- 2) Effort expenditure and persistence. Self-efficacy influences the level of effort people exert to accomplish their work and their tolerance to or confrontation against obstacles. People with high self-efficacy will be more curious, diligent, and determined towards their work than those with low self-efficacy.

- 3) Thought patterns and emotion reaction. Self-efficacy also influences patterns of thought and emotion reaction. People with high self-efficacy will be

diligent and attentive for their actions. When confronting obstacles, they will be stimulated to have more effort. On the contrary, people with low self-efficacy will have an adverse emotional reaction, i.e., high stress, anxiety, etc.; thus, they will not put in their utmost efforts, and this causes them a failure in their actions.

4) Humans as producers rather than merely foretellers of behavior. People with high self-efficacy will try to act and admit all occurring consequences caused by their actions. They will choose challenging work and participate in what they are interested in, including getting involved in activities. They will try even harder if their work is not accomplished as planned and try to make it successful. Thus, they will use the cause of past failure to support their future success. On the contrary, people with low self-efficacy will have little effort, be anxious, and stressful.

Benjamas Rochthanakit (2003) studied the relationship between perceived self-efficacy and work performance, and found that self-efficacy had a positive relationship with work performance.

Uthaiwan Chantharapraparp (2004) studied, "Job Recognition, Self-Efficacy, and Motivation for Achievement related to the Performance of Nursing Staffs of Metta Pracharak Hospital (Rai Khing Temple), and found that self-efficacy had a positive relationship with work performance.

Kannika Sukcharee (2005) studied, "Lotus of Control, Self-Efficacy Perception, and Job Performance of Operational Staffs of the World Equipment Co, Ltd." She found that the staff had a moderate level of the overall lotus of control, a moderate level of self-efficacy, and a high level of job performance. Besides, it was found that the staffs with different level of overall self-efficacy and external lotus of control were not found to have different job performance. However, it was found that the team with varying degrees of self-efficacy had different job performance. Besides, the staff with varying levels of both overall and individual self-efficacy had various job performances. However, it was found different self-efficacy evaluation and emotion creation for both themselves and others did not influence work performance differently.

Pilanthana Lamphachawa (2003) studied, "The Relationship among Self Perception, Internal Motivation, and Working Behavior in a Refrigerator Manufacturing Factory: A Case Study of Toshiba Consumer (Thailand) Company

Limited,” and found that employees with High levels of self-efficacy had a higher level of working behaviors than those with a lower level, and employees with a high level of internal motivation also had a higher level of working behaviors than those with little internal motivation. Besides, it was found that self-efficacy had a positive relationship with working behaviors, and internal motivation also had a positive relationship with working behaviors. Thus, self-efficacy and internal motivation can jointly predict working behaviors.

Bourquin (1999) studied the relationship between math anxiety, math self-efficacy, and math achievement, and found that math self-efficacy was a predicting variable of math achievement. Students with high self-efficacy had high math achievement and low math anxiety. Lower math anxiety tended to lead to higher math achievement.

Judge et al. (2001) studied, “Relationship of Core Self-Evaluation Traits: Self-Esteem, Generalized Self- Efficacy, Lotus of Control, Emotional Stability, with Job Satisfaction and Job Performance: A Meta-Analysis.” They found that self-efficacy was correlated with job performance. Thus, self-efficacy could predict job performance.

2.4.4 The Measurement of Self-Efficacy

Bandura (1977) states that self-efficacy can be measured in three dimensions:

- 1) Dimension 1: The level of magnitude or difficulty. Each person has different self-efficacy in conducting behaviors, and one same person can also perform behaviors of varying degrees of scale or complexity.
- 2) Dimension 2: The level of strength. It is a person’s confidence that work at a different level of difficulty can be conducted. If the magnitude of self-efficacy is low, a person will lack self-confidence. When a person faces any unexpected occurrence, his or her self-efficacy will be decreased. On the contrary, if the magnitude of self-efficacy is high, a person will struggle and try hard; though, he or she may face incongruent occurrences with his or her expectation.
- 3) Dimension 3: The level of generality. Self-efficacy may be extended from one situation to another different situation. Some experiences disable self-efficacy to be adopted in other situations.

From the review of concepts, theories, and related studies on learning capability and self-efficacy, the reviewed definition of self-efficacy is the confidence that a person believes that he or she can conduct some behaviors successfully as wished. People will decide to do something or perform any action when they are confident of getting their behaviors accomplished. Self-efficacy has a close relationship with the anticipation of results. Thus, persons with high self-efficacy with high expectations of the desired consequences tend to conduct such behaviors. Not only are they successful, but they can also increase their self-esteem. At the same time, if persons have low self-efficacy, they tend to expect the consequences of their actions or behaviors at a moderate or low level.

Factors related to self-efficacy are 1) performance attainment or enactive mastery experience, 2) vicarious experience, 3) verbal persuasion, and 4) physiological and emotional arousal. When persons perceive their self-efficacy, it will affect them in the following ways: 1) choice behavior, 2) effort expenditure and persistence, 3) thought patterns and emotional reaction, and 4) ability as producers rather than mere foretellers of acts. The criteria in evaluating self-efficacy are 1) magnitude 2) strength, and 3) generality. On the other hand, persons' behaviors may not occur or change because of the interactivity among internal personal factors (P), representative behavioral factor (B), and external environmental factor (E), which are caused by observation learning, self-regulatory, and self-efficacy.

2.5 Concepts, Theories, and Related Studies on Perceived Valence of Outcome

Vroom (1970) states that motivation is a process governing choices among alternative forms of voluntary activities. Two kinds of expectation stimulate motivation: “To what extent can the action or behavior yield some desired outcome?” and “To what extent will the outcome be important to or satisfied the person?” Therefore, if persons expect to have much chance to receive the intended outcome or return, they will have sufficient motivation to accomplish their work. On the contrary, if persons view that they had no chance or low chance to get rewarded or intended outcome from an individual work or behavior, they will not act or will not perform it

so well. Nor do they perceive the result or reward to be insignificant or dissatisfactory. In other words, they have low motivation to do so.

Lawler (1977, as cited in Thipsuda Chaiyapruk, 2009) mentions the background of expectancy theory, which relates to the process of generating motivation whose assumptions are based on individuals' behaviors in an organization as follows:

1) Internal personal factors and external environmental factors affect an individual's behavior highly. Commonly, behaviors are caused by two main factors in combination: particular interior elements of each individual and the influence of the environment. Internal personal factors are family background, experience, educational background, training, etc. These factors influence people to have attitudes, needs, and expectations. On the other hand, within an organization, there are some other environmental factors, i.e., leadership, compensation, or reward systems, etc., which influence an individual's behaviors.

2) People choose to conduct any practice by themselves. Individuals will make their decision on how to express their actions. Organizational behaviors may be divided into two types. The first type is behaviors for expressing their membership, i.e., work, activities, etc. The second type is behaviors of expressing their effort in working, i.e., how much effort they should exert to get an exceptional performance or specific quality of work.

3) People are different in their needs, desire, and goals. Besides, people also need different types of outcomes or remuneration from their work or behavior.

4) People can choose to behave in specific ways by their perceived sequel or consequence of that behavior. People tend to perform their work well if they view or expect that it is their chance to get desired outcomes or returns while they tend to avoid fulfilling their job if they perceive or assume that they have no chance to get desired results or returns.

Moreover, Lawler further explains that expectancy theory comprises three main components:

1) Performance-outcome expectancy. After doing something, people expect to gain some outcome or remuneration. However, each performance may lead to several different kinds of results or consequences.

2) Valency or valence of the outcome. It is the satisfaction with the received result or consequence. Typically, each person will be satisfied with or perceive the degree of each consequence's importance differently. For instance, some people may be happy with rewards in the form of salaries rather than honor, while some people give high importance to the outcome that leads to their career growth or their self-esteem of being able to make things accomplished, etc.

3) Effort-performance expectancy. It is people's belief or expectation that if they exert some effort in doing something, to what extent they can get things accomplished. If they expect that no matter how hard they try, and they will never be successful, their motivation then will be lower.

From the review of concepts and theories on the perceived valence of the outcome, it can be concluded that motivation, as a consequence of the expectation, is a process in which people make options on their expressed behaviors after they think, scrutinize, and anticipate what the outcome will be. Each person has a different motivation. Motivation caused by anticipation is the most influential, and this kind of motivation composes of three components: 1) Performance outcome expectancy, 2) valency or valence of the outcome, and 3) effort - performance expectancy.

2.6 Concepts, Theories, and Related Studies on Learning Environment

2.6.1 Definitions of Learning Environment

The learning environment is a significant factor affecting the effectiveness and learning proficiency. It involves directly with employees. If the learning environment is appropriate, it will enhance learning motivation and enable employees to develop their learning. However, if the learning environment is inappropriate, it will obstruct their knowledge.

Tannenbaum (1997) defines a "learning environment" as the nature of the working environment in enhancing and supporting learning, i.e., organizational

support, superiors' and co-workers' encouragement, support of resources, work delegation, rewards, etc.

2.6.2 Factors supporting a learning environment

Factors supporting a learning environment, especially in an organization, based on Tannenbaum (1997), are as follows:

1) Systems thinking. It means workers can connect everything in an organization by viewing the whole relationship as a total system with understanding while being able to see subsystems of it for planning and operating them one by one. An organization must create systems thinking all through the organization, including stimulating workers at all levels to be aware of the organization's policies and overview and to share their common goals. It is to lead both employees and the organization towards accomplishment together.

2) Task assignment. If employees can adapt what they learn to apply usefully in their work, it will enable them to extend their concepts. It can challenge their working and bring about self-development. However, if they lack an opportunity to adapt their knowledge to apply in their work, it will discourage their learning. In contrast, their expertise and competence cannot be utilized fully to bring benefits to the organization.

3) Learning by mistake. It is the learning from mistakes employees make when they try to use new skills and ideas. Such errors will be their proper lessons to strengthen them and enable them to cope with confronting problems until skills and a learning development process occur.

4) Understanding of a learning process and work performance. The awareness of the work performance and expectation from learning is vital for employees' career growth, advancement, and accomplishment.

5) Situational constraints that obstruct a continuous learning process (i.e., unclear task assignment, the shortage of tools, equipment, or devices, a lack of capable personnel, and a lack of time.) Time limit and inappropriate time allocation affect the application of new skills for working directly and are also obstacles against learning abilities. They also cause discouragement in learning and decrease their self-efficacy.

6) New ideas are valued. New insights are valuable and can stimulate thinking and problem-solving processes, not only the responsibility in management since ideas should come from all members in an organization. Collective thinking requires communication for exchanging knowledge. Thus, it should not be an employee's responsibility, but all in the organization.

7) Supervisor and Peer support. The support of supervisors and co-workers can induce the learning and adoption of new ideas. It helps to have timetable arrangements so that employees can have time to attend a training program or to search for additional knowledge, pieces of advice about training topics, working facilitation, determination of accomplishing goals, a follow-up of consequences after training, or further inquiry, etc.

8) Appropriate policies and support for proper performance. Applicable organizational policies and support for adequate performance will enhance the training effectiveness and support continuous learning. For example, an organization has to analyze training needs and communicate the benefits of training to their employees so that they can apply the knowledge gained from training for their actual work. It can increase motivation and self-efficacy.

Kittidet Sornritchngchai (2005) studied, "The Learning of Operational Personnel in the Office of the Ministry Army's Research Coordination and Development," and found that the organization had pleasant climate in facilitating research and development operation, i.e., location, building, complete but still insufficient facilities because of limited budgets. Besides, it was found that personnel had chances from their organization in acquiring knowledge regularly. However, the constraints found were insufficient numbers of staff. Regarding learning objectives, it was found that the main aim is employees' or working development. Two main factors found to influence personnel's learnings were internal factors involving learning for self-development and task development and external factors, i.e., readiness in knowledge inquiry and insufficient staff, which decreased the opportunities in knowledge inquiry. The patterns of personnel's learning found in the study were the voluntary and systematic knowledge inquiry, training, and seminars.

Dixon (1995) studied, "An Exploratory Study of Self-Directed Learning Readiness and Pedagogical Expectations about Learning among Adult Inmate

Learners in Michigan Correctional Institute, Michigan,” and found that learning with low formality induced more self-directed learning readiness than that with high formality. Still, no relationship between self-directed learning readiness and the level of formality of learning nor between self-directed learning readiness and learning experience was found. However, the association between self-directed learning readiness, age, and sex of learners was found. Therefore, self-directed learning readiness cannot predict by the level of learning’s formality or learning experience.

Phongphan Kerdpitak and Komphet Supakun (2000) studied, “Learning and Education Strategies of Teenage Students.” They found that variables correlated with the learning environment or climate that affect learners’ learning ways and achievement were the learning environment, the relationship between teachers and learners, the relationship with classmates, and the schools’ climate.

Ungsinun Intarakamhang (2002) studied, “Effects of Factors Concerning Adult Learning, Personal Background, and Organizational Environment on the Performance of Medical Service Providers,” and found that factors affecting the performance of medical service providers were: self-learning, collaborative learning, institution-level learning, personal background, and organizational environment. Besides, it was found that self-learning factors had the highest level of a positive direct effect on the performance of all three groups. In other words, if the level of their self-learning is high, the level of performance effectiveness is high too.

Mitchell and Gilson (1997) studied the relationship among the perceived learning environment, interest, and anxiety in the mathematics of grade-5 to graduate students. They found the link among the background supporting the learning interest at the high level and the increased level of learning importance of each student and their perceived benefits from learning. However, learning anxiety decreased. Female students affected environment arrangement at a high level. Besides, the learning environment was found to support or increase the mathematics-learning interest of the students who used to have a low level of mathematics-learning in the past.

2.6.3 Components of Working Environment

The working environment comprises three components (Tannenbaum, 1997):

1) Physical environment. It is the environment that affects people physically: buildings, working place, equipment, tools, operating devices, the general condition of the working site, i.e., light, noise, ventilation, temperature, etc.

2) Psychological environment. It is the learning environment that brings about a positive or negative feeling or something that can affect human emotions. For example, heat or coldness can make people irritated or delighted; colors can cause eye-soothing, dizzy, etc.; empty or crowded space or spatial distance causes proximity or alienation; cleanliness or orderliness of places causes a variety of feelings, etc. For people who are counted as a psychological learning environment, the effect is caused by the personality or action of concerned people, i.e., superiors, chiefs, co-workers, or other personnel, etc.

3) Sociological environment. It is the environment that affects people from their interpersonal relationships and natural or regulated mutual interaction, i.e., working collaboration, assistance, respect of others' opinions, hospitality, and support. Therefore, the sociological environment in an organization can be witnessed through interaction among superiors, co-workers, and concerned personnel.

From the research of Jones (1994, as cited in Wilaiporn Maneepan, 1996), it was found that the working environment had a positive relationship with the self-learning of professional nurses.

In conclusion, the learning environment means all surrounding environment of a person. It can be both visible or physical and invisible environment. The examples of the physical environment are equipment, places, etc., while invisible environment are interaction among people, budget allocation, time, etc. Both can affect the learning effectiveness. Therefore, an organization should support an appropriate learning environment for its personnel.

2.7 Concepts, Theories, and Related Studies on Anxiety

2.7.1 Definitions of Anxiety

Anxiety has been defined by several scholars, as follows:

Poonsri Kaewprakai (1999) states that the word “anxiety” comes from the Greek word meaning “To press tight” or “To strangle,” and the Latin word, “Anxious” that means “distress” and “squeeze.” Both meanings refer to discomfort (Stuart & Sundeen, 1979, as cited in Poonsri Kaewprakai, 1999). Therefore, anxiety is a word describing a human feeling and emotion. According to the meaning in psychology, it means a response or reaction towards some situations that can cause physiological changes. In other words, it is a kind of psychological condition belonging to some people that might be stimulated by some past experiences, i.e., no acceptance in society, blames, failure, etc. Such conditions may lead to difficulties in their adaptation.

Spielberger, Anton, and Bedell (1976, as cited in Sirichit Raisuksiri, 2006) define “anxiety” as a condition in which a person feels distressful, suffering, fearful, and stressful. It often occurs in combination with physiological changes, i.e., increased functioning of the automatic nervous system, etc.

Endler, Crook, and Parker (1992, as cited in Sirichit Raisuksiri, 2006) define “anxiety” as a feeling of discomfort caused by a person’s fear of some threatening phenomenon he is facing at the moment and anticipation of what will happen afterward through his physical and psychological responses.

English and English (1985, as cited in Supattra Chaithepha, 2001) define “anxiety” by the first meaning as “an unpleasant condition caused by some strong desire to reach a goal that may not be reached.” The second meaning is “a fearful confusion of some possible coming badness.” The third meaning is “a continuous fear that might be noticeable, but at the low degree,” and the ultimate meaning is a feeling one feels he is threatened, which is a fearful threat, but the person cannot tell what the danger he feels is.”

2.7.2 Nature of Anxiety

Pariya Pipattananon (1971, as cited in Supattra Chaithepha, 2001) classified behaviors expressing one's anxiety into excitement, apprehension, tension, sensitivity, shyness, and distraction.

2.7.3 Types of Anxiety

Domar (1998, as cited in Sirichit Raisuksiri, 2006) classifies anxiety into two types:

- 1) Normal anxiety is a consequence of the perception of some risks that may happen. This kind of anxiety helps a person to be prepared to fight or confront such a threat or danger.
- 2) Abnormal anxiety occurs when a person's perception distorts from reality or the disproportion, causing inappropriate adaptive behaviors.

Moreover, Spielberger (1977, as cited in Paradee Wiangwalai, 1999) divides anxiety into two types:

- 1) Trait anxiety or A-trait is a part of an individual's relatively stable personality and will not appear through his behaviors directly. This kind of anxiety often reinforces or complements state anxiety. It occurs when dissatisfactory or risky stimuli arouse his emotion. Persons with high trait anxiety will perceive dissatisfactory or dangerous stimuli more rapidly than those with low trait anxiety.
- 2) State anxiety or A-state. State anxiety is defined as an unpleasant emotional arousal in the face of threatening demands or dangers. A cognitive appraisal of threat is a prerequisite for the experience of this emotion. Persons will express their observable responsiveness at the stage they feel stressful and fearful. The functioning of the automatic nervous system of each person is increased with different degrees of violence and timing, depending partly on each person's trait anxiety and experience. While A-trait is rooted and embedded, B-trait is temporary and periodic.

Furthermore, Levit (1967, as cited in Supattra Chaithepha, 2001) categorizes anxiety into two types:

- 1) State anxiety, situational anxiety, or acute anxiety. It is anxiety that happens to a person only in some situations. The intensity of anxiety depends on the

strength of a stimulus. Usually, this kind of anxiety has high power, but happens and exists in a while.

2) Trait anxiety, anxiety proneness, anxiety predisposition, or chronic proneness. This kind of anxiety often occurs in a person in general situations. However, in all circumstances, such a person will be predisposed with a low level of intensity in the long term until it becomes a part of his characteristics or personal trait. Therefore, this kind of anxiety will be possessed by a person in all general situations unconsciously.

Similarly, Sarason (1960, as cited in Paradee Wiangwalai, 1999) also classifies anxiety into two types: general anxiety and specific anxiety, i.e., anxiety towards the examination, learning, etc., while Luxanee Jornjarunsolot (1988) divides it into three domains:

1) Social anxiety is anxiety caused by a relationship with friends of the same sex or across sex, a relationship with friends and other people in a society, and anxiety towards religious, cultural, political issues, etc.

2) Personal anxiety is anxiety caused by health problems, a relationship with family members, a family's economic status, and accommodation conditions, etc.

3) Learning and occupation anxiety is anxiety caused by learning adaptability, i.e., learning and teaching styles, exam preparation for future studying or careers, etc.

Siriporn Arunsinka (2001) studied, "Variables Related to Work Stability Anxiety of Siam City Bank Officers of Head Office in Bangkok." She found that working experiences had a negative relationship with work-stability anxiety. Workers with a moderate level of expertness and income with emotional maturity were more tolerant with situational pressure and admitted constraints of development and working; thus, they had good mental health leading to task accomplishment and effectiveness accordingly.

2.7.4 Levels of Anxiety

Black et al. (1993) divide anxiety into three levels:

- 1) Low-level anxiety will help people to adjust themselves in their daily life more successfully. This level of anxiety stimulates people to be active, better their perception and learning, and arouses them to solve problems with awareness.
- 2) Moderate-level anxiety can decrease people's perception and lose their functioning capability in some moments.
- 3) High-level anxiety brings about confusion and scattered thinking or thought, which obstructs learning and the intended accomplishment of conducting any activities.

On the other hand, Peplau (1989) divides anxiety into four levels:

- 1) Mild anxiety is a reasonable level of anxiety. People with this level of anxiety will be active, and capable of perceiving through their five senses well, including being able to learn and solving problems better.
- 2) Moderate anxiety. When anxiety is increased, it will narrow the perceptual ability through five senses, which decreases learning capabilities. However, if assisted, such anxiety may be reduced while skills will be better.
- 3) Severe anxiety can enormously decrease the perceptual ability, distort the perception of the surrounding environment from reality, and cause a focus on partial details rather than the full details. The expression of behaviors is to relieve the occurring anxiety.
- 4) Panic anxiety. Anxiety at this level will distort a person's perception, cause inability in controlling himself or herself, and incur cognitive and personality disorder, including reducing communication with others and losing learning capabilities.

2.7.5 Consequences of Anxiety

Chaweewan Maikami (1998) studied, "The Anxiety in Entrance Exam into the Higher Education Institutions of Grade-12 Students of the Affiliated Schools of the Department of General Education, Amphur Moeng, Maha Sarakham." She found that students with different learning achievement had varying levels of anxiety in the

entrance exam into higher education institutions. Thus, students with high learning achievement had higher level of anxiety in entrance exam into the higher education institutions than those with low and moderate level of anxiety. Besides, students with an average level of learning achievement had a higher level of anxiety than those with a low level of learning achievement.

Passawalee Tintabut (1998) studied, "Relationships among Beliefs, Anxiety, and Achievement in English Language Learning of Mathayom Suksa Five Students, Bangkok Metropolis," and found that beliefs in learning the English language had a positive relationship with the achievement of English language learning, and anxiety in English language learning had a negative correlation with the success of English language learning. However, beliefs in English language learning were found to have no relationship with anxiety in learning the English language. Still, beliefs and anxiety in English language learning were correlated with the achievement of English language learning of the students.

Murray (2003) studied Korean learners' anxiety in learning English as the second language and found that Korean learners had anxiety in cultural differences and the prior learning experiences at a high level. However, it was found that teachers' use of the theories on culture and society helped to develop learners' knowledge and language learning skills simultaneously, including decreasing their anxiety in the classroom.

Vargas (2006) studied various teaching methods for lowering anxiety in learning English as the second language of the 8th- and 9th-grade students in Puerto Rico. He found that teachers used several innovative teaching strategies and techniques to respond to the students' interests. Their teaching tools were role-playing, video-games for stimulating students' participation in learning, and environmental arrangement appropriate for education, and found that students were stimulated to have a higher motivation to learn English as the second language.

2.7.6 Theories on Anxiety and Learning

1) Psychoanalysis theory. This theory believes that when people feel that they are fighting with something or with severe stimuli that they do not know how to handle with them, anxiety will occur. Thus, unless they can find appropriate

ways to reduce them, the stressful condition will occur. Therefore, people can be cured by making conscious their unconscious thoughts and motivations, thus gaining insight. The aim is to release repressed emotions and experiences. Severe anxiety can disturb and affect mental health and cause mental disorders or neurosis. (Thipsuda Chaiyapruk, 2009, p. 63).

2) Spence's theory. Levitt quotes Spence's concept called "the Iowa Theory," by studying anxiety from different perspectives from the psychoanalysis approach. He states that anxiety is like a drive or motivation to do something. Thus, anxiety plays a part in enhancing learning, accelerating, and bettering working performance. The results of anxiety can help to increase response intensity. For complex learning, anxiety may obstruct the learning process at the early stage; however, after learners get familiar with their work or can create correct learning habits, anxiety can help to learn eventually. (Thipsuda Chaiyapruk, 2009, p. 63).

3) Yale's theory. This theory describes that how anxiety affects people depends on situations, stimuli, and personal characteristics, i.e., goals, values, etc. Therefore, the responsive methods to anxiety can be relevant or irrelevant to the performing work. They depend on the nature of task and how each person perceives the task. Anxiety can thus be advantageous or disadvantageous, depending on how the person responds to it. If the response through appropriate ways can solve the right problems, anxiety will help to develop the person. On the contrary, if a person yields to anxiety, i.e., thinking that there is no way to solve it or solving problems incorrectly, anxiety will be harmful to the person's personality (Thipsuda Chaiyapruk, 2009, p. 63).

4) The Yerkes & Dodson law. Yerkes and Dodson studied anxiety based on the assumption that anxiety or fear has a negative relationship with intricate work. In general, anxiety had a curvilinear relationship with learning. Specifically, low-level anxiety affects learning achievement very little or does not affect at all since the motivation is not sufficient enough to affect persons' work. However, if anxiety or drive is too high, it will obstruct the learning process. Thus, the effect will be similar to that of low anxiety. Therefore, the relationship between anxiety and work or learning also relies on the complexity of work or education. Besides, although the level of drive tends to occur for easy tasks or to learn more than difficult ones, such a

drive that supports easy learning can be an obstacle when learning is getting harder. (Thipsuda Chaiyapruk, 2009, pp. 63-64)

From the review of concepts, theories, and related studies on anxiety, it can be concluded that anxiety is the condition of mental distress, leading people to feel stressful, frightened, irritated, and active. Anxiety is a consequence of the internal and external pressure of an individual, which affects the effectiveness of conducting activities. Anxiety is divided into three groups: social, personal, learning, and occupational anxiety. These three groups of anxiety can occur in both normal and specific situations at any of three levels. 1) Low-level anxiety means an active state that enhances concentration on doing something. 2) Moderate-level anxiety means an active state that initiates some discomfort and deprives of concentration. 3) High-level anxiety means an active state with suffering, confusion, and scattered thinking. Regarding the relationship between anxiety and learning, it can be concluded that when people face difficult work or learning, they should have low-level anxiety to reduce their pressure and bring about good results. Theoretically, psychoanalysis theory perceives anxiety in a negative way or as a disadvantage while Spence theory perceives it in a positive way and as an advantage for learning or working. On the other hand, Yales' theory regards it in both a negative and positive way, depending on the situation, nature of the task, and personal characteristics. For Yerkes and Dodson Theory, moderate-level anxiety can enhance learning.

2.8 Concepts, Theories, and Related Studies on Training and Trainers

2.8.1 Definitions of Training

Training is crucial for human resource development in changing people's knowledge, expertness, and attitude. Several scholars have defined the meaning of training as follows:

Sompong Kasemsin (1995, pp. 1-2) defines it as an activity organized for supporting employees towards increased knowledge, competence, and working skills. It is an important activity to which superiors should pay attention and hold it regularly.

Wuttichai Chamnong (1995, p. 33) explains that training is for developing employees towards changes in knowledge, practical skills, and personality to express their satisfaction in working.

Good (1995, p. 13) distinguishes the differences between education and training as illustrated in Table 2.1

Table 2.1 Differences between Education and Training

Issues/Topics	Education	Training
Objective	To give knowledge, understanding, skills, attitudinal change to be applied in many years ahead.	To provide knowledge, understanding, skills, and attitudinal change that is required for the present work.
Knowledge Transfer Methods	Regular teaching as determined by the curriculum as much as possible.	Apply a variety of methods and techniques to develop trainees' thoughts and skills to be used.
Knowledge Content	Specified in the curriculum. The content is theoretical knowledge and general principles for further study.	Content comes from the practical problems of trainees and is a short-term course.
Knowledge Transmitter	A regular teacher with some qualifications determined by educational degree and position.	A knowledge provider based on specific experience and expertise without required qualifications nor position.
Length of Time	Continuously for a long time	Within time limit
Target Receivers	Students with similar age and knowledge.	Specific groups with joint problems.

Source: Good, 1995.

Chalong Mapreeda (1995, p. 1) defines training as a process of enhancing knowledge, expertness, and competence for workers in an organization to perform their work more successfully and to prepare them for future work. It is another way for human resource development aimed to change their behaviors towards organizational effectiveness.

Patana Sukprasert (1998, p. 1) explains that training is an essential process in developing or practicing personnel or new workers to be ready for work or be more capable in what they are working with more knowledge and increased competence suitable for their work.

Somkid Bangmo (1999, p. 14) summarizes that training is a process for increasing the effectiveness of employees' work by providing them increased knowledge and skills, including right attitude, to raise working standards and enable them to grow in their career and accomplish the organization's goals as planned.

Wichit Awakul (1997, p. 50) defines training as the development of employees to fit them into their work properly while education means the enhancement of knowledge, understanding, skills, expertness, and ability.

Thongfoo Thanachote (1988, p. 7) states that training is part of human resource management towards effective working, aimed to develop employees' skills, knowledge, and ability. Training is another way the management uses for improving its personnel. Thus, training is an organized process for developing staff to increase their aptitude, knowledge, and understanding, including developing them towards correct attitude and working habits to improve their working effectiveness. Accordingly, it is a well-organized and systematic process towards improvement and organizational success.

Remarkably, the meaning of training changes periodically by points of view of concerned people. Krit Umpote (1996, pp. 1-8) explains the evolution of the implications of training into four periods:

The First Period: Training means practice and teaching to enhance workers' knowledge and expertise in the needed area. When workers are required to have any necessary knowledge, competence, and expertness, they need to practice it with people who have experience or expertise in such areas. For a mechanic, it requires him to be trained with an entrepreneur or expert in the mechanic area until he can gain

needed knowledge, understanding, and expertise, and so do all other fields of occupation. The trainings in the first period requires no formal training place nor trainers. The training methods are mostly lectures and practices mainly. An organized training is to substitute a formal education in a specific subject. No fundamental knowledge is required for trainees, and the learning may be either compulsory or just trial-and-error.

The Second Period: In this period, training means the adoption of personnel without the needed knowledge and competence to be taught for performing some work. Mostly, graduates do not need some jobs with low prestige and remuneration. Consequently, those jobs fall in the hand of the uneducated who need to be trained to increase their knowledge and expertness. Moreover, trainees may feel that they are inferior and unknowledgeable, so they are motivated to attend training. The training organizers or trainers design the training courses that may not be selected from those with specific knowledge and expertise as it is believed that any graduate can teach and be a trainer. Besides, learning is compulsory and reinforced by punishment. For example, it is required that trainees have to possess some additional qualifications and are expected to perform specific tasks better after the training. Otherwise, they will be punished, i.e., overtime practicing, no regular meals, being blamed, cutting down marks or scores, or failing an exam, etc. However, this kind of learning causes trainees to work automatically, but without thorough and genuine knowledge and understanding. Thus, when they face different types of problems, they will have difficulties in solving them. Still, the distinguishing characteristics of the training in this period is a formal training place and trainers. Trainees are perceived as the uneducated while the training content has a broader range of subjects. Learning is compulsory, and education and training are perceived as identical. Thus, no training is provided for graduates. The training in this way can still be witnessed in some government offices, either intentionally or non-intentionally, due to the misunderstanding of the authorized organizers. Moreover, the training tends to dominate trainees' thoughts rather than to enhance their genuine knowledge and understanding.

The Third Period: Training means the provision of knowledge, understanding, expertness, and the right attitude for trainees to induce their creativity and be able to

improve their working to be more productive. The assumption of the training in this period is that education and training are different since education is to provide broad and general concepts and theories. In contrast, training will focus on some specific topics or subjects, aimed to increase people's knowledge and understanding of such issues or matters. The training in this period has been more popular, and training concepts and methods have been developed widely. On the other hand, the conduction of training is more systematic, organized, and invented with a variety of techniques to increase the effectiveness of the training, trainers, organizers, and all concerned.

Moreover, even graduates still need to be trained again since training has specific concepts, theories, and management processes. Training is seen as another field of occupation, and learning is voluntary. It aims to support trainees rather than a compulsion with negative reinforcement like in the earlier periods.

The Fourth Period: training means a kind of methods in human resource management, aimed to increase knowledge, competence, and working skills and to encourage personnel to think, to do, and to solve problems skillfully in their present and future work. Training courses and programs comprise topics or subjects to enhance working competency in the employees' present work partly, and another part is useful topics for employees' growth. It is the preparation step for higher responsibility in the future. If the training courses or programs focus more on the promotion of working competency at present, it will be considered as being a training. However, if they focus more on the growth promotion in a career, it will be perceived as human resource management. Therefore, trainers have to consider topics or subjects in proper proportion, especially in human resource management, scrutinization is highly needed since nowadays plenty of new knowledge occur, the decisions have to be made by considering organizations' mission. In short, training in this period believes that all employees should be developed by training for their present or future work. The evolution of training's meanings is illustrated in Figure 2.14.

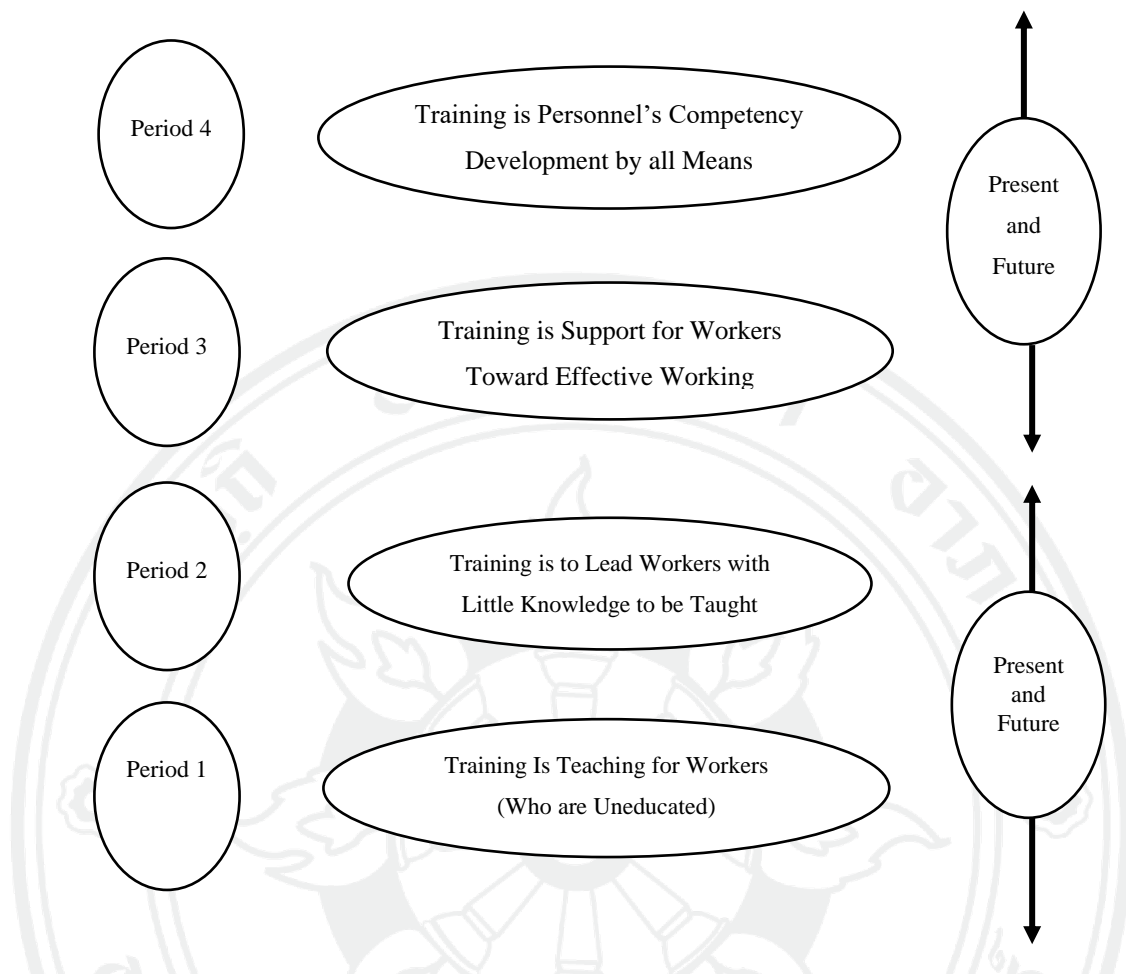


Figure 2.14 The Evolution of the Meanings of Personnel Training

Source: Krit Umpot, 1996.

2.8.2 Objectives of the Training

Chalong Mapreeda (1995, pp. 11-12) identifies two objectives of training:

1) Specific Objectives are to train employees to be able to work in a particular position, role, or area with effectiveness and efficiency, i.e., workshops on accounting, office filing, etc. by teaching them how to perform it and training them to catch up with new techniques to lead to the organizational growth.

2) General Objectives are to develop organizational personnel to engage in their work with higher knowledge, competence, skills, and capabilities, including the right attitude and general behaviors, in a broader scope, not precisely like specific objectives. Thus, these objectives are to inform trainees of the organization's news, policies, etc., and to induce them to have the right attitude towards other different work units. Consequently, they can adapt to these units, and it can also help to increase their working skills, etc.

Somkid Bangmo (1999, p. 15) classifies training objectives into three main groups:

1) To accumulate knowledge. Knowledge is fundamental, leading to understanding and enabling people to perform their work well.

2) To increase skills. Expertise or skills in working means agility in doing something automatically, i.e., the use of pieces of equipment, driving, motorcycling, etc.

3) To change attitude. Training can change the attitude towards a desirable direction, which is fundamental for improving a person's behaviors and mindset, either positive or negative, i.e., having loyalty for the organization, enhancing harmony in a group, feeling proud of the institute, etc.

Similarly, Patana Sukprasert (1998, pp. 5-6) states that training is aimed

1) To accumulate knowledge. Training is aimed to increase workers' education, augment intelligence, or correct some misunderstanding in their work at each level about laws, regulations, rules, responsibilities of each unit, or each individual.

2) To develop skills. The development of skills and expertise is one of the objectives of training. It requires lengthy development. It starts from prioritizing the importance of work, solving problems at hand, assuring decision-making, etc. so

that workers can perform their tasks correctly and adeptly and be guaranteed to complete it by themselves in an actual situation and by their readiness.

3) To change attitude. If the view is created correctly for trainees, they will have morale and motivation to work further with pleasure and satisfaction, including being able to work with others comfortably.

2.8.3 Benefits of Training

In terms of benefits of training, Somyot Chetcharoenrak (1997, pp. 6-7) states that human resource development needs to be conducted in a well-planned and systematic way to ensure the quality worth for the time being spent. Therefore, the study on human resource development is required and needs serious research, including being paid close attention. It can be witnessed in some organizations where a vast budget, namely 15% of all budgets, is invested for training and human resource development. The reasons are as follows:

1) No educational institution can produce graduates with prompt ability to work in an organization instantly. In an organization's admission of new workers, it often requires pre-service training in the form of an orientation or induction training to help them be familiar with their working place. Besides, it helps them to understand their rights and responsibilities as an organization's member, understand the organization's objectives, have knowledge, skills, and attitude responding to the nature of their work, and have a correct attitude with good morale.

2) All surrounding environment, both internal and external, changes all the time. External environment means a political, economic, and social condition or situation in a country and around the world, including governmental policies. For instance, the government gives importance to industry, science, and technology for developing economics and scientific and technological growth, or procedures in educational systems, moral or national resources decline, etc. Changes in the internal environment are organizational policies, work division, a shift of executives, adjustments of working styles, new systems of promotion, etc., that workers have to know and learn to work in such a unique environment within a limited time. Therefore, appropriate training can help workers to learn faster. Usually, this kind of

training or development often takes place after workers have started working in an organization, so-called “in-service training.”

3) A lack of systematic development and training causes more expenses in organizing indirect training. Without prior training, workers have to experience trial-and-error work or observe other workers, which causes more time and may not be the best way of learning.

Furthermore, (Somchart Kityanyong & Ornjaree Na Takuatung, 2006, pp. 16-17) state that training is a new dimension of human resource development, aimed to develop the quality of workers towards professionalism and to orient them towards the primary goal of a particular business. Accordingly, human resource development needs to be implemented systematically and continuously to facilitate business benefits highly. Thus, it can say that

1) Systematic human resource development can increase income and make profits for the business.

2) As a result of training, workers have knowledge, understanding, and expertise in their jobs well, so this can reduce expenses in running a business. Besides, knowledgeable workers can also prevent some risks and damages that might occur

3) Continuous human resource development can lead to the readiness of business expansion and enables the business to be expanded effectively by the support of their trained personnel.

4) Human resource development for increasing personnel’s knowledge, understanding, and competence in their work can also increase their good morale, motivation, and satisfaction in working.

5) Well-developed personnel give an excellent impression to customers who come to use the service.

Moreover, they also raise three significant benefits of training:

1) At the employee level. Training will be useful for employees since it enhances their knowledge and understand, which consequently increases their self-esteem, reduces accidents and mistakes, reflects their conceptual framework and attitude, and accumulates their skills and competence.

2) At the superior level. Training helps to bring about better work performance since workers are more aware of their roles, tasks, and responsibilities; it can reduce problems and mistakes. Correspondingly, it reduces the burden of supervising and organizing, and on the other hand, helps to enhance leadership with good work, sound characteristics, and ethical thought.

3) At the organizational level. Training helps to reduce labor costs, waste of industrial properties and related expenses, etc., while increasing productivity, both direct and indirect, and increasing profits with lower costs of the organization.

Besides, Wichit Awakul (1997, pp. 44-45) summarizes the benefits of training as follows:

1) Increase the effectiveness and efficiency of personnel working while helping to decrease the organization's expenses.

2) Respond to employees' needs in searching for knowledge, education, and career growth.

3) Accumulate working experience and skills, especially short-cut skills for working and management.

4) Develop and standardize the original work of an organization.

5) Increase competence capabilities and the working responsibility of employees.

6) Mobilize working functions and positions to improve employees' morale and motivation.

7) Augment and accelerate the quality of experience, knowledge, and competence of relatively senior employees.

8) Establish readiness for personnel in transferring, switching, and rotating their work, including adapting themselves to new work.

9) Reduce the admission of new workers to replace the old ones. When all employees can work effectively, fewer numbers of workers can work and yield as high productivity as the more significant numbers of workers. Because of this, it can help increase efficiency while decreasing the organization's expenses.

Sudarat Sumnakul (1990) studied, "the Follow-Up of Trainees of Self-Development Strategic Programs for Becoming Effective Officials of the Office of Educational and Social Service Promotion, Thammasat University" in the

empowerment programs of 3- to 5- level officials who attended the first to the seventh training program. She found that most trainees perceived the usefulness of the program at a moderate level and the knowledge gained from the training to be applied in their work at a moderate level as well. They found that the knowledge gained from the training could help to increase their proper working skills, human relations, adaptation, organization, and planning of work, problem-solving, and decision-making by themselves at a moderate level. However, for the expertise in public speaking, role-plays, participation in a meeting, or a group, they perceived the improvement at the mild level. Only some parts of trainees viewed that training could help to improve their work and environment, and it was worthwhile for their time to attend it.

2.8.4 Training Process and Evaluation

Human resource development through training needs to be a slightly formal process, which requires operational steps. Many scholars express their point of view as follows:

Saisaang Klaewkasetkorn (1991, p. 17) states that training based on theoretical foundation should be a patterned process that comprises its rationale, curriculum, operation, and evaluation.

Patana Sukprasert (1998, p. 27) specifies some significant training activities: a survey of training needs, design of training curriculum, a training project planning, training operation, training evaluation and follow up, and arrangement of a summary report.

Similarly, Somchart Kityanyong and Ornjaree Na Takuatung (2006, p. 25) summarize a training cycle or process as follows: a survey of training needs, design of training programs and curriculum, training conduction, and training evaluation.

From all these scholars' concepts, it can be seen that the details and steps of a training process that are essential parts of training are somewhat similar. Each level is also needed to be accomplished. The training steps thus, can be explained as follows:

1) Step 1: Investigate for Training Needs

Somkid Bangmo (1999, pp. 40-41) states that to study about the necessity of organizing training means a look for situations and problems in an

organization that can be solved by training to lead the organization to its goal as planned. The necessity or needs of training can be divided into two types:

- (1) Explicit necessity or needs, i.e., admission of new workers, work expansion, etc.
- (2) Implicit/observed necessity or needs, i.e., low productivity, neglecting duties, etc.

Chalong Mapreeda (1995, pp. 13-15) views that a survey of training necessity will occur under the following situations:

- a) When employees face problems in performing their work caused by their lack of knowledge or expertness.
- b) When employees' duties and responsibilities are changed, so new training is required for proper performance.
- c) When employees start their new work or are assigned to do a new assignment
- d) When employees express their needs for training
- e) When an organization issues or approves development plans and policies.

He further suggests news for surveying employees' needs as follows:

- (1) Inquire managers or immediate supervisors of each work unit since they should know the best about the shortfalls of their subordinates under their responsibility.
- (2) Study some indicators or indices by comparing such indicators at different period to investigate the tendency of changes and their direction. Some examples of significant indices to anticipate possible flaws or problems are as follows:

- a) Productivity, such as lower productivity, higher production costs, more frequent accidents, a higher rate of damaged tools, the adoption of modern technologies, etc.
- b) Supervision or management, i.e., outcomes with lower standards, delayed delivery due to backlog, different treatment for the same work, continuous organizational improvement, changes in significant operational policies, working conflicts, poor coordination, etc.

c) Workers or employees, i.e., new workers, rank promotion, job rotation, high turnover, frequent absence, expressed dissatisfaction or discomfort while working, a high number of unqualified employees being promoted, anonymous letters or complaints, the poor work performance of overrated employees because of poor knowledge and expertise, inappropriate attitude or personality for assigned work, etc.

(3) Compulsory responsibility attached with assigned work, which indicates in what kind of knowledge or expertise an employee should be supported.

(4) Tests from written exams, interviews, or psychological experiment, including work probation that help to find out a worker's weakness or shortcomings.

(5) Employees' needs learned from their statement since they will know the best what their weaknesses are and need to be improved to increase their effectiveness or to prepare themselves for a promoted job in the future. Sometimes, employees will request training directly from the concerned office. Some organizations may have a suggestion box, which is another channel to allow employees to express their needs for training.

(6) Performance evaluation conducted by a responsible work unit in considering a promotion for an employee's performance, i.e., salary raise, etc. From the assessment, it will indicate the problems and drawbacks of each employee.

Additionally, Somkid Bangmo (1999, p. 42) summarizes ways for collecting information for analyzing problems and needs for training, i.e., observation, survey questionnaires, documentary study, a comparison with working standards, tests, meetings, and seminars.

2) Step 2: Training Program Design

Noy Sirichote (1980, pp. 48-49) defines a training program as the knowledge content and methods for creating knowledge, understanding, and attitude to facilitate learning and change behaviors as specified in the objectives of training.

Kruawan Lim Aphichat (1988, pp. 20-21) defines a training program as a project held by an organization for trainees to collect and develop their knowledge and experience following the objectives of the project. Therefore, the design of content has to respond to such goals as well.

Stahl (1962) classifies training programs into five categories: training for trainers, training for orientation, training for work improvement, training towards utmost benefits, and training for superiors' development.

Likewise, Kingsbury (1957) classifies training programs into five categories as well: training for orientation, training for order and induction, training for superiors, training for management level, and other types of training.

Kiti Tayakkanon (1996, as cited in Kant Amphanont, 1999, pp. 35-36) classifies types of training as follows:

(1) Sources of training. This criterion indicates the source of training, which is classified into two sources:

a) In-house training. This type of training is training organized by an organization within its organization, responsible by a concerned office or unit who will design and develop a program, set a timetable, and invite experts, both within and outside the organization, to be trainers. The advantage of this type of training is an organization can determine a training program to respond to and be suitable for the organizational operation fully. The disadvantage of training is a relatively high investment of money and people for this training since the hired organization has to be responsible for the whole process from designing and developing a program, selecting trainers, organizing training, and evaluation.

b) To buy a training program out of an organization. This type of training is not organized by its training office, but by hiring a training organization or by delivering its workers to be trained. This type of training is appropriate for small-sized organizations with not so many workers and without its training division.

(2) Training experience arrangement. This type of training is organized during trainee's working period or during their temporary break from their work to obtain training.

a) On-the-job training. This type of training is conducted by letting trainees perform an actual job at a real place under the close supervision of a staff playing a role as a mentor. A mentor will explain all working details or steps and let a trainee follow his or her instruction. Thus, a mentor needs to keep advising and supporting a trainee in case any problem occurs.

b) Off-the-job training. For this type of training, trainees will learn or be trained in a training place only. Trainees have to take a break from their work until training ends.

(3) Needed skills. It depends on what an organization needs its workers to accumulate or needs to create for them.

a) Technical skills training is training aimed to develop skills relating to trainees' work or operation, i.e., mechanic maintenance, credit analysis, engine repair, etc.

b) Managerial skills training is training for increasing administrative and management knowledge and skills. Most trainees are managers and supervisors.

c) Interpersonal skills training is training aimed to develop trainees' interpersonal skills in working with others, and in establishing good relations with their co-workers.

(4) Levels of trainees are the level of trainees' responsibilities.

a) Employee training is training organized for workers at the operational or practitioner level, i.e., who is responsible directly for manufacturing products or providing service for customers. The topics of training tend to cover nature and the process of work, i.e., how to repair or maintain mechanics, how to respond to customers on the phone, sales techniques, etc.

b) Supervisory training is training for workers at the immediate supervision level, and the content often contains fundamental principles of management.

c) Managerial training is training for workers at the middle supervision level. The content of training aims to provide in-depth knowledge of management principles towards practical work and people management.

d) Executive training is training for top management personnel, i.e., directors, managing directors, president, vice-presidents, etc., to have thorough knowledge and understanding of organizational management, i.e., strategic planning and decision-making, organizational development, etc.

Chuchai Smithikrai (2011, pp. 7-10) thus summarizes criteria for classifying training programs as follows:

(1) Sources of training. This criterion indicates who is responsible for organizing training: the organization (in-house training) or an external organization (outsource training).

(2) Experience arrangement. This criterion indicates an organized training is conducted during trainees' working period or during their temporary break from their work to acquire training (on-job training) or out of their work (off-the-job training).

(3) Needed skill. This criterion indicates what an organization needs its workers to accumulate or wants to create for its workers, i.e., technical skills, management skills or interpersonal skills, etc.

(4) The level of trainees, i.e. employees, supervisors, managers, and executives.

3) Step 3: Training Operation

Noy Sirichote (1980, pp. 16-20) classifies training operation into three periods:

(1) Pre-training period comprises a number of activities, i.e., clarifying rationale for organizing training, preparing details of a program, proposing a plan for approval, assigning working committee, contacting a trainer, publicizing news, selecting trainees, procuring training equipment ready to be used, preparing training documents, places, and all procedure.

(2) During-the -training period comprises activities, i.e., facilitating trainers and trainees, preparing handouts, inspecting equipment and facilities for daily use, inviting trainers, expressing appreciation to trainers, preparing payment for trainers, organizing opening-ceremony orientation, preparing an evaluation of each session, preparing a certificate of attendance ceremony, and planning all public relations media.

(3) Training completion period comprises activities, i.e., preparing a delivery letter for trainees to return to work, a summary report, and thank-you letters for all concerned; gathering training documents, organizing a summary of budget expenses, and organizing a committee meeting to find ways for evaluation.

Similarly, Somkid Bangmo (1999, pp. 72-79) also divides training operation into three periods:

(1) Pre-training comprises the following activities, i.e., contacting a training place and trainers, preparing training documents and budgets, selecting trainees, coordinating and delivering letters to all concerned organizations, making all PR media, preparing training files, a training place, and opening-ceremony equipment.

(2) Training comprises the following activities, i.e., inspecting corrections, operating training as scheduled, distributing the daily document, facilitating for trainers and trainees, having substitutes for absent trainers, and preparing a withdrawing process during the training.

(3) After the training comprises the following activities, i.e., evaluating training, delivering thank-you letters to all concerned, collecting training documents, arranging finance, preparing a report for submitting the executives, and printing a yearbook.

4) Step 4: Training Evaluation

The critical factor for organizing training is the expectation of the training effectiveness or what consequences can be obtained after training from the investment of budget and time in each training. Therefore, to know to what extent training is effective requires evaluation. To ensure training effectiveness, an organization has to operate several sub-activities and functions, including the competence of trainees and people involving in training. Many scholars define “training evaluation” as follows:

Chalong Mapreeda (1995, p. 84) defines “training evaluation” as an effort in evaluating if training achieves the objectives as planned, or can change trainees’ behavior in a better way.

Somkid Bangmo (1999, p. 106) states that evaluation is to see what are the consequences of training, to what extend training achieves the objectives, and what kinds of obstacles training faces. The process of evaluation composes of studying training objectives; determining what consequences are expected from each purpose, planning how to evaluate it; i.e., timing, evaluators, methods, and devices; analyzing, interpreting, and summarizing data; and writing a report to responsible people.

Nirachara Thongthammachat (2001, p. 14) express their point of view that training efficiency depends on learning patterns, facilities, budget, location, evaluation staff, supplementary media, trainees' characteristics, and trainers.

Chan Sawatsalee (2012, p. 5) cites the necessities of training evaluation as follows:

- (1) Superior orders to do.
- (2) An organization needs to know if a training program or seminar achieves as planned
- (3) An organization needs to know advantages, shortcomings, appropriateness, including problems and obstacles of training to be able to correct or improve future training.
- (4) An organization needs to know the appropriateness, worthiness, value, or benefits of a training program to make it appropriate and beneficial for trainees as much as possible.
- (5) An organization needs evaluation as the foundation for executives' decision-making, i.e., for considering if further training should be organized in future or for finding if budgets for which training should be approved, reduced, or cut in future.

Chan Sawatsalee (2012, pp. 12-16) constructs a model for systematic training evaluation, consisting of three parts: inputs, process, and outputs, as follows:

- (1) Inputs compose of an analysis of training needs or necessity, main objectives of a training project, a schedule, documents, a list of trainers, and training places.
- (2) Process composes of a trainer, trainees, document, environment, and facilities.
- (3) Outputs compose of learning, reaction or responses, behaviors, and consequences on trainees.

Sawat Sukhontharangsri (1994, p. 1) states that after training, the results should be evaluated for finding guidelines for further improvement and development. General concepts of improving training projects are to solve what happened in the past training, to better future training, etc. Possible problems can be various, i.e., delayed coordination with people under the jurisdiction of trainees' office,

inconvenience in finance, location, and equipment, etc. However, this way of problem-solving cannot raise the effectiveness level of training genuinely since, to do so, it requires centralized standards in analyzing the whole project simultaneously in all dimensions. Besides, to reach such measures, it needs the right evaluation. Regarding training evaluation criteria, some criteria by scholars have been proposed as following:

Kirkpatrick (1987) specifies four criteria for evaluating training:

- (1) Reaction or the evaluation of trainees' feelings towards the content of a training program, trainers, training methods, training handouts, and environment, etc.
- (2) Learning or the evaluation of trainees' knowledge, skills, and attitude to see how much trainees are developed in a better way after the training.
- (3) Behavior or the evaluation of trainees' responses to see how much their behaviors are improved after the training.
- (4) Outcome or the evaluation of an organization's operation, i.e., production cost, turnover rate of workers, employee engagement, etc.

Mercado (1988, as cited in Surin Jitjang, 2001, pp. 7-8) divides the evaluation levels by cognitive, affective, and behavioral components into four levels:

- (1) Reaction evaluation or the evaluation of trainees' feelings and attitudes towards related training components.
- (2) The learning evaluation or the evaluation of what trainees receive from training in cognitive, affective, and behavioral domain.
- (3) Performance evaluation or the evaluation whether trainees can apply their knowledge and skills acquired from training to perform their work correctly.
- (4) Impact evaluation or the evaluation of an organization's operation affected by trainees' work performance after training.

2.8.5 Trainers

Wichit Awakul (1997, pp. 209-123) defines "trainers" as persons who play a role in transmitting knowledge to trainees to cause some changes: knowledge, attitude, and psychomotor. Besides their knowledge and competence, including being

trained in teaching methods and techniques like general teachers, trainers as a change agent, are also responsible for many extra roles and duties. For example, they must obtain practical training or gain adult teaching more than teachers at school or university. Besides, teaching in school or university is often strict to theoretical theories, which may be unsuccessful for general training people, especially adults. Therefore, to select a trainer who has been evaluated as a good trainer with the ability to transmit knowledge with a good reputation in the recommended field of training. Good or qualified trainers should be listed in the directory for the convenience of inviting them into a program.

1) Roles of trainers expected by training organizers. Typically, training organizers expect to get trainers with the following characteristics:

(1) Proper preparation for teaching as specified in the objectives. Trainers should be knowledgeable and thorough, prepare their teaching tools, and handouts for transmitting knowledge towards the best results.

(2) Strong determination for teaching. Trainers should be responsible for their education by attending a training course before or on time without frequent absence or coming late while finishing their class as scheduled. They should teach all planned content without violating other trainers' time or schedule.

(3) Support. Trainers should give their opinions to help improve the content of a training program, evaluating training needs in the topics they teach and submitting it to training staff, trainers of other issues, those to need help, and the director.

(4) Acknowledgement of the scope of a program. Trainers should know the range of a program, including training policies and objectives, by studying the details of the project.

2) Roles of trainers expected by trainees.

(1) Informality. Trainers should be ready to help and have empathy towards trainees, most of whom are adults who tend to face learning or training problems.

(2) Good research and well-planned teaching. Trainers should be knowledgeable and expert in the subjects they teach without being possessive.

(3) Ability to solve problems related to the subject they teach. Trainers should be astute and witty in answering questions with the ability to combine theories and practices smoothly.

(4) A supporter. Trainers should help to solve problems, give advice, and counsel, including keeping a pleasant training atmosphere.

3) Roles of trainers from trainers

Besides program organization, trainee selection, and training implementation, good trainers are a critical factor for training since they are considered as a model or prototype, which is very significant for trainee's learning. Excellent trainers, in the eyes of trainers themselves, should possess the following qualifications:

(1) Be knowledgeable about what they teach. Trainers should have substantial experiences, or they should not know theories but have experienced them in practice or application since most trainees own some experiences and need to use what they learn to apply in their actual work meaningfully.

(2) Be trained. Before being a good trainer, trainers should learn how to be a good teacher. For instance, they should learn teaching methods and educational psychology; they should pass some prior training or practices, etc. Trainers should thus be confident, extrovert, accountable, and can persuade people effectively, including being able to make trainees understand what they teach quickly.

(3) Know a variety of teaching methods and techniques. Trainers should be capable of choosing appropriate techniques and enable trainees to know how to apply their lessons into practice or to change their behaviors as wished.

(4) Love teaching. Trainers should be determined and have a strong will to transfer their knowledge to all trainees as much as they could. Besides, trainers should be kind, good-tempered, calm, and polite. They will not express their anger and irritation when questioned. Good human relations and trustworthiness are also needed.

(5) Have self-confidence in training. Trainers should be prepared for teaching, keep developing themselves by following new academic advancement in their work, and keep practicing themselves and their teaching expertise regularly.

(6) Understand training goals. Trainers should study and understand the goals of each subject, the relationship of each topic with the learning process in a program, rules, and methods for finding their relationships.

(7) Analyze for getting acquainted with trainees. Trainers should study and analyze the learning of a group, trainees' needs for developing themselves, and the society or area to which they wish to apply their knowledge.

(8) Impressive working experience as a good trainer. Trainers should be able to work with all concerned in training well and ready to provide their knowledge as "contribution," not for commercial purposes. They should behave morally or be a good exemplar for others. Their main goal of training is to provide knowledge and experience to trainees without taking advantage of disseminating their ideologies, defaming others, nor exploiting training for power. They should be willing to provide understanding without concealing their knowledge, but with a concern about benefits gained from teaching or training for developing people towards the interests of the society and the country. In short, they should always behave like a kind, friendly, and supportive developer for their trainees.

(9) Be tolerant or flexible for varying situations and trainees. Trainers should express their friendship and mutual support, but as a teacher and student like in a formal classroom. They should be tolerant of any provoking expression of trainees, to emotional questioning, and to any hardship, they may face during their training. They should not easily give up.

(10) Keep on having new ideas for updating their teaching methods. Trainers should be a leader and a good model for others so that trainees can take them as a model. Besides, they should know how to scope their teaching and plan their teaching tools.

(11) Improve their personality with an active look suitable for being a good trainer. Trainers should behave and maintain their teacher hood strictly. They should act as a good and respectful exemplar who values the human values of their trainees without looking down upon them and treat all trainees equally. They should also be sociable and have a good understanding of other people without being punctilious nor emotional. They should support others, give advice, and help to solve problems with all concerned parties.

(12) Evaluate their self-performance to improve themselves in the next training, including following up on how trainees apply the knowledge from training and to what extent the outcome is used. It will help them to improve themselves and their teaching methods.

(13) Ask what they and trainees gain from training while being ready to change logically.

Chongolnee Chutimadevin (1999, p. 137) the important roles of trainers to help training achieve its objectives:

- 1) Stimulate the genuine participation of all trainees.
- 2) Know potential and differences among trainees.
- 3) Persuade to determine concerning issues accurately and straightforwardly.
- 4) Set appropriate time for each activity while ensuring that an activity has been proceeded correctly for each group.
- 5) Extract trainees' knowledge and experience.
- 6) Provide information, frame of work, and opinions at the right time.
- 7) Summarize successful issues at each step of training.

Krit Umpote (1996, pp. 8-10) points out the necessary competence of trainers, such as Knowledge and understanding in what they teach, ability to connect learning and understanding with trainees' current situations, and ability to transmitting knowledge and understanding into words.

Suwadee Paphaphot (1981) proposes that trainers need to be trained in transmission ability, primarily through some specific skills. The necessary skills are ability in persuasive speaking, understanding of psychology, listening competence, and competence in connecting each trainee's opinion, including the ability to analyze and perceiving problems from different perspectives.

Nirachara Thongthammachat (2001) specifies five skills of trainers that help to enhance their teaching effectiveness: Verbal, nonverbal, personality, and communication skills; questioning skills, teaching-media usage skills; explaining skills; and arousing-attention skills.

Somchart Kityanyong and Ornjaree Na Takuatung (2006, p. 89) express their idea about the criteria of trainee selection by raising one of the requirements that

seniority and qualifications of trainers play an important part in trainees' acceptance. In other words, when trainees accept trainers, it means their openness for learning, and this thus brings about the effectiveness of training as a consequence accordingly.

Santi Kerdmolee (1995) studied, "The Accomplishment of Trainees of the Territorial Defense Volunteer Chiefs in Supporting the Rescue of the Ministry of the Interior: A Case Study of Trainees in 1994." He found that the accomplishment of trainees was a result of trainers' knowledge-transmitting ability, proper training methods, and functional training places.

Thirachat Thamrong (1996) studied, "Personnel Potential Development of the Metropolitan Police Bureau: Study of Factors Affecting Training Efficiency," and found that a trainer was one of the various factors requiring an improvement.

2.8.6 Communication Methods of Trainers

Somkid Bangmo (2008, pp. 85-94) calls "trainers' communication methods" as "training techniques, "which are ways of transmitting knowledge, skills, and attitude to trainees to make them learn as much as possible within the limited time. Training techniques are divided into two types:

- 1) Focusing on "trainers" as a learning center. It is a training technique emphasizing trainers as a learning center, which can be conducted in many ways, i.e., lecture, panel discussion, symposium, demonstration, and coaching, etc.

- 2) A focus on "trainees" as a learning center. It is a training technique emphasizing trainees as a learning center, which can be conducted in many ways, i.e., brainstorming, buzz session, case studies, forum, management game, role-playing, seminar, field trip, workshop, sensitivity training, recreational activity, activity-based training, etc.

Kajornsak Hannarong (1981, pp. 4-5) classifies training techniques into two techniques.

- 1) Divided by communication means: by "telling method" from someone who knows to someone who does not know. It can be also a "showing method" from an expert to people who do not know or have no expertise in a correct practice or "doing method" that trainees can learn how to do it by themselves to create knowledge, understanding, and skills.

2) Divided by roles of trainers and trainees. By these criteria, there are three types: trainer-oriented, trainer-and-trainee oriented, and trainee-oriented learning techniques.

Similarly, Pot Petcharaburanin (1978) divides training methods into two main approaches:

1) Leader-centered or trainer-centered methods. This method emphasizes an instructor or a trainer as a center for learning; thus, it focuses on trainers' performance or behaviors mainly.

2) Group-centered or trainee-centered approach. This method emphasizes trainees more than trainers based on the assumption that the goal of training is to enhance trainees' knowledge, experience, expertise, and good attitude. Thus, trainees should obtain what they need sufficiently and genuinely.

For training methods, Kajornsak Hannarong (1981) identifies 17 training techniques: lecture, symposium, seminar, panel discussion, colloquy, dialogue, buzz group, conference, brainstorming, role-play, case study, incident method, exercise, live project, in-basket, management game, and laboratory or sensitivity training.

Duangchan Awvijitrakul (1990) studied, "Appropriate Training Methods for Public Enterprises as Perceived by Trainers," and found that the appropriate method for providing knowledge is "lecture."

In this study, the researcher used concepts, theories, and related studies in communication mainly. From the review as mentioned above of literature, four latent variables: 1) qualification and competence of professional trainers, 2) training environmental management, 3) trainees, and training effectiveness.

Qualification and competence of professional trainers are essential in training from a communication perspective as trainers play a role as a presenter of main content, a transmitter of knowledge and experience, and a person who stimulates trainees to acquire learning content as scoped or determined in a program. If trainers do not perform their functions and roles properly to bring about trainees' learning as planned, it can be an obstacle against training effectiveness always (Chan Sawatsalee, 2012, p. 19). Thus, it can say that if each training misses any other components, training can still proceed; however, without a trainer, training cannot take place. On the other hand, a trainer must perform his or her role effectively; otherwise, training

will fail. Especially, trainers' communication skills are very crucial; though, only communication factors may not be sufficient to predict communication effectiveness. This notion accords with one of the remarks of trainer-selection criteria mentioned by Somchart Kityanyong and Ornjaree Na Takuatung (2007, p. 89) that seniority and qualification of trainers are significant for the trainees' acceptance. According to Aristotle's concept, source credibility depends on two factors: competence or expertness and trustworthiness, which receivers must perceive, possessed by senders. (Orawan Pilunowad, 2003, p. 124). Besides, according to Berlo, Lemert, and Mertz (1966), one of the three factors receivers perceive as a sender's source credibility is qualification factor, i.e., having experience in certain areas or subjects, being skillful, etc. Moreover, besides knowledge transmission, trainers are also responsible for designing the content of a training program. Regarding the importance of training content, according to communication concepts and theories, training is a message between a trainer and trainees, which is very important. Noy Sirichote (1981, pp. 48-49) defines "a training program" as subject content and methods enhancing knowledge, understanding, and attitude for learning and changing behaviors as planned for training. Thus, if trainers are competent, but the program content is ineffective, training will be weak as well. Correspondingly, good training content needs to be designed to respond to training objectives or requires message treatment and a shared understanding of message code between a trainer and trainees. It also accords with the concept of the message of Berlo (1960, as cited in Orawan Pilunowad, 2003, pp. 3-9). Due to the concepts above, trainers' qualifications, experience, reputation, communication skills, and training message designs are selected as latent variables no. 1-5, respectively, in this study.

Training Environmental Management. In a communication context, environmental management during the training is a kind of control of communication channels since the environment during the training influences trainees as receivers. According to the concept of five communication channels of Berlo (1960, as cited in Orawan Pilunowad, 2003, pp. 3-9), namely seeing, hearing, touching, smelling, and tasting, which trainees have to face. Besides, from the concept of nonverbal language, Chitapha Sukplum (2005) defines "environment factors" as things surrounding, including communication methods and climate that affect interpersonal

communication or affects people involving in training. Another nonverbal language mentioned by Chitapha Sukplum (2005, pp. 63-67) is proxemics or interpersonal space. In the context of training, it includes the learning environment of an organization as well. Additionally, Tannenbaum (1997) adds another environmental factor, which is a psychological environment or learning environment that can induce either positive or negative feelings towards communication. Because of the important roles of environmental factors, they are selected as other latent variables, which comprise the management of the physical, social, and psychological environment as manifest or observed variables no. 6-8 respectively.

Trainees. In a communication context, trainees are receivers. Based on the concept of receivers of Berlo (1960, as cited in Orawan Pilunowad, 2003, pp. 3-9), four elements of receivers should be studied: 1) communication skills (for this study, it focuses on trainees' skills mainly), 2) attitude: attitude towards oneself, message, and receivers. Attitude towards oneself can affect communication. Therefore, trainees' attitudes can be studied through their learning motivation. Blanchard and Thacker (2004) specifies that learning motivation is correlated with learning proficiency while Michell (1982, as cited in Chuchai Smithikrai, 2011, p. 93) states that trainees' motivation involves a psychological process that causes arousal, direction, and persistence in doing something. Arousal and stamina mean the condition in which persons invest their time, effort, and encouragement. Therefore, people with high motivation will have or express their behaviors with vigor and strong will. Psychologists believe that motivation can multiply people's strength, or when people have high motivation, they tend to work harder and longer than before. Noe (1986, as cited in Chuchai Smithikrai, 2011, pp. 93-94) adds that several factors can affect the level of trainees' motivation, such as locus of control affects a person's motivation and learning capability. In general, a locus of control is divided into two types: external and internal. "External locus of control" means an assumption that results or consequences, i.e., good luck, other people's responses, etc. come from other external factors, while "internal locus of control" or an assumption that any success or failure all comes from a person's actions. Goldstein (1993, as cited in Chuchai Smithikrai, 2011, p. 93) notes that people with an internal locus of control tend to have higher learning motivation than those with an external locus of control

since they believe that to get good or bad performance is a result of their actions. Thus, from the training perspective, trainees with learning motivation can lead to the success of the training. Accordingly, learning motivation was selected as the ninth observed or manifest variable. Knowledge. From the review of literature on trainees' self-efficacy, combined with the concept of Bandura (2000) that views the effect of self-efficacy on people's achievement, and the concept of Wexley and Latham (1991) that what trainees should possess is their trainability or the ability to learn knowledge, skills, and behaviors, which are essential in performing any task within a specified time. In other words, it is the ability to be trained. The result of training depends on the trainees' level of skill and motivation. On the other hand, according to the concept of Chuchai Smithikrai (2011, pp. 92-93), trainability means the level of expertness or skills for performing some tasks, which includes the level of seniority and experience of trainees. Training can be successful only when trainees have high self-efficacy, which will lead them to learn things. Besides, Bandura (1986, as cited in Chuchai Smithikrai, 2011, p. 93) indicates that trainees with high self-efficacy before and during the training can learn better than those with low self-efficacy, and Gist (1989, as cited in Chuchai Smithikrai, 2011, p. 93) also agrees with this notion. Moreover, Noe and Schmitt (1986) and Robertson and Downs (1989, as cited in Chuchai Smithikrai, 2011, pp. 93-94) found that trainees with high trainability and motivation and learn better than those with low level. Thirachat Thamrong (1996) studied, "Personnel Potential Development of the Metropolitan Police Bureau: Study of Factors Affecting Training Efficiency." He proposed one recommendation that trainers should use psychological principles in conducting training by considering trainees' needs and readiness since training can affect their morale, motivation, and determination. Psychologically, if trainees have high self-efficacy, training tends to be more successful. Because of the importance of self-efficacy, it was determined as the tenth manifest or observed variable. Social system & Culture. Social and cultural systems influence trainees' lifestyle, especially in the perceived valence of the outcome. According to Vroom (1970), if persons expect high chances of the valence of their performance, they will feel it as essential and be satisfied; thus, they will have sufficient motivation to accomplish their work. Likewise, if trainees perceive the valence of the outcome, training tends to be effective. Besides, trainees' anxiety was

studied in this research since, based on the Yerkes & Dodson Law; generally, anxiety has a curvilinear relationship with learning (Yerkes & Dodson, 1908). It means that too low anxiety will affect learning at a low level or will have almost no effect at all while too high anxiety will obstruct a learning process. Thus, trainees' anxiety affects training effectiveness. Due to the roles of self-efficacy and anxiety, self-efficacy and anxiety were determined as the eleventh and twelfth manifest or observed variables, respectively, in this study.

Training effectiveness. Training is a kind of communication, and the effectiveness of training is measured against its objectives. On the other hand, training is a kind of group communication. Orawan Pilunowad (1986, as cited in Orawan Pilunowad, 2003, pp. 347-348) defines "a group" as a gathering of people, who have mutual interaction and effect, with shared interest or expression on something. When people gather together with some common objectives, they will communicate and conduct activities together while being aware of other members' feelings and understanding one another as group members in maintaining a group. The aim of the training is its effectiveness or desirable consequences after the completion of training. Thus, the most important concern is what kind of benefits trainees obtain from training or what kind of results are the outcome of training from financial and time investment for each training. However, to know to what extent training is practical, it requires a training evaluation. Thus, whether training is worth or not can be identified from such assessment. On the other hand, it should be noted that in conducting any practical training, it covers the operation of several sub-activities of any component, including the competence of trainees and all involved in training. Nirachara Thongthammachat (2001, p. 14) states that the efficiency of training depends on learning styles, facilities, budget, place, staff, evaluation, training media, trainees' characteristics, and trainers. Many scholars established several evaluation criteria. Kirkpatrick (1987) sets four areas for evaluating training: 1) reaction or the evaluation of trainees' feeling towards program content, trainers, training methods, handouts, and environmental management, etc. 2) learning or the assessment of trainees' knowledge, skills, and attitude to see how much improvement they gain. 3) behavior or the evaluation of the organizational operation, i.e., production cost, turnover rate, employee engagement, etc. Regarding the importance of training evaluation, trainees'

satisfaction, acquired knowledge, developed behaviors, and better work performance are determined as no. 13-16 manifest or observed variables, respectively, for this study.



CHAPTER 3

RESEARCH METHODOLOGY

This study used mixed methods of both qualitative and quantitative research. Qualitative research was conducted from the beginning to help construct a structural equation model (SEM) and to design questions in the questionnaire, while quantitative research was conducted subsequently to test the research hypothesis drawn from the conceptual framework of this study. The detailed research methodology is as follows:

3.1 Research Conceptual Framework

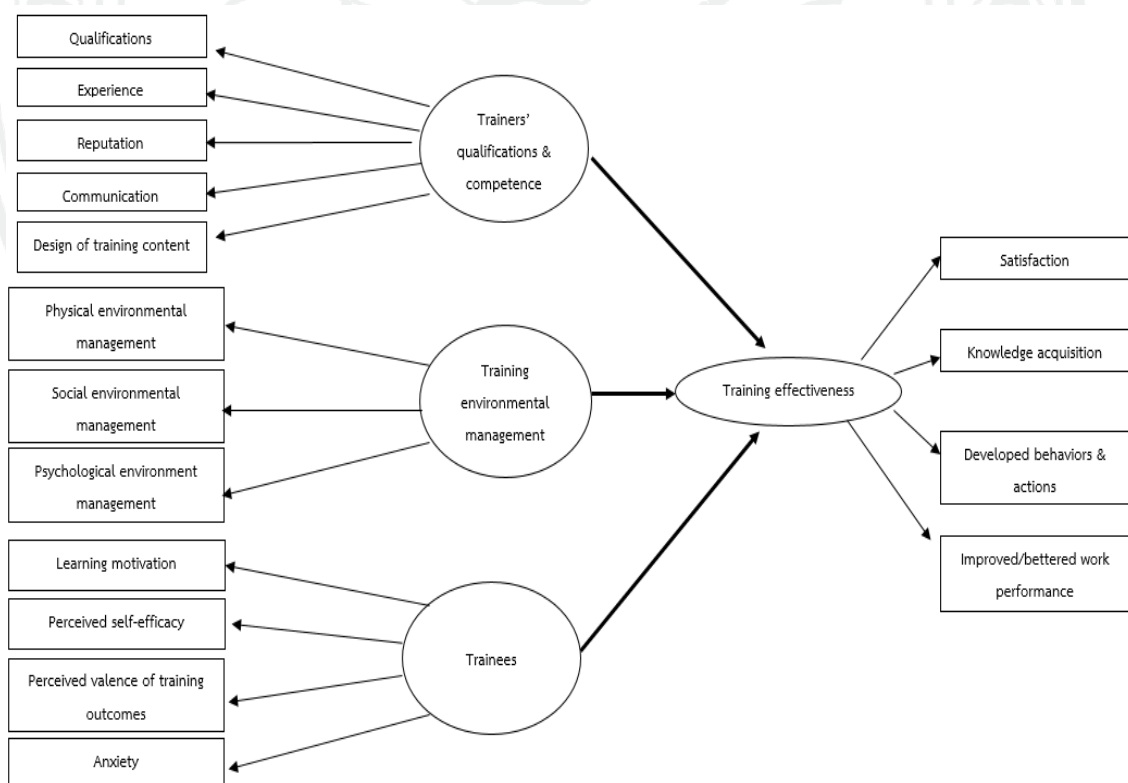


Figure 3.1 Research Conceptual Framework

3.2 Research Hypothesis

The structural equation model of latent variables, i.e., qualifications and competence of professional trainers, training environmental management, trainees, and training effectiveness, developed from the study, is congruent with empirical data.

3.3 Qualitative Research Methodology

3.3.1 Population

- 1) Professional trainers
- 2) Training organizers
- 3) Executives of human resource development

3.3.2 Samples

Samples were selected by purposive sampling as follows:

1) Professional trainers. Five professional trainers with the following qualifications were selected:

- (1) Still being a professional trainer.
- (2) Having training experiences of no less than ten years and having trained for more than 80 organizations.
- (3) The selected Professional trainers with the qualifications above are as appendix.

2) Training organizer. Five organizers with the following qualifications were selected:

- (1) Still in operation
- (2) Having at least 5-year experience in running business, or providing training for more than 50 organizations.
- (3) The selected Training organizer with the qualifications above are as appendix.

3) Executives of private organizations in the field of human resource development or training and development. Five executives were selected based on the following qualifications:

- (1) Currently, working in a private organization.
- (2) Affiliated in an organization having yearly training plans
- (3) Positioned at the executive level
- (4) Having at least 5-year experience in human resource development.
- (5) The selected executives with the qualifications above are as appendix.

3.3.3 Research Instruments

For collecting information from each group of samples, a variety of research instruments were applied:

1) Professional trainers: A face-to-face in-depth interview collected the data from expert trainers. Main questions, including operational definitions, were sent to the samples one week in advance. The main issues are:

- (1) What are the factors affecting training effectiveness?
- (2) What are the communication methods used in training?
- (3) What is the excellent experience of competent trainers?
- (4) What determines the reputation of effective trainers?
- (5) What are the qualifications of effective trainers?
- (6) What is a good environment for training?
- (7) How are trainers considered as effective?

2) Training organizers: The data from training organizers was collected by face-to-face-in-depth interviews. Main questions, including operational definitions, were sent to the samples one week in advance. The main issues are:

- (1) What are the factors affecting training effectiveness?
- (2) How are the affiliated trainers selected?
- (3) What are the communication methods used in training?
- (4) What is the good experience of competent trainers?
- (5) What determines the reputation of effective trainers?
- (6) What are the qualifications of effective trainers?
- (7) How are trainers considered as effective?
- (8) What is a good environment for training?

3) Executives of private organizations in the field of human resource development: The data was collected by face-to-face-in-depth interviews. Main questions, including operational definitions were sent to the samples one week in advance. The main issues are:

- (1) What are the factors affecting training effectiveness?
- (2) How are affiliated trainers selected?
- (3) What are the communication methods used in training?
- (4) What is the good experience of competent trainers?
- (5) What determines the reputation of effective trainers?
- (6) What are the qualifications of effective trainers?
- (7) What is a good environment for training?
- (8) How are trainers considered as effective?

3.3.4 Data Collection

The population with determined qualifications were selected as the samples for the study. Research objectives and background were explained, and a convenient time and place were appointed. Besides, data collection methods are explained to all groups with different collection time:

- 1) Professional trainers: April-June, 2018
- 2) Training organizers and HRD executives: May 2018

3.3.5 Data Analysis

Comparative data analysis was used by grouping the samples' common answers into three groups: 5 professional trainers, five training organizers, and 5 HRD executives. The findings were then used for constructing a structural equation model and used for designing questions in the questionnaire for quantitative research.

In analyzing data, the degree of the evaluation was based on the number of samples giving the same answer to each question as follows:

- 1) Analysis of each group:

5 Samples Provide the Same Answer	=	Highest
4 Samples Provide the Same Answer	=	High
3 Samples Provide the Same Answer	=	Moderate

- 2 Samples Provide the Same Answer = Low
 1 Sample Answers = Lowest
- 2) Analysis of all three groups
- 13 - 15 Samples = Highest
 10 - 12 Samples = High
 7 - 9 Samples = Moderate
 4 - 6 Samples = Low
 1 - 3 Samples = Lowest

3.4 Quantitative Research Methodology

3.4.1 Population

Employees of private organizations

3.4.2 Samples

The samples have to be former trainees in in-house training with no less than six hours of training time.

3.4.3 The Number of Samples

The researcher determined the size of the samples. Sixteen manifest or observed variables were determined from the conceptual research framework and then were multiplied by 10-20 times to get the sample size, namely between 160-320 samples for comparing means or analyzing the invariance of the model (Nongluck Wiratchai, 1999). To ensure the increased quality of the research, the researcher increased the number of samples to be 500 samples. However, for the actual data collection, the data from 520 samples were collected.

3.4.4 Research Instrument

For testing research hypotheses, a survey method with the single cross-sectional design was used to collect data from the samples by self-administered questionnaires, comprising 14 parts as following:

Part 1: Personal data of the respondents. Nominal and ordinal scales analyzed the answers to this part. The details of this part are as follows:

1) Sex

Male

Female

2) Age

Younger than 21 Years Old

21 – 30 Years Old

31 – 40 Years Old

41 – 50 Years Old

More Aged than 50 Years Old

3) Highest Education Level

Lower Than A Bachelor's Degree

A Bachelor's Degree

A Master's Degree

A Doctoral Degree

4) Your Position at the Current Working Place

Operation or Practitioner (No Subordinates)

Immediate Supervisor/Manager (Having Subordinates/Chief or Team Leader)

Middle Supervisor/Manager (Having Subordinates/Division Chief or Head)

Top Supervisor/Manager (Having Subordinates/Department or Office Head)

Top Executives (Having Subordinates/Organizational Head)

5) The Number of Attended Training Programs Yearly

Average 1 – 3 Programs Yearly

Average 4 – 6 Programs Yearly

Average 7 – 10 Programs Yearly

Average of More Than Ten Programs Yearly

Part 2: Questions about trainers' communication methods. (More than one answer is possible)

- 1) Speaking: lecture, narration, conversation, questioning, and samples
- 2) Opening an opportunity for trainees to give recommendations or suggestions
- 3) Learning activity
- 4) Case study
- 5) Presentation programs, i.e., PowerPoint, Keynote, etc.
- 6) Workshops and role-plays
- 7) Photos and videos
- 8) Games and recreational activities
- 9) Mobile applications
- 10) Brainstorming
- 11) Demonstration
- 12) Document/Handout
- 13) Field trip

Part 3: Questions 7-10 are questions on trainers' qualifications and the degree of their effect on training effectiveness. 5-point Likert Scale was used with the following criteria:

Highest	= 5 Scores
High	= 4 Scores
Moderate	= 3 Scores
Low	= 2 Scores
Lowest	= 1 Score

Part 4: Questions 11-13 are questions on trainers' experiences and the degree of their effect on training effectiveness. 5-point Likert Scale was used with the following criteria:

Highest	= 5 Scores
High	= 4 Scores
Moderate	= 3 Scores
Low	= 2 Scores
Lowest	= 1 Score

Part 5: Questions 14-16 are questions on trainers' reputation and the degree of its effect on training effectiveness. 5-point Likert Scale was used with the following criteria:

Highest	= 5 Scores
High	= 4 Scores
Moderate	= 3 Scores
Low	= 2 Scores
Lowest	= 1 Score

Part 6: Questions 17-19 are questions on trainers' communication and the degree of its effect on training effectiveness. 5-point Likert Scale was used with the following criteria:

Highest	= 5 Scores
High	= 4 Scores
Moderate	= 3 Scores
Low	= 2 Scores
Lowest	= 1 Score

Part 7: Questions 20-22 are questions on the design of program content and the degree of its effect on training effectiveness. 5-point Likert Scale was used with the following criteria:

Highest	= 5 Scores
High	= 4 Scores
Moderate	= 3 Scores
Low	= 2 Scores
Lowest	= 1 Score

Part 8: Questions 23-25 are questions on training physical environment and the degree of its effect on training effectiveness. 5-point Likert Scale was used with the following criteria:

Highest	= 5 Scores
High	= 4 Scores
Moderate	= 3 Scores
Low	= 2 Scores
Lowest	= 1 Score

Part 9: Questions 26-29 are questions on training social and psychological environment and the degree of its effect on training effectiveness. 5-point Likert Scale was used with the following criteria:

Highest	= 5 Scores
High	= 4 Scores
Moderate	= 3 Scores
Low	= 2 Scores
Lowest	= 1 Score

Part 10: Questions 30-32 are questions on trainees' learning motivation and the degree of its effect on training effectiveness. 5-point Likert Scale was used with the following criteria:

Highest	= 5 Scores
High	= 4 Scores
Moderate	= 3 Scores
Low	= 2 Scores
Lowest	= 1 Score

Part 11: Questions 33-35 are questions on trainees' self-efficacy and the degree of its effect on training effectiveness. 5-point Likert Scale was used with the following criteria:

Highest	= 5 Scores
High	= 4 Scores
Moderate	= 3 Scores
Low	= 2 Scores
Lowest	= 1 Score

Part 12: Questions 36-39 are questions on trainees' perceived valence of outcome and the degree of its effect on training effectiveness. 5-point Likert Scale was used with the following criteria:

Highest	= 5 Scores
High	= 4 Scores
Moderate	= 3 Scores
Low	= 2 Scores
Lowest	= 1 Score

Part 13: Questions 40-46 are questions on trainees' anxiety and the degree of its effect on training effectiveness. 5-point Likert Scale was used with the following criteria:

Highest = 5 Scores
 High = 4 Scores
 Moderate = 3 Scores
 Low = 2 Scores
 Lowest = 1 Score

Part 14: Questions 47-54 are questions on training effectiveness. 5-point Likert Scale was used with the following criteria:

Highest = 5 Scores
 High = 4 Scores
 Moderate = 3 Scores
 Low = 2 Scores
 Lowest = 1 Score

3.4.5 The Interpretation of Scores

The researcher interpreted the meaning of scores by order scale and divided into five levels according to the formula of Mallika Bunnak (1994) as follows:

$$\begin{aligned} \text{Class interval or width of delimiters} &= \frac{\text{highest score} - \text{the lowest score}}{\text{Numbers of class/ layers}} \\ &= \frac{5 - 1}{5} \\ &= 0.80 \end{aligned}$$

From the above calculation by the said formula, the interpretation of scores in part 3-13 or the effect of each variable on training effectiveness was as following:

Average Score 4.21-5.00 = Affect Training Effectiveness at the Highest Level

Average Score 3.41-4.20 = Affect Training Effectiveness at the High Level

Average Score 2.61-3.40 = Affect Training Effectiveness at the Moderate Level

Average Score 1.81-2.60 = Affect Training Effectiveness at the Low Level

Average Score 1.00-1.80 = Affect Training Effectiveness at the Lowest Level

Besides, from the above calculation by the said formula, the interpretation of scores of training effectiveness in part 14 was as follows:

Average Score 4.21-5.00 = Effective at the Highest Level

Average Score 3.41-4.20 = Effective at the High Level

Average Score 2.61-3.40 = Effective at the Moderate Level

Average Score 1.81-2.60 = Effective at the Low Level

Average Score 1.00-1.80 = Effective at the Lowest Level

3.4.6 The Validation of the Questionnaire

1) Indexes of Item-Objective Congruence (IOC). Besides, the content validity and appropriateness of the language of the questionnaire were approved by the experts. The questionnaire was revised and improved following the experts' recommendations to cover research objectives clearly and thoroughly. The questions were approved to have a value of $\geq .05$ (Patchanee Cheyjunya, 2015) The five experts are as follows:

(1) Associate Professor Tiwat Maneechote, Ph.D.

College of Teacher Education

Research Learning Center

Phranakhon Rajabhat University

An expert in quantitative research

(2) Associate Professor Rathaburut Kumsub, Ph.D.

Rector of Suvarnabhumi Institute of Technology

An expert in human resource management

(3) Associate Professor Klahan Na Nan, Ph.D.

Management Science, Business Administration

Rajamangala University of Technology Thanyaburi

An expert in human resource development

(4) Thun Thamrongnawasawat, Ph.D.

Director Iclif Leadership Centre

A trainer and expert in training.

(5) Borwornnant Thongkallaya

Vice President of HRD Mitrphol Group

President of Personnel Management Association of Thailand

An expert in training and training organizations in business organizations.

From the verification of the experts, the congruence index is illustrated in Table 3.1

Table 3.1 The Congruence Index from the Verification of the Experts

Question	Scores given by each expert					Total Scores
	1 = Congruent, 0 = Questionable, -1 = Incongruent					
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	
1 – 5, 7, 10 – 16, 18 – 22, 24 – 30, 32 – 46,	1	1	1	1	1	1
6	1	1	0	1	1	0.80
8	1	1	0	1	1	0.80
9	1	1	1	1	0	0.80
17	1	1	1	1	0	0.80
18	1	1	1	1	1	1
23	1	0	1	1	1	0.80
31	1	1	1	0	1	0.80
47	1	0	1	1	1	0.80
48	1	0	1	1	1	0.80
49	1	0	1	1	1	0.80
50	1	0	1	1	1	0.80
51	1	0	1	1	1	0.80
52	1	0	1	1	1	0.80
53	1	0	1	1	1	0.80
54	1	0	1	1	1	0.80

From Table 3.1, it is found that no question has scores less than 0.50. Accordingly, the questionnaire was proceeded for a further test of reliability.

2) Reliability test of the questionnaire. A pre-test of the verified questionnaire was conducted with a group of 30 people with similar characteristics to the samples to test its reliability by Cronbach's alpha coefficient. IBM SPSS was used for the analysis based on the concept of Nunnally (1978, as cited in Thanut Wongsachue, 2018) as follows: ≥ 0.9 means excellent), ≥ 0.8 means good, ≥ 0.7 means acceptable, ≥ 0.6 means questionable, and ≥ 0.5 acceptable. The findings of the reliability test on the questionnaire are illustrated in Table 3.2

Table 3.2 The Overall Reliability of the Verified Questionnaire Tested by Cronbach's Alpha Coefficient

Variables	Cronbach's Alpha Coefficient
T1 – T5	.662
EN1 – EN3	.506
A1 – A4	.502
EF1 – EF4	.845

3.4.7 Data Collection

The researcher selected the samples from the population with the required qualifications as determined by the study. Research rationale and objectives were explained, and the samples were asked for their convenience in providing information. After accepting to be the samples, the respondents were asked to respond to the questionnaire through a mobile application. The data was collected during October-November 2018.

3.4.8 Data Analysis

1) Descriptive statistics. IBM SPSS was used for analyzing data into percentage, means, and standard deviation for explaining the findings.

2) Inferential statistics. Two instant statistical programs: IBM SPSS and IBM SPSS Amos, were used. Besides, the following criteria were used to interpret the statistical findings:

(1) A correlation coefficient of manifest variables. The IBM SPSS was used in analyzing the correlation value by correlation coefficient to test if the correlation is valued no more than 0.85, according to the concept of Schroeder (1990, p.175), to avoid multicollinearity problems.

(2) Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO). According to (Supamas Ungsuchote et al., 2009), the KMO value is interpreted as follows: KMO value of higher 0.80 means the sampling is the most adequate, between 0.70-0.79 moderately adequate, between 0.50-0.59 minimally adequate, and lower than 0.50 means inadequate sampling for analyzing a component.

(3) Bartlett's test of sphericity. According to Yuth Kaiwan (2013, p.74), if the relationship value is higher than 0.50, it means the relationship has statistical significance, and components can be used for further analysis.

(4) Factor loading in the confirmatory factor analysis (CFA). According to Hair et al., 2006, p. 128), the value of factor loading must be higher than 0.3 to be evaluated as adequate or appropriate. However, the factor loading must also be congruent with the sample size, i.e., the factor loading of 0.30 for 350 samples, 0.35 for 250 samples, 0.40 for 200 samples, 0.45 for 150 samples, 0.50 for 120 samples, 0.55 for 100 samples, 0.60 for 85 samples, 0.65 for 70 samples, 0.70 for 60 samples, and 0.75 for 50 samples. If the factor loading is lower than 0.30, the researcher should cut the factor off.

(5) Model fit. According to Yuth Kaiwan (2013), the fit of the model to the data should comprise the following values: Chi-square/df of less than 3.00, GFI of higher than 0.95, AGFI of higher than 0.90, CFI of higher than 0.97, IFI of higher than 0.95, NFI of higher than 0.95, RMSEA of less than 0.05, and RMR of less than 0.05

CHAPTER 4

RESEARCH FINDINGS

The objectives of this study are 1) to study communication methods of professional trainers in organizing training, 2) to research communication factors during the training that affect training effectiveness of business organizations, and 3) to test the congruence between the developed structural equation model of manifest factors, namely, qualifications and competence of professional trainers, training environmental management, trainees, and the effectiveness of training, and empirical data. Correspondingly, the research questions are: 1) How do professional trainers apply communication methods in their training? 2) What are communication factors in training that affect the effectiveness of business training organizations, and 3) is the structural equation model of manifest factors, i.e., the qualifications and competency of professional trainers, environment management for training, trainees, and the effectiveness of training, developed from the study, congruent with the empirical data? The mixed methods of both qualitative and quantitative research were used. Qualitative methods were conducted to answer the objective no. 1) and 2, while quantitative methods to the objective no. 3) The findings of the research are presented as follows:

4.1 Findings of the Qualitative Rnearch

Qualitative methods were for responding to the research objectives, namely, to study communication methods of professional trainers in organizing training, and to study communication factors during the training that affect the effectiveness of business training organizations. The findings of the qualitative research are as follows:

4.1.1 Communication Methods of Professional Trainers Used in Organizing Training

1) From Professional Trainers. (Totally Five Trainers)

Speaking methods (i.e., lecture, coaching, narration, conversation, and questioning for stimulating trainees' thought), presentation by PowerPoint program, and allowing trainees to express their ideas and suggestions are used the most (5 responses). Video is moderately used (3 responses), case studies are used at a low level (2 responses), and games are the least used communication methods in training. (1 response)

2) From Training Organizers. (Totally Five Organizations)

Speaking methods (i.e., lecture, coaching, narration, conversation, and questioning for stimulating trainees' thought), and allowing trainees to express their ideas and suggestions are used at the highest level (5 responses). Learning activities are used at a high level (4 responses), video, workshops, role-plays, case studies, games, and recreation activities at a moderate level (3 responses), brainstorming, document, and other kinds of media at the lowest level in training. (1 response)

3) From the Point of View of Executives of Private Organizations in the Area of Human Resource Development. (Totally Five Executives)

Speaking methods (i.e. lecture, teaching, narration, conversation, and questioning for stimulating trainees' thought) are used at the highest level (5 responses). Workshops and role-plays are used at a high level (4 responses), learning activities and group activities are used at the moderate level (3 responses), allowing trainees to express their idea and suggestions, case studies, brainstorming, mobile application, are used at a low level (2 responses). In contrast, images/videos, demonstration, and field trips are used at the lowest level of training. (1 response)

From the responses of all three groups or 15 respondents, it can be concluded that speaking methods (i.e. lecture, coaching, narration, conversation, and questioning for stimulating trainees' thought) are used at the highest level (15 respondents); allowing trainees to express their idea and suggestions at a high level (12 respondents); learning activities at a moderate level (9 respondents); case studies, PowerPoint presentation, workshops, and role-plays at a low level (6 responses); images/videos at a low level (5 respondents); games and recreational activities at the

low level (4 respondents); mobile applications and brainstorming at the lowest level (3 respondents); and demonstration, document, and field trip at the lowest level (1 respondent).

4.1.2 Communication Factors Affecting Training Effectiveness

1) From Professional Trainers (Totally Five Trainers)

Qualifications and competence of professional trainers. Professional trainers perceived “experience”, “qualifications”, “reputation”, and “trainers’ training content” are the communication factors during training that affect training effectiveness the most. (5 responses) Experience comprises of experience needed in a training program and experience of being a trainer. Qualifications mean the qualifications relating to education and working experience that suits the training content and suitable for trainees, including accredited certificates, and actual knowledge and skills. Trainers’ reputation means acceptable reputation, or fame from trainers’ performance as trainers and other publicized work, i.e., articles, interview, distinguished and unique reputation, ethics, personality, friendliness, punctuality, etc. As for teaching content, it composes of a program’s content responding to needed objectives and desired consequences at both organizational and individual levels. The material has to be appropriate for each particular situation and enables trainees to learn and apply it in actual work. Trainers’ communication (i.e., message transmission, and ability to encourage trainees to participate, and ability in answering questions) are communication factors perceived as affecting training effectiveness at the low level. (2 responses).

Training environmental management factors. Physical environment (i.e., place, such as training rooms distant from working sites, convenient for travel, without nuisance, and equipped with training facilities: microphone, flipchart, projector, light, and temperature, is perceived as influential communication factor towards training effectiveness at the highest level (5 responses).

On the other hand, social and psychological environment (comprising learning climate, i.e., a feeling of safety, enjoyment, informality, respect towards one another, and seating) are perceived as the communication factor during training that affects the training effectiveness at the moderate level (3 responses)

Internal factors of trainees. Trainees' learning motivation (comprising learning willingness, determination, cooperation, and attitude towards training) and trainees' anxiety (composing of anxiety towards workload, training objectives and benefits, organization's expectation, superiors' expectation, training effectiveness evaluation, and training climate) are perceived as communication factors affecting training effectiveness at the highest level (5 responses). Trainees' perceived valence of outcome (comprising awareness, acknowledgment of training objectives and benefits, acknowledgment of the organization's and superiors' expectations are perceived as communication factors that affect training effectiveness at the low level (2 responses). On the other hand, trainees' perceived self-efficacy (or the belief that everything can be learned) is perceived as the communication factor affecting training effectiveness at the lowest level (1 response).

1) From Training Organizers (Totally Five Organizations)

Professional trainers' qualifications and competence. Trainers' experience, reputation, and teaching content are perceived as communication factors affecting training effectiveness at the highest level (5 responses). Experience means knowledge and expertise in training performance, training experience of over five years, working experience in well-known organizations, experiences in strategic operation or participation and in implementation into action plans, projects, or activities that can bring about changes or that can help to develop organizations or personnel concretely, and direct experience in the assigned training programs, including expertise and other relevant experiences that have been learned, screened, accumulated, and practiced towards higher expertise. Trainers' reputation means credibility resulting from continual good training performance that reflects duties as trainers in acceptable organizations or the training circle, including their responsibility, professional, ethical codes of conduct, proper manner, friendliness, and good image in a society. Teaching or program content comprises the content of the program that responds to desired objectives and outcomes at both the organizational and individual levels. The content must enable trainees to learn and adapt for actual use (but not necessarily 100%). The content must not be too difficult nor complicated, or be suitable for trainees, and be attractive. On the other hand, trainers' communication and qualifications are perceived as communication factors affecting training effectiveness at the high level (4 responses).

Trainers' communication means a variety of communication methods that can stimulate trainees to participate in training, in paying attention to the training content. The methods used must be attractive, amusing, and worth pursuing. It also includes an ability to answer questions, and in communicating appropriately to trainees. Trainers must have the ability to give concrete samples to support their content, be flexible in running a program but be committed to the agreed outcome. They should have the ability to connect knowledge and experience with the current situations, and in transmitting knowledge, skills, and expertise understandably. Regarding trainers' qualifications, trainers must understand their training programs genuinely. They must be qualified or certified in the related area, and graduate from accredited institutes. Trainers need to learn and develop themselves continually towards higher expertise with higher acceptance. They can learn from their lessons and gain broader perspectives from the success or failure of organizational and personnel development. They can use both science and arts to respond to the needed goals, objectives, and outcomes of training, namely good things and quality for customers.

Training environmental management factors. Training physical environment is perceived as communication factors affecting training effectiveness at the highest level (5 responses) while social and psychological factors at the low level (2 responses). Training physical environment comprises places, i.e., training rooms must be private, convenient for travel, without disturbance, and have proper sizes concerning the number of trainees and training content. It also includes proper seating, and clean rooms, including the readiness of training facilities, i.e., microphone, sound system, flipchart, projector, paper, light, temperature, and awards. As for the social and psychological environment, it means learning climate (i.e., no interruption in case of urgency, no interference, proper coordination among those concerned, and good relations between HRD personnel and trainees).

Trainees' Factors. Trainees' factors are trainees' learning motivation and anxiety, which are perceived as communication factors affecting training effectiveness at the highest level (5 responses), while trainees' perceived valence of the outcome at a moderate level (3 responses) and trainees' self-efficacy at a low level. Trainees' learning motivation means their curiosity to learn, openness, and participation in training, including physical and psychological readiness for learning.

Trainees' anxiety composes of anxiety towards the evaluation of training effectiveness that might affect their yearly work performance, bonus, promotion, and raises, etc.; anxiety towards workload and their responsibility in transferring what they learn to others, anxiety towards training objectives and benefits, anxiety towards training climate, anxiety towards their reactions to others (i.e., being questioned, presenting to others, telling a true story, etc.), anxiety towards their training organization (i.e., their stress in performing a role of a trainer), and anxiety towards returning home after the completion of a training program. For perceived valence of the outcome, it means expectation towards the benefits of training and the application of knowledge gained from training for actual work. Finally, trainees' self-efficacy comprises trainees' perception of the benefits of training for developing themselves and their knowledge, learning potential, and experience in comparison with other trainees.

2) From Executives of Private Organizations in the Area of Human Resource Development. (Totally Five Executives)

Professional trainers' qualifications and competence. Trainers' experience is perceived as a communication factor affecting training effectiveness at the highest level (5 responses), trainers' qualifications at a high level (4 responses), trainers' reputation, and communication at a moderate level (3 responses). Trainers' experience composes of training experience for customers with the same or similar business, experience in working for a large-sized and multinational organization, a variety kinds of business training and a number of various organizations, experience working with other trainers of different styles, direct experience with the assigned training program, experience in working in such positions or industries. Experience of being a consultant and trainer. For trainers' qualifications, trainers are expected to graduate from a master's degree at least, have strength in the assigned area, have profound knowledge in certain areas, be knowledgeable, expert, and have symmetrical relations with trainees. Trainers' reputation comprises reputation from a recommendation of someone in the field of human resource development. Trainers must be acceptable, do not involve in any illegal or immoral matters, have good governance, and be politically neutral. For trainers' communication, it is expected that trainers can choose words and apply all kinds of communication methods and styles,

including teaching media and samples, appropriate for corporate culture. They should have the ability to adjust appropriate communication styles and communication tempo for trainees towards their learning and ability to extend their knowledge. Trainers should use English as a communication language while being able to communicate amusingly and interestingly. Trainers should have the ability to raise questions while being able to answer questions, especially those complicated and difficult ones, to make them understandable. Trainers should have a co-facilitator for assisting trainees who cannot catch up with the group or for helping trainers with several group activities simultaneously. Regarding training content, all respondents perceive that training programs must go along with the actual operation of organizations, with trainees, and with the direction, strategy, and value of the organizations while complying with legal determinations. Training programs must be adaptable, attractive, and congruent with the knowledge and skills an organization requires. The content needs to help develop trainees' knowledge, skills, and behaviors, both directly and indirectly. In short, the training content must be appropriate for trainees.

The training environmental management factors. The physical environment is perceived as a communication factor affecting training effectiveness at the highest level (5 responses) while social and psychological environment at a high level (5 responses). The physical environment consists of training rooms that are convenient for travel, are designed for learning reinforcement, and relevant to the program content. The training rooms must have proper light, have no undesirable smell, be equipped well with facilities ready to be used: light, amplifier, chairs, no noise, proper temperature, and have quality food served. Regarding the social and psychological environment, it consists of a separate training room from a regular working place of trainees and superiors should not interfere with training with their work. Training rooms should be appropriate for the group size of trainees, i.e., comprehensive enough for the number of trainees and suitable for the positional level of trainees. Besides, there should be staff responsible for facilitation in case help is needed.

Trainees' factors. Trainees' learning motivation and anxiety are perceived as communication factors affecting training effectiveness at the highest level (5 responses) while trainees' self-efficacy at a high level (4 responses) and

perceived valence of the outcome at a low level (2 responses). Trainees' learning motivation means trainees' full participation in training and in all activities, their openness in learning and in listening others' opinions and beliefs different from theirs. Trainees must have determination, willingness, and needs to attend training. Trainees must manage their work promptly without disturbing others during training. They have to be on time and are physically ready. Trainees' anxiety is anxiety towards training content (i.e., too academic or too difficult to apply in daily work, or so general that trainees cannot see the connection between training exercises and real situation), It also includes anxiety towards superiors' expectation (i.e., superiors expect some changes on trainees in limited time, or expect them to submit an assignment on time, etc.), anxiety towards work performance (i.e., training takes too much time, more projects are assigned after the completion of training, etc.), anxiety towards training evaluation (i.e., the application of gained knowledge, the benefits gained from training, and anxiety towards themselves (i.e., the effect on their salary or promotion). As for perceived self-efficacy, trainees must plan how to apply the knowledge for actual work. Trainees should not have too significant differences in their primary education and learning. Trainees should know their strengths and weakness. Besides, trainees should be qualified and screened by organizational policies. On the other hand, the perceived valence of outcome means trainees should know the objectives of training and the necessity of their ability to apply knowledge and skills of each program.

From the responses of all three groups or 15 respondents, it can be concluded that trainers' experience, qualifications, reputation, design of training content, and physical environmental management, including trainees' learning motivation and anxiety, are perceived by 13-15 respondents as communication factors affecting training effectiveness at the highest level. In contrast, trainers' communication, social and psychological environment management, perceived self-efficacy, and perceived valence of outcome are perceived at a moderate level (7-9 respondents).

4.1.3 Other Findings Besides Research Objectives and Research

Hypotheses

From this study, the evaluation method for evaluating the effectiveness of business organizations' training, which might be beneficial for a future training organization, was found as follows:

1) From Professional Trainers. (Totally Five Trainers)

The evaluation of trainees' knowledge before and after training is found to be used the most by business organizations (5 respondents) while the assessment of trainees' behaviors after training and the evaluation of training outcomes on trainees' work performance are used at the high level (4 respondents). On the other hand, the assessment of trainees' feedback or responses after training is used at a moderate level (3 respondents)

2) From Training Organizers. (Totally Five Organizations)

It is found that the evaluation of trainees' feedback or responses after training and the assessment of outcome on work performance of trainees are used at a high level (4 respondents). On the other hand, the evaluation of trainees' knowledge before and after training and to inquire about information from the human resource development office are used at a moderate level (3 respondents). Regarding the evaluation of trainees' behaviors after training, it is the evaluation method used at a low level (2 respondents).

3) From Executives of Private Organizations in the Area of Human Resource Development.

The evaluation of trainees' behavior after training is used at the high level (4 respondents), the evaluation of trainees' feedback or responses after training at the moderate level (3 respondents), the evaluation of trainees' knowledge before and after training and the assessment of outcome on trainees' work performance at the low level. (2 respondents). However, to inquire about information from trainees' superiors is used at the lowest level (1 respondent).

The methods for evaluating the training effectiveness are illustrated in Table 4.1

Table 4.1 A Summary of the Methods for Evaluating the Training Effectiveness of Business Organizations of All Sample Groups

No	The Methods for Evaluating Training Effectiveness of Business Organizations	The Number of Respondents			Total
		Professional Trainers	Training Organizers	HRD Executives of Private Organizations	
1	Trainees' feedback or response after training	3	4	3	10
2	Trainees' knowledge before and after training	5	3	2	10
3	Trainees' behaviors after training	4	2	4	10
4	The outcome of trainees' work performance	4	2	2	8
5	Information inquiry from HRD offices of organizational clients	-	3	-	3
6	Information inquiry from trainees' superiors	-	-	1	1

The details of each method of training effectiveness evaluation of business organizations are as follow:

- 1) The assessment of trainees' feedback or response is conducted by questionnaires to evaluate trainees' satisfaction at the end of training, based on factors related to training organization, i.e., content, trainers, place, and coordination, etc.
- 2) The evaluation of trainees' knowledge is conducted twice: before and after training, by comparing the knowledge of both times.
- 3) The evaluation of trainees' behaviors after training, i.e., observing trainees' actions, inquiring trainees' surrounding people.
- 4) The evaluation of the outcome on trainees' work performance. At least 45 days after training, trainees' work performance is evaluated as jointly agreed between trainers and organizational clients, i.e., the needed outcome may be evaluated in the form of monetary or non-monetary results.

5) The information inquiry from human resource development offices. It is the method to evaluate the satisfaction with the overall training organization after training, which is similar to the evaluation of trainees' feedback or responses.

6) The information inquiry from trainees' superiors. This method is conducted by inquiring trainee's superiors about trainees' changes after training, i.e., knowledge, behaviors, and work performance, etc.

4.2 Findings of the Quantitative Research

4.2.1 Symbols Used to Represent the Statistical Values, Variables, and the Meanings of Symbols

For presenting the analyzed data, some symbols are used to represent the statistical values and variables, including the meanings of symbols for common understanding, as illustrated in Table 4.2

Table 4.2 Statistical Symbols and Their Meanings

Symbol	Meaning
r	Pearson Product Moment Correlation Coefficient
df	Degree of Freedom
P	Statistical Significance Level
S.E.	Standard Error
C.R.	Critical Ratio
CFI	Comparative Fit Index
GFI	Goodness of Fit Index
AGFI	Adjusted Goodness of Fit Index
IFI	Incremental Fit Index
NFI	Normed Fit Index
RMSEA	Root Mean Square Error of Approximation
SRMR	Standardized Root Mean Square Residual
Trainer	Qualification and Competence of Professional Trainers
Management	Management During Training

Symbol	Meaning
Trainee	Trainee
Effective	Training Effectiveness
T1	A Professional Trainer's Qualification
T2	A Professional Trainer's Experience
T3	A Professional Trainer's Reputation
T4	A Professional Trainer's Communication
T5	A Professional Trainer's Design of Training Content
EN1	Training Physical Environment Management
EN2	Training Social Environment Management
EN3	Training Psychological Environment Management
A1	A Trainee's Learning Motivation
A2	A Trainee's Perceived Self-Efficacy
A3	A Trainee's Perceived Valence of Outcome
A4	A Trainee's Anxiety During Training
EF1	Satisfaction
EF2	Knowledge Acquisition
EF3	Improved Behaviors and Action
EF4	Improved Work Performance

4.2.2 General Information of the Questionnaire Respondents

From statistical analysis, general information of the questionnaire respondents is presented in Table 4.3

Table 4.3 General Information of the Questionnaire Respondents

General Information	Frequency	Percentage
Sex		
Male	242	46.53
Female	278	53.46
Total	520	100.00

General Information	Frequency	Percentage
Age (Years Old)		
Younger than 21	1	0.19
21 – 30	106	20.38
31 – 40	262	50.38
41 – 50	126	24.23
Older than 50	25	4.80
Total	520	100.00
Education Level		
Lower than a bachelor's degree	112	21.53
A bachelor's degree	303	58.26
A master's degree	103	19.80
A doctoral degree	2	0.38
Total	520	100.00
Position in the Organization		
Operational (No Subordinate)	173	33.26
Immediate Supervisor (Have Subordinates/ Team Leader or Chief)	178	34.23
Middle Supervisor (Have Subordinates/ Department Head or Division Chief)	135	25.96
Top Supervisor (Have Subordinates/ Management Group or Functional Manager)	29	5.57
Top Executive (Have Subordinate/ Organizational Director)	5	0.96
Total	520	100
Average Numbers of Training Programs Attending Per Year		
1 – 3	400	76.92
4 – 6	99	19.03
7 – 10	13	2.50
More than 10	7	1.34
Total	520	100

From Table 4.3, it is found that there are 520 questionnaire respondents with the following details:

Sex: Most respondents or 278 respondents are female (53.46%), and 242 are male (46.53%).

Age: Most respondents or 262 respondents are 31-40 years old (50.38%), followed by 41-50 years old (126 respondents or 24.23%), 21-30 years old (106 respondents or 20.38%), more aged than 50 years old (25 respondents or 4.80%), and younger than 21 years old (1 respondent or 0.19%) respectively.

Education level: Most respondents or 303 respondents graduated with a bachelor's degree (58.26%), followed by lower than a bachelor's degree (112 respondents or 21.53%), a master's degree (103 respondents or 19.80%), and a doctoral degree (2 respondents or 0.38%) respectively.

Positions in the organization: Most respondents or 178 respondents are immediate supervisors or team chiefs with subordinates (34.23%), followed by operational staffs without subordinates (173 respondents or 33.26%), middle supervisor or department or division head with subordinates (135 respondents or 25.96%), top supervisors or management/ functional managers with subordinates (29 respondents or 5.57%), and top executives or organizational directors (5 respondents or 0.96%) respectively.

Average numbers of yearly attending training programs: Most respondents or 400 respondents attended averagely 1-3 training programs per year (76.92%), followed by 4-6 programs (99 respondents or 19.03%), 7-10 programs (13 respondents or 2.50%), and more than ten programs per year (7 respondents or 1.34%) respectively.

4.2.3 Professional Trainers' Communication Methods in Organizing Training

Communication methods used by professional trainers in organizing training are reported and presented in Table 4.4.

Table 4.4 Communication Methods Used by Professional Trainers

Professional Trainers' Communication Methods	Frequency	Percentage
Speaking methods: lecture, coaching, narration, conversation, questioning, giving examples	480	92.49
allowing trainees to express their idea and suggestions	411	79.19
Learning activities	279	53.76
Case studies	205	39.50
Presentation programs, i.e., PowerPoint, Keynote, etc.	275	52.99
Workshops and role-plays	235	45.28
Images/ videos	256	49.33
Games and recreational activities	350	67.44
Mobile applications	177	34.10
Brainstorming	323	62.24
Demonstration	212	40.85
Document/paper	275	52.99
Field trips	44	8.48

Note: More than 1 answer is applicable

From Table 4.4, most respondents or 480 respondents report that professional trainers use speaking (i.e. lecture, coaching, narration, conversation, questioning, and giving examples) as communication methods in organizing training the most (92.49%), followed by giving an opportunity for trainees to express their idea and suggestions (411 respondents or 79.19%), games and recreational activities (350 respondents or 67.44%), brainstorming (323 respondents or 62.24%), learning activities (279 respondents or 53.76%), presentation programs, i.e. PowerPoint, Keynote, etc., and document/paper (275 respondents or 52.99 equally), image/videos (256 respondents or 49.33%), workshops and role-plays (235 respondents or 45.28%), demonstration (212 respondents or 40.85%), case studies (205 respondents or 39.50%), mobile applications (177 respondents or 34.10%), and field trips (44 respondents or 8.48%) respectively.

4.2.4 Opinions on Communication Factors Affecting the Training Effectiveness of Business Organizations

The researcher determines the following variables as manifest variables: professional trainers' qualifications, professional trainers' experience, professional trainers' reputation, professional trainers' communication, professional trainers' design of training or program content, training physical environmental management, training social environmental management, training psychological environmental management, trainees' learning motivation, trainees' perceived self-efficacy, trainees' perceived valence of training outcome, trainees' anxiety, trainees' satisfaction, trainees' knowledge acquisition, trainees' developed behaviors and action, and trainees' bettered work performance. From analyzing mean and standard deviation of all manifest variables, the findings are presented in Table 4.5.

Table 4.5 Mean and Standard Deviation of All Manifest Variables

Symbol	Manifest Variable	Mean (\bar{x})	Standard Deviation (S.D)
T1	Professional trainers' qualifications	4.50	.473
T2	Professional trainers' experience	4.67	.406
T3	Professional trainers' reputation	4.35	.529
T4	Professional trainers' communication	4.76	.333
T5	Professional trainers' design of training or program content	4.74	.372
EN1	Training physical environmental management	4.51	.473
EN2	Training social environmental management	4.60	.465
EN3	Training psychological environmental management	4.67	.426

Symbol	Manifest Variable	Mean (\bar{x})	Standard Deviation (S.D)
A1	Trainees' learning motivation	4.75	.362
A2	Trainees' perceived self-efficacy	4.73	.377
A3	Trainees' perceived valence of training outcome.	4.69	.397
A4	Trainees' anxiety	3.97	.672
EF1	Satisfaction	4.60	.518
EF2	Knowledge acquisition	4.66	.497
EF3	Developed behaviors and action	4.58	.638
EF4	Bettered work performance	4.59	.608

From Table 4.5, most respondents perceive all trainers' variables as communication factors affecting training effectiveness at the highest level with the following mean and standard deviation: professional trainers' communication ($\bar{x}=4.76/.333$), followed by professional trainers' design of training content ($\bar{x}=4.74/.372$), professional trainers' experience ($\bar{x}=4.67/.406$), professional trainers' qualifications ($\bar{x}=4.50/.473$), and professional trainers' reputation ($\bar{x}=4.35/.529$) respectively.

Regarding environmental management, most respondents perceive training psychological environmental management as a communication factor affecting training effectiveness the most ($\bar{x}=4.67/.426$), followed by training social environmental management ($\bar{x}=4.60/.465$), and training physical environmental management ($\bar{x}=4.51/.473$) respectively. All these variables are perceived as communication factors affecting training effectiveness at the highest level.

As for trainees' internal variables, most respondents perceive trainees' learning motivation as a communication factor affecting training effectiveness the most ($\bar{x}=4.75/.362$), followed by trainees' perceived self-efficacy ($\bar{x}=4.73/.377$), trainees' perceived valence of training outcome ($\bar{x}=4.69/.379$), and trainees' anxiety

(\bar{x} = 3.97/.672) respectively. The effect of all variables on training effectiveness is perceived at the highest level, except trainees' anxiety at a high level.

For the outcome gained from training, most respondents perceive all training outcomes at the highest level with the following mean and standard deviation: knowledge acquisition (\bar{x} =4.66/.497), satisfaction (\bar{x} =4.60/.518), bettered work performance (\bar{x} =4.59/.608), developed behaviors and action (\bar{x} =4.58/.638), respectively.

4.2.5 Correlation Coefficient of Manifest Variables

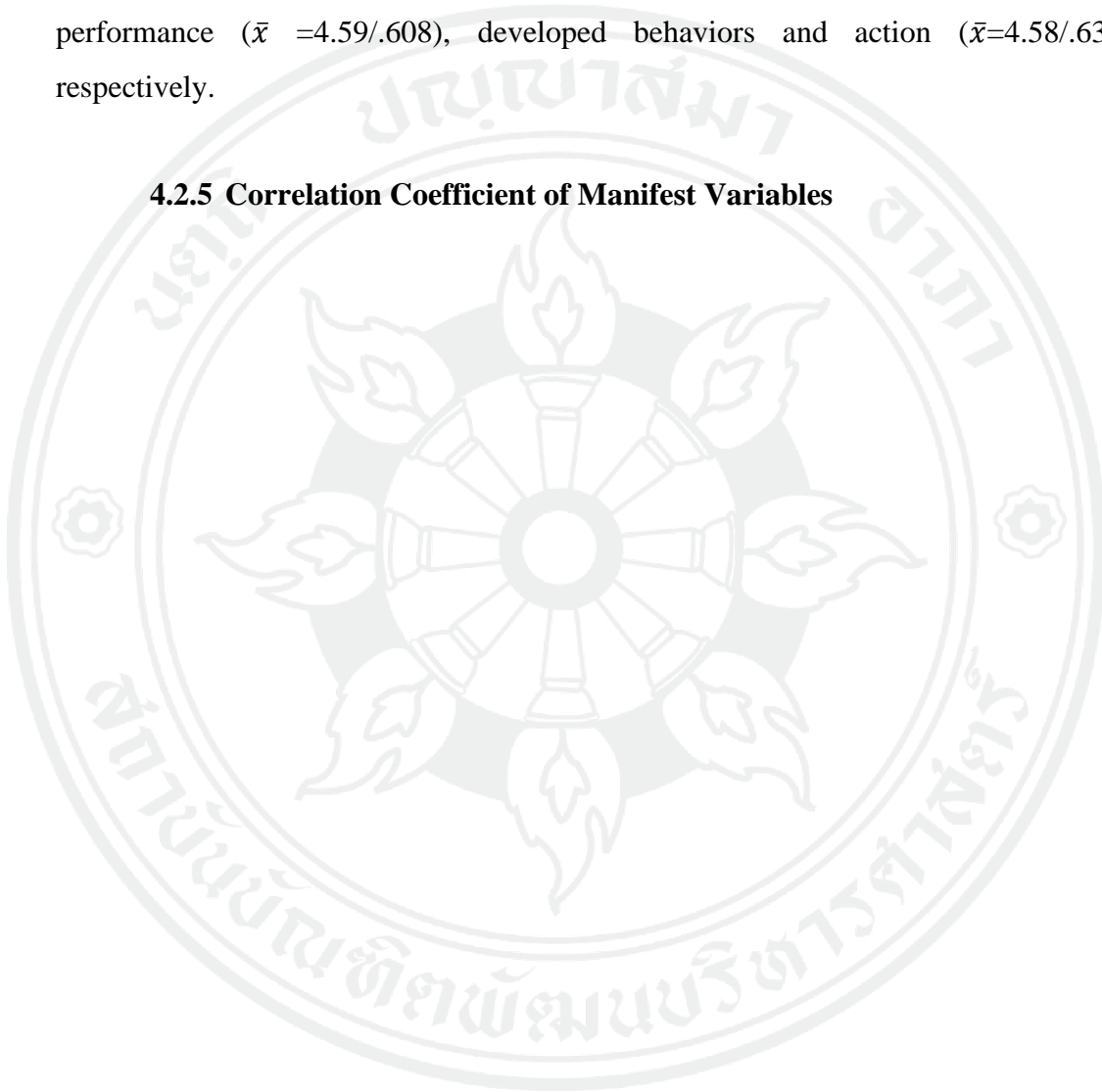


Table 4.6 Correlation Coefficients of Manifest Variables

	T1	T2	T3	T4	T5	EN1	EN2	EN3	A1	A2	A3	A4	EF1	EF2	EF3	EF4
T1	1															
T2	.398**	1														
T3	.439**	.378**	1													
T4	.305**	.340**	.329**	1												
T5	.211**	.338**	.171**	.488**	1											
EN1	.278**	.219**	.217**	.372**	.363**	1										
EN2	.234**	.232**	.296**	.407**	.370**	.517**	1									
EN3	.237**	.293**	.258**	.420**	.384**	.388**	.553**	1								
A1	.186**	.243**	.185**	.418**	.441**	.339**	.318**	.425**	1							
A2	.198**	.314**	.177**	.390**	.439**	.297**	.306**	.337**	.474**	1						
A3	.246**	.252**	.199**	.358**	.398**	.263**	.265**	.323**	.476**	.469**	1					
A4	.197**	.104*	.146**	.157**	.183**	.239**	.219**	.151**	.192**	.110*	.234**	1				
EF1	.259**	.231**	.151**	.310**	.302**	.241**	.219**	.261**	.351**	.411**	.331**	.107*	1			
EF2	.230**	.272**	.160**	.289**	.300**	.203**	.259**	.281**	.389**	.400**	.372**	.036	.646**	1		
EF3	.217**	.228**	.140**	.268**	.231**	.167**	.157**	.238**	.355**	.354**	.330**	.106*	.515**	.578**	1	
EF4	.217**	.187**	.117**	.254**	.242**	.171**	.175**	.189**	.316**	.369**	.365**	.078	.544**	.607**	.636**	1

Note: *p<0.05, **p<0.01

From testing the above correlation coefficients to find if there will be any problem caused by multicollinearity, it is found that most of the manifest variables have positive correlations with the relationship size between .036-.646 at the 0.01 and 0.05 statistical significance level. Besides, from analyzing the correlation between the manifest variables, it is found that the manifest variables that are correlated the most are knowledge acquisition (EF2) and developed behaviors and action (EF3) with $r = .646$, while those that are correlated the least are trainees' anxiety (A4) and knowledge acquisition (EF2) with $r = -.036$. However, it is found that the overall correlation of all pairs of manifest variables is less than 0.70. It illustrates that all manifest variables do not have too high correlation level or multicollinearity problems; thus, all manifest variables can be accepted as the common components. Thus, the correlation coefficient value is appropriate.

4.2.6 KMO and Bartlett's Test of Sphericity

From the test of the appropriateness of data by KMO and Bartlett's test of sphericity, the results are displayed in Table 4.7

Table 4.7 The Value of KMO and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.892
Bartlett's Test of Sphericity	Approx. Chi-Square	2855.419
	Df	120
	Sig.	0.000

From Table 4.7, it is found that the value of Bartlett's test of sphericity = 2855.419, $df = 120$, and $p = .000$. It indicates that the correlation coefficient matrix is not an identity matrix at the 0.01 statistical significance level. At the same time, the value of Kaiser-Mayer-Olkin Measure of Sampling Adequacy or KMO = .892, or close to 1, which indicates that the data is appropriate.

4.2.7 Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis is conducted to analyze the measurement model of the latent variable no. 1, namely professional trainers' qualifications and competence, which comprises 5 manifest variables: professional trainers' qualifications, experience, reputation, communication, and design of training or program content. The latent variable no. 2, namely training environmental management, which comprises three manifest variables: training physical, social, and psychological environmental management. The latent variable no. 3, namely trainees, which comprise four manifest variables: trainees' learning motivation, perceived self-efficacy, the perceived valence of training outcome, and anxiety. The latent variable no. 4, namely training effectiveness, which comprises 4 manifest variables: satisfaction, knowledge acquisition, developed behaviors and action, and improved work performance. The findings of the analysis of all latent variables are as follows:

1) Professional Trainers' Qualifications and Competence

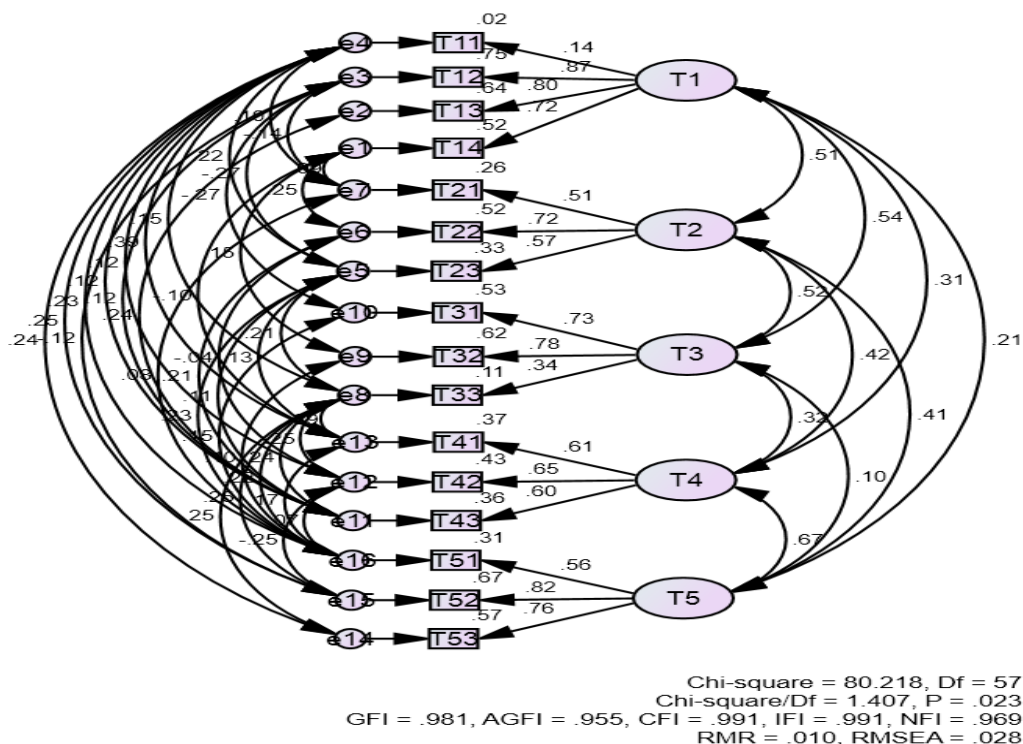


Figure 4.1 The Analysis of Exploratory Factor Analysis of the Latent Variable (Professional Trainers' Qualifications and Competence)

From Figure 4.1, it is found that factor loading of manifest variables: professional trainers' qualification (T1) = .14-.87, professional trainers' experience (T2) = .51-.72, professional trainers' reputation (T3) = .34-.78, professional trainers' communication (T4) = .60-.65, and professional trainers' design of training or program content (T5) = .56-.82. From the analysis, T11 is found to have factor loading with value of lower than 0.30, thus T11 is cut off.

Besides, it is found that the measurement model has the following model fit indices: Chi-square/df = 1.407 (< 3.00), GFI = .981 (> .95), AGFI = .955 (> 0.90), CFI = .991 (> 0.97), IFI = .991 (> 0.95), NFI = .969 (> 0.95), RMSEA = .028 (< .05), and RMR = .010 (< 0.05).

2) Training Environmental Management

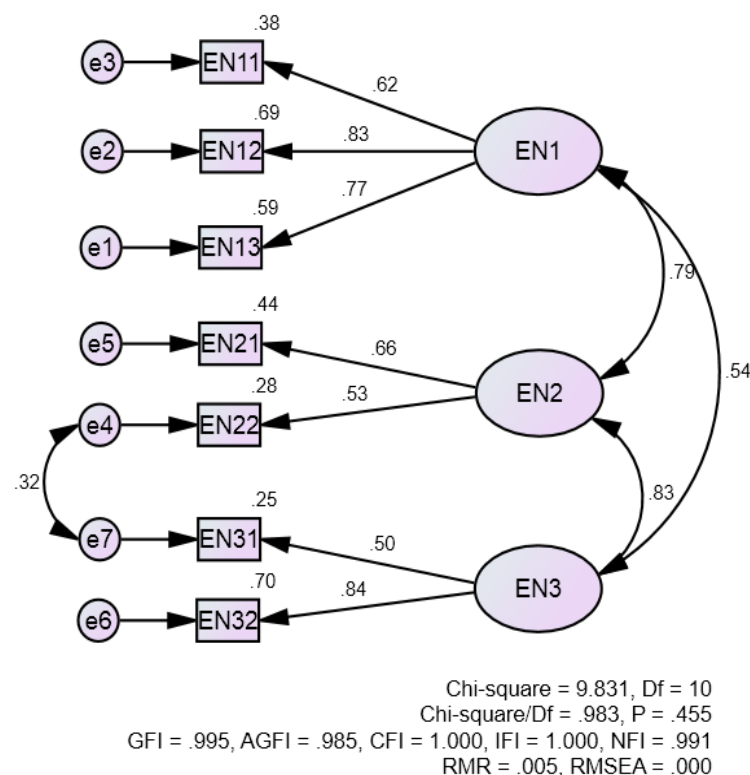


Figure 4.2 The Exploratory Factor Analysis of the Latent Variable (Training Environmental Management)

From Figure 4.2, it is found that the factor loading of manifest variables of training environmental management is as follows: training physical environmental management (EN1) = .62-.83, training social environmental management (EN2) =

.53-.66, and training psychological environmental management (EN3) = .50-.84. No index is cut off as the factor loading of all variables is higher than 0.30.

Besides, it is found that the measurement model has the following model fit indices: Chi-square/df = .983 (< 3.00), GFI = .995 (> .95), AGFI = .985 (> 0.90), CFI = 1.000 (> 0.97), IFI = 1.000 (> 0.95), NFI = .991 (> 0.95), RMSEA = .000 (< .05), and RMR = .005 (< 0.05).

3) Trainees

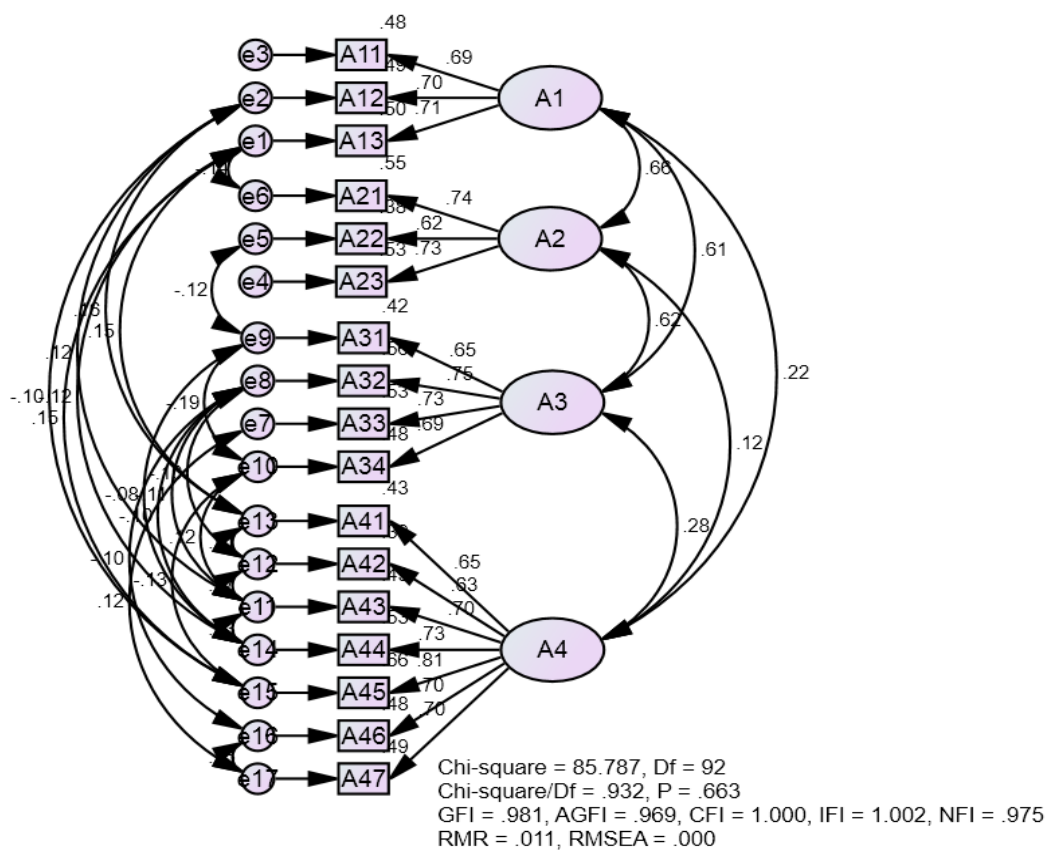
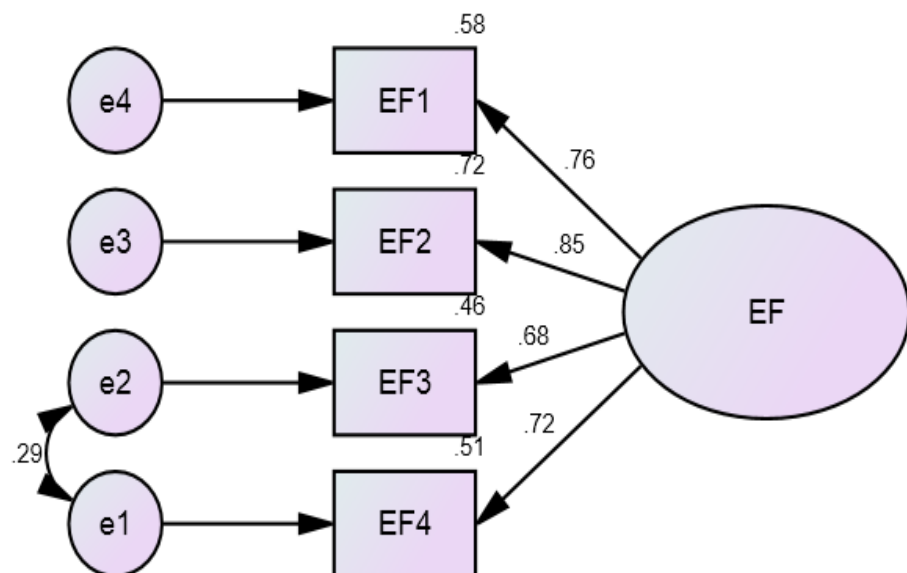


Figure 4.3 The Exploratory Factor Analysis of the Latent Variable (Trainees)

From Figure 4.3, it is found that the factor loading of manifest variables of trainees is as follows: trainees' learning motivation (A1) = .69-.71, perceived self-efficacy (A2) = .62-.74, perceived valence of training outcome (A3) = .65-.75, and anxiety (A4) = .63-.81. No index is cut off as the factor loading of all variables is higher than 0.30.

Besides, it is found that the measurement model has the following model fit indices: Chi-square/df = .932 (< 3.00), GFI = .981 (> .95), AGFI = .969 (> 0.90), CFI = 1.000 (> 0.97), IFI = 1.002 (> 0.95), NFI = .975 (> 0.95), RMSEA = .000 (< .05), and RMR = .011 (< 0.05).



Chi-square = .013, Df = 1
 Chi-square/Df = .013, P = .909
 GFI = 1.000, AGFI = 1.000, CFI = 1.000, IFI = 1.001, NFI = 1.000
 RMR = .000, RMSEA = .000

Figure 4.4 The Exploratory Factor Analysis of the Latent Variable (Training Effectiveness)

4) Training Effectiveness

From Figure 4.4, it is found that the factor loading of manifest variables of training effectiveness is as follows: Satisfaction (EF1) = .76, knowledge acquisition (EF2) = .85, developed behaviors and action (EF3) = .68, and improved work performance (EF4) = .72. No index is cut off as the factor loading of all variables is higher than 0.30.

Besides, it is found that the measurement model has the following model fit indices: Chi-square/df = .013 (< 3.00), GFI = 1.000 (> .95), AGFI = 1.000 (> 0.90), CFI = 1.000 (> 0.97), IFI = 1.001 (> 0.95), NFI = 1.000 (> 0.95), RMSEA = .000 (< .05), and RMR = .000 (< 0.05).

4.2.8 The Analysis of Structural Equation Model

From the exploratory factor analysis, it is found that all latent variables have an appropriate measurement model; thus, the structural equation model is further analyzed. The finding is as follows:

1) The Structural Equation Model (Before Being Adjusted)

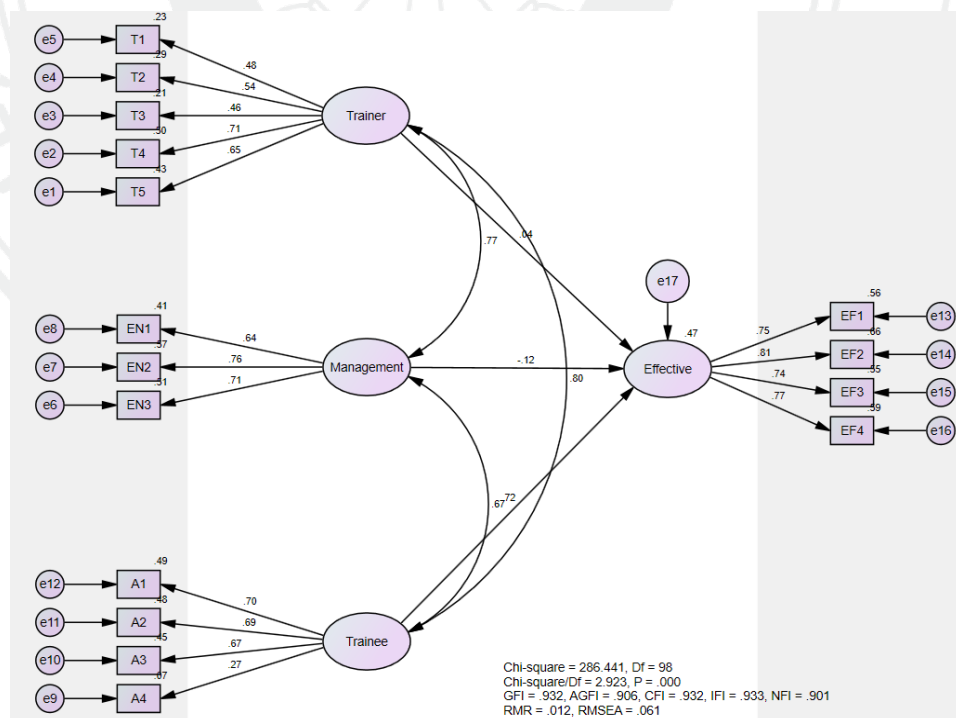


Figure 4.5 The Structural Equation Model (Before Being Adjusted)

From Figure 4.5, it is found that the factor loading of manifest variables of “professional trainers’ qualifications and competence” is as follows: “professional trainers’ qualification (T1) = .48, professional trainers’ experience (T2) = .54, professional trainers’ reputation (T3) = .46, professional trainers’ communication (T4) = .71, and professional trainers’ design of training or program content (T5) = .65. No index is cut off as the factor loading of all variables is higher than 0.30.

For the manifest variables of “training environmental management,” the factor loading is as follows: training physical environmental management (EN1) = .64, training social environmental management (EN2) = .76, and training psychological environmental management (EN3) = .71. No index is cut off as the factor loading of all variables is higher than 0.30.

For the manifest variables of “trainees,” the factor loading is as follows: trainees’ learning motivation (A1) = .70, trainees’ perceived self-efficacy (A2) = .69, trainees’ perceived valence of training outcome (A3) = .67, and trainees’ anxiety (A4) = .27. No index is cut off as the factor loading of all variables is higher than 0.30.

Lastly, for the manifest variables of “training effectiveness,” the factor loading is as follows: satisfaction (EF1) = .75, knowledge acquisition (EF2) = .81, developed behaviors and action (EF3) = .74, and improved work performance (EF4) = .77. No index is cut off as the factor loading of all variables is higher than 0.30.

From the analysis, the structural equation model is incongruent with empirical data as the following indices are found: Chi-square/df = 2.923 (< 3.00), GFI = .932 (> .95), AGFI = .906 (> 0.90), CFI = .932 (> 0.97), IFI = .933 (> 0.95), NFI = .901 (> 0.95), RMSEA = .061 (< .05), and RMR = .012 (< 0.05). Accordingly, the structural equation model is adjusted as illustrated in Figure 4.6.

2) The Adjusted Structural Equation Model

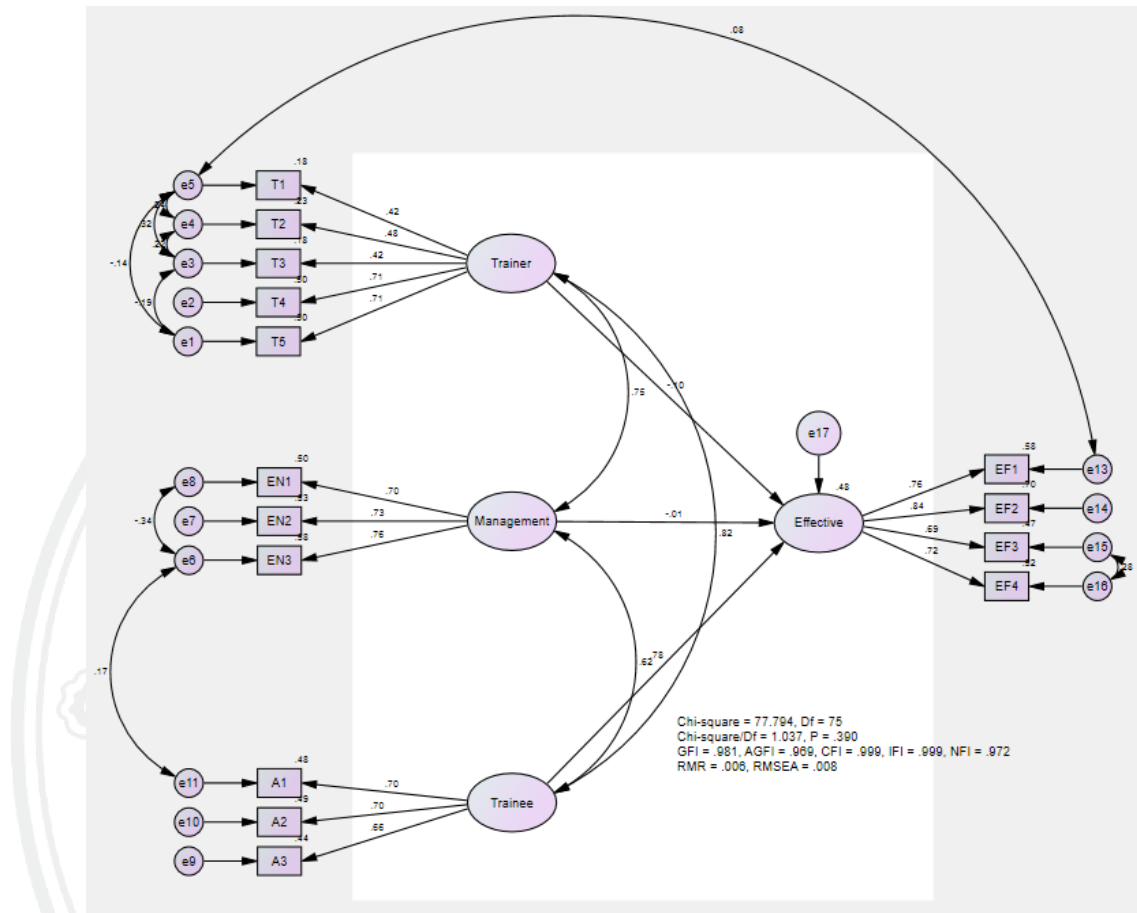


Figure 4.6 The Adjusted Structural Equation Model

From Figure 4.6, it is found that the factor loading of manifest variables of “professional trainers’ qualifications and competence” is as follows: “professional trainers’ qualification (T1) = .42, professional trainers’ experience (T2) = .48, professional trainers’ reputation (T3) = .42, professional trainers’ communication (T4) = .71, and professional trainers’ design of training or program content (T5) = .71. No index is cut off as the factor loading of all variables is higher than 0.30.

For the manifest variables of “training environmental management,” the factor loading is as follows: training physical environmental management (EN1) = .70, training social environmental management (EN2) = .73, and training psychological environmental management (EN3) = .76. No index is cut off as the factor loading of all variables is higher than 0.30.

After analyzing the factor loading of all manifest variables of the latent factor: trainees, “trainees’ anxiety” (A4) as one of the manifest variables is cut off, the factor loading of the rest is as follows: trainees’ learning motivation (A1) = .70, trainees’ perceived self-efficacy (A2) = .70, and trainees’ perceived valence of training outcome (A3) = .66. No index is cut off as the factor loading of all variables is higher than 0.30.

For the manifest variables of “training effectiveness,” the factor loading is as follows: satisfaction (EF1) = .76, knowledge acquisition (EF2) = .84, developed behaviors and action (EF3) = .69, and improved work performance (EF4) = .72. No index is cut off as the factor loading of all variables is higher than 0.30.

The adjusted structural equation model is found to have the following model fit indices: Chi-square/df = 1.037 (< 3.00), GFI = .981 (> .95), AGFI = .969 (> 0.90), CFI = .999 (> 0.97), IFI = .999 (> 0.95), NFI = .972 (> 0.95), RMSEA = .008 (< .05), and RMR = .006 (< 0.05). Accordingly, all indices of the adjusted structural equation model pass the criteria.

3) Correlation Patterns of Latent Variables in the Structural Equation Model

From analyzing the correlations of latent variables in the structural equation model, it is found that

“Professional trainers’ qualifications and competence” and “training environmental management” have a direct and positive effect (.752) at the .001 statistical significance level.

“Professional trainers’ qualifications and competence” and “trainees” have a direct and positive effect (.818) at the .001 statistically significant level.

“Training environmental management” and “trainees” have a direct and negative effect (.624) at the .001 statistical significance level, as illustrated in Table 4.8.

Table 4.8 Correlation Patterns and Statistical Values of Latent Variables in the Structural Equation Model

Correlation Pattern	(r)	S.E.	C.R.	Interpretation
Trainer <-> Management	.752	.007	9.637	Positive Effect
Trainer <->Trainee	.818	.006	9.284	Positive Effect
Management<->Trainee	.624	.006	8.344	Positive Effect

4) Causal Relationship Pattern of Latent Variables in the Structural Equation Model

From the analysis of causal relationships and path coefficients of latent variables in the structural equation model, it is found that “professional trainers’ qualifications and competence” have no effect on “training effectiveness” with the path coefficients = -0.099 , S.E. = $.250$, and C.R. = -0.591 . “Training environmental management” has no effect on “training effectiveness” with path coefficients = -0.010 , S.E. = $.111$, and C.R. = -0.113 . On the other hand, “trainees” have a direct effect on “training effectiveness” with path coefficients = $.778$ at the $.001$ statistical significance level, with S.E. = $.217$, and C.R. = 5.35 , which indicates positive effect. Thus, all trainee manifest variables can explain the effectiveness of training. Moreover, from the value of Squared Multiple Correlations = $.482$, the causal relationship patterns of latent variables in the structural equation model are summarized in Table 4.9.

Table 4.9 Causal Relationship and Statistical Values of the Latent Variables in the Structural Equation Model

Causal relationship Pattern	Path Coefficients	S.E.	C.R.	Interpretation
Trainer -> Effective	-.099	.250	-.591	No Effect
Management -> Effective	-.010	.111	-.113	No Effect
Trainee -> Effective	.778	.217	5.35***	Positive Effect

Note: Squared multiple correlations (R^2) of training effectiveness = .482

*** At the .001 statistical significance level

4.2.9 The Developed Structural Equation Model and the Test of Research Hypothesis

From the test of the research hypothesis that the developed structural equation model of the latent variables, namely professional trainers' qualifications and competence, training environmental management, trainees, and training effectiveness, is congruent with empirical data. The finding rejects the hypothesis as illustrated in Figure 4.7

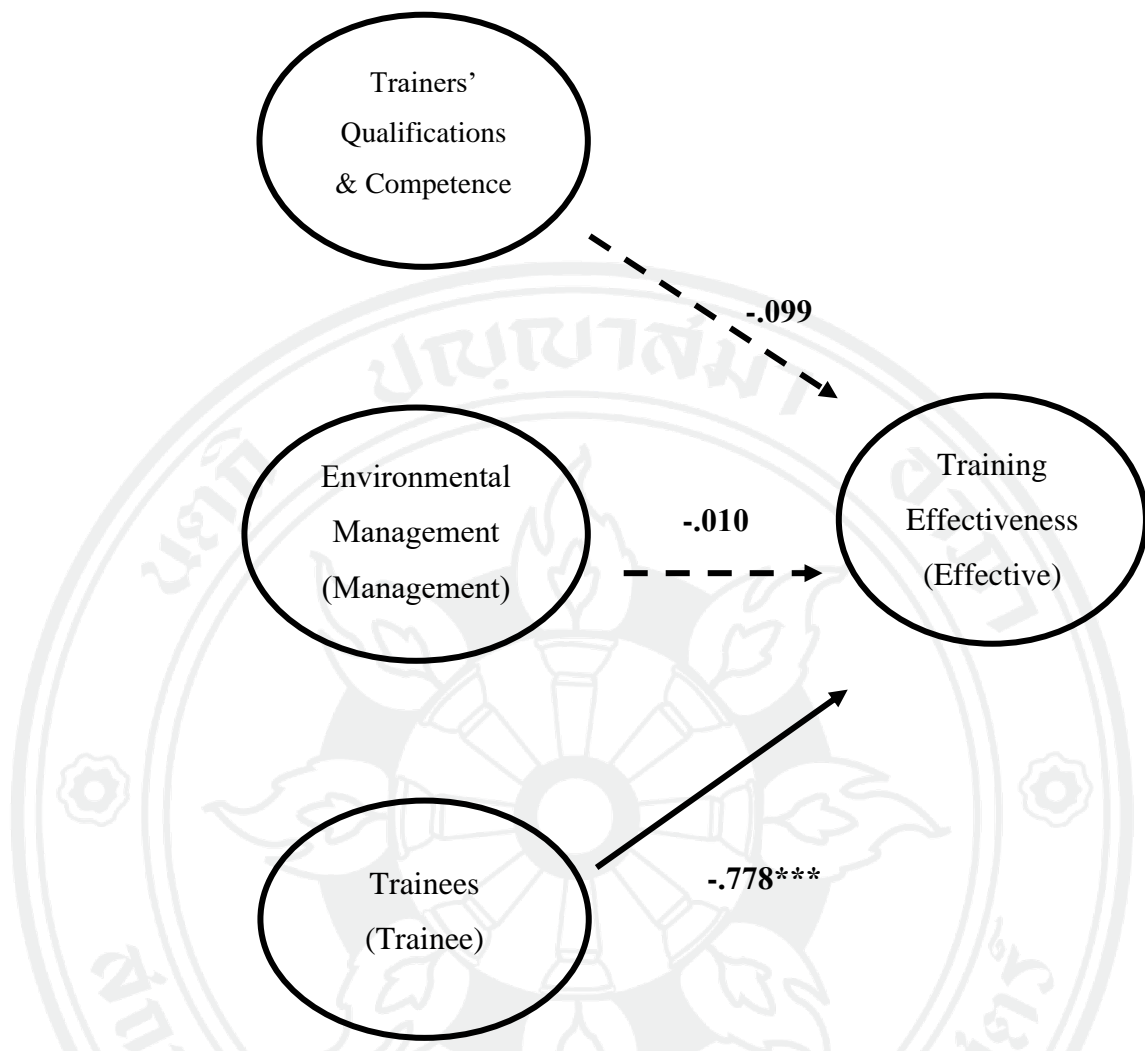


Figure 4.7 The Illustration of the Research Hypothesis Test

Note: ————— Statistically Significant at .001

- - - - - No Statistical Significance

1) The Structural Equation Model Presented by Standard Values of the Model

From Table 4.9 and Figure 4.7, the structural equation can be developed by the following standard values of the model.

$$\text{Effective} = -.099\text{Trainer} -.010\text{Management} +.778\text{Trainee}, R^2 = .48 \quad (1)$$

(.250)	(.111)	(.217)
-5.91	-.113	5.35***

*** At the .001 statistical significance level

From the equation (1), it indicates that “professional trainers’ qualifications and competence” (Trainer) and “training environment management” (Management) cannot explain the variance of “training effectiveness” (Effective) or the research hypothesis is rejected. However, “trainees” (Trainee) can explain the variance of “training effectiveness” (Effective) as it is found to have a positive effect on the training effectiveness at the .001 statistical significance level, or the research hypothesis is accepted. In other words, if the standard deviation of trainees increases by 1, it will yield a .778 increase in the standard deviation of training effectiveness. Consequently, the developed structural equation model can explain the variance of training effectiveness by 48%.

CHAPTER 5

SUMMARY AND DISCUSSION

The research is aimed to 1) study communication methods of professional trainers in organizing training, 2) to study communication factors affecting training effectiveness of business organizations, and 3) to test the congruence of structural equation model of latent variables, namely professional trainers' qualifications, and competence, training environmental management, trainee, and training effectiveness, with empirical data. The research was conducted by qualitative methods to answer the research question no. 1, and 2; and quantitative methods for answering the research questions no. 3, respectively.

5.1 The Findings of the Study

5.1.1 Professional Trainers' Communication Methods in Organizing Training

Totally 13 communication methods are found and summarized in order from the most to the least used methods as illustrated in the Table 5.1.

Table 5.1 A Summary of Professional Trainers' Communication Methods in Organizing Training

No	Communication Methods	The Number of the Research Samples			Total
		Professional Trainers	Training Organizers	HRD Executives of Business Organizations	
1	Spoken/ oral communication or speaking methods: lecture, coaching, narration, conversation, questioning,	5	5	5	15

No	Communication Methods	The Number of the Research Samples			Total
		Professional Trainers	Training Organizers	HRD Executives of Business Organizations	
	and raising examples (92.49%)				
2	Providing an opportunity for trainees to give their opinions, suggestions, and discussion (79.19%)	5	5	2	12
3	Learning activities (53.76%)	2	4	3	9
4	Case studies (39.50%)	2	2	2	6
5	Presentation programs (52.99%)	5	1	-	6
6	Workshops and role-plays (45.28%)	-	2	4	6
7	Image/ video (49.33%)	3	1	1	5
8	Games and recreational activities (67.44%)	2	2	-	4
9	Mobile application (34.10%)	-	1	2	3
10	Brainstorming (62.24%)	-	1	2	3
11	Demonstration (40.85%)	-	-	1	1
12	Handout/document (52.99%)	-	1	-	1
13	Field trip (8.48%)	-	-	1	1

From the quantitative research by questionnaire, it was found that most respondents or 480 respondents (92.49%) used oral or speaking methods the most, i.e., lecture, coaching, narration, conversation, questioning, and raising examples, followed by providing trainees an opportunity to give opinions and suggestions (411 or 79.19%), games and recreational activities (350 or 67.44%), brainstorming (323 or 62.24%), learning activities (279 or 53.76%), presentation programs, i.e., PowerPoint and Keynote (275 or 52.99%), image and video (256 or 49.33%), workshops and role-plays (235 or 45.28%), demonstrations (212 or 40.85%), case studies (205 or 39.50%), mobile application (177 or 34.10%), and field trips (44 or 8.48%).

5.1.2 Communication Factors Affecting Training Effectiveness of Business Organizations

The findings of communication factors affecting the training effectiveness of business organizations are illustrated in Table 5.2.

Table 5.2 A Summary of Communication Factors Affecting Training Effectiveness of Business Organizations

No	Communication Factors		The Number of the Research Samples			Total
	Factor Group	Factors	Professional Trainers	Training Organizers	HRD Executives of Business Organizations	
1	Professional trainers' qualifications and competence	Experience	5	5	5	15
		Qualifications	5	4	4	13
		Communication	2	4	3	9
		Reputation	5	5	3	13
		Design of training content	5	5	5	15
2	Training environmental management	Training physical environment management	5	5	5	15
3	Trainee	Learning motivation	5	5	5	15
		Perceived self-efficacy	1	2	4	7
		Perceived valence of training outcome	2	3	2	7
		Anxiety	5	5	5	15

From the quantitative research by questionnaire, classified by groups of communication factors affecting training effectiveness, it was found that 1) Professional trainers' qualification and competence factors: the respondents perceived "professional trainers' communication" as the factor affecting training effectiveness at the highest level the most ($\bar{x} = 4.76/ df = .333$), followed by the design of training content at the highest level ($\bar{x} = 4.74/ df = .372$), trainers' experience at the highest level ($\bar{x} = 4.67/ df = .406$), trainers' qualification at the highest level ($\bar{x} = 4.50/ df = .473$), and trainers' reputation at the highest level ($\bar{x} = 4.35/ df = .529$). 2) Training environmental management factors: the respondents perceived training psychological environmental management at the highest level the most ($\bar{x} = 4.67/ df = .426$), followed by training social environmental management at the highest level ($\bar{x} = 4.60/ df = .465$), and training physical environmental management at the highest level ($\bar{x} = 4.51/ df = .473$). 3) Trainee factors: the respondents perceived trainees' learning motivation at the highest level the most ($\bar{x} = 4.75/ df = .362$), followed by perceived self-efficacy at the highest level ($\bar{x} = 4.73/ df = .377$), perceived valence of training outcome at the highest level ($\bar{x} = 4.69/ df = .379$), and anxiety at the high level ($\bar{x} = 3.97/ df = .692$). Regarding training effectiveness, the respondents perceived knowledge acquisition at the very high level ($\bar{x} = 4.66/ df = .497$), satisfaction at the very high level ($\bar{x} = 4.60/ df = .518$), bettered or improved work performance at the very high level ($\bar{x} = 4.59/ df = .608$), and developed or improved behaviors or action at the very high level ($\bar{x} = 4.58/ df = .638$).

From the test of correlation coefficients, it was found that most of the manifest variables have positive correlations with $r = .036 - .646$ at the 0.01 and 0.05 statistical significance level. From the analysis of correlation coefficients between the manifest variables, it is found that knowledge acquisition (EF2) and developed or improved behaviors and action (EF3) with $r = .646$ have the highest correlation coefficients. In contrast, trainee's anxiety (A4) and knowledge acquisition (EF2) have the lowest correlation coefficients with $r = .036$. Besides, from the analysis, $KMO = .892$, from Bartlett's test of sphericity, approximated Chi-Square = 2855.419, $df = 120$ at the 0.000 statistical significance level.

Furthermore, from the exploratory factor analysis of latent variables, the following = factor loading of latent variables is found:

Professional trainers' qualification and competence factors: Trainers' qualification (T1) = .14-.87, trainers' experience (T2) = .51-.72, trainers' reputation (T3) = .34-.78, trainers' communication (T4) = .60-.65, and the design of training content (T5) = .56-.82. Since from the analysis of manifest variables, trainers' qualification (T1) has factor loading of less than 0.30, so it is cut off. Consequently, the measurement model is congruent with the following indices: Chi-square/df = 1.407 (< 3.00), GFI = .981 (> .95), AGFI = .955 (> 0.90), CFI = .991 (> 0.97), IFI = .991 (> 0.95), NFI = .969 (> 0.95), RMSEA = .028 (<.05), and RMR = .010 (< 0.05).

Training environmental management factors: the factor loading of training physical environmental management (EN1) = .62-.83, social environmental management (EN2) = .53-.66, and psychological environmental (EN3) = .50-.84. For this group of factors, no factor has factor loading of less than 0.30, no index is cut off and the measurement model is thus congruent with the following indices: Chi-square/df = .983 (< 3.00), GFI = .995 (> .95), AGFI = .955 (> 0.90), CFI = .985 (> 0.97), IFI = 1.000 (> 0.95), NFI = .991 (> 0.95), RMSEA = .000 (<.05), and RMR = .005 (< 0.05).

Trainee factors: The factor loading of trainees' learning (A1) = .69-.71, perceived self-efficacy (A2) = .62-.74, perceived valence of training (A3) = .65-.75, and anxiety (A4) = .63-.81. For this group of factors, no factor has factor loading of less than 0.30, no index is cut off and the measurement model is thus congruent with the following indices: Chi-square/df = .932 (< 3.00), GFI = .981 (> .95), AGFI = .969 (> 0.90), CFI = .985 (> 0.97), IFI = 1.000 (> 0.95), NFI = .975 (> 0.95), RMSEA = .000 (<.05), and RMR = .011 (< 0.05).

Training effectiveness factors: the factor loading of satisfaction (EF1) = .76, knowledge acquisition (EF2) = .85, developed or improved behaviors and action (EF3) = .68, and bettered or improved work performance (EF4) = .72. For this group of factors, no factor has factor loading of less than 0.30, no index is cut off and the measurement model is thus congruent with the following indices: Chi-square/df = .013 (< 3.00), GFI = 1.000 (> .95), AGFI = 1.000 (> 0.90), CFI = 1.000 (> 0.97), IFI = 1.001 (> 0.95), NFI = 1.000 (> 0.95), RMSEA = .000 (<.05), and RMR = .000 (< 0.05).

In the structural equation model (before modification), it is found that the factor loading of the manifest variables of latent variables, "professional trainers' qualification and competence (Trainer) is as follows: professional trainers' qualification (T1) = .48,

experience (T2) = .54, reputation (T3) = .46, communication (T4) = .71, and the design of training content (T5) = .65.

The factor loading of the manifest variables of latent variables, “training environmental management (Management) is as follows: physical environmental management (EN1) = .64, social-environmental management (EN2) = .76, and psychological environmental management (EN3) = .71. Thus, no manifest variable of this group is cut off.

The factor loading of the manifest variables of latent variables, “trainee” (Trainee) is as follows: Trainees’ learning motivation (A1) = .70, perceived self-efficacy (A2) = .69, and perceived valence of training outcome (A3) = .67. However, the factor loading of anxiety (A4) is less than 0.30, so it is cut off.

Lastly, the factor loading of the manifest variables of latent variables, “training effectiveness” (Effective) is as follows: Satisfaction (EF1) = .75, knowledge acquisition (EF2) = .81, developed or improved behaviors and action (EF3) = .74, and bettered or improved work performance (EF4) = .77. However, the structural equation model has not been congruent yet due to the following indices: Chi-square/df = 2.923 (< 3.00), GFI = .932 (> .95), AGFI = .906 (> 0.90), CFI = .932 (> 0.97), IFI = .933 (> 0.95), NFI = .901 (> 0.95), RMSEA = .061 (<.05), and RMR = .012 (< 0.05).

After the model modification, it is found that the factor loading of manifest variables of latent variables “professional trainers’ qualification and competence” (Trainer) is as follows: Trainers’ qualification and competence (T1) = .42, experience (T2) = .48, reputation (T3) = .42, communication (T4) = .71, and the design of training content (T5) = .71.

The factor loading of manifest variables of latent variables “training environmental management (Management) is as follows: Training physical environmental management (EN1) = .70, social-environmental management (EN2) = .73, and psychological environmental management (EN3) = .76.

The factor loading of manifest variables of latent variables “trainee” (Trainee) is as follows: Trainees’ learning motivation (A1) = .70, perceived self-efficacy (A2) = .70, perceived valence of training outcome (A3) = .66.

The factor loading of manifest variables of latent variables “training effectiveness” (Effective) is as follows: Satisfaction (EF1) = .76, knowledge acquisition

(EF2) = .84, developed or improved behaviors and action (EF3) = .69, and bettered or improved work performance (EF4) = .72.

The developed structural equation model is found to have a model fit indices as follows: Chi-square/df = 1.037 (< 3.00), GFI = .981 (> .95), AGFI = .969 (> 0.90), CFI = .999 (> 0.97), IFI = .999 (> 0.95), NFI = .972 (> 0.95), RMSEA = .008 (<.05), and RMR = .006 (< 0.05). Thus, all model indices pass the criteria.

For the correlations between latent variables of SEM, it is found that professional trainers' qualification and competence (Trainer) has a direct positive effect on training environment management (Management) (.752) and on trainees (Trainee) (.818) at the .001 statistical significance level. Moreover, training environmental management (Management) has a direct positive effect on trainees (Trainee) (.624) at the .001 statistical significance level. Furthermore, from the analysis of causal relationship of latent variables in SEM, it is found that professional trainers' qualification and competence (Trainer) has no effect on training effectiveness (Effective) with path coefficient = .099, S.E. = .250, and C.R. = -.591. Training environmental management (Management) has no effect on training effectiveness (Effective) with path coefficient = .010, S.E. = .111, and C.R. = .113. However, Trainees (Trainee) has a direct positive effect on training effectiveness (Effective) with path coefficients = .778 at the .001 statistical significance level, S.E.= .217, and C.R. = 5.35, with $r^2 = .482$.

From the analysis, the constructed structural equation model of latent variables: professional trainers' qualification and competence, training environmental management, trainee, and training effectiveness are incongruent with empirical data. Thus, the model equation in standardized form can be written as follows:

$$\text{Effective} = -.099\text{Trainer} - .010\text{Management} + .778\text{Trainee}, R^2 = .48 \quad (1)$$

(.250)	(.111)	(.217)
-5.91	-.113	5.35***

*** at the .001 statistical significance level

From the equation (1), it explains that professional trainers' qualification and competence (Trainer) and training environmental management (Management) cannot explain the variance of training effectiveness (Effective) or, in other words, it rejects the

research hypothesis. However, trainees (Trainee) has a positive effect on training effectiveness (Effective) at the .001 statistical significance level, or in other words, it confirms the research hypothesis. It means that if the standard deviation of trainees increases by 1, training effectiveness will increase = .778 of standard deviation value. In other words, the constructed structural equation model can explain the variance of training effectiveness by 48%.

5.2 Discussion

From the findings, it can be concluded that 13 issues are found as congruent with theoretical concepts and previous studies, while another two issues are incongruent.

5.2.1 The Research Results Found to be Congruent with Theoretical Concepts and Previous Studies

5.2.1.1 A Part of Training Communication is Interpersonal Communication

1) According to Chitapha Sukplum (2005, p. 16), interpersonal communication is the communication of people, at least two, who have reciprocal relationships, for transmitting their knowledge, thought, and feeling in the form of verbal and nonverbal language in face-to-face, while switching their roles as a sender and a receiver, causing a two-way communication for the common understanding of both sides.

2) Based on the interpersonal communication model of O'Donnell and Kable (1982, as cited in Orawan Pilunowad, 2011, pp. 3-4), a communication model comprises a sender, receiver, message, channel, feedback, and environment. However, one more component that should be included is “personal components or factors”, i.e. belief, value, attitude, experience, and some individualized characteristics, which functions as a filter in an individual’s selective perception, as a consequence of socialization, cultural biases, and concerned benefits, etc.

3) From the concept of verbal and nonverbal language of Devito (1995, p. 175), when we communicate, we can communicate through both verbal and nonverbal language, but we cannot communicate without nonverbal language. In general, nonverbal language plays six reciprocal relationships to verbal language: as 1) emblem or replace verbal language, 2) illustrator or to emphasize or reinforce verbal language, 3) affect display or display of emotion or feeling, 4) contradiction to verbal language, 5) regulator or to control the other communicator, and adaptor or to release emotion.

From the aforementioned theoretical concepts, training is partly interpersonal communication or face-to-face communication between a professional trainer and a trainee or trainees through their verbal or oral communication, i.e., spoken and written language, and nonverbal communication, or communication without words.

From the study, it is found that verbal language professional trainers communicate to trainees is transmitted through many communication methods: No. 1) spoken or oral communication, i.e., lecture, teaching, narration, conversation, questioning, raising some examples, No. 2) providing an opportunity for trainees to participate in expressing their ideas, suggestions, and discussion, and No. 5) presentation programs, and No. 12) handouts or document.

The nonverbal language used the most by professional trainers in training are No. 3) learning activities, No. 4) case studies, No. 6) workshops and role-plays, No. 7) image/video, No. 8) games and recreation activities, No. 9) mobile application, No. 10) brainstorming, No. 11) demonstration, and No. 13 field trips.

The congruence between the research findings and theoretical concepts is summarized in Table 5.3.

Table 5.3 A Summary of the Congruence between the Research Findings and Theoretical Concepts of a Part of Training Communication is Interpersonal Communication

Concurrent Propositions/Findings	Theoretical Concepts
A professional trainer uses both verbal and nonverbal language in their face-to-face interaction with a trainee or trainees through four verbal and nine nonverbal communication methods.	1) The concept of interpersonal communication of Chitapha Sukplum (2005, p. 16) 2) O'Donnell & Kable's Model of Communication (1982, as cited in Orawan Pilunowad, 2011, pp. 3-4) 3) The concept of verbal and nonverbal language of Devito (1995, p. 175)

5.2.1.2 Professional Trainers use a Variety of Communication Methods in Organizing Training

The communication methods used by professional trainers that are congruent with theoretical concepts are as follows:

1) The concept of trainer-centered learning of Somkid Bangmo (2008, pp. 85-94) is found in professional trainers' communication methods, i.e., lecture, coaching, etc.

2) The concept of trainee-centered learning of Somkid Bangmo (2008, pp. 85-94), i.e., panel discussion, symposium, demonstration, brainstorming, buzz session, case study, forum, management game, role playing, seminar, field trip, workshop, sensitivity training, recreational activity, and activity-base activity, etc.

3) The concept of transmission of meaning through telling method from a knower to a person who does not know of Kajornsak Hannarong (1981, pp. 4-5), i.e. lecture, symposium, seminar, panel discussion, colloquy, dialogue, buzz group, and conference.

4) The concept of doing method or the method of letting an individual who does not know or cannot do something or has no expertise of doing something to try to do it by himself or herself until he or she gains knowledge, understanding, and expertise. The communication methods used are brainstorming, role-playing, case study, incident method, exercise, live project, in-basket, management game, laboratory or sensitivity training, etc.

5) The concept of training methods classification of Pet Petcharaburanin (1978), who classifies training methods into two kinds, and one of them is a leader-centered method, which emphasizes the role of a lecturer or trainer and considers trainees as less critical. Therefore, this kind of training method emphasizes the role of trainer.

From the study, it is found that professional trainers use 13 communication methods for organizing training: 1) speaking or oral methods, i.e., lecture, coaching, narration, conversation, questioning, and raising examples, 2) providing an opportunity for trainees to participate in expressing their opinions, suggestion, and discussion, 3) learning activity, 4) case study, 5) presentation programs, 6) workshops and role-plays, 7) image and video, 8) game and recreational activity, 9) mobile application, 10) brainstorming, 11) demonstration, 12) handouts/document, and 13) field trips. All of these methods are classified into three types:

1) Spoken or oral communication means communication from a professional trainer to trainees by speaking or oral methods, i.e., lecture, coaching, narration, conversation, questioning, and giving examples.

2) Communication by equipment means interaction from a professional trainer to trainees by some kinds of equipment, i.e., presentation programs, image and video, mobile application, and handouts or document.

3) Activity communication means communication from a professional trainer to trainees by doing some kinds of activities, i.e., providing an opportunity for expressing their idea and suggestion, discussion, learning activity, case study, workshops, role plays, demonstration, and field trip.

The concurrence between the findings and theoretical concepts on professional trainers' communication methods in organizing training are summarized and illustrated in Table 5.4

Table 5.4 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Professional Trainers use a Variety of Communication Methods in Organizing Training

Concurrent Propositions/Findings	Theoretical Concepts
1) Professional trainers use a total of 13 communication methods in organizing training.	1) The concept of trainer-centered and trainee-centered learning of Somkid Bangmo (2008, pp. 85-94).
2) Communication methods used in training are classified into three types: 1) spoken or oral communication (1 method), 2) communication by equipment (4 methods), and 3) activity communication (8 methods)	2) The concept of telling method and doing method of Kajornsak Hannarong, (1981, pp. 4-5) 3) The concept of training methods classification of Pot Petcharaburanin (1978, p. 44)

5.2.1.3 Professional Trainers use a Variety of Communication Methods Based on their Roles, Trainees' Learning Capability, and Factors Facilitating Trainees' Learning

The concepts, used for explaining the findings that professional trainers use a variety of communication methods based on their roles, trainees' learning capability, and factors facilitating trainees' learning, are as following:

1) The concept of speakers' effective communication methods of Wichit Awakul (1997, pp. 209-213), which explains that a good speaker must know a variety of teaching methods and are able to choose the right teaching techniques to make it possible for learners to apply it and to change their behaviors as desired or determined by training objectives.

2) The concept of Gagne, Wager, Golas, and Keller (2005), which explains that human beings are capable of learning in many ways. They categorize types of learning into five domains: 1) Cognitive learning that emphasizes intellectual skills, 2) strategic-thinking learning, 3) factual and knowledge learning, 4) motor-skill learning, and 5) attitudinal learning.

3) Five factors enhancing the learning of Chiansri Wiwithasiri (1991) and Aree Panmanee (1997, as cited in Thipsuda Chaiyapruk, 2009): 1) Motivation 2) Needs 3) Individual differences 4) Readiness, and 5) Culture.

Based on the above concepts, the findings show that professional trainers need to communicate with trainees by a variety of communication methods, not a particular one, to enable trainees to learn and apply it for practice and for changing their behaviors as expected or needed goals. Besides, in each training, trainees are different in many ways. Firstly, they are different in learning capability, i.e. in 5 domains: cognitive or intellectual learning, strategic-thinking learning, factual or knowledge learning, motor-skill learning, and attitudinal learning.

Secondly, they need to understand factors facilitating or affecting learning. These factors are 1) Motivation, 2) Needs, 3) Individual differences, 4) Readiness, and 5) Culture. Due to the fact that trainees can learn in many different ways and their learning is affected by several factors, including the degree of their differences and the degree of the effect of the facilitating factors, professional trainers cannot use only a single communication method for training. If not, training of each time is hard to be achieved. Accordingly, they have to use a variety of communication methods to respond to such differences.

The propositions of trainers' use of a variety of communication methods based on their roles, trainees' learning capability, and factors facilitating trainees' learning in parallel to the quoted theoretical concepts are summarized and illustrated in Table 5.5

Table 5.5 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Professional Trainers Use a Variety of Communication Methods Based on their Roles, Trainees' Learning Capability, and Factors Facilitating Trainees' Learning

Concurrent Propositions/Findings	Theoretical Concepts
1) Professional trainers use a variety of communication methods because of their role and professional necessity.	1) The concept of teaching techniques and strategies of Wichit Awakul (1997, pp. 209-213).
No single method should be used.	2) The concept of Gagne, Wager, Golas,
2) Professional trainers use a variety of communication methods due to trainees' differences in learning capability.	& Keller (2005) on 5 domains of human learning.
3) Professional trainers use a variety of communication methods based on factors facilitating trainees' learning.	3) The concept of five factors enhancing learning of Chiansri Wiwithasiri (1991) and Aree Panmanee (1997, as cited in Thipsuda Chaiyapruk, 2009).

From the qualitative research by in-depth interviews with the samples, it is found that all samples respond that professional trainers use spoken or oral communication, i.e., lecture, coaching, narration, conversation, questioning, and reflective questions, the most. In parallel, the findings from the quantitative research, conducted by a questionnaire with 480 samples, also indicate that most samples (92.49%) respond that speaking or oral methods are the most used method by professional trainers, i.e., lecture, coaching, narration, conversation, reflective questions, etc. From such findings, the following are synthesized:

5.2.1.4 Professional Trainers' Speaking Methods must be Convenient and Proper by Considering their Ability in Knowledge Provision, Persuadability, and Ability to Help Each Trainee to Develop His or Her Perceived Self-Efficacy

The above proposition is concurrent with the following theoretical concepts and previous studies:

1) The concept of Katz and Lazarsfeld (1955) on face-to-face communication that it is more convenient for human beings to communicate at the interpersonal level with their primary group members than at the group and mass level. Besides, face-to-face communication influences receivers' attitudinal changes and compliance the most.

2) The concept of Infante, Rancer, & Womack (1997) on verbal language that speaking is a kind of communication that occurred over 2,000 years ago and considered as the most important communication and tool in guiding a society.

3) From the research finding of Duangchan Awwijitrakul (1990), lecture is the most appropriate training method in providing knowledge.

4) The concept of Bandura (1986) on the factors enhancing perceived self-efficacy.

From the concurrence between research findings, theoretical concepts, and previous studies, it can be concluded that it is more convenient for both professional trainers and trainees to communicate face-to-face the most; thus, speaking methods are the most chosen training method by professional trainers, especially due to most training is conducted in a closed area, so it is more convenient to use spoken method the most. One example of the spoken method in training is when a professional trainer explains the content of a training program to a trainee or trainees with the planned objective of inducing them to accept training and to change their attitude. In other words, it means that if trainees understand the content of a training program, they will cooperate in complying with what trainers advise, i.e., doing some learning activities. Thus, trainers use speaking as a communication method to persuade trainees. Besides, it is found that spoken or oral communication can enhance trainees' perceived self-efficacy. Most of all, it is the most comfortable mean and used widely in stimulating trainees to develop their self-efficacy, i.e., through their compliments, encouragement, etc. to trainees.

The proposition from the findings is summarized and illustrated in parallel to the quoted concepts and previous studies in Table 5.6.

Table 5.6 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Professional Trainers' Speaking Methods must be Convenient and Proper by Considering their Ability in Knowledge Provision, Persuadability, and Ability to Help each Trainee to Develop his or her Perceived Self-Efficacy

Concurrent Propositions/Findings	Theoretical Concepts & Previous Studies
1) Professional trainers use a speaking method as it is convenient for providing knowledge.	1) The finding of Duangchan Awwijitrakul (1990) that a speaking method is the most appropriate method for providing knowledge.
2) Professional trainers use a speaking method because they expect trainees to understand the content of a training program and hence comply with their advice.	2) The concept of face-to-face communication of Katz & Lazarsfeld (1955)
3) Professional trainers use a speaking method to persuade trainees.	3) The concept of Infante, Rancer, & Womack (1997) on the utmost importance of speaking or spoken communication.
4) Professional trainers use a speaking method to enhance trainees' self-efficacy.	4) The concept of Bandura (1986) on the factors for developing self-efficacy.

5.2.1.5 Professional Trainers can Manage their Group Communication Through Speaking Methods

The above proposition is concurrent with the following theoretical concepts:

1) The definition of a group defined by Orawan Pilunowad (1986, as cited in Orawan Pilunowad, 2003, pp. 347-348) as “a group means a collection of individuals who have relations to one another that make them interdependent to some significant degree. When people are together, they have common goals, communication, and activities while being aware of and paying

attention to other members' feelings to function their roles as a part of the group and to maintain the group's existence.”

2) The concept of Orawan Pilunowad (1986, as cited in Orawan Pilunowad, 2003, pp. 348-351, 353-364) on the emergence of a group leader that a group leader can be a formal leader whose communication can be a two-step flow. The group division into sub-groups can cause incongruent opinions among groups and lead to group conflicts. On the other hand, when a group is larger, patterns of communication will be changed, and communication will become more formal. Members' feedback can be immediate or delayed.

3) The concept of feedback of Leavitt and Mueller (1951, pp. 401-410) that group members' feedback can make increase the accuracy of the delivered message.

From synthesizing the research findings and theoretical concepts, the scope and the definition of training for this study is developed. Training thus is defined as a kind of group communication organized either by internal or external organizations for developing organizational personnel. Training is formal and patterned, i.e., taking a total of at least 6 hours, requiring a registration, comprising a trainer and a number of trainees of the same organization, and having a clear operational schedule. However, training in this study excludes an informal mentoring technique or a coaching method by a supervisor or co-worker at the site. As a group, each training means the emergence of a group in which a group leader is assigned, and a large group can be divided into sub-groups, which may cause some disagreement or incongruent opinions among groups. The pattern of communication is more formal. Professional trainers use speaking methods most frequently to help manage their group communication more easily since speaking is convenient to communicate with other group leaders who have to transmit their message to other trainees. The larger a group is, the more difficulty a professional trainer will face in communicating directly with all members. Besides, speaking can decrease the degree of formality. Once the degree of formality is decreased, it is easier to solve things whenever there is any dissonance or conflict since it facilitates members to express their opinions more freely and entirely. It is like providing an opportunity for trainees to ask questions, either directly to a trainer or through other group leaders. Besides,

spoken communication facilitates the management of members' or trainees' feedback, either immediate or delayed, more effectively. For instance, a professional trainer can ask a question to a group leader and other trainees immediately to check their understanding while listening or after the completion of the program or other group leaders, including other trainees, can direct their questions to a professional trainer, etc. Accordingly, feedback from trainees is constructive for increasing training effectiveness.

The concurrent research findings and theoretical concepts are summarized and illustrated in Table 5.7

Table 5.7 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Professional Trainers can Manage their Group Communication through Speaking Methods

Concurrent Propositions/Findings	Theoretical Concepts
<p>1) Training is a kind of group communication. When a group is formed, a leader is assigned. A group can be divided into sub-groups, and there may be incongruent opinions among sub-groups, while the pattern of communication becomes more formal. A professional trainer uses spoken methods for helping manage group communication more easily, i.e., to speak to a group leader and then to other trainees, which helps to decrease the formality and also disagreement (if any) accordingly.</p>	<p>1) The definition of a group defined by Orawan Pilunowad (1986, as cited in Orawan Pilunowad, 2003, pp. 347-348). 2) The concept of the emergence of a group leader of Orawan Pilunowad (1986, as cited in Orawan Pilunowad, 2003, pp. 348-351, 353). 3) The concept of Leavitt & Mueller (1951, pp. 401-410) on the role of feedback on increasing the accuracy of message.</p>
<p>2) Speaking methods help to manage trainees' feedback, either immediate or delayed, more effectively.</p>	

5.2.1.6 Only Training Communication does not Affect Training Effectiveness

The proposition that only training communication does not affect training effectiveness is in accordance with some theoretical concepts. Klapper (1967, p. 49, as cited in Meyapim Somprasong, 1995) cites that 1) only communication is not sufficient to have an influence over receivers' cognition, 2) there are other intervening variables that can facilitate or obstruct the influence of communication, and 3) communication can yield genuine effect can be possible only in the case that there is a monopoly in communication or people have no interpersonal communication.

From the aforementioned previous studies and theoretical concepts, training effectiveness is evaluated by trainees' satisfaction, knowledge acquisition, developed or improved behaviors or action, and bettered or improved work performance; however, it is found in this study that professional trainers' qualifications and competence and their training environmental management have no effect on training effectiveness. Such a finding can be explained by three main reasons as follows:

- 1) Only communication is not a prerequisite cause or sufficient for yielding any influence over trainees' cognition. This notion accords with the finding from the quantitative research that two of the three latent variables: professional trainers' qualifications and competence and training environmental management do not affect training effectiveness. It indicates that the manifest variables related directly with communication, namely trainers' communication and the design of training content or message, are not fundamental causes or sufficient for influencing trainees' cognition. Still, training effectiveness must be evaluated from trainees.

- 2) The notion that some variables can facilitate or obstruct communication influence accords with the finding from the quantitative research of this study, which is found that two latent variables, namely professional trainers' qualifications, and competence and training environmental management have no effect on training effectiveness; however, the other latent variable or trainee variable is found to have an effect on training effectiveness. All of these findings point out that

the trainee variable is the variable that can facilitate or obstruct the impact of communication.

3) The notion that communication can yield genuine effect can be possible only in the case that there is a monopoly in communication or people have no interpersonal communication accords with the findings from both qualitative and confirmatory factor analysis, which is found that in training, communication cannot be manipulated by any individual, even professional trainers. Correspondingly, they have to use a variety of communication methods in organizing training, which can be classified into three main types: 1) spoken communication, i.e., lecture, coaching, narration, conversation, questioning, giving examples, etc. this type of communication is used the most by professional trainers. 2) communication by equipment, i.e., presentation programs, image/video, mobile application, documents/handouts, and 3) activity communication, i.e., providing trainees an opportunity to express their opinions and suggestions, discussion, learning activity, case study, workshops and role-plays, game and recreational activities, brainstorming, demonstration, and field trip. From the communication methods trainers use, it indicates that trainers try not to monopolize communication, but try to decentralize their communication to trainees as well. As discussed earlier, training also involves interpersonal communication within-group communication. Accordingly, only training communication has no effect on training effectiveness, as summarized in Table 5.8.

Table 5.8 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Only Training Communication does not Affect Training Effectiveness

Concurrent Propositions/Findings	Theoretical Concepts
<p>1) Only communication is not an important cause or sufficient for influencing trainees' cognition. From the findings of the quantitative research of this study, it is found that two of three latent variables, namely professional trainers' qualifications and competence and training environmental management do not affect training effectiveness. Besides, the manifest variables related directly with communication in these two latent variables, specifically trainers' communication (a sender's transmission) and the design of training content (communication message), are not fundamental causes or have sufficient effect on trainees' cognition.</p> <p>2) Other variables can facilitate or obstruct the effect or influence of communication. From the quantitative research of this study, it is found that the latent variable (Trainee) affects training effectiveness.</p> <p>3) Communication can yield substantial effect that can be possible only in the case that there is a monopoly in communication or people have no interpersonal communication. From the findings of the qualitative research and confirmatory factor analysis, it is found that in training, communication is not monopolized by any individual. In training, it still requires interpersonal communication.</p>	<p>The concept of Klapper (1967, p. 49, as cited in Meyapim Somprasong, 1995) that specifies that only communication is not sufficient for influencing receivers.</p>

5.2.1.7 Trainees can have Selective Reception of Training Message by Themselves, which Affects Training Effectiveness

The finding that trainees can have selective reception of training message by themselves, which affects training effectiveness accords with the following theoretical concepts:

1) According to Pira Jirasophon (2014, p. 82), the information selection process comprises three steps: 1) selective exposure, 2) selective perception, and selective retention.

2) The concept of Severin and Tankard, Jr. (2001, as cited in Pira Jirasophon, 2014, p. 82) that receivers possess a complex perception and information-processing process. Thus, to disseminate information or persuade receivers to achieve the intended goal is not easy; though, such information may have been transmitted to delivered to them already. Besides, each receiver tends to selectively expose himself or herself to some information and ignore some information.

3) The concept of information-processing of McGuire (1989, as cited in Pira Jirasophon, 2014, p. 83), which divides information processing into 12 steps: 1) being exposed to communication, 2) paying attention to particular information, 3) having positive feeling and a desire to follow it up, 4) learning skills or methods in that subject, 6) being inclined to and changing attitude to that direction, 7) memorizing the content or what are agreed, 8) reflecting to make use of such information, 9) making decisions based on such information, 10) doing or behaving in the decided way, 11) creating some reinforcement to continue such action or behaviors, and 12) establishing collaborative support for the committed behaviors.

4) The concept of elaboration likelihood model or ELM of Petty and Cacioppo (1986, as cited in Pira Jirasophon, 2014, p. 83) that in processing information, there are two alternative routes: the central route or peripheral route. The information processing by the central route means the information process that requires thorough and well-rounded thinking of received information, evidence, and arguments. In contrast, the information processing by the peripheral route means the processing does not need scrutinization of the conveyed content directly but pays more attention to other superficial messages.

5) The concept of O'Keefe (1990, as cited in Pira Jirasophon, 2014, p. 83) that the way receivers decide which route or by which means they will process a particular message depends on some factors, i.e., motivation, knowledge, and ability in entering message scrutinization.

6) The Schema theory of Graber (1988, as cited in Pira Jirasophon, 2014, p. 84), explains that the pattern of or path for processing information of each receiver is a priori and embedded in his or her brain. Accordingly, receivers will respond to specific messages or information based on their existing framework, refer to what used to be, and integrate their schema in various dimensions towards certain things, which are often influenced by the leading of mass media.

7) The concept of the use of past experience in processing and perceiving information of Graber (1989, as cited in Pira Jirasophon, 2014, p. 84), in which the word "schema" is defined as cognitive structure comprising knowledge about situations or people accumulated from previous experiences and used for processing new information about perceived or experienced situations or people.

From synthesizing the researching findings and related theoretical concepts, it can be concluded that trainees can have selective attention to or ignore training messages by themselves, starting from their decision of whether they will attend a training program or not until their participation in training. After attending a program, if training communication contradicts or is incongruent with their existing opinions or interest, they may select not to expose to trainers' messages. Still, after trainees have decided to expose to training messages, their interpretation and memorization of a message depend on their existing opinions, interest, and readiness. When training communication occurs, i.e., when a professional trainer talks to trainees or trainees talk to one another, etc., it does not mean that each trainee will expose to the training. The reason is that each trainee has a different information processing process, depending on each trainee's interest. The method of deciding if trainees want to support further, the committed behaviors can be conducted by either 1) the use of logical reasoning or 2) the use of feeling or emotion. In short, information processing depends on each trainee's competency, motivation, a priori frame of reference, past experiences, and schema of various dimensions on a certain thing, which are often influenced by trainees' mass media exposure.

The congruence between the research findings and the theoretical concept is summarized and illustrated in Table 5.9.

Table 5.9 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Trainees can have Selective Reception of Training Message by Themselves, which Affects Training Effectiveness

Concurrent Propositions/Findings	Theoretical Concepts
1) Trainees can select to expose to or ignore any training message by themselves	1) The concept of information selection process of Pira Jirasophon (2014, p. 82) 2) The concept of Severin & Tankard, Jr. (2001, as cited in Pira Jirasophon, 2014, p. 82) that receivers have a complex perception and information processing process of the received message.
2) After attending a training program, if communication during training contradicts with trainees' existing opinions and interest, trainees may select not to expose to.	3) Information Processing Theory of McGuire (1989, as cited in Pira Jirasophon, 2014, p. 83)
3) After trainees have decided to expose to training message, the interpretation and memorization of knowledge depends on trainees' opinions, interest, and readiness.	4) The concept of ELM (Elaboration likelihood model) of Petty and Cacioppo (1986, as cited in Pira Jiraphon, 2014, p. 83)
4) Once communication occurs, it does not mean that each trainee will expose to all training communication. In fact, they have information processing process that is rather complex and differs by each trainee's interest. The information processing can be done in two ways: reasoning or feeling and emotion. Besides, information processing of each person depends on	5) The concept of O'Keefe (1990, as cited in Pira Jirasophon, 2014, p. 83) about motivation, knowledge, and ability for scrutinizing received message. 6) Schema theory of Graber (1988, as cited in Pira Jirasophon, 2014, p. 84)
	7) The concept of using past experience in processing and perceiving information of Graber (1989, as cited in Pira Jirasophon,

Concurrent Propositions/Findings	Theoretical Concepts
their ability, motivation, and existing frame of experience in several dimensions on a particular subject.	2014, p. 84)

5.2.1.8 Trainees are the Important Component in a Training Communication Process and Affect Training Effectiveness

The finding that trainees are the important component in a training communication process and affect training effectiveness accords with the following theoretical concepts

1) The circular communication model of Schramm (1954, as cited in Passawalee Nitikasetsunthorn, 2014, p. 39), which illustrates that receivers do not play a passive role of receiving a message from a sender, but they have to decode and interpret the received message from their shared field of reference. On the other hand, they also take a role of a sender by transmitting their decoded or interpreted message or feedback back to the source or sender, who then plays a position as a receiver and decode, interpret, and then circularly encode the new message.

2) The communication model in which receivers play a role in determining message. (Passawalee Nitikasetsunthorn, 2014, p. 40) that identifies a working process of mass media, which does not always function as a message creator to persuade receivers. Still, they also play the role of an active communicator who reflects events and opinions or voices in society to the mass of people or receivers. Views that occur in society are receivers' feedback transmitted to mass media or source of the message, either directly or indirectly.

From synthesizing research findings with related theoretical concepts, it can be concluded that trainees are an essential component in a training communication process. They play a role in decoding and interpreting messages from training if and how the delivered message contains meaning that accords with their perception. Besides, they also play a position as a sender by transmitting their decoded message back to the original sender or professional trainer, including other trainees. The delivered message from professional trainers is a communication method chosen by a professional trainer. Thus, trainees are essential in determining

training content. Besides, from the qualitative research, it indicates that in designing the content of a training program, a part of professional trainers' consideration is based on trainees mainly, i.e., appropriateness in learning and actual application. Moreover, all through a training program, professional trainers have to examine and evaluate trainees' feedback to see to what extent they can understand the training content. Accordingly, trainees are a crucial component of training communication.

The concurrent research findings and theoretical concepts that support the proposition that trainees are an essential component in training communication and affect training effectiveness are summarized and illustrated in Table 5.10

Table 5.10 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Trainees are the Important Component in a Training Communication Process and Affect Training Effectiveness

Concurrent Propositions/Findings	Theoretical Concepts
<p>1) Trainees are important in a training communication process, playing the role of decoding and interpreting knowledge learned from training. Then, they play a role as a sender by transmitting their message or feedback to the source or sender, including other trainees via communication methods chosen by professional trainers.</p>	<p>1) The circular communication model of Schramm (1954, as cited in Passawalee Nitikasetsunthorn, 2014, p. 39)</p> <p>2) Communication model in which receivers play a role in determining message (Passawalee Nitikasetsunthorn, 2014, p. 40)</p>
<p>2) Trainees also play a substantial role in determining the training content since in designing training content, professional trainers' consideration is based on trainees mainly. Besides, throughout the training, professional trainers need to observe and evaluate trainees' feedback to examine to what extent trainees understand training content and knowledge.</p>	

5.2.1.9 Trainees Determine Benefits and Satisfaction from Training, which Affects Training Effectiveness

The finding that trainees determine benefits and satisfaction from training, which affects training effectiveness accords with the following theoretical concepts:

1) The concept of information inquiry for uses of Kanjana Kaewthep (2013, p. 285), which states that mostly in exposing to any message, receivers tend to have certain determination in searching for information for uses in some ways, i.e., for their career, for purchase decision-making, for controlling a situation, for preparing before implementation, etc.

2) The concept of receivers' needs of McGuire (1974, as cited in Kitti Gunpai, 2013), which explains the theory of receivers' motivation from psychological approach based on the theory of human needs. Besides, it makes a distinction between cognitive and affective needs.

3) The concept of obstinate audience of Bauer (1964, as cited in Kitti Gunpai, 2013), explains that readers, viewers, or audience can have themselves in control and maintain to be unaffected by exposed media, except what they have chosen by themselves.

4) The model of media and message uses of Sawanit Yamaphai and Rawewan Prakobpol (1994, p. 136, as cited in Passawalee Nitikasetsunthorn, 2014, p. 39), which explains that receivers choose the content from exposed media for their uses that are affected by the following factors: 1) internal and external characteristics of individuals, 2) needs, necessity, and interest of individuals, and 3) their expectation and perception about media, content, and sources or senders. These factors will determine what receivers will or will not choose to make uses of mass media. Thus, from the functional approach, mass media is not a single alternative for individuals. On the contrary, there are some other media or other types of communication that may function even better than mass media, i.e., receivers' exposure to listening to music, or their choice to play sports rather than to watch movies to release their stress. etc.

From the abovementioned theoretical concepts, it can explain the findings of the study that trainees can decide if they will attend a training program,

based on their necessity and benefits, including their needs. If it does not respond to their obligation or needs, they will not be willing to participate in the program since they can also acquire their knowledge from other sources by themselves. Typically, the necessity and needs are two types: cognitive or the selection by reasons and affective or their likes or dislikes. Accordingly, trainees are those who consider their benefits and satisfaction as the criteria for attending and participating in training, and thus, they affect the effectiveness of training profoundly.

The congruence between research findings and theoretical concepts is summarized and illustrated in Table 5.11

Table 5.11 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Trainees Determine Benefits and Satisfaction from Training, which Affects Training Effectiveness

Concurrent Propositions/Findings	Theoretical Concepts
<p>1) Trainees will decide if they will attend a training program based on their necessity and benefits, including their needs. If it does not respond to their necessity or needs, they will not be willing to participate in the program. The necessity and needs are two types: cognitive and affective. Thus, trainees are factors affecting training effectiveness.</p>	<p>1) Information inquiry for uses of Kanjana Kaewthep (2013, P. 285) 2) Receivers' needs of McGuire (1974, as cited in Kitti Gunpai, 2013). 3) The concept of the obstinate audience of Bauer (1964, as cited in Kitti Gunpai, 2013) 4) Media and message uses the model of Sawanit Yamaphai and Rawewan Prokobpol (1994, p. 136, as quoted in</p>
<p>2) Training in a room is not the only source of knowledge as trainees can acquire knowledge from other sources by themselves.</p>	<p>Passawalee Nitikasetsunthorn, 2014, p. 39)</p>

5.2.8.10 Trainees are Adult-Learning Oriented, which Affect Training Effectiveness

The finding that trainees are adult-learning oriented, which affect training Effectiveness accords with the following theoretical concepts:

1) Modern Adult Learning Theory of Knowles (1978, as cited in Suwat Wattanawong, 2004), which summarizes five characteristics of adult learning. 1) Needs and interest: adults can be easily persuaded to learn if learning responds to their needs and interest. Thus, it is very crucial to start their learning with this notion properly, especially in organizing activities to keep them be encouraged to learn. 2) The situation related to adult life: adult learning can be effective if it is adult-centered learning or training. Therefore, for content to be learned, it should focus on situations related to their adult life, not on the general subjects. 3) Analysis of experience: Experience is the most valuable learning source for adults. Thus, the principal method of adult learning is an analysis of each adult's experience thoroughly to find out which parts of their skills can be used for training and making uses for further learning. 4) Self-directing learning. The grave needs of adults are the ability to do things by themselves. Accordingly, the role of trainers or teachers is a co-learner with an adult rather than a transmitter or transmitting media of knowledge. The primary duty is to evaluate if trainees comply with what they are learned or told. 5) Individual differences: individual differences will be increasing by increased age. Therefore, a trainer should be well aware and well-prepared for this, i.e., proper learning or training style, time, place, etc. Most importantly, the learning capability of each level of age depends on each adult's pace of learning.

2) The concept of Maple (1933; Janis & Rife, 1959, as cited in Meyapim Somprasong, 1995), which explains that persuadability will be more difficult for adults of older ages. Besides, from the study, it is found that young people tend to be more idealistic, optimistic, and unstable emotions than older people. On the other hand, older people tend to be more obstinate and cautious than young people.

From the research findings and theoretical concepts, it indicates that considering the demographic characteristics of the samples of this study, all trainees are adults who need adult-learning, which is different from child-learning. They also give high importance to their needs and interest. Thus, if training can respond to their

needs and interest, training tends to be more effective. On the contrary, if not, it is difficult to reach training effectiveness. Correspondingly, this notion affects professional trainers' design of training content. If the design accords with trainees' actual state, training can yield a positive outcome for their learning. However, if the training content is irrelevant to the real situation, they will face in their life.

Similarly, if it is too academic for trainees to connect with their life, it is difficult to be effective. It is partly because each trainee has prior life experience, work experience, and learning experience more or less. Therefore, all involved in organizing training should analyze their trainees thoroughly to prepare proper training content and program, communication methods, and others. Otherwise, trainees may select not to learn.

Furthermore, due to their needs for self-directing learning, trainees will selectively consider the content by themselves. It means that in each training program, professional trainers are not the most powerful ones, but trainees are. It accords with the findings of this study. Moreover, due to individual differences among trainees, the older trainees are, the more differences trainers will face. Such individual differences affect the overall effectiveness of training since training is a co-learning of a number of trainees, not a particular trainee. Lastly, due to the fact that the older trainees are, the harder trainers can persuade them; thus, it is more difficult for training to be effective as well.

The congruence between the research findings and theoretical concepts is summarized and illustrated in Table 5.12.

Table 5.12 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Trainees are Adult-Learning Oriented, which Affect Training Effectiveness

Concurrent Propositions/Findings	Theoretical Concepts and Previous Study
1) Trainees give high importance to their needs and interest; therefore, training should respond to their needs	1) Modern Adult Learning Theory of Knowles (1978, as cited in Suwat Wattanawong, 2004)

Concurrent Propositions/Findings	Theoretical Concepts and Previous Study
and interest to ensure training effectiveness.	2) The study of Maple (1933) and Janis & Rife (1959, as cited in Meyapim
2) Training content that accords with actual situation trainees will face tends to be effective.	Somprasong, 1995), which indicates that persuadability will be more difficult by increased ages.
3) Each trainee has previous life, work, and learning experiences, which affect their perception towards learning and hence affect training effectiveness.	
4) Trainees' needs for self-directing learning affect training effectiveness.	
5) There are individual differences among trainees, which affect the overall training effectiveness since training is a co-learning of several trainees, not of a particular trainee.	
6) Due to trainees' adulthood, the analysis of their ages affects the effectiveness of persuasion and training eventually.	

5.2.1.11 Trainees' Learning Motivation Affects Training Effectiveness

The finding that trainee's learning motivation affects training effectiveness accords with the following theoretical concepts:

1) The concept of learning motivation of Blanchard and Thacker (2004). Learning motivation is defined as a desire to use learned knowledge and skills for working in a definite direction by putting both physical and mental effort. Motivation is essential for learning and learning proficiency. Besides, learners' ability, learning depends significantly on learners' motivation.

2) The concept of learning of Mitchell (1982, as cited in Chuchai Smithikrai, 2011, p. 53), which defines motivation as a psychological process involving arousal, direction, and stamina in doing something. Arousal and stamina are individuals' time and physical effort investment.

3) The concept of motivation to learn of Suwat Wattanawong (2004), which explains that better learning can take place in one situation than the others. This assumption relates to learning principles and learning theories that motivation is the factor facilitating or supporting adult learning and enhance the effectiveness of training. Factors affecting learning are learning motivation, learning environment, prior knowledge and experience, learning content and activities, realistic problems, cognitive or intellectual and physical participation, sufficient time for learning, opportunities for practices, and for expressing learners' potential and learning competency. People will rely on knowledge gained from people, and people will comply with new ideas and behaviors if a persuader is a member of society.

4) The concept of the locus of control and its effect on the level of motivation of Noe (1985, as cited in Chuchai Smithikrai, 2011, pp. 93-94), which states that factor affecting trainees' level of motivation and learning capability is the locus of control, which consists of external and internal control. External locus of control means the outcome or consequences caused by something outside the control of an individual, i.e., luck, or other people's action, etc. In contrast, internal locus of control believes that the consequences caused the deeds of themselves.

5) The concept of the internal locus of control and learning motivation of Goldstein (1993, as cited in Chuchai Smithikrai, 2011, p. 93), which assumes that people with a high internal locus of control tend to have higher learning motivation than those with an external locus of control since the former believe that no matter the performance is good or bad, it is caused by one's action.

6) The concept of the drive as a learning component of Dollard and Miller (1999, as cited in Aree Panmanee, 2003), which believes that learning must come from a drive, either primary drive caused by fundamental needs in living, which can simultaneously occur since birth or secondary drive caused by subsequent social needs i.e. love, social status, stability, and safety.

7) The concept of the factor enhancing learning of Chiansri Wiwithasiri (1991; Aree Panmanee, 1997, as cited in Thipsuda Chaiyapruk, 2009), which believes that motivation is a process inducing the response of human needs and subsequent satisfaction. Motivation is thus a kind of drive, which is a significant factor enabling human behaviors to reach their intended goals. By nature, human beings will behave or learn something when they are stimulated to have some desire to do or to learn.

8) Hierarchy of needs theory of Maslow (1954, as cited in Boonman Thanasuppawat, 1994). Maslow makes three assumptions about human needs: 1) human beings have continuous and endless needs, 2) if the lower needs have not been accomplished or responded, they will not be motivated to have higher needs, and 3) human needs are hierarchical by their importance. Thus, when needs at the lower level are responded, people will pay attention to the next higher needs. Maslow specifies five human needs in a hierarchy: 1) physiological needs, 2) security of safety needs, 3) social or belonging needs or love, 4) esteem or status needs, and 5) self-actualization needs.

9) The concept of Bass and Vaughan (1966) on the hierarchy of needs towards career growth, based on the self-actualization level of Maslow's hierarchical needs, since they believe career growth is part of human self-actualization needs, which involves the level of their working competency. Training is an important activity, which provides readiness towards trainees' growth in their career. Therefore, training can respond to the needs of organizational personnel.

10) Vroom's Expectancy Theory, which points out whether people will be motivated to put their effort into their performance to achieve the desired outcome or not depends on three kinds of expectancy: Effort – Performance expectancy or EP, Performance-Outcome expectancy or PO, and expectancy on the valence of outcomes. (Bartol & Other, 1998, as cited in Wirote Sarnrattana, 2008). Vroom believes that motivation can be stimulated under the condition that these three expectancies are high. If any expectancy is low, motivation will not occur.

The aforementioned research findings and theoretical concepts thus support the proposition that trainees with high motivation will learn more than those with a lack of motivation. Besides, trainees with high motivation tend to express their

behaviors curiously and purposively. They are like to be continually stimulated and express their needs for learning certain things. Therefore, trainees with high motivation will be more willing and determined to learn no matter how hard, or long training is, or what kind of outcome they will gain since they believe in an internal locus of control or a belief that either success or failure is a consequence of one's action, not of others'. Besides, trainees have some needs and satisfaction to be responded. Such needs will be leveled up in a hierarchy. Therefore, if trainees evaluate that training enables them to achieve those hierarchical needs, they will have high learning motivation and willingness to learn to accomplish their desired goals. Likewise, if trainees have high EF or effort-performance expectancy, high PO or performance-outcome expectancy or high instrumentality, and high perceived valence of training outcomes, their training motivation is high accordingly.

All of these remarks accords with the findings from in-depth interviews with all samples, both individuals and organizations, in the qualitative research of this study. Apiwut Pimolsaengsuriya said, "trainees need to be ready and open to learning, and they should be curious to learn too."

People Value Solution Provider Co., Ltd. stated, "trainees have to be curious to learn and participate in training, i.e., questioning, cooperating in doing activities, giving some examples they experienced, etc. at the appropriate level without bothering other trainees' learning time too much. Nor should they keep watching their mobile phones all the time."

Sunon Choophol said, "Trainees must be prepared to learn new things. They must be open and listen to opinions or beliefs different from theirs. Most of all, they must need to attend training." It indicates that high training motivation tends to induce high training effectiveness; thus, learning motivation is influential for training effectiveness.

The concurrent findings and theoretical concepts are summarized and illustrated in Table 5.13.

Table 5.13 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Trainees' Learning Motivation Affects Training Effectiveness

Concurrent Propositions/Findings	Theoretical Concepts and Previous Studies
<p>1) Trainees with high motivation can learn more and better than those without motivation.</p> <p>2) Trainees with high motivation will express their curiosity and purposeful behaviors</p> <p>3) Trainees with high motivation will be willing or determined to learn in training, no matter how hard or how long training is or takes.</p> <p>4) Trainees with high motivation tend to have a high internal locus of control as they believe that success or failure is a consequence of one's action.</p> <p>5) All trainees have specific needs and satisfaction to be responded to or achieved. Their needs will be increased in a hierarchy. If trainees perceive that training can respond to their needs, they will have high learning motivation and have high determination on learning to achieve their desired goals.</p> <p>6) If trainees have high EF expectancy, high PO or instrumentality, and high valence of</p>	<p>1) Learning motivation of Blanchard & Thacker (2004)</p> <p>2) Learning motivation of Mitchell (1982, as cited in Chuchai Smithikrai, 2011, p. 93)</p> <p>3) Motivation to learn of adults of Suwat Wattanawong (2004)</p> <p>4) Factors affecting the level of motivation of Noe (1986, as cited in Chuchai Smithikrai, 2011, pp. 93-94)</p> <p>5) Locus of control and learning motivation of Goldstein (1993, as cited in Chuchai Smithikrai, 2011, p. 93)</p> <p>6) Learning components of Dollard and Miller (1999, as cited in Aree Panmanee, 2003)</p> <p>7) Factors enhancing the learning of Chiansri Wiwithasiri (1991) and Aree Panmanee (1997) (as cited in Thipsuda Chaiyapruk, 2009)</p> <p>8) Maslow's hierarchy of needs (1954, as cited in Boonman Thanassupawat, 1994).</p> <p>9) Hierarchy of needs and career growth of Bass & Vaughan (1966)</p> <p>10) Expectancy theory of Vroom (1964, as cited in Wirote Sarnrattana, 2008)</p> <p>11) Expectation components of Bartol and Other (1998, as cited in Wirote Sarnrattana,</p>

Concurrent Propositions/Findings	Theoretical Concepts and Previous Studies
outcome expectancy, their training motivation is high too.	2008).

5.2.1.12 Trainees' Perceived Self-Efficacy Affects Training

Effectiveness

The finding that trainee's perceived self-efficacy affects training effectiveness accords with the following theoretical concepts and previous studies:

1) Self-efficacy theory of Bandura (1977, as cited in Chuchai Smithikrai, 2011). Bandura believes that self-efficacy affects individuals' actions. Two persons may have the same ability but express different quality performance. Likewise, even for the same person, he or she may have different self-efficacy in different situations, which results in different behaviors. Bandura views that a person's ability is not fixed but flexible by the case. Therefore, the effectiveness depends on a person's self-efficacy in certain situations. If a person perceives that he or she can do it or has the competence to do it, he or she will express himself or herself explicitly. Usually, people with high self-efficacy will be tolerant, diligent, and persistent until their goals are achieved. Thus, whether people will express their behaviors or not depends on two main factors: self-efficacy and valence of outcomes. Hence, to encourage people to behave as wished, not only should their expectation be created, but also a belief and confidence that they can do it as well.

2) The concept of self-efficacy of Cook and Hunsaker (2001). Self-efficacy is defined as one's perception of his or her competence to accomplish doing something. Self-efficacy is important and influential for working performance since it is a positive feeling towards oneself and related surroundings.

3) The concept of self-efficacy of Judge, Erez, and Bono (2001), who define self-efficacy as an expectation about one's competence in confronting some situations to accomplish one's goals. People with high self-efficacy tend to have better work performance.

4) The concept of self-efficacy of Schultz & Schultz (2001). Self-efficacy is defined as a person's belief about his or her ability to work

successfully. It involves a sense of effectiveness and competency in managing things as desired in one's life.

5) The concept of self-efficacy of McShane, Steven, Von, & Mary (2002), who define self-efficacy as an individual's belief that he or she is able to reach his or his working goal effectively.

6) The concept of trainees' competence of Wexley & Latham (1991), which states that what trainees should possess is their trainability, or the ability to learn knowledge, skills, and behaviors needed for performing some tasks within a stipulated period of time. Trainability may be considered as the consequence of each trainee's competence and motivation.

7) Self-efficacy theory of Bandura (1986, as cited as Chuchai Smithikrai, 2011, p. 93), which is defined a person's perceived capability to accomplish a certain level of performance.

8) The concept of trainability of Chuchai Smithikrai, (2011, pp. 92-93), which means the level of expertise or skills for performing some tasks, including an individual's level of qualification and experience.

9) The concept of self-efficacy of Gist (1989, as cited in Chuchai Smithikrai, 2011, p. 93), which points out that people with high self-efficacy, both before and during training, can learn better than those with low self-efficacy.

10) The concept of competence and motivation of (Noe & Schmitt, 1986; Robertson & Downs, 1989, as cited in Chuchai Smithikrai, 2011, pp. 93-94), which points out that trainees with high competence and motivation can learn better than those without competence and motivation.

11) The study on the factors affecting training effectiveness of Thirachat Thirachat Thamrong (1996) entitled, "Personnel Potential Development of the Metropolitan Police Bureau: Study of Factors Affecting Training Efficiency", which found that trainers should use psychological techniques for organizing training by considering trainees' needs and readiness, which affect their morale, motivation, and determination towards training.

12) The study of Bourquin (1999) entitled, "The relationship among math anxiety, math self-efficacy, gender, and math achievement among college student at an open admissions computer institute," which found that self-

efficacy in learning maths is a predicting variable of high math achievement. In other words, students with high self-efficacy that they can be successful in learning math have low anxiety towards learning math and hence tend to have higher math-learning achievement.

13) The study of Yaowalux Parnploy (2000) entitled, “Factors Predicting Learning and Self-Development Behaviors in Organizations,” and found that employees with high learning behaviors and self-development behaviors have a higher level of perceived work accomplishment than those with low learning and self-development behaviors. Besides, the variables found to be the most influential in their learning and self-development behaviors are learning readiness and organizational support for education.

From the abovementioned research findings and theoretical concepts, it can be concluded that when trainees have high self-efficacy or believe that they are capable of participating in training successfully, including having a high perceived valence of training outcome, they will be diligent and persistent in the training. However, trainees should also have some related knowledge and skills. All of these combinations thus enable training to be effective.

Such a notion accords with the findings from the interviews with the samples in the qualitative research, both individuals and organizations. For instance, Atchara Juicharoen stated, “For good trainees, firstly they have to believe that everything can be learned. They should not think that they are learning something greater than their responsibility. Thus, training effectiveness depends on trainees, especially their commitment to self-development.”

People Value Solution Provider Co., Ltd gave an opinion, “We give high importance to the grouping of trainees. In classifying classes or seating arrangements for trainees, it requires consideration of their knowledge foundation, learning potential, and experience in similar areas.”

Similarly, Wipaphan Kajornpai said, “Trainees need to be ready with some knowledge foundation and not too different learning capability. They have to know their weaknesses too. From my experience of selecting trainees, we select them based on several criteria, i.e., positional level, headcounts, the speed of investment return, etc. Then, budgets and resources are invested.”

The concurrent research findings and theoretical concepts are summarized and illustrated in Table 5.14.

Table 5.14 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Trainees' Perceived Self-Efficacy Affects Training Effectiveness

Concurrent Propositions/Findings	Theoretical Concepts & Previous Studies
1) Trainees with high self-efficacy and high perceived valence of training outcomes will be more diligent and persistent in learning.	1) The concept of self-efficacy of Bandura (1977, as cited in Chuchai Smithikrai, 2011) 2) The concept of self-efficacy of Cook & Hunsaker (2001)
2) Trainees should have a related knowledge foundation and skills in learning specific topics or areas.	3) The concept of self-efficacy of Judge, Erez, & Bono (2001) 4) The concept of self-efficacy of Schultz & Schultz (2001) 5) The concept of self-efficacy of McShane, Steven, Von & Mary (2003) 6) The concept of trainees' competence of Wexley & Latham (1991) 7) The concept of self-efficacy of Bandura (1986, as cited in Chuchai Smithikrai, 2011, p. 93) 8) The concept of trainees' trainability (Chuchai Smithikrai, 2011, pp. 92-93) 10) The concept of self-efficacy of Gist (1989, as cited in Chuchai Smithikrai, 2011, p. 93) 11) The concept of competence and motivation (Noe & Schmitt, 1986; Robertson & Downs, 1989, as cited in Chuchai Smithikrai, 2011, pp. 93-94).

Concurrent Propositions/Findings	Theoretical Concepts & Previous Studies
	12) The study on factors affecting training effectiveness of Thirachat Thirachat Thamrong (1996)
	13) The study on math achievement of Bourquin (1999)
	14) The study on employees' learning and self-development behaviors of Yaowalux Parnploy (2000)

5.2.1.13 Trainees' Perceived Valence of Outcome Affects Training Effectiveness

The finding that trainees' perceived valence of outcome affects training effectiveness accords with the following theoretical concepts:

1) The concept of the expectation on the outcome of Vroom (1970), which explains that if employees expect to have great chance to receive outcome or remuneration from their work performance, and such outcome and remuneration is perceived as important and satisfactory, they tend to have sufficient motivation to perform their task successfully. On the contrary, if they expect no chance or low chance to get outcome or remuneration from their performance or there is great chance that they may receive important or dissatisfactory outcome or remuneration, then they will have low motivation and yield low or bad work performance.

2) Motivation process of Lawler (1977, as cited in Thipsuda Chaiyapruk, 2009), which explains a process inducing motivation based on a number of assumptions on organizational personnel's behaviors, such as employees decide to express their behaviors for their needed outcome, employees will decide to perform good performance once they perceive or expect that they will have a great chance of getting needed outcome or remuneration and avoid performing any task that may yield unwanted outcome or remuneration. Lawler further adds that the process of inducing or creating motivation comprises three components: 1) Effort-Performance expectancy, 2) Performance-Outcome expectancy, and 3) valence of the outcome.

From the research findings and theoretical concepts, it can explain that when trainees have Performance-Outcome expectancy, or what kind of benefits they will gain from training, and if they perceive such outcome or benefits as important or satisfactory, they will have the motivation to express their determination towards achieving their planned goals. On the contrary, if trainees have no or low expectation on the outcome or perceive such outcome as unimportant or dissatisfactory, their training motivation will be low, and they will express their inattentive behaviors, which causes no or low training effectiveness.

The aforementioned notions accord with the findings from the interviews with both individuals and organizations in qualitative research. Apiwut Pimolsaengsuriya said, “Trainees must know why they attend this training program, what their expectation is, what they look for, why they have been chosen, and what the organization expects to gain from this training.”

Pisit Chokepreecha stated, “trainees must have a good attitude towards training. They must know the goal of training and must cooperate in training.”

Similarly, Wirapot Wirunharat expressed his idea, “trainees must understand the objectives of the program, the necessity in using acquired knowledge and skills from the training, and plan how they can apply what they learn for their actual work.”

Additionally, Wipaphan Kajornpai said, “trainees must understand and well aware of the ultimate goal of training.”

Sunon Choophol pinpointed, “In selecting trainees, our criterion is that the target trainees must be harmonious with training content and objectives and trainees can apply what they learn for further use.”

The concurrent research findings and theoretical concepts are summarized and illustrated in Table 5.15

Table 5.15 A Summary of the Congruence between the Research Findings and Theoretical Concepts of Trainees' Perceived Valence of Outcome Affects Training Effectiveness

Concurrent Propositions/Findings	Theoretical Concepts
1) When trainees have Performance-Outcome expectancy, or what kind of benefits they will gain from training, and if they perceive such outcome or benefits as important or satisfactory, they will have the motivation to express their determination towards achieving their planned goals. Thus, training tends to be effective.	1) Expectancy theory of Vroom (1970)
2) If trainees have no or low expectation on the outcome or perceive such outcome as unimportant or dissatisfactory, their training motivation will be low and they will express their inattentive behaviors, which causes no or low training effectiveness.	2) A process of inducing motivation of Lawler (1977, as cited in Thipsuda Chaiyapruk, 2009)

5.2.2 The Research Findings that are Incongruent with Theoretical Concepts and Previous Studies

5.2.2.1 Professional Trainers' Qualification and Competence Factors do not Affect Training Effectiveness

The finding that professional trainers' qualification and competence factors are incongruent with the following theoretical concepts:

1) The concept of source credibility factors. According to Berlo, Lemert, and Mertz (1969), if receivers perceive a sender as having proper qualifications, it can imply that such a sender has a high tendency to persuade. Thus, what a sender conveys is less critical than his or her personality, which is more potent in changing receivers' attitudes. In other words, if a sender is perceived as incredible,

no matter what subject he presents, it will look incredible too. Generally, receivers see a sender's creditability by three factors: 1) safety factor, 2) qualification factor, and 3) dynamism factor

2) Characteristics of source credibility (Dejphan Pravichai, 1988). From his study, it was found that if receivers did not perceive a sender as credible, a sender's persuasion failed.

3) Source credibility varies by topic and situation. According to Orawan Pilunowad (2003, p. 124), source credibility is not what a sender can declare to let others know or accept it. On the other hand, it is not individuated characteristics like age and sex but is something receivers can see, perceive, and trust.

4) Aristotle's concept of ethos (Cooper, 1960), which assumes that a sender's characteristics are a major persuasive appeal, especially when receivers do not know the subjects he says. Thus, when opinions are divided, a sender's ethos will be very influential, especially when he can be perceived as having intelligence, goodwill, and good character.

5) Characteristics of an opinion leader (Berelson et al., 1954) Berelson et al explain characteristics of an opinion leader as follows: being a model for group members, being a person whose opinions and suggestions are followed and complied by other members, possessing higher status than followers, acquiring more information, being a better leader than others, and graduated with higher education than other members.

6) The concept of necessary competence of trainers (Krit Umpote, 1996, pp. 8-10), which identifies trainers' ability to transmitting knowledge and understanding into words as their primary skill.

7) The definition of a training program (Kruawan Lim Aphichat, 1988, pp. 20-21), which is defined as a training project in which a training organizer accumulates and provides knowledge and experience for trainees, either in-house or outside an organization, to develop them to reach the project's objectives, i.e., to gain understanding or to change behaviors, etc.

From the research findings, it is found that professional trainers' qualifications and competence comprising qualifications, experience, reputation, and the design of training content does not affect training effectiveness. The reason is that

training is unlike general communication in which a sender's credibility, influence, and ability in telling stories are compelling. Training is the communication of knowledge, which relies on several trainees' factors. For instance, from this study, it is found that trainees' learning motivation, self-efficacy, and perceived valence of training outcomes influence training effectiveness despite trainers' high qualifications and competence. In general, trainers perform as an opinion leader, a model, and a leader with more elevated status than trainees. They are experts, trustworthy, i.e., giving trainees a feeling of safety and comfort in learning, being kind, congenial, friendly, cheerful, etc. Besides, they possess proper qualifications, i.e., highly experienced, skillful, authoritative, capable, intelligent, and also possess excellent characteristics, i.e., bold, active, energetic, etc. All of such qualifications, either from word-of-mouth or from trainees' own experience, are theoretically considered as high source credibility in general communication contexts but do not affect training effectiveness.

From in-depth interviews in the qualitative research of this study, a group of samples perceives in the same way. For instance, Apiwut Pimolsaengsuriya said, "Professional trainers must have the right experience for a program. It means that they must have genuine experience and knowledge in that particular subject of the program. However, this qualification may be gradually required less in the future as training may not need any expert in a particular topic or area any more since learning can be done in a variety of ways. As a result, professional trainers will become a facilitator, rather than a directive teacher or instructor. Likewise, several experiences, i.e., training experience, transmitting experience, or experience of getting jobs from an organization, etc. will also be less important."

Chaiyos Punsakulchai stated, "If contact persons are Gen X or Baby Boomer or people of aged over 45 years old, they will perceive the experience as a major qualification. However, nowadays, things change. Most contact persons are new human resource development personnel of age less than 40 years old. They will not perceive the length of working time as necessarily good experiences. A number of trainers are senior, but organizational clients do not choose them to be trainers." He further gave a remark that if tracing back to 20 years ago, Gen X and Baby Boomer gave high importance to educational qualifications, i.e., education level, the reputation

of an institution, kinds of certificates, etc. All of these were criteria for selecting trainers. However, at present, such qualifications are less critical. Thus, trainers do not necessarily graduate with a doctoral degree or graduate from well-known institutions abroad. For example, one of his friends graduated from engineering overseas, but he got only a few training jobs. Thus, it reflects that organizational clients today do not highlight educational background so much. Therefore, some trainers who graduated with only a bachelor's degree or with a certificate from abroad can be hired continually since organizational clients emphasize what trainers learn rather than from where they graduate. In short, educational qualifications may affect training effectiveness, but not always. Regarding trainers' reputation, reputation may come from trainers' previous training performance for some organizational clients, so if clients are satisfied with their performance, they will be called back to perform their trainer roles for the same old organization. For new clients, mostly trainers' reputation comes from word-of-mouth or the acquaintance's or other HRD personnel's recommendations, primarily through new media, i.e., Google or websites.

Similarly, Pisit Chokepreecha said, "For trainers' qualifications, I do not pay attention too much. Now trainers do not necessarily graduate from high education levels. Instead, I give more importance to actual knowledge and experience. For instance, some trainers may not graduate with a high degree, but they know thoroughly and deeply what they train; thus, they can be considered as good trainers, such as local wisdom, etc." He added that trainers' reputation might come from trainers' unique and distinguished design of training programs, i.e., lecture style, learning activities, etc.

Additionally, Phakorn Attanon pointed out, "organizational clients mostly hire trainers because of word-of-mouth from people in the training area. Besides, reputation can be evaluated from the fame or image of hiring organizational clients. Thus, it is noticeable that well-known trainers often used to be trainers for organizations with a good reputation and image or having a great profile. The reputation can also be evaluated from the number of hiring and continual projects. If a training program of a certain topic or area is organized, then his name will show up or mentioned first. Such trainers are considered thus as having distinguished performance" Regarding trainers' qualifications, he relies on specific experience and

expertise (specialist) more than educational qualifications as he believes that from practices, trainers can use their previous training experience to synthesize or conceptualize their accumulated knowledge and experience to be a body of knowledge in specific area, which is more realistic and better than general knowledge from academic institutions. Therefore, trainers' qualifications (or how much they earn their studies or how high their graduation is), it does not mean that they can be effective trainers. Therefore, trainers' qualifications and competence are not necessarily important factors that affect training effectiveness. Besides, their training effectiveness, the requirement of trainers depends on the needs of organizational clients as well.

Besides, Wipaphan Kajornpai gave her idea, "Trainers must have symmetrical relationships with their trainees. They are not necessarily all alike but can communicate with one another. Trainers' communication language should be communicative, amusing, interesting, etc. They should give some examples and can answer difficult or complicated issues to make it more understandable." From her direct experience of selecting trainers, she has been often recommended by other people in the HRD circle, which is most successful. Regarding educational qualifications, she does not concern about graduation from the same area as a training program or a well-known institution. Still, she gives more importance to actual or real experience and trainers' compatibility with trainees instead.

The incongruence between the research finding and related theoretical concepts is illustrated in Table 5.16.

Table 5.16 A Summary of the Incongruence between the Research Finding, Related Theoretical Concepts, and Previous Studies of Professional Trainers' Qualification and Competence Factors do not Affect Training Effectiveness

Contrasting Propositions/Findings	Theoretical Concepts & Previous Studies
1) Training is unlike general communication in which a sender's credibility, influence, and competences are very influential. Instead, training is the communication of knowledge, whose effectiveness depends much on several factors of trainees. From this study, it is found that trainees' learning motivation, self-efficacy, and perceived valence of outcome affect training effectiveness.	1) The concepts of factors for evaluating a sender's credibility of Berlo, Lemert, & Mertz (1969) 2) Characteristics of source credibility (Dejphan Pravichai, 1978) 3) The concept that source credibility varies by topics and situation (Orawan Pilunowad, 2003, p. 124) 4) Aristotle's concept of ethos (Cooper, 1960) 5) Characteristics of opinion leaders of Berelson, Lazarfeld, & McPhee (1954)
2) Even though trainees play a role in interpreting trainers' factors, it does not affect training effectiveness.	6) The concept of trainers' necessary competence (Krit Umpote, 1996, pp. 8-10) 7) Definitions of a training program (Kruawan Lim Aphichat, 1988, pp. 20-21)

5.2.2.2 Training Environmental Management Factors do not Affect Training Effectiveness

The finding that training environmental management factors do not affect training effectiveness are incongruent with training effectiveness as follows:

1) The study of learning and educational strategies of teenage students of Phongphan Kerpitak and Komphetch Chat Supakun (2000) found learning climate, the relationship between a teacher and students, the relationship with classmates, and the environment in school to affect students' learning methods and learning performance.

2) The study of Mitchell & Gilson (1997) on the effect of perceived learning environment of students of grade 5 to graduate students on their interest in learning, in learning math, and anxiety in learning math, which found that environmental arrangement could stimulate students' interest and induce them to have motivation to learn math. Besides, students who used to have good experience leading to positive motivation were more willing to learn math further or were interested in using their math knowledge for their future occupations that may require mathematical thinking skills.

From the findings in contrast with theoretical concepts and previous studies, it can explain that from the study, it is found that the training environmental management, comprising physical environmental management, social environmental management, and psychological environmental management, have no effect on training effectiveness. Such finding is not congruent with two previous studies. It may be because this study was conducted in the context of training for business organizations, which is different from formal academic learning in an educational institution in many ways, such as differences in senders (Teachers vs professional trainers), including qualifications, experience, reputation, communication, and the design of training programs, 2) differences in message (lessons vs. training programs/training content), i.e. lessons for learning in academic institutions vs. training program content for learning to improve their work performance, 3) differences in environment (Environment in classroom vs. environment in a training room), i.e. place, the relationship between an instructor and students and relationship among friends, and 4) differences in receivers (students vs. trainees), i.e. learning motivation, self-efficacy, valence of outcome, and anxiety. Relatively, the level of concentration of the above factors of trainers is higher than that of students. For instance, students may have learning motivation to pass their exams or to get better grades while trainees might have learning motivation for their future occupation or career growth. In short, trainees have a higher bet than students.

From the finding that the training environmental management does not affect training effectiveness, the proposed arguments in contrast with previous studies are summarized and illustrated in Table 5.17

Table 5.17 A Summary of the Incongruence between the Research Finding, Related Theoretical Concepts, and Previous Studies of Training Environmental Management Factors do not Affect Training Effectiveness

Contrasting Propositions/Findings	Previous Studies
<p>This research is a study in the context of business organizations', which differs from students' formal learning in an academic institution in many ways: 1) difference in a sender (a teacher vs. professional trainer), 2) difference in the message (lessons vs. training program content), 3) difference in the environment (classroom environment vs. training place environment), and 4) difference in receivers (students vs. adult trainees)</p>	<p>1) The study of learning and educational strategies of teenage students of Phongphan Kerpitak and Komphetch Chat Supakun (2000) 2) The study of Mitchell & Gilson (1997) on the effect of perceived learning environment of students of grade 5 to graduate students on their interest in learning, in learning math, and anxiety in learning math</p>

5.3 Recommendations for the Development of Training Communication

From the findings of the study, "Communication Factors Affecting Training Effectiveness of Business Organizations," the recommendations are proposed and illustrated in Figure 5.1

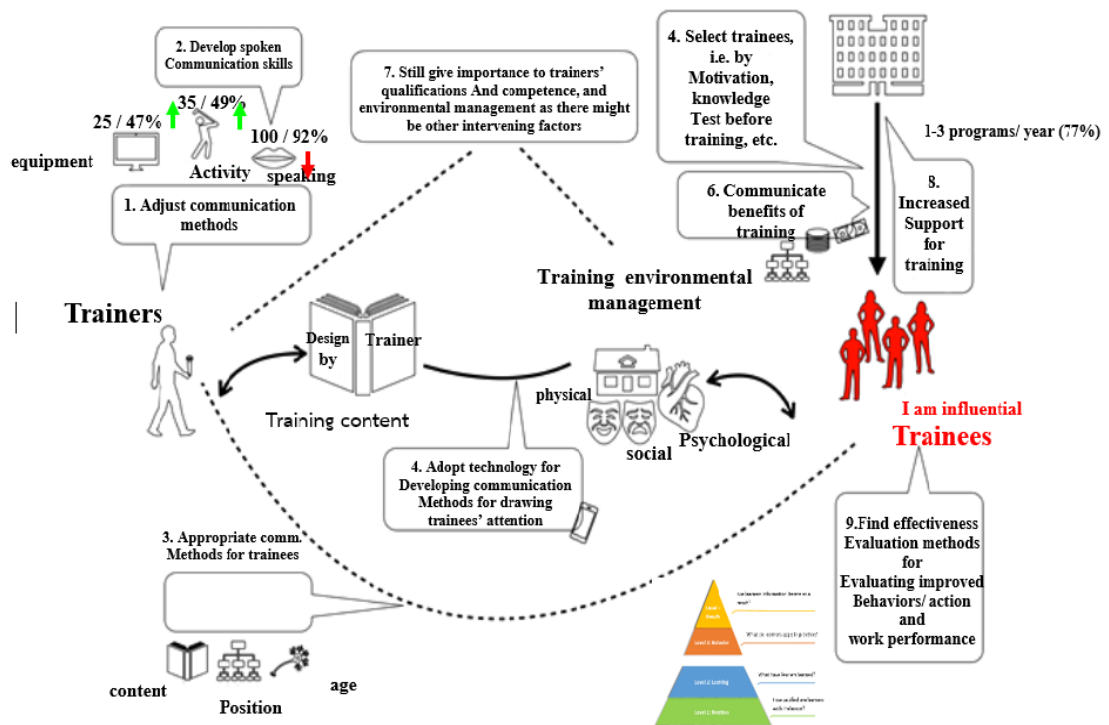


Figure 5.1 A Model of Proposed Recommendations for Developing Training Communication

From Figure 5.1, which is a model of the proposed recommendations for developing training communication, it shows that a professional trainer is the main sender transmitting his or her message or training content designed by the trainer via a channel or training physical, social, and psychological environmental management to trainees as receivers, who can switch their roles to be senders all the time. Nine recommendations are proposed as following:

1) Professional trainers should adjust their proportion of using communication methods of three kinds: speaking methods, communication by equipment, and activity communication, to be more balanced since, from the study, it was found in the qualitative research that professional trainers used speaking methods (100%) and 92% found in the quantitative research. On the other hand, 25% and 47% of trainers using communication by equipment and 35% and 49% using activity communication are found in qualitative and quantitative research, respectively. The more balanced usage of communication methods may help professional trainers' communication, which is one of the manifest variables in the latent variable

(professional trainers' qualifications and competence), yield higher effect on training effectiveness.

2) Besides, balancing communication methods, professional trainers should develop their spoken or oral communication skills as well since they have to use spoken communication while communicating with equipment and by activity all the time.

3) Communication methods should be used by considering the appropriateness for trainees, i.e., positional level, age, etc. and for training content. For instance, for top executive or old trainees, communication by activity, especially activities requiring body movement, i.e., game and recreational activities, should not be used. Instead, more cognitive activity communication should be used, i.e., brainstorming, learning activity. On the other hand, for operational staff or practitioners, activity communication should be used, i.e., game and recreational activities, etc. or field trips, which help trainees to see actual work outside the training room.

4) Professional trainers should adopt technologies for developing their communication skills and methods, such as new presentation techniques via presentation programs or mobile application, etc., to draw trainees' attention.

5) Since trainees were found in this study to be a significant communication factor affecting training effectiveness, an organization should have thorough criteria for selecting trainees, i.e., motivation, knowledge, and competence (from a test before a training), etc.

6) Besides the thorough selection of trainees, an organization should communicate the benefits trainees will gain from each training program, i.e., an opportunity for being considered for a positional promotion, etc.

7) Despite the fact that two latent variables, namely professional trainers' qualifications, and competence and training environmental management, were found to have no effect on training effectiveness, an organization still should give importance to them since they might have an effect on other factors or variables.

8) An organization should support more pieces of training. From the survey by questionnaires, 400 respondents or 76.62% attended 1-3 training programs yearly, which is relatively quite low. From 2020 Global Talent Competitiveness Index

or GTCI, which is a report of comparative evaluation and ranking of growth capabilities and the ability to attract and maintaining personnel with high competency of 132 countries, organized collaboratively by three global organizations: 1) INSEAD The Business for the World 2) The Adecco Group and 3) Google, a number of indices, categorized as “input” and “output” are presented, as illustrated in Figure 5.2

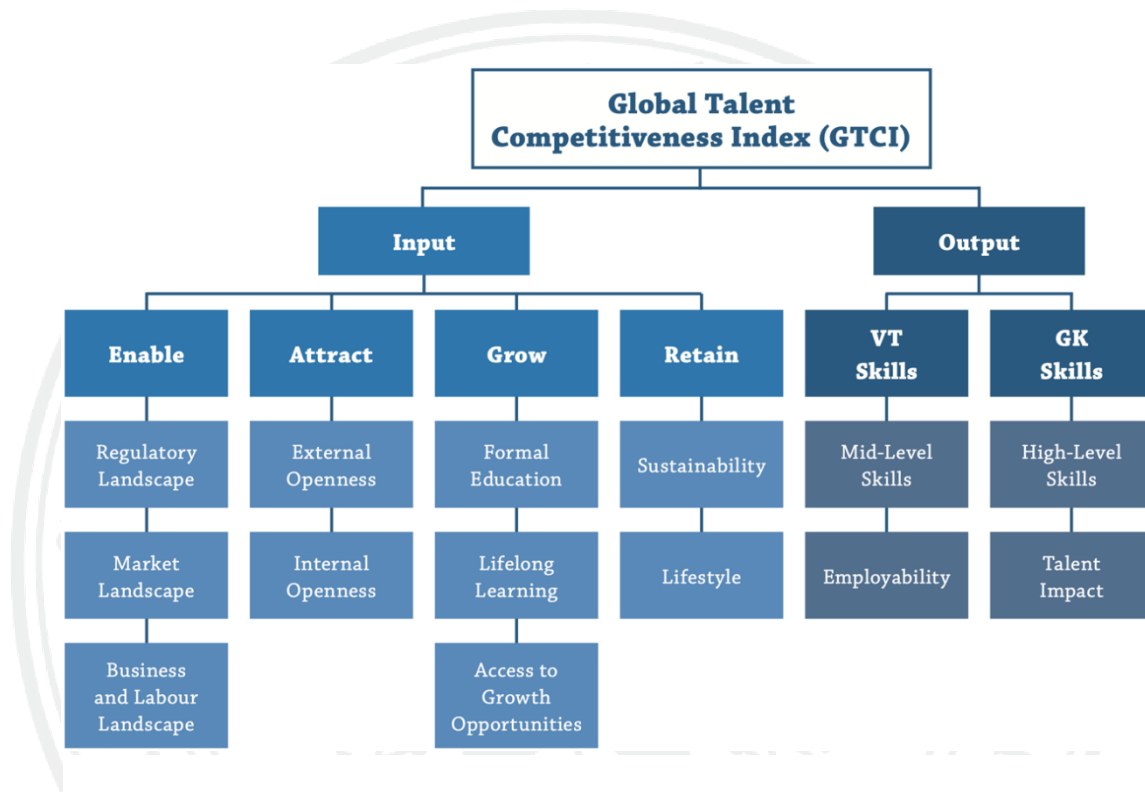


Figure 5.2 Indices of 2020 Global Talent Competitiveness Index

For “input” indices, the researcher selects indices and their sub-indices, showing a direct reflection of human resources’ competency development. For instance, “Lifelong learning” is one of the sub-indices of “Grow.” Besides, there are several sub-indices behind, and one of them is “Prevalence of training in firms,” or the distribution of organizational pieces of training. Thailand was scored 19.26 at the 83rd rank of the world. Another sub-index is “Employee Development.” Thailand was scored 50.35 at the 44th rank of the world. Regarding “output” indices, the index reflecting human resource competency is “VT Skills,” with two sub-indices: “Mid-Level Skills” and “Employability.” For “Mid-Level Skills,” one of the sub-indices are 1) “Technicians and associate professionals” or the number of professionals in various areas. Thailand was scored 19.23 at the 93rd rank of the world, and 2) “Labour

productivity per employee.” Thailand was scored 19.68 at the 69th rank of the world. For “Employability,” one of its sub-indices is “Ease of finding skilled employees.” Thailand was scored 49.42 at the 84th rank of the world (Global Talent Competitiveness Index, 2020, retrieved on February 8, 2020). All of these figures illustrate that Thailand was scored and ranked at the middle or mid-low level. Thus, training should help to increase those scores and rankings in the future.

9) An organization should develop evaluation methods for evaluating training effectiveness based on the degree of trainees’ improved behaviors/action and work performance, which are indicators with more quality than satisfaction and knowledge acquisition.

5.4 Recommendations for Further Studies

From the study “Communication Factors Affecting Training Effectiveness of Business Organizations,” some recommendations for further studies are proposed.

1) This research studied only the training of private organizations organized by professional trainers. However, there are a number of training in other forms, i.e., internal training by organizational trainers, public training, etc., including coaching by supervisors, etc.

2) This research studied only training in business or private organizations; thus, future studies can be conducted in government and state enterprise sectors.

3) This study bases on communication content and theories. Thus, the research on training in the future may be studied from other approaches, i.e., organizational studies from political, economical (in terms of optimization), or human resource development approach directly, etc.

BIBLIOGRAPHY

- Anderson, A. (1993). *Successful training practice a manager's guide to personal development*. Oxford: Blackwell Business Publishers.
- Aree Panmanee. (1997). *Teaching and learning psychology*. Bangkok: Ton-O Grammy. (In Thai)
- Aree Panmanee. (2003). *Psychology of creative teaching and learning*. Bangkok: Ton-O Grammy. (In Thai)
- Asch, S. E. (1951). Effect of group pressure upon the modification and distortion of judgements. In H. Guetzkow (Ed.), *Groups, leadership and men* (pp. 177-190). Pittsburgh, PA: Carnegie Press.
- Ayres, H. W. (2005). *Factor related to motivation to learn and motivation to transfer learning in a nurse population* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3162411)
- Bandura, A. (1977). Self-efficacy : Toward a unifying theory of behavior change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood CA: Prentice-Hall.
- Bandura, A. (2000). Self-efficacy. In A. E. Kazdin (ed.), *Encyclopedia of psychology* (Vol. 4). Oxford: Oxford University Press.
- Bass, B. M., & Vaughan, J. A. (1966). *Training in industry-The management of learning*. London: Tavistock Publications.
- Benjamas Rochthanakit. (2003). *The relationship between perceived self-efficacy organization culture, justice in the organization, and performance*. Bangkok: Kasetsart University. (In Thai)
- Berelson, B., Lazarsfeld, P. F., & McPhee, W. (1954). *Voting: A study of opinion formation in a presidential campaign*. Chicago: University of Chicago Press.
- Berlo, D. (1960). *The process of communication: An introduction to theory and practice*. New York: Holt, Rinehart and Winston.
- Berlo, D. K., Lemert, J. B., & Mertz, R. J. (1969). Dimensions for evaluating the acceptability of message sources. *Public Opinion Quarterly*, 33(4), 563-576.
- Bettinghaus, E. (1980). *Persuasive communication* (2nd ed.). New York: Holt, Rinehart

and Winston.

- Black, J. M., & Matassarini-Jacobs, E. (1993). *Luckmann and Sorensen's medical-surgical nursing: A psychophysiological approach* (4th ed.). Philadelphia: W.B.Saunders.
- Blanchard, N. P., & Thacker, J. W. (2004). *Effective training: Systems, strategies and practice* (2nd ed.). Upper Saddle River, NJ: Pearson Prentice.
- Boondham Mungthong. (1983). *Desirable characteristics of agricultural extension agents as viewed by agriculturists in Chom Thong Agricultural Project, Chiang Mai Province* (Unpublished master's thesis). Chulalongkorn University, Bangkok. (In Thai)
- Boonman Thanasupawat. (1994). *Organizational psychology*. Bangkok: Odeon Store. (In Thai)
- Bourquin, S. D. (1999). The relationship among math anxiety, math self-efficacy, gender, and math achievement among college student at an open admissions computer institute. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 60(3-A). 0679.
- Bussaba Sutheethorn. (2014). *Communication philosophy and theories*. Nonthaburi: Sukhothai Thammathirat University. (In Thai)
- Chalong Mapreeda. (2015). *Training and conference techniques*. Bangkok: Odeon Store. (In Thai)
- Chan Sawatsalee. (2012). *Organizing techniques for trainings and conferences: handbook for evaluating and monitoring training for trainers*. Bangkok: The Office of the Civil Service Commission. (In Thai)
- Chaweewan Maikami. (1998). *The anxiety in entrance exam into the higher education institutions of grade-12 students of the affiliated Schools of the Department of General Education, Amphur Moeng, Maha Sarakham* (Unpublished master's thesis). Maha Sarakham Rajabhat University, Maha Sarakham. (In Thai)
- Chitapha Sukplum. (2005). *Interpersonal communication*. Bangkok: O.S. Printing House. (In Thai)
- Chongolnee Chutimadevin. (1999). *Development training*. Bangkok: A.P. Living. (In Thai)

- Chuchai Smithikrai. (2011). *Staff organization training* (7th ed.). Bangkok: Chulalongkorn University Press. (In Thai)
- Cook, C. W., & Hunsaker, P. L. (2001). *Management and organization behavior* (3rd ed.). New York: McGraw-Hill/Irwin.
- Cooper, L. A. (1960). *The rhetoric of aristotle: An expanded translation with supplementary examples for students of composition and public speaking*. Englewood Cliffs, NJ: Prentice-Hall.
- Dejphan Pravichai. (1988). *The relationships between the attributes of the agricultural extension officers and the farmers' adoption of basmati rice in Tambon San Sai, Amphoe Phrao, Chiang Mai Province* (Unpublished master's thesis). Chulalongkorn University, Bangkok. (In Thai)
- Devito, J. A. (1995). *The interpersonal communication book*. Harlow: Pearson.
- Dixon, W. B. (1995). An exploratory study of self-directed learning readiness and pedagogical expectations about learning among adult inmate learners in Michigan. *Dissertation Abstracts International*, 55(7), 1789-A.
- Duangchan Awvijittrakul. (1990). *Appropriate training methods for public enterprises as perceived by trainers*. Bangkok: Chulalongkorn University. (In Thai)
- Eddie, W. L., & Danny, C. K. (2001). The influence of job and career attitudes on learning Motivation and transfer. *Career Development International*, 6(1), 20-27.
- Gagne, R. M., Wager, W. W., Goal, K. C., & Keller, J. M. (2005). *Principles of instructional design* (5th ed.). New York, CA: Thomson Learning Academic Resource Center.
- Geraldine. (1993). Research for the 1993 NSF surveys of scientist and engineering. Retrieved from <http://srsstats.sbe.nst.gov/docs/research/9-31.pdf>
- Good, C. V. (1995). *Dictionary of education*. New York: McGraw-Hill.
- Hair, J. F., Jr., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). New Jersey: Prentice Hall.
- Hellriegel, D. (2001). *Organizational behavior* (9th ed.). Mason, OH: South-Western Cengage Learning.

- Hovland, C. I., Janis, I. L., & Kelley, H. E. (1953). *Communication and persuasion: Psychological studies of opinion change*. Westport: Greenwood Press.
- Infante, D. A., Rancer, A. S., & Womack, D. F. (1997). *Building communication theory* (3rd ed.). Prospect Heights, Ill: Waveband Press.
- Janis, I. L., & Rife, D. (1959). *Persuasibility and emotional disorder*. New Haven: Yale Univer. Press.
- Johnson, R. B. (1976). Organization and management of training. In R. L. Craig (Ed.), *Training and development handbook: A guide to human resource development* (2nd ed.). New York: McGraw-Hill.
- Judge, T. A., Erez, A., & Bono, J. E. (2001). Relationship of core self-evaluation traits-selfesteem, generalized self-efficacy, locus of control and emotional stability-with job satisfaction and job performance : A meta-analysis. *Journal of Applied Psychology*, 86(2), 80-92.
- Kajornsak Hannarong. (1981). *The application of training techniques*. Bangkok: National Institute of Development Administration. (In Thai)
- Kanjana Kaewthep. (2013). *Mass media theories and research approach*. Bangkok: Parbpim. (In Thai)
- Kannika Sukcharee. (2005). *Locus of control, self-efficacy perception, and job performance of operational staffs of the World Equipment, Co., Ltd.* (Unpublished master's thesis). King Mongkuts University of Technology North Bangkok, Bangkok. (In Thai)
- Kangwan Yodwisitsak et al. (2004). *Factors enhancing learning towards operation development: A case study of Acer Computer Co., Ltd. as a successful sales agent of Taiwanese Technology Company in Thailand* (Research Report). n.p.
- Kant Amphanont. (1999). *Training of human resources in production and service companies in bangkok and vicinity*. Phetchabun: Phetchabun Rajabhat University. (In Thai)
- Katz, E., & Lazarsfeld, P. F. (1955). *Personal influence*. Bangkok: Random Press.
- Kingsbury, J. B. (1957). *Personnel administration for Thai students*. Pathumthani: Institute of Public Administration Thammasat University. (In Thai)
- Kirkpatrick, D. L. (1987). Evaluation of training. In R. L. Craig (Ed.). *Training and*

- development handbook : A guide to human resource development* (2nd ed.). New York: McGraw-Hill.
- Kitti Gunpai. (2013). *The analysis of mass media receivers*. Bangkok: Rianbun Printing. (In Thai)
- Kittidet Sornritchngchai. (2005). *The learning of operational personnel in the Office of the Military Army's Research Coordination and Development*. Chonburi: Burapha University.
- Komwut Chongbunwatana. (2005). *Interpersonal Communication between inquiry officers and complainants to achieve satisfaction of complainants at Pathumwan Police Station* (Unpublished master's thesis). Chulalongkorn University, Bangkok. (In Thai)
- Kriangsak, N., Kusang, S.-F., Potjanat C. B., & Aphiwut, P. (2012). *Untold stories of executive coaching Thailand*. Bangkok: Business Media. (In Thai)
- Krit Suebson. (1989). *Communication and information science*. Bangkok: Chulalongkorn University Press. (In Thai)
- Krit Umpote. (1996). *New concepts in training*. Bangkok: National Institute of Development Administration. (In Thai)
- Kruawan Lim Aphichat. (1988). *Principles and techniques of training management and development*. Bangkok: Siamsilp Printing. (In Thai)
- Leavitt, H., & Mueller, R. A. (1951). Some effects of feedback on communication. *Human Relations*, 4, 401-410.
- Luxana Satawetin. (1997). *Principles of speaking*. Bangkok: Fueang Fa Printing House. (In Thai)
- Luxanee Jornjarunsolot. (1988). *The Study of the anxiety of boarding students and students of Suranari Wittaya School*. Bangkok: Srinakharinwirot University (Prasarnmit). (In Thai)
- Mallika Bunnak. (1994). *Statistics for decision-making*. Bangkok: Chulalongkorn University Press. (In Thai)
- Mallika Chulathammat. (2001). *Administrative and supporting factors affecting work motivation: A case study Government Officials Operating in Legal Matters*. Bangkok: Thammasat University. (In Thai)

- Marple, C. H. (1933). The comparative susceptibility of three age levels to the suggestion of group versus expert opinion. *The Journal of Social Psychology*, 4(2), 176-186. <https://doi.org/10.1080/00224545.1933.9921568>
- McGehee, W., & Thayer, P. W. (1961). *Training in business and industry*. London: Wiley.
- McShane, S. L., Von, G., & Mary, A. (2003). *Organizational behavior: Emerging realities for the workplace revolution* (2nd ed.). New York: McGraw-Hill.
- Meyapim Somprasong. (1995). *Public opinion toward "Thai Conceptualization" of television advertisement*. Bangkok: Chulalongkorn University. (In Thai)
- Mitchell, M., & Gilson, J. (1997). Interest and anxiety in mathematics. *Journal Announcement*, 150(7), 41.
- Moorhead, G., & Griffin, R. W. (1995). *Organizational behavior: Managing people and organizations* (4th ed.). Boston: Houghton Mifflin.
- Murray, B. (2003). *Anxiety as an affective factor for adult korean students learning english as a second language* (Unpublished master's thesis). University of Nevada, Las Vegas.
- Myers, G. E., & Myers, M. T. (1998). *The dynamics of human communication* (5th ed.). New York: McGraw-Hill.
- Nadler, L. (1980). *Corporate human resource development*. New York: American Society for Training and Development.
- Nirachara Thongthammachat. (2001). *Training and speakers' strategies in the globalization era*. Bangkok: Lincoln Promotion. (In Thai)
- Noe, R. A. (2013). *Employee training and development* (6th ed.). London: McGraw-Hill.
- Nongluck Wiratchai. (1999). *Lisrel model: Statistical analysis for research* (3rd ed.). Bangkok: Chulalongkorn University Press. (In Thai)
- Noy Sirichote. (1980). *Training techniques*. Bangkok: Odeon Store. (In Thai)
- Okoye, P. W. C., & Ezejiofor, R. (2013). The effect of human resources development on organizational productivity. *International Journal of Academic Research in Business and Social Sciences*, 3(10), 250-268.
- Orawan Pilan-o-wad. (2003). *Persuasive communication* (3rd ed.). Bangkok:

- Chulalongkorn University Press. (In Thai)
- Paradee Wiangwalai. (1999). *Anxiety of Teachers of kalasin educational service area in professional development for higher education accreditation under the national education act 1999*. Mah Sarakham: Maha Sarakham University.
(In Thai)
- Parama Satawetin. (1990). *Communication principles* (7th ed.). Bangkok: Chulalongkorn University. (In Thai)
- Passawalee Nitikasetsunthorn. (2014). *A collection of communication philosophy and communication*. Nonthaburi: Sukhothai Thammathirat University. (In Thai)
- Passawalee Tintabut. (1998). *Relationships among beliefs, Anxiety and achievement in English Language Learning of Mathayom Suksa Five Students, Bangkok Metropolis* (Unpublished master's thesis). Chulalongkorn University, Bangkok.
(In Thai)
- Patana Sukprasert. (1998). *Training strategies*. Bangkok: Kasetsart University.
- Patchanee Cheyjunya. (2015). *Quantitative methods for communication research*. Nonthaburi: Sukhothai Thammathirat University. (In Thai)
- Peplau, H. E. (1989). *Interpersonal theory in nursing practice: Selected works of Hildegard E. Peplau*. New York: Spinger.
- Petcharee Rupavichet. (2011). *Training and conference management techniques*. Bangkok: Offset Creation. (In Thai)
- Phongphan Kerdpitak, & Komphet Supakun. (2000). *Learning and education strategies of teenage students* (Research Report). Bangkok: Srinakharinwirot University.
(In Thai)
- Pilanthana Lamphachawa. (2003). *The relationship between self perception and internal motivation and working behavior in a refrigerator manufacturing factory: A case study of Toshiba Consumer (Thailand) Company Limited* (Unpublished master's thesis). Ramkhamhaeng University, Bangkok. (In Thai)
- Pimolchan Namwat. (1997). *The concepts on motivation*. Nonthaburi: Sukhothai Thammathirat University. (In Thai)
- Pira Jirasophon. (2014). *Communication philosophy and theories*. Nonthaburi: Sukhothai Thammathirat University. (In Thai)

- Piyaporn Khongchan. (2003). *Personal factors and organizational climate: Influencing self-learning*. Bangkok: Ramkhamhaeng University. (In Thai)
- Poonsri Kaewprakai. (1999). *The effects of individual counseling by rational emotive behavior therapy for reducing anxiety in facing outside world and daily living of prisoners in Central Prison of Udon Thani* (Unpublished master's thesis). The University of Maha Sarakham, Maha Sarakham. (In Thai)
- Pornsit Pattananurak. (1982). *Factors affecting source credibility: A case study of peasants' opinion in Rangsit Area* (Unpublished master's thesis). Kasetsart University, Bangkok. (In Thai)
- Pot Petcharaburanin. (1978). *Communication and training*. Bangkok: National Institute of Development Administration. (In Thai)
- Pramual Phiratphan. (1996). *Persuasive communication*. (Supplementary Sheet of Persuasive Communication Course). The Faculty of Communication Arts. Chulalongkorn University. (In Thai)
- Prasarn Malakul Na Ayutthaya. (1973). *General psychology (No. 2)*. (Supplementary Sheet of General Psychology Course). The Teacher's Council of Thailand Press. (In Thai)
- Preeyaporn Wonganutrarot. (1996). *Educational psychology*. Bangkok Supplement Media Center. (In Thai)
- Rattana-apa Subsombat. (2013). HR in an aging World. In Natthika Nawanno (Ed.), *Collection of new human resource management articles*. Nonthaburi: Office of the Civil Service Commission. (In Thai)
- Robbins, S. P. (1993). *Essentials of organizational behavior*. Englewood CA: Prentice-Hall.
- Rungthip Chotayundorn. (2001). *The relationship between organizational climate self-efficacy and self-development of employees of electronic components manufacturing companies* (Unpublished master's thesis). Kasetsart University, Bangkok. (In Thai)
- Saisaang Klaewkasetkorn. (1991). *Manual for writing training and seminar projects*. Bangkok: The Institute of Civil Officers, the Office of Civil Service Commission. (In Thai)

- Santi Kerdmolee. (1995). *The accomplishment of trainees of the territorial defense volunteer chiefs in supporting the rescue of the Ministry of the Interior: A case study of trainees in 1994* (Unpublished master's thesis). Krirk University, Bangkok. (In Thai)
- Santima Srisungsuwan. (1997). *Self-learning development towards learning organizations: A case study of Sukhothai Thammathirat Open University* (Unpublished master's thesis). National Institute of Development Administration, Bangkok. (In Thai)
- Sathit Wongsawan. (1982). *Educational psychology*. Bangkok: Bamrungsarn Press. (In Thai)
- Sawat Sukhontharangsri. (1994). *Factors and criteria for evaluating training*. Bangkok: National Institute of Development Administration. (In Thai)
- Schultz, D. P., & Schultz, S. E. (2001). *Psychology and work today*. Englewood CA: Prentice-Hall.
- Seal, J. & McKenna, M. (1990). British quality awards. *The Daily Telegraph*. Retrieved from <https://www.telegraph.co.uk/expat/7681793/The-Telegraphs-Best-of-British-awards-the-winners-in-full.html>
- Sherif, M. (1935). A study of some social factors in perception. *Archieve of Phychology*, 27(187), 23-46.
- Sirichit Raisuksiri. (2006). *Computer anxiety, thoughts, attitudes and experiences of High School Students in Nonthaburi* (Unpublished master's thesis). Kasetsart University, Bangkok. (In Thai)
- Siriporn Arunsinka. (2001). *Variables related to work stability anxiety of Siam City Bank Officers of Head Office in Bangkok* (Unpublished master's thesis). Maha Sarakham University, Maha Sarakham. (In Thai)
- Siriwan Sereerat. (1996). *Organizational theory* (2nd ed.). Bangkok: Thammasarn Printing. (In Thai)
- Somchart Kityanyong, & Ornjaree Na Takuatung. (2006). *Techniques of effective training* (2nd ed.). Bangkok: Se-Education. (In Thai)
- Somkid Bangmo. (1999). *Training and conference techniques*. Bangkok: Pimdee. (In Thai)

- Somkid Bangmo. (2008). *Training and conference techniques* (4th ed.). Bangkok: Witthayaphat. (In Thai)
- Somkid Issarawat. (2000). *Adult teaching*. Bangkok: Charunsanitwong Printing. (In Thai)
- Sompong Kasemsin. (1995). *Types of training*. Bangkok: Agricultural Cooperative of Thailand Printing House. (In Thai)
- Somyot Chetcharoenrak. (1997). *The development of training curriculum related to manufacturing industry management* (Unpublished doctoral dissertation). King Mongkut's University of Technology North Bangkok, Bangkok.
- Somyot Naveekarn. (2000). *Organizational management and behaviors*. Bangkok: Manager Printing. (In Thai)
- Stahl, O. G. (1962). *Public personnel administration*. New York: Harper & Brother.
- Sucheera Pharaphong. (2005). *The learning of KrungnThai Bank (Public Company Limited) employees in Muang District, Nakhon Ratchasima* (Unpublished master's thesis). Maha Sarakham University, Maha Sarakham. (In Thai)
- Sudarat Sumnakul. (1990). *The follow-up of trainees of self-development strategic programs for becoming effective officials of the Office of Educational and Social Service Promotion, Thammasat University* (Unpublished master's thesis). Chulalongkorn University, Bangkok. (In Thai)
- Supattra Chaithepha. (2001). *Anxiety, attitude, expectation, and understanding of education quality assurance of teachers of secondary schools under the Department of General Education of Maha Sarakham Province* (Unpublished master's thesis). Mahasarakham University, Maha Sarakham. (In Thai)
- Suwadee Paphaphot. (1981). *Training techniques*. Bangkok: National Institute of Development Administration. (In Thai)
- Suwat Wattanawong. (2001). *Psychology for training adults*. Bangkok: Theera Pom Wannakam. (In Thai)
- Suwat Wattanawong. (2004). *Psychology of adult learning*. Bangkok: Srinakharinwirot University. (In Thai)
- Tannenbaum, S. I. (1997). Enhancing continuous learning: Diagnostic findings from multiple companies. *Human Resource Management*, 36, 437-452.

- Thanut Wongsachue. (2018). Research instrument test: How to fix all low values of Alpha Cronbach. Retrieved from <https://www.youtube.com/watch?v=bzEJv1FeY54> (In Thai)
- Thipsuda Chaiyapruk. (2009). *Leaning motivation of support staff in public higher educational institutions to become a learning organization* (Unpublished master's thesis). Suranaree University of Technology, Nakhon Ratchasima. (In Thai)
- Thirachat Thamrong. (1996). *Personnel potential development of the metropolitan police bureau: Study of factors affecting training efficiency* (Unpublished master's thesis). Thammasat University, Bangkok. (In Thai)
- Thongfoo Thanachote. (1988). *Training and personnel development*. Bangkok: Kasetsart University Press. (In Thai)
- Thongsri Kamphu Na Ayutthaya. (1989). *Personnel management in new approach*. Phatumthani: Thammasat University Press. (In Thai)
- Training and enhanced skills business “Pan Pho” created learning expo 2010. (2010). *MGR Online*. Retrieved from <http://www.manager.co.th/Business/ViewNews.aspx?NewsID=9530000115688> (In Thai)
- Ungsinun Intarakamhang. (2002). *Effects of factors concerning adult learning, personal background, and organizational environment on the performance of medical service providers* (Unpublished master's thesis). Chulalongkorn University, Bangkok. (In Thai)
- Ungsuchote, S., Wijitwanna, S., & Pinyopanuwat, R. (2009). *Statistics for analytical social and behavioral science research: lisrel-program techniques* (3rd ed.). Bangkok: Charoenmankong Printing. (In Thai)
- Uthaiwan Chantharapraparp. (2004). *Job recognition, self-efficacy, and motivation for achievement related to the performance of nursing staffs of Metta Pracharak Hospital (Rai Khing Temple)* (Unpublished master's thesis). Kasetsart University, Bangkok. (In Thai)
- Vargas, B. (2006). *Teaching units to lower language anxiety for 8th and 9th Grade ESL students in Puerto Rico* (Unpublished master's thesis). University of Puerto Rico, Mayaguez Campus.

- Varunee Suwannapisit. (2000). *Interpersonal communication in reinforcing life insurance adoption among Thai people in Bangkok* (Unpublished master's thesis). Chulalongkorn University, Bangkok. (In Thai)
- Vipaporn Mapopsuk. (2000). *Human relations*. Bangkok: Se-Education. (In Thai)
- Vroom, V. (1970). *Industrial social psychology: Management and motivation*. New York: McGraw-Hill.
- Wallapa Sabaiying. (1999). *Factors of goal setting, self-efficacy perception, and personality affecting the work performance of direct vendors* (Unpublished master's thesis). Srinakharinwirot University, Bangkok. (In Thai)
- Wexley, K. N., & Latham, G. P. (1991). *Developing and training human resources in organizations* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.
- Wichit Awakul. (1997). *Training*. Bangkok: Chulalongkorn University Press. (In Thai)
- Wilaiporn Maneepan. (1996). *Relationships between personal factors, work environment and self-directed learning readiness of staff nurses in governmental hospitals* (Unpublished master's thesis). Chulalongkorn University, Bangkok. (In Thai)
- Wirat Apirattanakul. (1993). *Public relations* (6th ed.). Bangkok: Chulalongkorn University Press. (In Thai)
- Wirote Sarnrattana. (2008). Performance evaluation. Retrieved from <http://ednet.kku.ac.th/ed128/ad06/article5.html> (In Thai)
- Wuttichai Chamnong. (1995). Experimental research on training. *OCSC Journal*, 32-29. (In Thai)
- Yaowalux Parnploy. (2000). *Factors predicting learning and self-development behaviors in organizations*. Chiangmai: Chiangmai University. (In Thai)
- Yuth Kaiwan. (2013). *An analysis of multivariate statistics for research*. Bangkok: Chulalongkorn University Press



APPENDICES

APPENDIX A

The Selected Samples Brief Biography

1. Apiwut Pimolsaengsuriya

Brief Biography (Slingshot Group, 2018, retrieved on April 20, 2018)

Education Background

- B.A. (Political Science), Thammasat University
- M.A. (Political Science), Thammasat University
- M.A. (Business Administration), National Institute of Development Administration.

Other Qualifications

- Certificate of Executive Education Program from Columbia University, U.S.A.
- Certificate of Director Certification Program Thai Institute of Directors (TIOD)
- 2011 Distinguished Advisory Award, the Ministry of Industry
- Best in Practice in Executive Coaching and Citation for Talent Development Award in 2008-2009, American Society for Training and Development (ASTD)
- Certified trainer in the Situational Leadership Program, organized by the Center for Leadership Studies
- Certified trainer in the Emotional Capability Profile and the Persuasive Communicator Program by Persona Global
- Certified trainer in the Extraordinary Leader and Extraordinary Coach Program, organized by Zenger Folkman
- Certificate of Executive Coaching, International Coaching Academy

- Certificate of Result – Based Coaching, Neuro Leadership Institute
- Certificate of Advanced Leadership Development, UCLA
- Certificate of Advanced Human Resources Management Project, Chulalongkorn University
- Special lecturer for the Ministry of Industry, and universities, i.e. Chulalongkorn, Kasetsart, Burapa, Mahidol, etc.

Past Working Experience

- Deputy director, APM Group Co., Ltd.
- Executive, Marlow International (Thailand) Co., Ltd.
- Vice president of Human Resource Committee, Thai-American Chamber of Commerce.
- Management Advisory Committee, Department of Industrial Promotion, the Ministry of Industry.

Current Work

- A founder and executive, Slingshot Group Co., Ltd.
- Director, H.C.M. Consultant Co., Ltd.

Professional Trainer Experience

- Approximately 20 years.
- Trainers for more than 300 organizations
- Past training programs:
 - Team Building
 - Selling
 - Change Management
 - General Management
 - Train the Trainer
 - Communication Skills
 - Leadership
 - Supervisory
 - Coaching

- Skillful and frequent training programs
 - Communication Skills
 - Leadership
 - Supervisory
 - Coaching

2. Atchara Juicharoen

Brief Biography (AcComm & Image, 2018, retrieved on April 20, 2018)

Education Background

- B.A. (Education), Chulalongkorn University
- M.A. (Arts), National Institute of Development Administration
- Ph.D. (Development Management) (International Program), National Institute of Development Administration.

Other Qualifications

- Certificate of Training Program Design, Deutsche Institute, Germany, and J. Howard and Associates, U.S.A., and Japan.
- Certificate of Executive Education Programs, Harvard Business School, U.S.A.
- Distinguished Alumni of National Institute of Development Administration in 2013.
- The Best Manager of the Year of Northwest Airlines in 1997.
- PCC Coach of International Coach Federation (ICF)
- The only Thai formal alliance with Dr. Marshall Goldsmith, a global top executive coach, and leadership thinker
- Master Trainer of the following programs:
 - Think on Your Feet®
 - The Advanced Thinking
 - Communication Skills

Past Working Experience

- In-flight service executive of Northwest Airlines
- Director of Central Retail Corporation Limited.
- General manager and coach of Extended DISC (Thailand) Co., Ltd.

Current Work

- Managing director of AcComm & Image International Co., Ltd.

Professional Trainer Experience

- Approximately 15 years
- Trainers for more than 300 organizational clients
- Past training programs:
 - Service
 - Team Building
 - Communication Skills
 - Leadership
 - Neuro-Linguistic Program (NLP)
 - Emotional Intelligence
 - Organizational Development
 - Personal Image Development
 - Corporate Branding
 - Coaching skills
- Skillful and frequent training programs:
 - Coaching skills

3. Chaiyos Punsakulchai

Brief Biography (Chaiyos Punsakulchai, 2018, retrieved on April 20, 2018)

Education Background

- B.A. (Business Administration), Chulalongkorn University
- M.A. (Human Resource and Organizational Development), National Institute of Development Administration.

Other Qualifications

- Academic consultant of GO Training Magazine
- Author of “Professional Trainer” and “Organizational Human Resource Development” on OK Nation Blog.
- Special lecturer in “Roles of Training & Development Professionals” and “Train-The-Trainer” at the Faculty of Human Resource Development, National Institute of Development Administration.
- Writer in “HR Corner” column of Prachachat Turakij Newspaper.
- 1 of 7 Speakers on the first Go Training Live Talk Forum under the title of HR: Infinite Human Potential, on February 27, 2009.
- Author of “Innovative Trainer” book.

Past Work Experience

- Customer service officer, Bangkok Bank Public Company Limited.
- Training personnel, Bangchak Petroleum Public Company Limited.
- Assistant manager, Personnel Recruitment and Development Division, Jaspal & Sons Co., Ltd.
- Central training manager, Nestle (Thailand) Co., Ltd
- Distribution and sales manager, Food Service Business Division, Nestle (Thailand) Co., Ltd.
- Training administration manager, Pharmaceutical Division, Diethelm Co. Ltd.)

Current Work

- Managing director, CC & B Consultant
- Independent trainer and consultant in Human Resource and Organizational Development

Professional Trainer Experience

- Approximately 13 years
- Trainers for approximately 100 organizational clients

- Past training programs:
 - Service
 - Problem Solving & Decision Making
 - Creative Thinking
 - Communication Skills
 - Leadership
 - Supervisory skills
 - Team Building
 - Sales
 - Change Management
 - General Management
 - Train the Trainer
- Skillful and frequent training programs:
 - Train the Trainer

4. Pisit Chokepreecha

Brief Biography (ITC Innotraining, 2018, retrieved on April 20, 2018)

Education Background

- B.A. (Sociology and Anthropology), Thammasat University

Other Qualifications

- Senior Consultant, International Quality Management Co., Ltd.
- Advisory trainer, Golden Mind Service Co., Ltd.
- Advisory trainer, Strategic Business Development Center (SBDC)

Past Working Experience

- Management and academic executive on human resource development, National Housing Autho

Current Work

- Consultant, Business Solution Training Center Co., Ltd.
- Trainer, moderator, and consultant in organizational and human resource development for both government and private sectors.

Professional Trainer Experience

- Approximately 25 years
- Trainers for more than 300 organizational clients.
- Past training program:
 - Communication Skills
 - Leadership
 - Supervisory Skills
 - Train the Trainer
 - General Management
 - Team Building
- Skillful and frequent training programs:
 - Team Building

5. Phakorn Attanon

Brief Biography (ATTA9 Training, 2018, retrieved on April 20, 2018)

Education Background

- B.A. (Business Administration), Assumption College.
- M.A. (Organizational and Human Resource Development), National Institute of Development Administration.

Other Qualifications

- Certificate
 - Quantum Leap, T. Harv Eker's Signature Program
 - Life Coaching Practitioner, Thailand Coaching Academy
 - Customer Service Trainer, Signature Worldwide
 - Trainer the Trainer, Blair Singer's Signature Program

Past Working Experience

- Training teacher and chief of flight attendants, Thai Airways Public Company Limited.

Current Work

- Managing director, Atta 9 Training Co., Ltd.

Professional Trainer Experience

- Approximately 16 years
- Trainers for approximately 100 organizational clients.
- Past training programs:
 - Service
 - Communication Skills
 - Leadership
 - Supervisory Skills
 - Coaching Skills
 - Train the Trainer
- Skillful and frequent training program:
 - Train the Trainer

Training Organizer. Five organizers with the following qualifications were selected:

1. Still in operation
2. Having at least 5-year experience in running business, or providing training for more than 50 organizations.
3. The selected organizations or training organizers possessing such qualifications were as following:

1. Genius Training Co., Ltd

Brief Company Profile (Genius Training, 2018, retrieved on April 20, 2018)

Information about the Company

Genius Training was established in 2009, providing training services of both in-house and public training. For in-house training, the company will design a program responding to each customer's needs. In contrast, for public training, the company will develop a program by itself with a mission "Life is endless learning. Genius Training, and its team of experts and professional trainers are ready to respond to all learning needs for every success filled with potentials and creative power." Genius Training comprises five personnel: 1 director, 1 manager, and 3 sales and

program supervision. Genius Training has no regular trainers but hires outsources periodically.

Contact Channel:

- 113 On Nut 70 Alley, Lane 3, Prawet, Bangkok 10250
- website: <http://www.geniustraining.co.th/>
- Facebook: https://web.facebook.com/GeniusTrainingTH/?ref=br_rs
- Application Line: @GeniusTraining
- Email: cs@geniustraining.co.th
- Telephone: 086-326-3004

Experiences in Training

Approximately nine years

- Having more than 300 organizational clients
- Programs in service:
 - In-House Training, i.e.
 - Service
 - Problem Solving & Decision Making
 - Creative Thinking
 - Communication Skills
 - Leadership
 - Supervisory Skills
 - Team Building
 - Selling/Sales
 - Change Management
 - General Management
 - Train the Trainer
 - Public Training, i.e.
 - Communication Skills
 - Leadership
 - Supervisory Skills
 - Selling/ Sales
 - General Management

Key Informants

Mr. Sakkhachat Bunthanawat, manager, with 6-year experience in training.

2. Business Solution Training Center Co., Ltd. (BSTC)

Brief Company Profile

Business Solution Training Center, Co., Ltd was established in 2010 to provide service in seminar and in-house training organization, aimed to respond to training needs and necessity. The company prioritizes the design and development of a training program that can respond to the needs of each organization as the most important. It also provides training through the presentation of various kinds of activities and learning tools to bring about changes by professional trainers with immense knowledge, competence, and experiences worth for the invested budgets. BSTC offers a variety of seminars and training programs that can catch up with changes in the business world for an organization to apply it to develop all concerned skills towards the increased capabilities or to empower the human resources of an organization continuously. In general, there are two types of programs:

1. Customized Training Course is a service in providing consultation and in organizing a training program from training needs. The training also complies with Individual Planning Development (IPD) and Key Performance Indicator (KPI) of an organization for empowering human resources to move forward simultaneously in the same direction towards the organization's determined goals.

2. Standard Training Course is an organization of an approved training program that covers the development of skills needed by an organization, by professional trainers with immense knowledge, competence, and experiences, within the budget worth for an organization's investment.

The vision of BSTC is to be a business partner that helps to respond to the development of human resources, which are crucial foundations of each organization to mobilize the organization towards a top-tier training organizer.

Besides, the missions of BSTC are

1. Direct to continuous human resource development by different tools to lead to genuine organizational efficiency.

2. Select and present a popular program responding to an organization's needs effectively.

3. Provide an exceeding-expectation service to enhance long-lasting relationships between BSTC and an organization or a customer.

BSTC has no regular trainers of its own but hires outsource trainers periodically.

Contact Channel

- 154/43 Soi Rath Utit 16, Rath Utit Road, San Sab, Minburi, Bangkok 10510
- Website: <http://bstc.co.th/>
- Facebook: <https://web.facebook.com/BusinessSolutionsTrainingCenter/>
- Email: info@bstc.co.th
- Telephone: 02-919-5109

Training Organization Experience

- Approximately eight years
- Having about 100 organizational clients
- Training programs in service
 - Technical Skill
 - Sales & Marketing
 - Accounting
 - Financial
 - Risk Management
 - Human Resources
 - Human Skill
 - Communication
 - Presentation
 - Smart Teamwork, Team for Work
 - Conceptual Skill
 - Creative Thinking
 - Systems Thinking
 - Positive Thinking

- Management Skill
 - Coaching
 - Supervisory Skill
 - Strategic Planning
 - Project Management

Key Informant

Miss Orawin Chokepreecha, director, with 8-year experience in training.

3. People Value Solution Provider or People Value Co., Ltd.

Brief Company Profile (People Value Solution Provider, 2018, retrieved on April 20, 2018)

Company Background

People Value Co., Ltd was established in 2013, with expertise in training-program design and development, including customized human development. The company applies principles of participative and integrative learning to establish trainees' adoption of learned knowledge, skills, and behaviors for their actual operation. Besides, research is used for designing, developing, servicing, including for creating a learning process, tracking, and concrete follow-up tools for reliable, accurate, and apparent measurement.

People Value has no regular trainers, but hires outsource trainers periodically. People Value proposes three kinds of programs:

1. Single-Course Training is one-subject training for 1-2 days, aimed to enhance knowledge, understanding, skills, and attitude as specified in the goals.
2. Package Training is the training of a group of related subjects with different details for customers' selection. Customers or organizations can also choose a package of only 1-2 topics, but unnecessarily in orderly sequences as specified in a program, such as five programs of thinking skills for awareness, memorization, trial, planning, and development.
3. Series Training is the training of several subjects in orderly sequences to yield serial learning. This kind of training helps to spend customers' or organizations' time more worthwhile by combining overlapping content among

issues. It can increase the effectiveness of conducting activities by connecting what is learned from previous lessons with the next lessons continually.

Contact Channel

- 450/55 Casa Ville Village, Rama 2 - 3 Soi Rama 2, Soi 50, Samae Dam Subdistrict, Bang Khun Thian District, Bangkok 10150
- Website: <http://peoplevalue.co.th/>
- Facebook: <https://www.facebook.com/PeopleValue.Co.Th/>
- Email: contact.peoplevalue@gmail.com
- Telephone: 087-535-9393

Professional Training Experience

- Approximately five years
- Having around 200 organizational clients
- Programs in service:
 - Single Course
 - Team Building: Play for Culture
 - Package)
 - Five programs of thinking skills: awareness, memorization, trial, planning, and development
 - Series)
 - Supervisory Skills

Key Informant

Miss Thanutporn Kunarayakul, a program designer with 5-year experience in training.

4. Human Achievement Service Co., Ltd or HAS

Brief company profile (Human Achievement Service, Co., Ltd, 2018, retrieved on April 20, 2018.

Company Background

HAS was established in 2014, aimed to be a hub in promoting human resource development of all concerned organizations of government, state-enterprise, and

private sectors. The goal is to develop human resources to meet organizations' needs, to be qualified, and to be effective while being able to maintain quality personnel with reduced expenses. Besides, HAS keeps bettering human resources development continuously in all domains. Notably, the trends of global human development do not focus on training in the classroom only, but in people's daily life or lifestyles, i.e., development via online interaction via social media, knowledge creation among the same professional groups, etc. HAS has no regular trainers but hires outsource trainers periodically.

Contact Channel

- 92 The Rawipa building, Soi Summakorn 2, Tedsabarnsongkloe Rd., Ladyao, Chatuchak, Bangkok 10900
- Website: <http://hastolearn.com/>
- Facebook: <https://www.facebook.com/hastolearn/>
- Email: contact.hastolearn.com
- Telephone: 02-953-9799

Professional Trainer Experience

- Approximately four years
- Having approximately 100 organizational clients
- Programs in service, mostly categorized by areas of working in an organization, i.e., secretary, logistics, IT and computer, laws, finance and accountancy, sales and marketing, management and organization, service, human resource management, language, quality and professional safety systems, specialized work, engineering, and production, etc.

Key Informant

Mr. Aekawat Panyaprateep, manager, with 10-year experience in training.

5. Development Outsourcing (Thailand) Co., Ltd.

Brief Company Profile

Development Outsourcing was established in 2014, expanded from HRSSS (Thailand) Co., Ltd, providing services and consulting in organizational management and human resources development. The company's training programs emphasize a

project-training program or long-term training. Most of the trainees are executives, and the evaluation of training is conducted formally.

Development Outsourcing has no regular trainers but hires outsource trainers periodically.

Contact Channel

- 29/16 Soi Ruamsirimit, Chom Phon, Chatuchak, Bangkok 10900 (Headquarter)

- Email: pongsatid@hotmail.com, pongsatid@gmail.com
- Telephone: 084-169-1618

Professional Trainer Experience

- Approximately four years
- Having about 100 organizational clients
- Programs in service:
 - Executive Development Program
 - Management Development Program
 - Leadership Development Program

Key Informant

Mr. Pongsatid Kummoon, consultant, with 13-year experience in training

Executives of private organizations in the field of human resource development or training and development. Five executives were selected based on the following qualifications:

1. Currently, working in a private organization.
2. Affiliated in an organization having yearly training plans
3. Positioned at the executive level
4. Having at least 5-year experience in human resource development
5. The selected executives with the qualifications above are as follows:

1. Wirapot Wirunharat

Working Experience from Past to Present

- HRD Senior Supervisor, Toyota Motor (Thailand) Co., Ltd (approximately ten years)
- Store HR Manager and HR Manager (Training-Hypermarket & Value), Ek-Chai Distribution System Co., Ltd (Tesco Lotus) (approx. 7 years)
- HR Assistant Manager, Sun Hua Seng International Co., Ltd. (approx. 1 month)
- AVP of People Capability Development, Central Group (approx. 9 years)
- AVP of Learning and Development, Bangkok Bank Public Company Limited (at present)

2. Wipaphan Kajornpai

Working Experience from Past to Present

- Sales Representative Sales Supervisor and Sales Trainer, Diamond Interest International Co., Ltd. (approx. 2 years)
- Project Coordinator and Sales Trainer, Field Impact (Thailand) Co., Ltd. (approx. 2.5 years)
- Course Designer, CPF Training Center Co., Ltd. (approx. 3 years)
- Talent & Capability Development, Sermsuk Public Company Limited. (at present)

3. Pattavee Ubonrat

Working Experience from Past to Present

- Human Resources Management Section Head, Sahacogen (Chonburi) Public Company Limited (approx. 2 years)
- General Manager, K.S. Print and Packaging Co., Ltd., (approx. 2 years)
- Learning Analysis & Curriculum Design Specialist, King Power International Co., Ltd. (at present)

4. Supaporn Chumworathayee

Working Experience from Past to Present

- Human Resources Officer, Total Access Communication Public Company Limited (DTAC) (approximately six years)
- Training Senior Officer, True Corporation Public Company Limited (approx. 6 years)
- Training Section Manager, L.P.N Development Public Company Limited (at present)

5. Sunon Choophol

Working experience from past to present

- HRD Supervisor, TOA Paint (Thailand) Co., Ltd. (approximately 18 years)
- HR assistant manager, Professional Co., Ltd. (at present)

APPENDIX B

Interview: Professional Trainers' Communication Methods in Organizing Training

1. Communication Methods

1.1 Professional Trainers

1.1.1 Apiwut Pimolsaengsuriya

He uses a variety of communication methods. For instance, a lecture will be in a conversational style to enhance two-way communication with some facilitating media, such as video, PowerPoint program, games, activities, case studies, and reflective questioning. The methods used aim to let trainees exchange their idea. A case study is the most used because it helps trainees to learn situations similar to those they may have a chance to face. Besides, it enhances their exchange of ideas and opinions with others. Thus, communication will not be a one-way communication from the trainer only.

1.1.2 Atchara Juicharoen

She also uses a variety of communication methods since she believes that trainees will quickly get bored by the only single method, and they can easily lose their concentration. Thus, communication methods will be changed every 8-9 minutes. The communication method she uses the most is a narration (or she calls a story-telling), which is a communication from a trainer to trainees directly, based on the assumption that trainees like to listen to stories. Besides, some instructional media are used in her communication, i.e., videos, etc. to let trainees see some movement.

1.1.3 Chaiyos Punsakulchai

He divides his communication methods into two types: direct communication (40%) and indirect communication (60%). Direct communication is direct teaching by speaking, coaching, presenting, and narrating the content through some kinds of media, i.e., PowerPoint. Indirect communication is to let trainees learn

from activities (or what he calls activity-based learning or ABL). Activities are workshops, games, watching movies, listening to music, and doing activities with some particular equipment or tool, such as game boards, balls, cards, etc. ABL is the communication method he uses the most.

1.1.4 Pisit Chokepreecha

Mostly, he uses lecture by PowerPoint program but emphasizes two-way communication between the trainer and trainees. Besides, more than 70% of his communication is activity-based learning, which is similar to playing games with some special tools that he prepares by himself, i.e., Lego, balls, straws, etc., depending on the learning activity. He will always summarize the learned lessons to connect with the program content for trainees.

1.1.5 Phakorn Attanon

He believes that trainers can learn, but learning should come from two-way communication and three sources: the trainer, other trainees, and trainees' internal learning. Source 1 (the trainer) is the communication method using lecture and teaching by PowerPoint, which he uses the most. Source 2 (other trainees) is the communication method in which trainees are encouraged to give ideas and suggestions, and Source 3 (trainee's internal learning) must come from trainees themselves who are stimulated through reflective questioning. It is the primary communication method of coaching, in which questions are raised to induce new perspectives and to encourage trainees to think reflectively by themselves.

1.2 Training Organizers

1.2.1 Genius Training Co., Ltd.

Most professional trainers use lectures, giving samples and case studies, paper, video clips or movies, role-plays, workshops, group discussions, games, and competitive learning activities as their communication methods. Lecture, giving samples and case studies, and reflective thinking and practices are the most common communication methods.

The company perceives that communication methods in which trainees are encouraged to do activities together and do workshops are the methods leading to training effectiveness the most.

1.2.2 Business Solution Training Center Co., Ltd. (BSTC)

Most professional trainers use mixed communication methods, i.e., lecture, instructional media, such as videos, workshops, group discussions, learning activities, and recreation games, but the lecture is the most-used communication method.

1.2.3 People Value Solution Provider, Co., Ltd.

Most professional trainers use a variety of communication methods, such as giving questions randomly, calling trainees' name periodically, using trainees as some characters in the examples, letting trainees exchange their idea on paper, (i.e., Post-it, etc.) anonymously, feeding questions for thinking, conversing to share some experiences, and summarizing their learning into visual on a piece of paper or handout. Using trainees as characters in story-telling is the most popular communication methods used by trainers.

The company perceives that random questioning, calling trainees' names occasionally, and using trainees as characters in storytelling are the most effective methods, but depend on each trainee's background.

1.2.4 Human Achievement Service Co., Ltd. (HAS)

Most professional trainers use a variety of mixed communication methods, i.e., lecture, experience exchanges, two-way communication for questioning and answering to create participation, workshops, brainstorming, videos, or case studies. Still, lecture and experience exchanges are the most used methods.

HAS perceives that trainers must use various kinds of communication methods, not a single method, to increase the utmost training effectiveness.

1.2.5 Development Outsourcing (Thailand) Co., Ltd.

Similarly, most professional trainers use integrated communication methods, i.e., two-way communication between a trainer and trainees, etc., and mediated communication through several media. At present, there has been a tendency to use more mediated communication.

Development Outsourcing (Thailand) perceives that training effectiveness depends mainly on the trainees' perceptions and responses towards learning. Besides, any two-way communication should be adapted to suit each generation of trainees.

1.3 HRD Top Executives of Private Organizations

1.3.1 Wirapot Wirunharat

Most professional trainers use oral communication or speaking methods, i.e., lecture, especially with audio-visual media or mobile applications, etc. to increase trainees' participation in training. Besides, they prefer using case studies and letting trainees practice by themselves.

From his point of view, trainers' communication by demonstration and letting trainees practice by themselves is the most effective method.

1.3.2 Wipaphan Kajornpai

Most professional trainers use lectures and give some examples. 20-50% of communication methods tend to have activities included in the training, but depend on each trainer's training style.

From her point of view, every communication method can be effective if a trainer can do it well, especially doing it clearly with well-planned timing and suitably for trainees' competency. Moreover, if trainers add some activities for trainees to practice, trainees can feel it and learn more.

1.3.3 Pattavee Ubonrat

Most professional trainers use a variety of mixed communication methods, i.e., lecture, group activities, brainstorming, case studies, role-plays, and field trips. However, group activities and brainstorming are the most common and also most effective methods.

1.3.4 Supaporn Chumworathayee

Most professional trainers use a variety of integrated communication, i.e., lecture, and providing trainees' participation in expressing ideas. The lecture is the most used method. However, they often use it for two-way communication that is facilitated by some technology, or full-duplex, i.e., Line application for supporting their communication towards the most effectiveness.

1.3.5 Sunon Choophol

Most professional trainers use a variety of communication methods, i.e., lecture, group activities, brainstorming, case studies, and role-plays, but in a way that suits for training programs and trainees. For instance, for top-management trainees, not too many physical or body movement activities are used, i.e., ice-breaking, etc.,

but trainers will prefer using case studies, lectures, and discussion for sharing ideas. On the other hand, for trainees at the operational level, it is better to use learning activities than lecture to make the training content more understandable and more accessible.

She also added that two-way communication between a trainer and trainees is the most frequently found method, but shared learning activities among trainees should enhance training effectiveness.

2. Communication Factors Enhancing Training Effectiveness of Business Organizations

2.1 Professional Trainers

2.1.1 Apiwut Pimolsaengsuriya

Trainers' Qualifications and Competence Factors. Professional trainers need to use their skills and competence in transmitting training content interestingly and in encouraging trainees to participate in training, including their capability in answering questions. In general, the experience can be divided into two types:

1) Right experience required by each training program. It means that to teach any program, a trainer must have actual knowledge and experience in that program. However, this kind of experience may be gradually decreased, or in the future, it may not require an expert in a specific area since learning can be learned widely. Thus, professional trainers will play the role of facilitating learning or being a facilitator.

2) Experience as a trainer. It means experiences in transmitting training Content and in dealing with training organizers. This kind of experience will also be less needed in the future.

Reputation is an essential factor but depends significantly on trainers' performance. Some examples from his own experience are that an organizational client often prefers an academic instructor as a trainer. Trainer's reputation comes from word-of-mouth among clients due to his or her past performance. Fame may also come from their publicized work, i.e. articles, media interview, especially in social or

new media. Furthermore, proper behaviors and manners also affect trainers' higher reputation, i.e., ethics, personality, friendliness, punctuality, etc.

Qualifications are also relevant, especially for training markets in Thailand in which trainers' education and work experience are the main criteria paid close attention by organizational clients and trainees, especially for inexperienced trainers. In contrast, for experienced trainers, qualifications may be required less or unnecessary. For each training program and program content, it must be appropriate for a particular situation and must be applied for trainees in their actual work.

Training programs that he has been assigned the most were those related to the topics on leadership and organizational management skills. He also added that at present, there had been a tendency for a large-sized organization, especially multinational corporations, to organize training as required by the company mother.

Training Environmental Management Factors. Training places and training rooms should be equipped with light, sound, and all the training facilities, i.e., flipcharts, projectors, etc. Room arrangement is also essential. A room should be organized in a way that facilitates group discussions or activities so trainees can exchange their ideas. Usually, a good learning climate should be a place distant from a working area or far away from all disturbances. Having training organized at a workplace or in a meeting room may not sound acceptable since it allows trainees to get in and out all the time. Thus, to organize training near a working place can cause more nuisances that disturb trainees' learning concentration.

Trainee Factors. Trainees must be prepared and open to learning. Trainees should be aware of the reason why they need to attend training, what they expect for themselves, what they need from training programs, etc. A number of trainees attend training without knowing the reasons behind it. "They attended with doubt despite their willingness. Some did not even know what training was about, or why they were chosen, or what their organization expected them to gain from training." Trainees' anxiety also affects the effectiveness of training. For instance, some training is organized during the crucial time of trainees' work, i.e., executive training during the end of the quarter or trimester, during the fiscal budget preparation, or during the payroll period, etc. Improper time makes trainees lose their learning concentration and not ready to learn since they will focus on what they are

supposed to do during that time. Another kind of trainees' anxiety is their lack of understanding of training goals. Thus, they will feel uncomfortable and wonder why they have to attend such training. Some may not be informed clearly of the rationale. It can easily cause some misunderstanding; i.e., do they have problems? Are these their shortfalls? Thus, they will be short of willingness and openness to learning.

2.1.2 Atchara Juicharoen, Ph.D.

Professional Trainers' Qualifications and Competence Factors. She said that she used to conduct a study with 300 trainees in a coaching program, and found that a part of training effectiveness depends on trainers. She further explained that trainers' experience (numbers of training hours) is vital, as a coach. Such experiences can tell a trainer what can happen in each training, especially since the training climate of each organization is not alike. For example, some trainers may feel unconfident about why trainees keep quiet since they have no experience nor have faced this kind of happening before. People of each organization are different. Silence may not necessarily mean trainees dislike their teaching, etc. Thus, trainers' experience can help in this kind of situation. However, the only significant experience is insufficient; trainers must have the right knowledge and skills required in each program content and suitable for trainees.

Regarding trainers' reputation, from her experience, she overheard some organizational clients share their ideas about each trainer's performance. Thus, most trainers are invited because of clients' word-of-mouth of their impressive performance. Concerning trainers' qualifications, trainers' education relatively affects training. Although she is often told that trainers' knowledge does not affect training effectiveness, she disagrees. For school, she includes a trainer certificate or trainers' background in training, which is generally needed by most organizational clients. However, the level of certificate or degree is not as important as the right qualifications required for a program and needed by trainees. Mostly, from her experience, most organizational clients choose a trainer based on their expected outcome or value from training, not on costs or expenses. Besides, trainers' qualifications vary by trainees' positional level as well. If trainees work at the operational level, topics on management may not be appropriate and are too difficult to communicate with them. Most of her training programs are for the executive or

management level, but she also used to be trainers for several kinds of programs. At present, her training programs are on coaching, but sometimes on communication and leadership, but not so often. It depends on the clients' needs and their desired objectives and outcome. Nevertheless, mutual communication is important. When a trainer knows the needs of an organization or trainees, he or she can perform his or her role correctly by understanding some constraints, being flexible and ready to adjust training content and all working process.

Training Environmental Management Factors. In terms of the physical environment and related factors, the training environment should enhance a kind of climate to empower trainees or to induce their energy. As an example, the light should be appropriate. In some hotels, yellow light does not give a pleasant training atmosphere. Thus, trainers have to frankly tell their organizational clients that what kind of equipment and climate will be proper for a particular training since eventually it is clients who will get the consequences. Besides, trainers have to give a safe training climate for learning. Trainers can choose whatever methods, i.e., games or competition, etc. to make learners feel safe if they make something wrong and let them think that such mistakes are common or there are no right or wrong answers. On the other hand, positive reinforcement for learning should be given, i.e., reward systems, feeling of amusement, feeling that they can do it without any fear or anxiety, etc.

Trainee Factors. Good trainees must, first of all, believe that everything can be learned. However, they should not learn things greater than themselves or beyond their responsibility. Secondly, during their training, trainees should respect other trainees. In general, trainees tend to respect a trainer, but not necessarily their classmates or other trainees. From her research, another part of training effectiveness comes from trainees themselves, especially depending on their commitment to developing themselves. Trainee's anxiety is another factor affecting training effectiveness. When a trainer is assigned to attend several programs within a limited time, anxiety occurs, especially anxiety, of their inability to submit their regular work as scheduled that will have an impact on her work performance. Anxiety may also be caused by fear of their subordinates' poor performance without their presence. Thus, too long training can cause problems. Therefore, if training is necessarily organized

for an extended period consecutively, it should be organized somewhere far away from working places, i.e., out of town to release trainees' anxiety,

2.1.3 Chaiyos Punsakulchai

Professional Trainers' Qualifications and Competence Factors.

Trainers should be well-prepared and have a good understanding of trainees' needs to provide the right knowledge and skills applicable to their actual work. Thus, trainers need to have qualified experience and skills required in the program. Since he used to work in a bank in charge of customer service, earlier he was invited often to be a trainer on this subject. At present, most frequent programs are "Train the Trainer" programs due to his direct experience. Besides, he gave some remarkable advice. "If a contact person is Gen X and baby boomer or aged over 45 years old, trainers' experience will be the priority. However, at present, such a concept has changed since most contact people are HRD staff of new generations aged less than 40 years old; they do not value high experience. Some trainers have the high experience, but these new-gen organizational clients do not need them. For trainers' qualifications, over 20 years ago, people of Gen X and Baby Boomer gave high importance to trainers' education, i.e., education level, graduation institution, kinds of certificate, etc.; thus, these were the main criteria for selecting trainers. However, now education is paid less importance. A trainer does not necessarily graduate with a doctoral degree nor graduate from abroad. For example, one of his friends graduated from engineering overseas, but he has not been a trainer so often. It reflects that organizational clients give less importance to education. Some graduated with a bachelor's degree or some with only a certificate from abroad. Still, they have assigned to many training programs since parts of organizational clients believe in what they know or learn rather than the institution they graduate from as it may respond to their clients more. In short, educational qualifications may affect training effectiveness, but not always. Regarding trainers' reputation, from his experience, if his old clients were satisfied with his performance, they would keep asking him to be a trainer. For new clients, word-of-mouth about a trainer's performance or recommendation from some friends or acquaintances or people in the HRD area plays more roles. Reputation from media, especially on new media, such as Google or websites, also affects training hiring. Furthermore, the good design of training programs affects training effectiveness too.

A quality program must be a program that trainees can adapt to their actual use for working.

Training Environmental Management Factors. For a physical environment, a training room must be spacious with a high ceiling and causes no discomfort or crowdedness. For a small place, more space is required; thus, many desks and chairs are not needed to make trainees feel more comfortable. On the other hand, the too-low ceiling is also not appropriate as it gives a feeling of being oppressed. There should be sufficient light with proper temperature. Besides, kinds of organizational clients also determine physical environmental management. For example, for a formal organization, the physical environment should be organized to convey a sense of formality, i.e., having nametags, focusing on punctuality, etc.

Trainee Factors. Trainees' characteristics affect the overall training environment. For instance, it may be difficult to have quiet and introvert trainees participate in games while good trainees give high cooperation and willingness for learning, etc. Trainees' anxiety is another factor. Trainees might be afraid of their failure in performing their work after training or as expected by their superiors or organizations. However, it depends on an opportunity an organization provides for trainees, which he classifies into two ways: an opportunity provided by their superiors for trainees to practice what they have learned from training and opportunity trainees create for themselves. As an example, in the "Train the Trainer" program, one of his frequent programs, some trainees have high anxiety remarkably because of the high cost of the program since the organization should expect trainees to perform their tasks as effective trainers for the organization from what they learn. Besides, anxiety may be caused by trainees' anticipation about the outcome evaluation of their training attendance caused by their regular work, i.e., loaded work, urgent tasks to be accomplished, important meetings, which makes them absent from training. At the same time, the outcome of training is also evaluated.

2.1.4 Pisit Chokeprecha.

Professional Trainers' Qualifications and Competence Factor. In his opinion, trainers need to prepare themselves to be trainers with a good attitude in the profession and the right motivation in performing their duty with direct experience to the program, i.e., experience, etc. They should earn some experience as trainers for

various kinds of business organizations. Regarding trainers' qualifications, he does not give high importance to them. For him, trainers do not have to graduate at the high education level, but instead, he should know thoroughly and genuinely about being a trainer with actual experiences; for example, local wisdom or trainers with direct educational qualification to the topic of the training programs. In terms of trainers' reputation, normally, trainers are hired from two sources: hired by organizational clients directly or engaged by training organizers who are employed by organizational clients. No matter where the hiring comes, trainers' reputation must be accepted by both corporate clients and training organizers. The distinct differences in trainers' training performance and arrangement bring about their reputation, i.e., lecture style, kinds of activities, etc. For the quality of training programs, sound programs should enable trainees to use the knowledge and skills they learn in their actual work. Importantly, trainees must realize their expected benefits. Most of the training programs he used to conduct are programs for developing knowledge and skills for supporting work performance (or soft skills). The most frequently conducted training programs are "Team Building."

Training Environment Management Factors. The location should be appropriate for training. For instance, for a "Team Building" program, a training room should be large enough or facilitates trainees to move for doing activities, etc., with well-equipped facilities, such as lighting, colors, sound, etc. Besides, a training climate should enhance learning motivation, i.e., making trainees willing to cooperate, respectful atmosphere, etc.

Trainee Factors. Good trainees should have the right attitude towards training. They must know the purposes of training, be willing to cooperate, and pay respect to both trainers and other trainees. For trainees' anxiety, he classifies it into three phases:

Before training: Trainees will be anxious to know about trainers' knowledge and competence, and the benefits gained from training.

During training: Trainees are worried about whether they should ask questions or if the training climate is stressful.

After training: Trainees have anxiety if they can adapt what they learn in their work genuinely or if there will be any test for their gained knowledge.

2.1.5 Phakorn Attanon

Professional Trainers' Qualifications and Competence Factor. From his point of view, training effectiveness depends on the most on trainers, especially their communication methods, program design, and arrangement that can achieve organizational clients' goals. For trainers' experience, the best indicator to tell if a trainer is experienced or not is the repeated hiring from old clients. Repeated hiring means clients' trust in such trainers. Moreover, another indicator comes from the formal evaluation of a program, i.e., an organization's evaluation report or from informal evaluation, i.e., compliments from trainees to trainers after the completion of a program. Besides, the high experience can be reflected in the name list of former organizational clients, from which any other corporate client can search about trainers' background or biography. Regarding trainers' reputation, he cited from his old experience that most of the hiring came from word-of-mouth of people in the training circle. (or what he called "connection.")

Most of his training programs come by this connection. Moreover, it is quite common that if any trainer is considered as well-known, he or she should be expected to be a trainer for well-known organizational clients as well. Trainers with a good profile are often hired by a high number of clients and have continuous training programs. When any training program is needed, his or her name will be mentioned first. It indicates a trainer's reputation. For trainers' qualifications, he believes in specific experience and expertise or expertness more than educational qualifications. After a lot of practice, trainers with high experience can collect, screen, and conceptualize what they experience to be the body of knowledge, which is more accurate and better than knowledge gained from the formal education system that might be broad but inapplicable. Besides, trainers' qualification that affects training effectiveness, their design of training programs or content is another influential factor. Training programs must be designed well to meet trainees' needs and achieve training goals. Sometimes, trainers can conduct a good training program, but the program does not respond to trainees' needs; thus, such a training program cannot be evaluated as effective. For him, he has been conducting several training programs, i.e., "Train the

Trainer,” “Presentation,” “Service,” “Coaching,” and “Supervisory Skills,” mostly for immediate supervisors. For every training program, he will give high importance to the design of any program that can respond to the needs of organizational clients.

Training Environment Management Factors. A good training environment requires training location away from trainees’ working place to avoid their loss of learning concentration and frequent training absence to go back to perform their regular work. Thus, the distant location from the working area makes travel more difficult or inconvenient. However, it should not too far, but also be convenient for trainees to travel to the training place. The important facility is a sound system since the learning climate can be created and determined by the trainers’ voice. Therefore, some trainers will bring their microphones. If the sound system is annoying, trainers’ energy cannot be projected fully. Moreover, a room should be spacious, not too crowded, and convenient for doing training activities.

Trainee Factors. Good trainees will express their willingness, participation, openness, knowledge acquisition, and curiosity to learn new things during training. They tend to express their opinions, raise the right questions, and crystalize what they learn. Besides, their readiness for training also matters. For instance, some trainees may be asked to attend a training program while their regular task has not been accomplished. It causes anxiety and affects training effectiveness. From his experience, he faced some trainees’ anxiety in some practice programs such as “Train the Trainer” or “Presentation,” which require skill practices that are new things for them. Anxiety then occurs accordingly.

2.2 Training Organizers

2.2.1 Genius Training Co., Ltd.

Trainers’ Qualifications and Competence Factors. Trainers need to have specialized expertise in an assigned program, which reflects what they have experienced, learned, scrutinized, and practiced by themselves. They should have lifetime learning and develop themselves continuously until they gain genuine expertness and knowledge, and adapt their good points for the actual application. Usually, Genius Training will select trainers based on their experience, knowledge, expertise, and communication or teaching methods. Trainers should use a variety of methods and can transmit their knowledge, skills, and experience that are interesting

and easy for trainees to understand. Besides, they should be able to encourage trainees' participation all over the training and can answer their questions precisely. Trainers need to be accepted and trusted continually, which can be reflected in their past training performance for other organizational clients. However, the cost should be compatible with a corporate client's budget. For the content of training programs, it should start with a training coordinator who can communicate all necessary information of tentative trainees, i.e., objectives, needs, and expected outcomes from training to a training organizer, and then to trainers. After that, trainers can design their program following what clients need. The topics Genius Training Co., Ltd used to provide for clients were communication, sales, and marketing, service, human resource development and management, motivation, thinking, team building, creative thinking, leadership, management skills, analytical thinking and planning, strategic management, presentation skills, on-the-job training, coaching, transportation, and information technology, etc.

Training Environmental Management Factors. A training room should be private without any disturbance with an appropriate size for the number of trainees. It should be equipped with quality and sufficient facilities, handouts, and devices. Besides, the location should be convenient for trainees.

Trainee Factors. Trainees need to be open and ready to learn, including exchanging their idea and doing activities with a trainer and other trainees. A social manner and etiquette are required in training to avoid disturbing a trainer and other trainees. Trainees must know their expected outcomes or benefits from training so that they can use what they learn to apply for and develop their work. The company used to experience some trainees' anxiety from their incoordination. These trainees express their worries about unfinished work, urgent problem-solving at the workplace, no prior interest before training or being forced to attend training, having a bad image on training as boring and stressful, communication apprehension in expressing themselves during activities and presentation, fear that they cannot return home timely, etc.

2.2.2 Business Solution Training Center Co., Ltd. (BSTC)

Professional Trainers' Qualifications and Competence Factors. Trainers must have good communication methods and should have training

experience for more than five years, especially direct experiences to the assigned programs. They must be accepted in the training circle and by organizational clients. They must have the knowledge and competence needed in the programs and graduate from accredited institutions. For training content, it must respond to trainees' needs and facilitate their actual working; thus, the content must not be too difficult for trainees to understand. The training programs BSTC used to conduct are communication, sales & marketing, service, human resource management, team building, thinking development, leadership, and management skills, etc.

Training Environmental Management Factors. A training room must have enough light, with appropriate size for training patterns. It has to be clean and has proper temperature without noise from outside. Besides, the necessary equipment for training must be complete and ready for perfect use.

Trainee Factors. Trainees must be physically and psychologically prepared and open to learning new things. They have to cooperate with trainers and other trainees without bothering others during the training. Trainees should be able to apply what they learn from training in their actual work. Regarding trainees' anxiety, BSTC views that the causes of anxiety may come from the following: How can a trainer perform his or her role as a trainer? Is he or she friendly? Will the training climate be stressful? Can they understand the training content, or can they answer the questions? Will the content be useful for their actual work? Etc.

2.2.3 People Value Solution Provider Co., Ltd.

Professional Trainers' Qualifications and Competence Factors.

Trainers must be able to communicate accurately and understandingly. Communication methods must be suitable for trainees and can stimulate trainees' participation. (by orientation activities, rhetorical questions, or informal talk). They must communicate straightforwardly (no pleasing but insincere words), keep their promises, give bright illustrations, and answer the questions sharply and clearly. Trainers must understand a training program genuinely. They should graduate or receive a certificate from the area per program and trainees' background. They must be experienced but flexible in running a program while assertive in the agreed outcome. Trainers must be responsible, comply with the code of ethics of professional trainers, be friendly and helpful. The designed training content must support trainees

and help them to apply it for their actual work effectively (not 100%, but with some development). The application depends on the selection of training programs and the level of depth of content. The complexity of content must be appropriate for trainees. Examples of some training topics provided by the company are Teamwork Management, Goal Setting and Planning, Team Communication, Coaching, Teamwork Development, Thinking Skills (i.e., Systems thinking, strategic thinking, innovative thinking, and facilitating tools, i.e., QC 7 Tools, Mind Map, and Visual Thinking, etc.)

Training Environment Management Factors. The size of the training room should be proportional to the number of trainees. It should not be too compact or uncomfortable or allow no movement, without external disturbances, i.e., machines, etc. Besides, room arrangement, seating arrangement, and the installation of all concerned equipment, i.e., Flipchart, light, projector, temperature, microphone, computer, rewards, etc. have to be well-prepared.

Trainee Factors. Trainees must be curious to learn and participate in training, i.e., answering questions, cooperating in sharing experienced cases or problems, etc. at the appropriate length of time that will not bother other trainees' learning. They should not stare at their mobile phone all the time but should pay respect to a trainer. The company gives high importance to the grouping of trainees based on similarities of trainees' knowledge background, learning potential, and work experience. Regarding trainees' anxiety, the company has faced several cases. For example, trainees are called back to their regular work during training by their superiors, subordinates, or customers; they are afraid that training may affect their work, they were assigned for training because of their flaws, etc. Besides, during training, some anxiety can occur. They are afraid of giving the wrong answers, and they will lose their face. The narration about their experience may affect other people, both trainees, and people outside the training room. The evaluation of training may affect the annual evaluation for promotion, etc.

2.2.4 Human Achievement Service Co., Ltd. (HAS)

Professional Trainers' Qualifications and Competence Factors. Trainers' experience and communication techniques are very important since they can stimulate trainees' attention. They should have working experiences in a well-known

organization with a good image in society. They should have a neutral attitude in politics. For the design of a training program, the remuneration should be appropriate for a program and an organization's budgets. Regarding trainers' qualifications, HAS perceives them as good criteria for selecting trainers. For the program design, it should respond to the training objectives and be interesting to follow. The programs that HAS provides for organizational clients are Leadership, Business Knowledge, etc.

Training Environmental Management Factors. Training rooms should be illuminated with good temperature, not too cold nor too hot, and equipped with audio equipment and other facilities. HAS Co. Ltd also gives importance to coordination with all concerned in training organization and management, especially good relationship between HRD coordinators and trainees.

Trainee Factors. Trainees must try to participate in learning and in answering questions. For trainees' anxiety, HAS experienced several cases, i.e., trainees dared not to answer a question, or are afraid to give wrong answers, etc.

2.2.5 Development Outsourcing (Thailand) Co., Ltd.

Trainers' Qualifications and Competence Factors. Trainees must have experience and expertise in performing a role of a trainer, either experience or participation in both strategic and practical training in planning, conducting, and evaluating programs aimed to change or develop an organization or personnel concretely. They can take lessons and perspectives learned from successful or unsuccessful organizational or personnel development. Trainers must be responsible for their work, learn, understand, and adapt themselves to be able to transmit knowledge and experience appropriate for organizational clients. People in the profession should also accept them. They must be able to apply their arts and science of training that are compatible with an organization's research objectives and expected outcome, including responsive to trainees' needs. The regular training programs of the company are Development Program (for immediate, middle, and top supervisors or management), Change Management, Leadership, Management Skills, etc.

Training Environmental Management Factors. A training place should facilitate learning sharing, be convenient, and well-equipped, i.e., tools or equipment,

including having a learning climate without any disturbance, i.e., being interfered with by urgent work, bringing regular work assignment into a training place, etc.

Trainee Factors. Trainees must be ready for learning and willing to share ideas, including asking and answering questions. They need to synthesize what they learn for developing themselves. Trainees' anxiety mostly found by the company is the fear of how to adapt what they learn from training to use in their work concretely in the short, middle, and long term, or how to transfer their knowledge to other personnel or the organization.

2.3 HRD Top Executives of Business Organizations

2.3.1 Wirapot Wirunharat

Professional Trainers' Qualifications and Competence Factors.

Trainers must select words for communication and apply communication patterns, methods, and media, including examples that are suitable for the corporate culture of an organization. The tempo or speed of training depends on trainees. Besides, sometimes trainers should use English for their communication. They must have knowledge and experience applicable to or needed by the hired organizational clients. Importantly, they should be evaluated positively. Generally, trainers should graduate with a master's degree at least and have direct experience of what they are going to transfer or transmit to trainees. The training content must be that of their focal expertise as they should know thoroughly in that topic or area. Trainers should have had working experiences in a large-size corporation before, especially from various kinds of businesses of different organizations. They must be able to adjust and apply the main content following an organization's operation. Accordingly, they should study information on their organizational clients and trainees. Trainers should not mind giving their clients a trial before actual training and offer their remuneration within their clients' budget limits. Sometimes, trainers should have a co-facilitator for supporting trainees, especially when they have several group activities. Trainers must also be on time and manage their time effectively.

Regarding the program design, it should respond to the actual operation of the hiring organizations and the trainees' needs. Therefore, a clear goal or expected outcome of training is very crucial, which depends significantly on the level of participation in developing and designing a program between an organizational client

and a trainer. From his experience, most of the organizations he used to work for all set their training roadmap for their personnel. Each program will have content in congruence with trainees' positional level and responsibility. Regarding the training programs that he used to conduct are Functional Skills, Relationship Skills, Future Skills, etc. with all needed facilities that are ready for use.

Trainee Training Environmental Management Factors. Training rooms should be located separately from trainees' regular workplace. Still, they should be arranged for enhancing trainees' learning. Training rooms must be compatible with the program content, equipped **Factors.** Trainees must understand the objectives of a training program and why it is important to know how to use specific knowledge and skills contained in the program so that they can plan how to apply what they learn in their actual work. Trainees must have full participation in training, or all activities, including preparing questions and ideas to be shared during training. Before training, they should arrange their regular work in advance, i.e., asking their co-workers to be in charge of their work, etc. to avoid disturbances during training, and trainees also have to be on time. Regarding trainees' anxiety, what he faced is the content is too academic and cannot be applied in real situations. Training assignment is often for general conditions, so it is difficult for trainees to see its connection to their actual work. Another anxiety is their superiors expect some changes after training, which trainees are not sure if they can do it within a short time. They are also afraid that the assigned work cannot be accomplished as scheduled, etc.

2.3.2 Wipaphan Kajornpai

Professional Trainers' Qualifications and Competence Factors. Trainers must have knowledge, experience, and expertise, including proportional relationships with their trainees. It is not necessarily identical but can communicate with one another. The language used by trainers should be communicative, amusing, entertaining, etc. with some examples and Q&A for complicating or complex issues to make it more understandable. Trainers should have direct experience in the assigned programs or used to have working experiences similar to those of trainees. For the organization, trainers will be questioned and evaluated, from which it can indicate their genuine understanding of the problems. If trainers have prior experiences as a consultant, especially with a variety of business, it can be considered as exclusive

experiences, as it genuinely helps trainers to have a good insight into the confronted problems. From her recruitment experience, trainers are often recommended by people in the area of human resource development, which is mostly quite effective. For academic qualifications, she does not pay so much attention to which field of study or where trainers graduated. Instead, she pays more attention to actual experiences and appropriateness. Concerning training content, it must accord with an organization's direction, strategies, and values, including legal issues, especially programs for industrial operations. The content of the training must be able to be applied for actual use. The content must be worth, compared with the invested budget. The examples of the company's conducted training programs are Functional Skills, Leadership, Presentation, Communication, Negotiation, Supervisory Arts, Planning, Analytical Thinking, Time Management, etc.

Training Environmental Management Factors. The overall training environment must be of good quality, i.e., Good illumination, good amplifiers with no noise, suitable temperature, good food, etc.

Trainee Factors. Trainees must be well-prepared with some similar basic knowledge and learning skills. They must know what their flaws are while understanding training objectives and expected outcomes. From her recruitment experience, the selection of trainees is considered by several criteria, i.e., positional level, headcount, payback capability (whether fast or slow), etc., including budget and other invested resources. Regarding trainees' anxiety, most trainees are afraid that they cannot accomplish their regular unfinished work on time. Anxiety also occurs in the case of continuous training programs. After the completion of training, they are anxious about how they can proceed with what they learn for actual implementation.

2.3.3 Pattavee Ubonrat

Professional Trainers' Qualifications and Competence Factors. Trainers must be accredited and impressive. They should have the right expertise and educational background to the assigned training programs. Besides, they should have training experiences from several kinds of business organizations and can apply them in conducting their future programs, which are important factors for selecting trainers. Regarding the program design, a training program must be interesting and harmonious with trainers' knowledge, skills, and competency as desired by the organization. The

content of the programs must be practical and usable. Most of the organization's training programs involve managerial competency and functional competency, but the issues deal with language and service the most.

Training Environmental Management Factors. Training rooms must be well-equipped, i.e., sound audio system, comfortable seats, proper temperature, etc., and there should be staff responsible for facilitating trainees.

Trainee Factors. Trainees must be determined and collaborate in all training activities. Demographic factors, i.e., age and education level, etc. are also important. The fundamental criterion for selecting trainees is a competency gap among trainees. The main purpose of training is thus to close such a difference. For trainees' anxiety, most of them have pressure from their superiors' expectations to see how they will apply what they learn from training in their actual work or what training gives to them.

2.3.4 Supaporn Chumworathayee

Professional Trainers' Qualifications and Competence Factors. The main factor that affects training effectiveness is trainers' knowledge, expertise, and work experience, including training experience as needed in a program. The next important factor is demographic factors, especially the education level. Besides, trainers must not involve any criminal matters, be politically neutral, no moral violation, and have good governance. The selection of trainers starts with an inquiry to organizational clients using a trainer's service for his or her reputation and performance. For program content, it must respond to the organization's policy and strategies at a specific time. The content must be able to help develop trainees' knowledge, skills, and behaviors, both directly and indirectly, including their management skills. Finally, the program must contain content useful for trainees' applicability. Most of the training programs conducted in the organization are management and functional skills, leadership, etc. The most frequent training topic is management.

Training Environmental Management Factors. Training rooms should have no disturbance during training, nor undesirable smell. It should be located at trainees' convenience. Besides, superiors should not follow up on trainees' regular work during training.

Trainee Factors. Trainees must be physically and psychologically ready for learning, or no sickness, willingness without being forced, respectively. The organization selects trainees by considering personnel whose weakness or strength should be developed in priority to comply with the organization's policy or towards career growth. Regarding trainees' anxiety, it can occur under several situations, i.e., being interfered with urgent work, sickness, family members' sickness, the evaluation of training on their salary raise or promotion, evaluation after training, etc.

2.3.5 Sunon Choophol

Professional Trainers' Qualifications and Competence Factors.

Trainers must have direct knowledge, experience, competence, and expertise required in a program as needed by organizational clients. They must be able to teach by a variety of methods for enhancing their trainees to learn and to further their knowledge. The designed content must be appropriate for trainees, and trainees can apply such material for their work. Most of their organizational training focuses on management and supervisory skills, motivation, sales techniques, service, communication, and teamwork. The most frequent topics are management, supervisory skills, and sales techniques.

Training Environmental Management Factors. The environment and training place must be proper for trainees, i.e., room size should be proportional to the number of trainees and their positional level. For instance, if trainees are top executives, activities should exclude any activity requiring trainees to sit on the floor, or for team building, the place should be spacious for doing activities in a group.

Trainee Factors. Trainees must be open and prepared to learn new things, including listening to others' different opinions or beliefs. They should have a desire to attend training. To select trainees, they must be target groups following training content and the organization's objective of inducing trainees to expand their knowledge. Trainees' anxiety found in the organization mostly occurs because of the expectation of trainees' superiors.

3. Methods of Evaluating Training Effectiveness of Business Organizations

3.1 Professional Trainers

3.1.1 Apiwut Pimolsaengsuriya

Typically, trainees' feedback is evaluated at the end of each training to see if they are satisfied with the program or if the training is effective. In the case of evaluating trainees' knowledge, a pre-test, and post-test or before and after training, knowledge is evaluated. In rare cases, trainees' behaviors after training are evaluated relative to their previous ones, which is evaluated by 360 degrees (or by people all around) 30-45 days before the training. After training, 360-degree evaluation is evaluated again to see if there are any behavioral changes or improved behaviors or performance. Only a few programs evaluate the effectiveness at the outcome level, or namely feasible returns or payback after investment, which will be conducted under the situation where some agreement is made with the organizational client before the training. Mostly, they are long-term projects, taking several years.

As a consequence of this kind of evaluation, Slingshot Group (established by Apiwut) was awarded "Best in Practice in Executive Coaching and Citation for Talent Development in 2008-2009" from the American Society for Training and Development (ASTD). He added that to enhance training effectiveness. An organization has to support both budget and time since sometimes trainees have some regular work to accomplish and have no time for training; thus, training may be canceled and postponed. Finally, an organization should have a follow-up system for evaluating the effectiveness of trainees clearly and systematically.

3.1.2 Atchara Juicharoen, Ph.D.

She evaluates training effectiveness based on the 4-level evaluation criteria of Donald Kirkpatrick. Still, she adds the fifth level, depending on which level clients need evaluation to reach, which involves their budget and competency. Mostly, she will offer the 5-level criteria. For instance, if clients need to evaluate their trainees by Level 2 or learning capability, they will use coaching as the primary evaluation method by evaluating what trainees have learned. Nevertheless, the evaluation at the learning level should not leave too long since trainees may forget what they learn from training. Through this process, it also helps to remind trainees of the training content. This process takes about 2 hours, which is not long, but it

should be done rather often. For the evaluation at Level 3 or behavioral level, 360-degree assessment is evaluated if and how trainees' behaviors are changed or improved. For the behavior-level evaluation, evaluation timing can be done later than the knowledge-level, or approximately three months. Sometimes, trainees go back to their unaccomplished work and do not concern about self-development. Thus, it is very crucial that what to be evaluated needs to be clear and transparent. For the result-level, it is important to have the commonly agreed result in advance with organizational clients, i.e., a better relationship with their co-workers, good relationship and increased support among workers of different divisions, etc. Such a result is tied with the behavior-level evaluation. Remarkably, the result-level is not necessarily measured by the monetary index, but by other indicators, such as decreased customers' complaints, or the gained biddings over other companies, etc.

3.1.3 Chaiyos Punsakulchai

Mostly, the evaluation is conducted in the training room. For instance, in the "Train the Trainer," trainees are evaluated to what extent they understand the training content. 2-3 months after that, they are evaluated by their trainer-practice through a simulation, i.e., having attendants supposed to be trainees, etc. Trainees are evaluated if they can meet the determined criteria. In the "Train the Trainer" training program, the effectiveness will be measured from the number of hiring organizations trainees are invited. The high number means the success of the training. However, it takes time, i.e., six months after training, etc. On the other hand, some trainees may not be selected to be a trainer for years.

3.1.4 Pisit Chokeyprecha

He divides his evaluation of training effectiveness into 3 phases:

Phase 1: A pre and post-test that can be either objective or subjective criteria, depending on the training content.

Phase 2: Behavioral evaluation during training by observing trainees' behaviors while doing activities, answering questions, practicing, etc.

Phase 3: Application of evaluation after training by following and evaluating if trainees can apply what they learn from training for their actual work.

3.1.5 Phakorn Attanon

Mostly, the evaluation is conducted during training, which is divided into two methods: 1) By observing interactions between trainers and trainees. Trainees are supposed to have a concentration on trainers and training content continuously with some shared feelings, amusement, laughter, increased expression of ideas, increased self-confidence, and expressed energy in class. 2) By evaluating trainees during training from their practices, i.e., if they follow trainers' instruction or communication, not in their way.

3.2 Training Organizers

3.2.1 Genius Training Co., Ltd.

The company uses several evaluation methods, i.e., observation on training climate; inquiry from trainers, trainees, and all involved; evaluation form after the completion of training; or feedback from HRD concerned offices of organizational clients, etc.

3.2.2 Business Solution Training Center Co., Ltd. (BSTC)

BSTC also uses a variety of evaluation methods, i.e., a pre- and post-test, assignment, a follow-up sheet, satisfaction evaluation after training, an inquiry from clients or trainees directly, etc.

3.2.3 People Value Solution Provider Co., Ltd.

Likewise, the company evaluates training effectiveness in several ways, i.e., a pre- and post-test, 180-degree evaluation by collecting information from people surrounding trainees, satisfaction measurement after training, interviews with trainees or HRD offices of organizational clients, a follow up of trainees' application in their actual work, etc.

3.2.4 Human Achievement Service Co., Ltd. (HAS)

HAS uses a variety of methods for evaluating training effectiveness, i.e., satisfaction after training, and project assignment whose result is proposed to top executives, etc.

3.2.5 Development Outsourcing (Thailand) Co., Ltd.

The company also uses a variety of evaluation methods, i.e., a summary of both individual and group learning, both during and after training, monitoring and

follow-up via project assignment or initiative plans, or an individual learning evaluation by a pre- and post-test, etc.

3.3 HRD Top Executives of Business Organizations

3.3.1 Wirapot Wirunharat

He uses several methods for evaluating training effectiveness, i.e., a pre- and post-test, a follow-up, and monitoring of trainees' behavior changes by superiors, subordinates, and trainees, etc.

3.3.2 Wipaphan Kajornpai

Several methods used for evaluating training effectiveness are survey questionnaires after training, knowledge test, inquiry or interview with trainees, and a follow up of trainees' behavior changes by superiors, etc.

3.3.3 Pattavee Ubonrat

The company uses a variety of methods for evaluating training effectiveness, i.e., behavioral assessment, if trainees can apply what they learn for actual use and if behaviors are improved by evaluating 30 days after training, including assigning trainees to do a work project, etc.

3.3.4 Supaporn Chumworathayee

A variety of evaluation methods are used, i.e., post-test, interview with superiors, especially if and how trainees can use their learned knowledge to adapt in their work, work performance evaluation, etc.

3.3.5 Sunon Choophol

She uses a variety of evaluation methods, i.e., a post-test, a follow up after training, or behavioral observation to see if and how trainees' behaviors are changed or improved

APPENDIX C

Questionnaire

Communication Factors Affecting Training Effectiveness of Business Organizations

Qualifications of Questionnaire Respondents

1. An employee of a private organization
2. Used to attend an in-house training program of no less than six hours

Instruction

1. The questionnaire is divided into 14 parts.
2. To answer this questionnaire, please only refer to only in-house training, but no specific program is required.
3. Respondents are kindly requested to give accurate answers for the utmost academic benefits.

Part 1: General Information

1. Sex

- Male
 Female

2. Age

- Younger than 21 Years Old
 21 - 30 Years Old
 31 - 40 Years Old
 41 – 50 Years Old
 Older than 50 Years Old

3. The Highest Education Level

- Lower Than a Bachelor's Degree
- A Bachelor's Degree
- A Master's Degree
- A Doctoral Degree

4. Positional Level/ Rank in the Organization

- Operational Employee/Practitioner (Without Subordinates)
- Immediate Supervisor/Team Leader (With Subordinates)
- Middle Supervisor/Division or Department Head (With Subordinates)
- Top Supervisor (With Subordinates)
- Top Executive/Organizational Leader

5. The Average Number of Training Programs Attending per Year

- 1-3 Programs
- 4-6 Programs
- 7-10 Programs
- More than 10 Programs

Part 2: Trainers' Communication Methods in Training

6. Since the first training program, what kinds of communication methods do trainers use? (more than one answer is applicable)

- Speaking Methods: Lecture, Coaching, Narration, Conversation, Questioning, Raising Examples, etc.
- Providing an Opportunity for Trainees to Express their Ideas, Suggestion, and Discussion
- Learning Activities
- Case Studies
- Presentation Programs, i.e., Powerpoint, Keynote, etc.
- Workshops and Role-Plays
- Image/Video
- Games and Recreational Activities
- Mobile Application
- Brainstorming

- Demonstration
- Handouts/Document
- Field Trips

Part 3: Professional Trainers' Qualifications

To what extent do professional trainers' qualifications affect training effectiveness?

	Highest Level	High Level	Moderate Level	Low Level	Lowest Level
7. Knowledge and expertise in training					
8. Education level					
9. Area/field of study					
10. Training certification					

Part 4: Professional Trainers' Experience

To what extent does professional trainers' experience affect training effectiveness?

	Highest Level	High Level	Moderate Level	Low Level	Lowest Level
11. Past experience, i.e., an organization's consultant, etc.					
12. Training experiences, i.e., numbers of years, numbers of organizational clients, etc.					
13. The direct and actual experience of training content					

Part 5: Professional Trainers' Reputation

To what extent does professional trainers' reputation affect training effectiveness?

	Highest Level	High Level	Moderate Level	Low Level	Lowest Level
14. Past work performance					
15. Fame in society					
16. Responsibility/ characteristics/ethics					

Part 6: Professional Trainers' Communication

To what extent does professional trainers' communication affect training effectiveness?

	Highest Level	High Level	Moderate Level	Low Level	Lowest Level
17. Speaking methods: lecture, coaching, raising examples, etc.					
18 Providing an opportunity to express ideas, suggestions, discussion, etc.					
19. The use of facilitating media, i.e., presentation programs, image, video					

Part 7: Professional Trainers' Design of Training Content

To what extent does professional trainers' design of training content affect training effectiveness?

	Highest Level	High Level	Moderate Level	Low Level	Lowest Level
20. Training content is appropriate for learning					
21. Training content can be applied for realistic practice.					
22. Training content is appropriate for trainees' roles and work position					

Part 8: Training Physical Environmental Management

To what extent does training physical environmental management affect training effectiveness?

	Highest Level	High Level	Moderate Level	Low Level	Lowest Level
23. Location and convenience of the training place					
24. Training rooms, i.e., size, cleanliness, design, light, temperature					
26. Training equipment, i.e.,					

Part 9: Training Social and Psychological Environmental Management

To what extent does training social and psychological environmental management affect training effectiveness?

	Highest Level	High Level	Moderate Level	Low Level	Lowest Level
26. Seating and grouping of trainees					
27. Training climate, i.e., formality, familiarity, stress, amusement, etc.					
28. Respect, i.e., between a trainer and trainees, and among trainees.					
29. Management of a training organizer's team					

Part 10: Trainees' Learning Motivation

To what extent does trainees' learning motivation affect training effectiveness?

	Highest Level	High Level	Moderate Level	Low Level	Lowest Level
30. Trainees' determination and commitment					
31. Trainees' physical and psychological readiness, willingness					
32. Trainees' cooperation in training					

Part 11: Trainees' Self-Efficacy

To what extent does trainees' self-efficacy affect training effectiveness?

	Highest Level	High Level	Moderate Level	Low Level	Lowest Level
33. Trainees' knowledge of their strength and weakness					
34. Trainees' confidence in learning					
35. Trainees' knowledge of what and how to develop themselves					

Part 12: Trainees' Perceived Valence of Outcome

To what extent does trainees' perceived valence of outcome affect training effectiveness?

	Highest Level	High Level	Moderate Level	Low Level	Lowest Level
36. Trainees' acknowledgment of training necessity					
37. Trainees' acknowledgment of training benefits					
38. Trainees' acknowledgment of benefits for the organization.					
39. Trainees' expectation of training benefits					

Part 13: Trainees' Anxiety

To what extent does trainees' anxiety affect training effectiveness?

	Highest Level	High Level	Moderate Level	Low Level	Lowest Level
40. Trainees' anxiety of their workload					
41. Trainees' anxiety of their expression to others.					
42. Trainees' anxiety about trainers' knowledge, competence, and roles					
43. Trainees' anxiety of training climate					
44. Trainees' anxiety about the training content					
45. Trainees' anxiety of their organization's and superiors' expectation					
46. Trainees' anxiety of effectiveness evaluation after the training completion					

Part 14: Training Effectiveness

To what extent does training's outcome affect you after the completion of training?

	Highest Level	High Level	Moderate Level	Low Level	Lowest Level
47. Satisfaction and happiness					
48. Encouragement/ good feeling					
49. Increased useful knowledge					
50. Increased knowledge of self- and work-development					
51. Enhanced behaviors as a good example for others					
52. Improved/bettered work performance					
53. Direct and indirect compliments from work performance					
54. Better work quality					

BIOGRAPHY

NAME Jompon Jeebpinyo
ACADEMIC Master of Public Administration (HRM)
BACKGROUND National Institute of Development Administration

Bachelor of Arts (Political Science)
Ramkhamhaeng University
EXPERIENCES Managing Director
More Training Co., Ltd.

Training & Coaching Service
Thailand Management Association

Training Quality Assurance
True Corp. PLC.

HRD Executive
TOA Paint (Thailand) Co., Ltd.

