



## **UNITY IN THE WORKPLACE: THE EFFECTIVENESS OF TEAMWORK TRAINING**

**Maria Helena Suprpto, Widya Mandala Catholic University, Indonesia**  
**Ellysa Verdyana, Pelita Harapan University, Indonesia**

### **ABSTRACT**

One way to increase group cohesiveness is to provide teamwork training. This study aims to determine the effectiveness of teamwork training in improving the cohesiveness of working groups. This study used quasi-experimental with one group of pre-test-post-test design. Group cohesiveness was measured by the Group Environment Questionnaire (GEQ) questionnaire. Teamwork training was followed by 12 employees who were less able to work in groups. Research data were processed by using a paired sample t-test. The result of this study indicates that teamwork training can improve the working group cohesiveness ( $T = -4.114$ ,  $p < 0.05$ ). Teamwork training can improve team cohesiveness.

Keywords: teamwork, cohesiveness, teamwork training

## **Introduction**

A good leader can encourage the creation of optimal team performance. One of the leaders' roles is to build commitment and cohesiveness among members of the work team. Leaders who have a transformational leadership style relate to higher work team cohesiveness than leaders who use the transactional leadership style (Stashevsky, and Koslowsky, 2006). Work team cohesiveness is related to increasing work team productivity (Mullen and Copper, 1994; Haroon and Mahmood, 2012). Cohesiveness is associated with the success of the work team (Carron, Bray, and Eys, 2010).

Cohesiveness is the indicator of the health of a team (Forsyth, 2010). Group cohesiveness is a degree to which members are attracted and motivated to settle in the organization (Robbins and Judge, 2008). Group cohesiveness is a dynamic process that reflects the tendency of the team members together to remain united in working together to achieve a goal (Forsyth, 2010). Sanders and Schyns (2006) stated that cohesiveness is important in group characteristics because the group members will volunteer to cooperate with one another. This is because the group members will tend to be more sensitive to their peers and will be willing to provide assistance and guidance. Cohesive team has a higher commitment of members and more long-term oriented (Arriaga and Agnew, 2001).

Various previous studies discuss how to improve group cohesiveness. Cahyadi (2012) uses team-building training to improve the confidence of colleagues and the quality of teamwork. Cahyadi (2012) found that team-building training could improve the quality of teamwork, but had not been able to increase the trust of colleagues. Setianingtyas and Darokah (2015) use team-building training to improve the cohesiveness of Inna Garuda hotel employees. Another study conducted by Novianti and Zipi (n.d) using outbound training to form the cohesiveness of the teaching staff team.

Previous studies only conducted training within one day so that only brought cognitive change, but not yet able to produce further behavioral changes. In addition, previous research has not considered the effect size in the implementation of the analysis. Effect size is a measure of the practical significance of the research results. This measure complements the analysis results provided by the significance test and can be used to compare the effects of a variable from studies using different measurement scales.

The least amount of research on team building in Indonesia, and the lack of comprehensiveness of previous studies, hence it is essential to study the effectiveness of teamwork training. The aim of this study is to evaluate the effectiveness of teamwork training on improving group cohesiveness in work teams. Teamwork training is expected to improve the cohesiveness of teamwork.

## **Method**

### *Participant*

We use XYZ Tea Company's staffs as participants in our experiment. The selection of participants was made by purposive sampling method. Each supervisor chose his or her staff to meet the criteria: (1) less able to work with their teams; (2) less able to communicate effectively, (3) less caring staff with their teammates, and (4) limit themselves and do not want to mix with other group members. A total of 12 employees were assigned by their supervisors for training. The majority of participants in this teamwork training are female (75%). Most of the participants (33.33%) worked as team leaders; some of the participants (41.67%) were

employees who had been working for 1-2 years at XYZ Tea Company. Most of participants (41.67%) were graduated from vocational high school.

Table 1. Characteristics of Participants

Characteristics	N	Percentage (%)
Gender		
Male	3	25
Female	9	75
Total	12	100
Age		
18-24 years	9	75
25-30 years	2	17
> 30 years	1	8
Total	12	100
Division		
Administration	2	16,67
Purchasing	1	8,33
Seeding production	3	25
Team leader	4	33,33
Warehouse	2	16,67
Total	12	100
Length of work		
1-3 months	1	8.33
4-6 months	2	16,67
7-11 months	2	16,67
1-2 months	5	41,67
3-5 months	0	0
> 5 years	2	16,67
Total	12	100
Education		
Junior high school	1	8,33
High school	3	25
Vocational high school	5	41,67
Diploma	2	16,67
Bachelour	1	8,33
Total	12	100
Marital status		
Single	9	75
Married	3	25
Total	12	100

### *Teamwork training*

Teamwork training is structured on the basis of four core dimensions put forward by Baker and his colleagues (1999). The four core dimensions of teamwork are communication, interpersonal relations, group decision-making and planning, and adaptation or flexibility. Teamwork training was delivered by using experiential learning. Four important phases that occur during the process of experiential learning is (Adi, 2009): 1) Phase experience, the depth of the participants to absorb the meaning or experience during the training which will be applied in

the work will depend on the trainer in directing the session, 2) Phase review, here the participants to reflect on experience in training activities through mutual give an opinion on the activity Newly implemented; 3) Concluding Phase, the conclusions drawn by the trainer will affect the depth of participants' absorption on the meaning of the training. Of course this affects whether training outcomes are well achieved or not (Luckmann, 1996); 4) Planning Phase, after drawing conclusions from the learning outcomes during the training, the participants will undertake the self-development plan (action plan) as a follow-up step for each participant to apply the knowledge he has learned. This training used a variety of methods, i.e. games, lectures, role-plays, and action plans. Teamwork training is divided into three stages. The stages carried out in one day.

### *Measures*

**Cohesiveness.** The questionnaire used to measure the cohesiveness is adapted from the work-adapted version of the Group Environment Questionnaire (GEQ). The survey measures the four dimensions of group cohesiveness as proposed by Carron, Widmeyer, and Brawley (1985): group integration-task, group integration-social, individual attraction to group-task, and individual attraction to group-social. The questionnaire consisted of 18 items filled with five choices of ranged answers from strongly agree to disagree strongly. This questionnaire has been tested to 31 employees of Great Tea Company. The questionnaire has good reliability ( $\alpha = 0.881$ ).

### *Post-intervention Manipulation Checks.*

Manipulation checks were to evaluate the course of the training. Training evaluations was done three times at the end of each session. The training was evaluated in terms of materials, activities, facilitators, tools, and overall training. The evaluation sheet consists of 14 items of the statement with a choice ranged from strongly disagree to strongly agree.

### *Procedures*

The method used in this research is quasi-experimental with one group pre-test post-test design. This design can measure changes in a situation, phenomenon, problem, or attitude and is appropriately used to measure the effectiveness of a program (Kumar, 2010). The experimental method is used to see the direct effect of training on group cohesiveness. The impact of training cannot be determined if this study uses the survey method. This research used quasi-experimental method because of limited time and permitted from the company.

The training was conducted in three stages or meetings once a week for three consecutive weeks. The participants' cohesiveness was measured at the beginning before the participants took part in the training, and ended at the end of the third session. At the end of each session, participants are asked to evaluate the course of the training by filling out the training evaluation sheet.

## **Results**

### *Descriptive statistics*

After the employee attended the training, employees experienced an increase in cohesiveness as indicated by increase in mean cohesiveness scores at pre-test and post-test.

### *Hypothesis testing*

**Test assumptions.** The assumption test was using the normality test. The data used were 31 samples. Normality test will be more accurate using Shapiro-Wilk if the sample data is less than 50. Normality test results showed the value of  $p = 0.266$  ( $p > 0.05$ ) with the value of  $z =$

0.917 on the pre-test score and  $p = 0.244$  ( $p > 0.05$ ) with Value  $z = 0.915$  on the post-test score. It can be concluded that the data is normally distributed.

Hypothesis testing. Hypothesis test was analysed by using paired sample t-test with SPSS program. The hypothesis of this study is that there is a difference in-group cohesiveness score after being given training. The results showed the difference between the pre-test score and the post-test. The value of significance ( $p$ ) is 0.002 ( $p < 0.05$ ), it can be concluded that the hypothesis was accepted, there is a difference in group cohesiveness score in the participant after being given a teamwork training.

#### *Effect Size*

The result of size calculation shows the effect of size ( $d$ ) is 0, 726. The effect of the size according to Cohen (1988) can be categorized as a large size effect. Previous studies have found that teamwork training can enrich teamwork in multiple contexts with value effects ranging from 0.46 to 1.23 (McEwan et al., 2017).

#### *Post-intervention Manipulation Check*

Evaluation results showed that the training has been going well. The selection of materials and activities is considered useful. The facilitator was quite capable of bringing the material well. Training equipment helped with the proper course of training. A number (72%) participant suggested that the training provided useful experience for their personal development. A total of 17% of participants indicated that training enabled participants to gain a new attitude, and 11% of participant suggested that they had acquired new knowledge.

### **Discussion**

This study aims to test the effectiveness of teamwork training in improving teamwork cohesiveness. Table 2 shows the results of the survey regarding the cohesiveness score at the pre-test and post-test. Table 2 shows the difference in mean cohesiveness score at pre-test and post-test.

Table 2. Mean and Standard Deviation of Cohesion

Statistics	N	Mean ( $\mu$ )	Standard Deviation ( $\sigma$ )
Pre-test	12	70.58	4.62
Post-test	12	73,92	4.58

Table 3 shows that the difference in mean participants' cohesiveness score before and after training is statistically significant at 5%. This study has a large effect size, indicating that statistical differences are not due to chance, but due to the treatment provided.

Table 3. Paired Sample T-Test Between Pre-test and Post-test Condition

	Paired Differences			t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Pre-test-Post-test	-3.333	2.807	0.810	-4.114	11	0.002

The results of this study show that teamwork training has increased the cohesiveness of the participants' groups ( $T = -4.114$ ,  $p < 0.05$ ,  $d = 0.726$ ). The increased of group cohesiveness affects the four components of group cohesiveness: group integration in tasks, social group

integration, individual interest in-group tasks, and individual interest in social groups (Carron, Widmeyer, and Brawley, 1985). The task cohesion dimension consists of two components: group integration in task and individual interest in-group task, while in the social cohesion dimension consists of two components: social group integration and individual interest in a social group (Carron et al., 1985; Carless and Paola, 2000). Improvement in the aspect of group integration in tasks shows a change of group members' perceptions of team closeness in completing tasks. This means that if the employee of the team is lacking the task and achieving the goal, then after training the employee is more able to work with the workgroup. The individual's interest in the group's task will affect the group's tasks and achieving common goals of working groups.

Improvement in the social cohesion dimension appears to change the two components, ie social group integration and individual interest in social groups. After the employee attended the training, the social cohesion dimension score experienced a considerable increase compared to before the training. This affects how employees can unite socially within their workgroups, where they feel that the group has a close and intimate relationship in terms of socializing. In addition, employees also feel involved in the formation of interpersonal relationships among members within the workgroup, so they are more interested in interacting with colleagues in the workgroup.

The results of this study are in accordance with the results of research conducted by Prichard, Bizo and Stratford (2006) that teamwork training can improve the cohesiveness of working groups. The results of this study are also supported by previous research, which stated that training team building could improve group cohesiveness (Prichard, Bizo and Stratford, 2006). This teamwork training proved to be effective in improving group cohesiveness, such as the conclusions of Dally and Nicolle (1997), a process of team development could be accelerated through appropriate interventions, one of which is training.

The effectiveness of teamwork training is in accordance with the research of Kriek and Venter (2009). Kriek and Venter stated that the success criterion of teamwork training is the establishment of a good communication network, the development of team synergy, and the ability to find solutions. This increase in-group cohesiveness indicates participants' success to alter the experience and to learn gained during the training, thereby enhancing positive emotions for his team. Positive emotions can be shown through the emergence of feelings of togetherness, which affects the formation of social attachment and duty.

Johnson and Johnson (2001) argued that experiential learning is an effective training method to increase participant skills and skills in specific domains. In this training, the participant has undergone a concrete experience through the game and various activities, and then enters the reflective observation stage through debriefing, and concluding with the abstract conceptualization stage, in which the participant thinks and integrates the results of his reflection into concepts. In the end, the participant experienced an increase in group cohesiveness, so they experienced the last stage of active experimentation, ie they have processed in the conduct of new behaviors that are the expected goals of this training activity (Johnson and Johnson, 2001).

Some of the factors that support effective teamwork training are the seriousness and activity of participants while attending all training sessions. The results of training evaluations also show that trainees rated the training materials, methods, and facilities used during the training, quite well. This is consistent with the statement from Salas and Cannon-Bowers (2001) that the

effectiveness of the training is influenced by the initial conditions of participant training, the seriousness of the participant in the practice, the participant's active participation in training, materials, methods, media, situational characteristics and trainer characteristics. For an organization, group cohesiveness can help create conducive atmospheres in working for employees, so that employees will be more focused when working (Davis and Newstrom, 2000).

The contribution of this study to knowledge is that group cohesiveness can be improved through training. Employees with different educational backgrounds, experiences and positions can be a solid team through teamwork training. Teamwork cohesiveness can grow when good communication is established among group members. Personal relationships between group members and the adaptability of group members can increase cohesiveness in groups. Awareness of the importance of group planning and decisions rather than individual member decisions, will foster cohesiveness among team members. The contribution of research methodology is the use of effect size as the basis for determining the number of samples to strengthen the analysis (Santoso, 2010).

### Conclusion

The teamwork training that has been given successfully increases the cohesiveness of the employees in the working group. This teamwork training can be a recommendation to be implemented by HRD in improving employee cohesiveness in the company. Cohesiveness is important in supporting the effectiveness of a team to achieve a high performing work team (Akmal, 2015). Team cohesiveness also encourages the emergence of OCB behavior among employees who can support overall company performance.

Limitations of this study were the use of quasi-experimental methods. The quasi-experimental method does not use the control group so we can't determine whether the cohesiveness increase caused by teamwork training alone. The next research can apply this teamwork training to the broader settings, such as: the company with international scale and Multi-national. Subsequent studies should also increase the number of participants and use the true-experiment method, so it can be determined whether the increase in cohesiveness is really due to the teamwork training itself.

### References

- Adi, W. (2009). Manfaat induction training & intensive team building workshop yang diberikan secara experiential learning di harian Kompas. (The benefits of induction training & intensive team building workshop given experiential learning in Kompas daily). *Jurnal Psikologi Indonesia Himpunan Psikologi Indonesia*, 6(1), 62-74
- Akmal, K. (2015). Personality traits influence on team cohesiveness and performance: The moderating effect of leadership. *Information and knowledge management*, 5(4), 104-109.
- Arriaga, X. B., & Agnew, C. R. (2001). Being committed: Affective, cognitive, and conative components of relationship commitment. *Personality and social psychology bulletin*, 27(9), 1190-1203.
- Baker, D. P., Horvath, L., Campion, M., Offermann, L., & Salas, E. (1999). Teamwork: Status Memorandum. Retrieved July, 5, 2006.
- Cahyadi, A. (2012). *Intervensi Team Building Training Untuk Meningkatkan Kepercayaan terhadap Rekan Kerja dan Kualitas Teamwork di PT. S* (Doctoral dissertation, Master Thesis, Universitas Indonesia).
- Carless, S. A., & De Paola, C. (2000). The measurement of cohesion in work teams. *Small group research*, 31(1), 71-88.

- Carron, A. V., Widmeyer, W. N., & Brawley, L. R. (1985). The development of an instrument to assess cohesion in sport teams: The Group Environment Questionnaire. *Journal of Sport and Exercise psychology*, 7(3), 244-266.
- Daly, R., & Nicoll, D. (1997). Accelerating a team's development. *OD Practitioner: Journal of the Organizational Development Network*, 29(4), 20-28.
- Davis, K., & Newstrom, J. W. (2000). *Organizational behaviour*, 7<sup>th</sup> ed., (A. Darma, Trans), Jakarta: Erlangga.
- Forsyth, D. R. (2010). *Group dynamics*, 5<sup>th</sup> ed., USA: Woodsworth Learning.
- Harun, M. Z. M. B., & Mahmood, R. B. (2012). The relationship between group cohesiveness and performance: An empirical study of cooperatives movement in Malaysia. *International Journal of Cooperative Studies*, 1(1), 15-20.
- Johnson, D. W., and Johnson, F. P. (2001). *Joining together: Group Theory and Group Skills*, New York: Prentice Hall.
- Kriek, H. S., & Venter, P. (2009). The perceived success of teambuilding interventions in South African organisations. *Southern African Business Review*, 13(1), 112-128.
- Kumar, R. (2019). *Research methodology: A step-by-step guide for beginners*. London: Sage Publications Limited.
- Luckmann, C. (1996). Defining experiential education. *The Journal of Experiential Education*, 19(1), 6-7.
- McEwan, D., Ruissen, G. R., Eys, M. A., Zumbo, B. D., & Beauchamp, M. R. (2017). The effectiveness of teamwork training on teamwork behaviors and team performance: a systematic review and meta-analysis of controlled interventions. *PloS one*, 12(1), 1-23.
- Mullen, B., & Copper, C. (1994). The relation between group cohesiveness and performance: An integration. *Psychological bulletin*, 115(2), 210-227.
- Noviati, N. P., & Zipi, N. P. (2013). Pengaruh pelatihan Outbound terhadap peningkatan kohesivitas tim tenaga kependidikan. *JIP (Jurnal Intervensi Psikologi)*, 5(2), 289-305.
- Prichard, J. S., Stratford, R. J., & Bizo, L. A. (2006). Team-skills training enhances collaborative learning. *Learning and instruction*, 16(3), 256-265.
- Robbins, S. P., & Judge, T. A. (2008). *Perilaku Organisasi (Organizational Behavior)*. (D. Angelica, R. Cahyani, & A. Rosyid, Trans.) Jakarta: Salemba Empat.
- Salas, E., & Cannon-Bowers, J. A. (2001). The science of training: A decade of progress. *Annual review of psychology*, 52(1), 471-499.
- Sanders, K., & Schyns, B. (2006). Leadership and solidarity behaviour. *Personnel Review*, 35(5), 538-556.
- Santoso, A. (2010). Studi deskriptif effect size penelitian-penelitian di fakultas psikologi universitas sanata dharma. *Jurnal Penelitian*, 14(1), 1-7.
- Setianingtyas, A. F., & Darokah, A. F. S. M. (2015). The influence of team building training to improve team work cohesiveness at Inna Garuda, Yogyakarta (in Indonesia: Pengaruh Pelatihan Team Building untuk Meningkatkan Kohesivitas Tim Kerja di Inna Garuda Yogyakarta). *Empathy*, 3(1), 1-30.