# DEVELOPING TRAINING MODEL USING GAMES TO ENCOURAGE TEAMWORK BEHAVIORS

# Jintana Tiyarungsinukul<sup>1</sup> Rajanee Quanboonchan<sup>2</sup> Silpachai Suwantada<sup>3</sup>

**Abstract:** The objectives of this research were 1) to develop a training program by using games to encourage teamwork behaviors, 2) to study the effectiveness of the training program and 3) to study the retention of the training program.

The sample group of this research, obtained from Purposive Sampling, was composed of 30 officers, employees and operating staffs from Local Administration, Wangchai Sub district Administration Organization, Mahasarakam who participated in an Operational Efficiency Increment Project Seminar on 6-8 February, 2014 at Phukaongam resort. Tools used in the research were 3 sets of questionnaires: a questionnaire on teamwork characteristics of the organization, a questionnaire on employees' teamwork behaviors and a training program utilizing games to encourage teamwork behaviors. Percentage, mean and standard deviation (SD), t-test Dependent measure and Descriptive Statistics were used in data analysis.

The research findings were as follows: 1) A training program that utilizes games to encourage teamwork comprised of main activities, namely Group Dynamics activity, Puzzle activity, Analysis activity, Silent Game activity, Elephant Shooting activity, Tower building activity, Walk Rally activity, Carnival activity, Warlord activity, Virtue Telling activity and Promise activity 2) The study of the training program that utilizes games to encourage teamwork was effective and showed excellent results. The pre-test on the teamwork characteristics of the organization was considered at a medium level (3.05) while the post-test was at high level (3.86). When comparing the two tests, statistically significant difference was detected at p = 0.05. The pre-test on teamwork behaviors in general was considered high (3.67) while the post-test was very high (4.36), giving statistically significant difference at p = 0.05. 3) The retention of the program, evaluated by comparing post-test and retention test one month after the training showed that the employees' teamwork behaviors were still at a very high level, with the statistically significant difference level of 0.05.

**Keywords**: Developing Training, Model Using Games, Teamwork Behaviors.

<sup>&</sup>lt;sup>1</sup> DBA. Candidate in Sports Management, Graduate of Chandrakasem Rajabhat University, Thailand.

Jintana pro-act@hotmail.com

<sup>&</sup>lt;sup>2</sup> Ph.D., Associate Professor, Graduate of Chandrakasem Rajabhat University, Thailand. Rq.2486@gmail.com

<sup>&</sup>lt;sup>3</sup> Ph.D., Assistant Professor, Graduate of Chandrakasem Rajabhat University, Thailand. Suwantada Sc@hotmail.com

#### Introduction

As employees are the center of the work development of an organization, Human Resource Development (HRD) plays an important role to benefit the organization both in terms of product and development in a desired direction. In order to work together, cooperation between individuals is needed. Teamwork is hence a fundamental procedure of work development in order to efficiently achieve the organization's goals. The concept of Human Resource Development originally aimed to train and enhance employees' potential via the process of learning through motivation to invoke work-satisfaction. The concept nowadays, however, has been greatly changed. The aims are to motivate individuals to love and engage to the organization more and to be willing to learn and to feel committed. Moreover, it aims at employee achievement and engagement because failing to engage the employees will cause conflicts and oppositions as well as decrease work efficiency within the organization.

The common issues associated with group work are conflicts, nepotism, characteristics of schism, uncooperativeness, and sometimes solitary characters. Undeniably, working independently doesn't make benefits, waste time and resources, and cause an inability to achieve the goals. Therefore, working in the organization requires collaboration between members to result in an overall success.

As teamwork is a basic requirement for any organizations, it is essential for the Human Resource Department to find HRD programs to produce efficient employees. Also, games are widely used in training nowadays since they can build harmony, strengthen relationship between members, create group process and develop teamwork skills. We were then interested in studying the implementation of a training program by using games to build teamwork behaviors as well as the effectiveness of the created programs. This was to maximize their utilization benefits for teamwork development and to create training innovation for human resource development which results in organizational stability.

# **Objectives**

There are three objectives for the study

- 1. To develop a training program that utilizes games to encourage teamwork behaviors
- 2. To study the effectiveness of the training program
- 3. To study the retention of the training program

#### **Research Procedure**

This research was conducted as Research and Development in order to develop a training program that utilizes games to encourage teamwork behaviors.

The research procedure contains 4 stages as follows:

Stage 1 Data Study and Analysis

This is to create a training program according to related theories. The working steps are as follows:

1.1 Gather and Process theories regarding training course, game organizing and teamwork development.

- 1.2 Interview experts of training program course, game organizing and teamwork development.
- 1.3 Conclude and synthesize the theories in order to create conceptual framework.

# Stage 2 Program Design and Implementation

The working steps are as follows:

- 2.1 Specify objectives of the training or desired characteristics expected on the trainees
- 2.2 Analyze activities that correspond to the objectives or the expected characteristics.
- 2.3 Have three experts perform quality assurance on the program. The steps include:
  - (1) Invite one expert for each of the following expertise:
  - training course
  - game organizing
  - organizational psychology and human resource development
- (2) Let the experts comment and validate the created program on the content and the expectation from the training.
- (3) Find the opinion congruence values from the three experts in order to check the content validity. This is done by asking the experts to consider the congruence between the objectives and the questionnaire. We then calculate the Index of Item Objective Congruence (IOC) using the following formula:

$$IOC = \frac{\sum R}{N}$$

When IOC is Objective-Questionnaire Congruence  $\Sigma R$  is a summation of scores from the experts N is a number of experts

We developed questionnaires and presented them to the thesis committee for verification and approval. Adjustments and revisions were made accordingly to make sure the questionnaires were valid, corresponded to the objectives, and covered all evaluated contents. We chose the topics that the three experts considered congruent, with IOC and r values as follows:

- 1) IOC values of the questionnaire on teamwork characteristics is 0.87
- 2) IOC values of the questionnaire on teamwork behaviors is 0.89
- 3) r values of the questionnaire on teamwork characteristics is 0.963
- 4) r values of the questionnaire on teamwork behaviors is 0.951
- 2.4 Specify quality criteria for the assessment of training program development that utilizes games to encourage teamwork behaviors. We use the typical 5-level Likert scale (Boonchom Srisa-art 1992: 23-24) as well as data on efficiency level of the program, with criteria of score interpretation as follows:

<u>Percentage</u>	Average Score	<u>Meaning</u>
90.00 - 100.00	Average score of $4.50 - 5.00$	Very high efficiency
70.00 - 89.99	Average score of $3.50 - 4.49$	High efficiency
50.00 - 69.99	Average score of $2.50 - 3.49$	Medium efficiency
30.00 - 49.99	Average score of $1.50 - 2.49$	Low efficiency
20.00 - 29.99	Average score of $1.00 - 1.49$	Very low efficiency

2.5 The tools used in data gathering are three sets of questionnaires: teamwork characteristics and environment in the organization, teamwork behavior, and the training program.

The teamwork characteristics and environment in the organization questionnaire is a Rating Scale of 5 levels, assessing 5 aspects:

- (1) member characteristics
- (2) organizational behavior
- (3) Man-Work compatibility state
- (4) work environment
- (5) organizational culture
- 2.6 The teamwork behavior questionnaire, a set of questions on working-withothers behaviors, is a Rating Scale of 5 levels, assessing 9 aspects:
  - (1) personal behavior
  - (2) role and responsibility
  - (3) good relationship
  - (4) support, assistance and trust
  - (5) clear common goals and objectives
  - (6) communication and data sharing
  - (7) creative conflict elimination
  - (8) friendly work environment and surrounding
  - (9) cooperation
- 2.7 The created training program is a training format that utilizes games to develop teamwork behaviors. The program includes activities that will build personal behavior and responsible behavior, good relationship, trust, goal-oriented work, open and accurate communication, creative conflict elimination, friendly work environment, and satisfactory cooperation. The activities are:
  - (1) Group Dynamics activity, with an objective to build relationship and encourage trainees to help one another
  - (2) Puzzle activity, with an objective to create desired characteristics of the team member
  - (3) Analysis activity, with an objective to allow trainees to communicate and share data on teamwork
  - (4) Silent Game activity, with an objective to allow trainees to learn their roles and responsibilities
  - (5) Elephant Shooting activity, with an objective to create team goals
  - (6) Tower building activity, with an objective to build trust and team assistance
  - (7) Walk Rally activity, with an objective to practice teamwork skills
  - (8) Carnival activity, with an objective to create teamwork environment
  - (9) Warlord activity, with an objective to practice communication skills

- (10) Virtue Telling activity with an objective to build good team relationship
- (11) Promise activity with an objective to build faith in oneself and colleagues

Stage 3 Finding Efficiency by Trying Out the Program

The working steps are as follows:

Population: government officers, government employees, and Local Administrative Organization staffs

Sample group: government officers, government employees, and operating staffs from Wangchai Sub-district Administrative Organization, Mahasarakam Province. The sample size was 30, with both male and female who were willing to participate in the research. Also, the group was purposively sampled in order to perform a treatment according to the created training program.

- 3.1 Prepare by training the speakers and research assistants who will utilize the training program
- 3.2 Execute the training program as developed. The program takes 3 days 2 nights and includes 11 activities to find the efficiency. The procedures are as follows:
  - (1) Ask the attendees to fill out the pre-test to assess teamwork behaviors
  - (2) Train the attendees according to the created program
  - (3) Ask the attendees to fill out the post-test to assess teamwork behaviors

Stage 4 Finding the Retention Values from the Post-Test.

We asked the trainees to fill out questionnaires to evaluate teamwork behaviors after a month of the training in order to calculate the Retention Test in real-life situation.

#### **Data Analysis**

The data acquired from the questionnaires were processed to test the hypothesis and present the research findings. The Unit of Analysis was an individual who took part in the training. Statistics used for the analysis were as follows:

- 1. Descriptive Statistics was used to describe characteristics of the sample group while percentage was used for levels of variables used in the research.
- 2. Mean ( $\bar{x}$ ) and Standard Deviation (S.D.) were used to analyze teamwork characteristics within the department and teamwork behaviors.
  - 3. Analyze and compare difference of means ( $\bar{x}$ ) between
  - 3.1 teamwork characteristics within the department Pre-Test and Post-Test, using t-test (Dependent)
  - 3.2 teamwork behavior Pre-Test and Post-Test, using t test (Dependent)
  - 3.3 teamwork behavior Post-Test and Retention test, using t test (Dependent)

## **Research findings**

Research findings consisted of:

- 1. A training program that utilizes games to encourage teamwork behaviors was composed of 11 activities: 1) Group Dynamics activity 2) Puzzle activity 3) Analysis activity 4) Silent Game activity 5) Elephant Shooting activity 6) Tower building activity 7) Walk Rally activity 8) Carnival activity 9) Warlord activity 10) Virtue Telling activity and 11) and Promise activity.
  - 2. The results from the study of the training program usage found that:

- 2.1 The results from teamwork characteristics within the department Pre-Test was in a medium level (3.05) while the Post-Test was in a high level (3.86). When compared the two scores, statistical significance was 0.05, showing apparent improvement.
- 2.2 The results from teamwork behavior Pre–Test was in a high level (3.67) while the Post Test was in a very high level (4.36). When compared the two, statistical significance was at 0.05. The Post-Test outcome showed that teamwork behavior was very high; moreover, when considering item by item, the scores improved in all items, with the average value of teamwork behavior in a very high level.
- 2.3 The results from the Retention Test for teamwork behavior, taken 1 month after the trial, showed that teamwork behavior in overall was still in a very high level. When compared the Post Test and the Retention Test, statistical significance was at 0.05; however, the Post-Test's overall average score was considered 100% while the Retention-Test's decreased to 98.60%. Yet, it was still in a very high level range.
- 2.4 The results from interviews and observation showed that teamwork of the operation unit of Wangchai Sub-district Administrative Organization, 1 month after the trial, significantly improved. The employees well cooperated, planned their works together with good relationship, think/talk/do positive as well as realize their roles and responsibilities. They also have fun and warm work environment, work together towards common goals and try to achieve expected outcome together, communicate openly and clearly, and help one another and eliminate conflicts when problems occurred.

## **Conclusion and Discussion**

The development of a training program that utilizes games to encourage teamwork behaviors.

The created training program that utilizes games to encourage teamwork behaviors can be efficiently used as it has been proved through 4 research procedures. The first procedure was fundamental data study in order to create a training program according to related theories. The procedure was divided into 1) gather and process theories regarding training course, game organizing and teamwork development; 2) Interview experts of training program course, game organizing and teamwork development; 3) Conclude and synthesize the theories in order to create conceptual framework. The second procedure was the program design and implementation which was quality assured by the experts. The third procedure was a training trial to find the efficiency. The procedure was divided into 1) Ask the trainees to fill out a pre-test to assess teamwork behaviors 2) Execute the created training program 3) Ask the trainees to fill out a post-test to assess teamwork behaviors. The last procedure was finding the Retention Test values of the teamwork behaviors a month after training.

The study on efficiency of the training program found that employees in the department significantly improved. This was because we developed the training program by analyzing contents and designing activities from teamwork, which is a form of management. This type of management is widely accepted nowadays as a management that maximizes benefits for both the individual and the organization. It allows every member in the team to play their part in management and problem-

solving; and to let whomever encountering the problem take part in fixing it and making decisions can bring about harmony, love, work engagement and a clear prediction of the organization future. Furthermore, teamwork builds spirit and work satisfaction so that everyone can achieve their goals. In conclusion, to achieve efficient teamwork, there should be 5 essential components: 1) work environment 2) Man-Work compatibility 3) Organizational culture 4) team member characteristics and 5) Organizational behavior.

The study on the retention of the training program found that there were 7 aspects that the retention decreased: 1) personal behavior 2) role and responsibility 3) support, assistance and trust 4) clear common goals and objectives 5) communication and data sharing 6) friendly work environment and surrounding and 7) cooperation. The two aspects that still retained were 1) good relationship and 2) creative conflict elimination.

#### Recommendation

Recommendation on Using the Research Findings

- 1. The created training program should be used in trainings to develop employees to work efficiently.
- 2. The training program has a special feature being more of a recreational activity rather than a lecture or discussion. It highlights on working together and applying life experience in learning, and realizing organizational harmony which leads employees to prioritize organization benefits. Moreover, the program can be held in various places due to circumstances not necessarily a training room.
- 3. The department should continue focusing on the work environment which includes:
  - 3.1 Team members realize their roles, both as a leader and a follower.
  - 3.2 Team members do not involve their personal matters to work.
  - 3.3 Work environment is positive and warm.
  - 3.4 Work is thoroughly delegated, possible and appropriate.
  - 3.4 Team members take responsibility for the their work.
- 4. The training is particularly effective for the organizations that have roles and require teamwork.
- 5. There should be continuous trainings or HRD activities at least once or twice a year. Because teamwork behavior tends to decrease over time, the training will encourage more continuous teamwork behaviors, which will affect organizational efficiency.
- 6. Teamwork behavior is possible when there are some other factors involved such as organization leader, work environment, colleague behaviors, organizational culture, work description, etc. These factors should be well-balanced in order for the teamwork to succeed.
  - 7. There are a few concerns if the training program is going to be used:
  - 7.1 The activity leader should clearly understand the objectives and how to use the program.
  - 7.2 The number of attendees should be between 20-60, which is most effective.
  - 7.3 The activity leader should focus on connecting each activity.

- 7.4 There should be a study of the results with good understanding and a straight-to-the-point conclusion from the activity leader.
- 7.5 There should be extra care on the matter of privacy violation.
- 7.6 The attendees should participate throughout the program and should be the employees who work together within the organization.
- 7.7 The training environment should be casual and fun. The attendees should not be forced to participate.

Once the concerns are taken care of, participation in the program will result in expected achievement which is truly advantageous for both the individual and the organization.

# Recommendation for the Future Research

- 1. One should develop a training program, focusing on activities regarding
- 1.1 Individual i.e. Responsibility and intention to work full-time with full effort and enthusiasm.
  - 1.2 Colleagues i.e. Friendship, help and support, and warmth and friendliness.
- 1.3 Teamwork i.e. Cooperative consultation, cooperative planning, coordination, communication, data sharing and collaboration.
- 2. One should develop a more efficient training program by considering other related variables such as longer training period; position level of trainees such as executive and operational level; job description; organizational culture; organizational leadership; environment and supporting factors; justice; and spirit encouragement.
- 3. One should try out this training program on every level of operational unit i.e. educational institutes, government sectors, private sectors and Local Administrative Organization in order to find the efficiency of the program and develop it to match the organizational roles and responsibilities.

#### References

- Armstrong, Michael. (2006). *A Handbook of Human Resource Management Practice*, (10<sup>th</sup> Ed.). London: Kogan Page.
- Bemowski, K. (1995). What Makes American Team Tick?. *Journal of Quality Progress*, 28: 41 46.
- Bozarth, J. (2008). From Analysis to evaluation. San Francisco. CA: Pfeiffer.
- Cartwright, R. (2003). *Implementing a Training and Development Strategy*. United Kingdom: Capstone Publishing.
- Chang, Y. Richard. (1995). Success through Teamwork: A Practical Guide to Interpersonal Team Dynamics. London: Kogan Page Ltd.
- Delahaye, B. L. (2005). *Human Resource Development: Adult learning and Department of Physical Education Ministry of Tourism and Sports*. (16 July 2010). Recreation activities www.jittavittaya-marines.com/knowlege/play-song.pdf
- Edgar, Huse. R. (1982). Team Building. Citing Daniel Robbery and Steven Altman. Organization Development: Progress and Perspective. New York: McMillan Publishing Ltd.

- French, Wendell L., and Bell, Jr., Cecil H. (1990). *Organization development: Behavioral science interventions for organization improvement*, (4th Ed.) New Jersey: Prentice Hall.
- Gilley, J. W., England, S. A., and Gilley, M.A. (2002). *Principles of Human Resource Development*. New York: Perseus Publishing.
- Herrenkohl. (2004). Becoming A Team. Ohio: Library of congress Control.
- Knowles, M. S., Holton III, E. F., & Swanson, R. A. (2005). *The Adult learner: The Definitive Classic in Adult Education and Human Resource Development* (6th Ed.). New York: John Wiley & Sons.
- Lawson, L. (2009). The trainer's handbook. San Francisco. CA: Pfeiffer.
- Likert, Rensis. (1983). A Technique for the Measurement of Attitudes. *Archives of Psychology*, 140: 1 55
- McGourty & Meuse (2001). *The Team Developer*. New York: Branford and Bigelow. McLean D. D, Hurd A. R, Rogers N. B. (2005). *Kraus' Recreation and Leisure in*
- Modern Society, 7th Edition. Jones and Bartlett.
- Rothwell, William J., & Sullivan, Roland. (2005). Organization Development. In Rothwell, William J., and Sullivan, Roland, eds. Practicing Organization Development: A guide for consultants, (2nd Ed.). California: John Wiley & Sons.
- Nick, B. P., Thacker, J. W. (2007). *Effective Training: Systems, Strategies, and Practice* (3rd. Ed.). New Jersey: Pearson Education.
- Noe, R. A. (2010). Employee Training and Development. New York: McGraw Hill. Singer, Robert N. (1980). Moter learning and human performance includes bibliographies and index. New York.
- Silapachai Suvarnthada. (2005). *Theoretical and practical movement skills learning*. Bangkok: Sports Science Chulalongkorn University.
- Thanawat Pamornanant. (2008). *Teamwork study and model creation. Training to develop employee teamwork*. Dissertation Doctor of Education Program. Faculty of Education Srinakharinwirot University.
- Thompson. Rosemary. (2003). Counseling Techniques: Improving Relationships with Others, Ourselves, Our Families and Our Environment. (2<sup>nd</sup> ed). New York: Brunner-Rutledge.