Effectiveness of Team Building Training
Improving The Cohesiveness of The Working Group

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Article Info

Article history:
Received 27/02/2022
Revised 27/02/2022
Accepted 27/02/2022

Keywords:
COVID-19;
Group Cohesiveness;
Team Building Training

ABSTRACT
The study aims to test the effect of team building training on the cohesiveness of working groups on production operators on CV. The subject of this study was the employees of production operators who had a low level of cohesiveness. The research method is an experiment with the type "Nonequivalent control group design", where 21 study subjects are divided into 11 experimental groups and 10 control groups. The interventions used were team building training given to the experimental group, while the control group was not given any intervention. The data analysis technique used Mann Whitney to determine the difference in the average group of experiments with the control group. The results revealed that team building training can improve group cohesiveness to be higher with a significant score difference (p < 0.05). The results of this study can be used as a reference to establish team building training programs regularly and periodically so that the company is able to maintain group cohesiveness in its working group.

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BACKGROUND

Human resources optimization efforts in various developing companies are a common problem, where business prospects with good levels of profitability have problems with poor performance levels due to human resource that cannot be optimized (Okoye and Ezejiofor, 2013). HR management often experiences difficulties and uncertainties of understanding of employees' contributions in individual and collective optimization, which ultimately results in strategic and policy failures. Whereas the human resource management function in terms of optimization aims to improve employees to handle various types of tasks to strengthen competitiveness and adaptation to the environment through appropriate strategies and policies and proven to increase company productivity (Jumawan, 2015).

The company that relies most on the optimal or not the function of the group to realize the goal is the company that uses the human group as its main capital. One such company is CV. IM, where the production process still relies heavily on empowering the skills of groups of employees to produce goods. CV. IM in this case is one example of companies experiencing constraints related to HR optimization, where HR management strategies and policies through system changes are not balanced with strategies to optimize group functions, which ultimately results in the failure of these strategies and policies.

CV. IM is a manufacturing company engaged in the production of raincoat manufacturing. The operationalization of the company employs most of the workforce for the affairs of production called production operators. There are at least 44 employees of production operators according to CV staffing data. IM in December 2019 which is further divided into several specialties, namely cutting, tailoring, scotlight installation and packing. CV success. IM in achieving its goals and targets is very dependent on the performance of this group of production operators, so the effort to optimize the organization strategically is an effort to improve the performance of the production operator group.

Problems experienced by CV. IM is related to the group of production operators it has is the difficulty of achieving optimal performance from the planned performance potential. Based on the results of an interview with the director initials "T" on June 15, 2020, mentioned that production capacity still ranges from 70-80% of the last 1 year. The main problem that is felt is that the erratic variation of the types of products carried out cause's imbalances of workload in each of the working specializations of the production operator group, so that the design of work in which the individual is responsible for the work in accordance with their respective positions even causes the production flow to be not optimal. The company's management has made efforts to change the system as an effort to improve the performance of the production group, namely turning the individual daily target system into a squad bulk system with the expectation of the production operator group together synergizing to complete its targets. But these changes have led to a decrease in production capacity.

Group cohesion in more academic terms is also called group cohesion. Conditions in which cohesiveness is assessed as low mean low levels of well-being among individuals in a group (Mcshane and Glionow, 2010). Problems of group cohesion in employees of production operators on CV. The BROTHERHOOD is characterized by several actual conditions in terms of social strength, unity within the group, attractiveness to the group and the desire to cooperate in the group.
The problem that arises based on these conditions are that employees who have felt they have completed their portion of work individually will tend to relax or reduce their work speed rather than choose to help other coworkers. On the other hand, employees who experience a buildup of workload are affected by a relaxed attitude and indifference to the completion of their work and expect initiation from colleagues to be willing to help him.

The sense of indifference that most group members have results in the inhibition of the smooth productivity of production, which in fact this condition can be overcome through cooperation and mutual help. Production flows that accumulate at one point of the production process cause overload on certain tasks, and cause underloading at the point of the production process thereafter and before. In the opinion of "W", this should be easily overcome if only employees at the point of the production process who are before and after the point of the production process who experience buildup are willing to help break down the buildup for the smooth result of production more effectively and efficiently. But the fact of the field shows no signs of mutual help and caring can be realized.

Team building training can increase the awareness and attitude of individuals in groups to have the desire and ability to work together and synergize in doing work activities as a team in a working group. Team building training is a learning process with an experimental approach that aims to improve the internal functioning of the group such as cooperation among fellow team members, improve the quality of communication and reduce dysfunctional conflicts (Kreitner and Kinicki, 2014). Team building training means efforts to facilitate the formation of effective teams in working groups through training of individuals in the group.

**Team building** based on its stages can occur organically or gradually or form on its own, but it often takes a long time and repeated gradual adjustments. The function of training in this case is as stimulation to accelerate the formation of an effective team in the working group. Through **team building** training team members are encouraged to examine more deeply how they have worked together over the years, find gaps and weaknesses in the team, provide an overview of the ideal way of working together and build an action plan to implement effective ways of working (Davis and Newstrom, 2012).

Based on various conditions in the dynamics of the production operator group that have been spelled out before, it can be concluded that the main problem of the group is the lack of awareness between groups to help each other and a lack of concern to achieve group goals. In other words, individuals in the production operator group have a low level of cohesiveness as a work team. Based on these conditions, it is felt necessary to carry out an intervention in the form of **team building** training to increase concern between individuals in the group to create a more cohesive work team.

Based on the plan to conduct **team building** training to employees of the production operator, the researcher intends to conduct research on how effective the influence of **team building** training to improve group cohesiveness in production operator employees in CV.IM.

**RESEARCH METHODS**

**Research Design**

This study is an experimental study, which is a method used to look for the influence of certain treatments on others under controlled conditions (Sugiyono, 2013). Arikunto (2010) further revealed that experimental research is a way to look for
cause-and-effect relationships between two factors that are deliberately caused by researchers by reducing or setting aside other disturbing factors.

Research Subjects

The subjects in the study were Production Operator Employees at CV. IM. Determination of research subjects is done by screening 44 employees. Screening aims to find out the cohesive value of the group.

After finding a subject that meets the criteria, the subject is then asked to fill out an informed consent as a form of approval of this research involvement from start to finish. Furthermore, the selected subjects were divided into two groups, namely the experimental group and the control group, so that the number of each subject for each group was balanced. The division of experimental groups and control groups is based on the grouping of shift work. The experimental group was the subject group with the morning shift, while the control group was the subject's column with the afternoon shift. The reason for this division is to facilitate assessment and evaluation, where the group that gets the intervention is in one working group.

The number of study subjects based on screening results was 21 employees, who were divided into 11 employees as an experimental group and 10 employees as a control group. The division of the number of these subjects is determined based on the company's management policy in the grouping of shifts.

Data Collection Methods

The cohesiveness scale used is a scale developed by Putri and Mirza (2018) and previously used by Ginting (2010) based on a concept from Forsyth (2010) which was then re-tested by researchers. This scale has been tested for its validity and reliability to determine its reliability in revealing group cohesiveness. This test was conducted to respondents with characteristics that were as close as possible to the study subjects. The respondents used are employees of production operators at CV. IM is not included as a study subject with a total of 23 people. The result of the cohesiveness scale is 0.973 which means the reliability of this scale is very high.

Data Analysis Techniques

The data distribution test used in this study is a descriptive test. Descriptive tests are used to see a picture of the data being studied. Descriptive tests in the study were used to look at the frequency of data distribution based on certain characteristics that the study subjects had, such as gender, age, tenure, job title and education level. In addition, to see the characteristics of the data itself, such as average, standard deviation, maximum and minimum value.

The hypothesis test in this study used a nonparametric statistical test. Nonparametric statistical tests are used in research because of several conditions or assumptions in parametric statistical tests that are not met, namely the determination of research subjects that are not done randomly and the number of samples are small.

RESEARCH RESULTS

The distribution of research subjects in this case explains how the distribution of research subjects based on certain characteristics. These characteristics are based on gender, education level, working life and age.
Table 1 Distribution of Research Subjects

<table>
<thead>
<tr>
<th>Characteristics of The Research Subject</th>
<th>Number of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experiment Group</td>
</tr>
<tr>
<td>Gender</td>
<td>Man</td>
</tr>
<tr>
<td></td>
<td>Woman</td>
</tr>
<tr>
<td></td>
<td>SMA</td>
</tr>
<tr>
<td>Education</td>
<td>D3</td>
</tr>
<tr>
<td></td>
<td>S1</td>
</tr>
<tr>
<td>Working Timescale</td>
<td>1 to 2 years</td>
</tr>
<tr>
<td></td>
<td>3 to 5 years</td>
</tr>
<tr>
<td></td>
<td>19 to 30 years</td>
</tr>
<tr>
<td>Age Range</td>
<td>31 to 40 years</td>
</tr>
<tr>
<td></td>
<td>41 to 50 years</td>
</tr>
</tbody>
</table>

Descriptive Test Results

The distribution of data collection results describes the distribution of data collection results on the cohesive scale of the group based on the categorization of scores and descriptions of data distribution, such as averages, maximum scores, minimum scores, data variants, deviation standards and error standards in data groups. Data groups are distinguished based on experimental groups and control groups as well as pretest and posttest data groups.

The categorization of the cohesiveness scale of the group is divided into 5 categories. The determination of the score range for each category is calculated based on the 5-range categorization formula according to Azwar (2012). The categorization can be seen in the table below.

Table 2. Categorization of Group Cohesiveness Scale

<table>
<thead>
<tr>
<th>Category</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Low</td>
<td>X ≤ M – 1,8SD</td>
</tr>
<tr>
<td>Low</td>
<td>M – 1,8SD &lt; X ≤ M – 0,6SD</td>
</tr>
<tr>
<td>Moderate</td>
<td>M – 0,6SD &lt; X ≤ M + 0,6SD</td>
</tr>
<tr>
<td>High</td>
<td>M + 0,6SD &lt; X ≤ M + 1,8SD</td>
</tr>
<tr>
<td>Very High</td>
<td>M + 1,8SD &lt; X</td>
</tr>
</tbody>
</table>

Based on Table 2, the categories are subjects that have a score between 22 to 39.6, low categories between 39.7 to 57.2, moderate categories between 57.3 to 74.8, high categories between 74.9 to 92.4, and very high categories between 92.5 to 110.

This cohesiveness scale categorization will be used to see the distribution of research data in control groups and experiments, before and after the intervention stage.

Hypothesis Test Results

The research hypothesis is tested in two ways, the first being a different test between the experimental group and the control column after the intervention (the test of the difference in unpaired data groups); The second is a different test in the experimental group between the pretest data group and the posttest data group (the test of different groups of paired data).

Test different unpaired data groups

Hypotheses that want to be proven in the context of different tests of this unpaired data group are, whether there is an
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Effectiveness of treatment (team building training) on group cohesion between the control group and the experimental group after the intervention stage (posttest). The results of this test serve as a comparison to prove hypotheses that in the design of the study use control groups. The test was conducted using the nonparametric statistical test of the Mann Whitney Test. The test results using the help of SPSS program version 21.0 are as follows:

Table 3. Mann Whitney Test Results on Posttest

<table>
<thead>
<tr>
<th>Cohesiveness After Treatment; Posttest Experimental Group – Posttest Control Group</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-3.424</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Results from the Mann Whitney Test's nonparametric statistical test in table 4.8 concluded that there was a difference in group cohesiveness values between the control group and the experimental group, with the value $z = -3.424$ and the value $p = 0.001$ ($< 0.05$). This means that the treatment or intervention in the form of team building training affects group cohesion. The mean value between the control group and the experimental group showed that the experimental group had a greater value compared to the control group ($64.00 > 45.10$). Results from $p$ grades that showed greater significance and mean value of experimental groups than the control group concluded that team building training could improve group cohesiveness.

Test different groups of paired data

Hypotheses that want to be proven in the context of different tests of this paired data group are, whether there is an effect of treatment (team building training) on group cohesiveness between before and after the treatment in the experimental group. The test was conducted using the nonparametric statistics Wilcoxon Signed Ranks Test. The test results using the help of SPSS program version 21.0 are as follows:

Table 4. Results of Different Test Wilcoxon Signed Ranks Test Experimental Group

<table>
<thead>
<tr>
<th>Cohesion of The Experimental Group After Treatment (Posttest) – Cohesiveness of the Experimental Group Before Treatment (Pretest)</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-2.703</td>
<td>0.007</td>
</tr>
</tbody>
</table>

Results from the Nonparametric Statistical Wilcoxon Signed Ranks Test in table 4.7 concluded that there was a difference in group cohesiveness values between before and after team building training in the experimental group, with $A$ values of $Z = -2.703$ and a value of $p = 0.007$ ($< 0.05$). This means that the treatment or intervention in the form of team building training affects group cohesion. The difference in mean value between group cohesion before and after treatment explained that group cohesiveness after treatment was higher than before treatment ($64.00 > 48.73$). This means that the cohesiveness of the group increases after team building training.

Results from $p$ grades showing the significance of intervention influence and an increase in average scores between before and after the intervention concluded that team building training could improve group cohesiveness to be higher.

The results of the Wilcoxon Signed Ranks Test concluded the same comparison as the main test results (mann Whitney Test nonparametric statistical test), further reinforcing the conclusion that team building training can increase group cohesiveness to be higher.
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Graph of cohesion score changes in experimental groups

This group's cohesiveness score change graph describes how the average overall group cohesiveness score across the entire experimental group subjects changed from before the intervention to after the intervention. It also explains how high or low the rate of change is.

![Graph of cohesion score changes in experimental groups](image)

Figure 1 Graph of Average Results of Group Cohesiveness Scores in Experimental Groups Before and After Intervention

Figure 1 above mentions that the cohesiveness score of the group at the pre stage (before the intervention) is 48.73 which is in the low category (39.6 - 57.20 on the graph), while in the post stage (after intervention) is 64.00 which is in the moderate category (between 57.20 - 74.80 on the graph). These results concluded that there was an increase in group cohesion scores between before and after the intervention. This means that research interventions in the form of team building training can increase group cohesiveness.

Graph changes in the score of cohesive aspects in experimental groups

This graph explains how the group's cohesiveness score changes in each aspect. The purpose of this explanation is to find out which aspects most influence score changes, or which aspects are most affected by interventions. The graphic can be seen in the image below.

![Graph of cohesion score changes in experimental groups](image)

Figure 2 Graph of Average Results of Group Cohesiveness Aspects Score in Experimental Groups Before and After Intervention
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Figure 2 above explains that all aspects of group cohesiveness experienced an increase in scores, but each aspect had different variations in score increases. This means that the effectiveness of team building training can improve group cohesiveness in a varied manner from one aspect to another. The improvement of each of these aspects can be seen in table 4.10 below.

<table>
<thead>
<tr>
<th>Cohesive aspects</th>
<th>Score Pre</th>
<th>Post Score</th>
<th>Difference</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Power</td>
<td>2.49 (low)</td>
<td>3.05 (Moderate)</td>
<td>0.56</td>
<td>Increase of 0.56 points and increase in categorization from &quot;low&quot; to &quot;moderate&quot;</td>
</tr>
<tr>
<td>Unity in the Group</td>
<td>2.32 (low)</td>
<td>2.75 (Moderate)</td>
<td>0.43</td>
<td>Increase of 0.43 points and increase in categorization from &quot;low&quot; to &quot;moderate&quot;</td>
</tr>
<tr>
<td>Group Appeal</td>
<td>1.88 (Very low)</td>
<td>3.12 (Moderate)</td>
<td>1.24</td>
<td>Increase of 1.24 points and increase in categorization from &quot;very low&quot; to &quot;moderate&quot;</td>
</tr>
<tr>
<td>Cooperation in groups</td>
<td>2.05 (low)</td>
<td>2.87 (Moderate)</td>
<td>0.82</td>
<td>Increase of 0.82 points and increase in categorization from &quot;low&quot; to &quot;moderate&quot;</td>
</tr>
</tbody>
</table>

Based on the description of the change in score on each aspect of group cohesion between before and after the intervention, it can be concluded that the aspect that experienced the most score changes is the aspect of "group attractiveness", where the change in score is matched by the increase in score and increasing the categorization of scores from very low to moderate categories. As for the aspects of "social strength", "unity in groups" and "cooperation in groups" also experienced an increase in scores and an increase in categorization from low to moderate categories. These results mean that changes in the overall group cohesiveness score are most influenced by changes in scores on the "group attractiveness" aspect or in other words that team building training exerts the most influence on the improvement of scores on the "group attractiveness" aspect than in other aspects.

DISCUSSION

Based on the results of hypothesis tests concluded that there is an influence of team building training on group cohesiveness in production operator employees on CV. IM, where the mean group cohesion for the experimental group is higher than the control group and group cohesion after treatment in the experimental group is higher than before the treatment which means that team building training can improve group cohesiveness. Employees of production operators who previously had a low drive to stay in the group, lack of a sense of togetherness in the group, lack of interest in the group and lack of willingness to cooperate in the group then experience behavioral changes become more driven to survive in the group, have a sense of togetherness in the group, lack of interest in the group and have a high enough willingness to cooperate in the group.
This change occurs because team building training in its application provides new knowledge, understanding and experience to individuals resulting in new perceptions and motives in behavior. This behavior is directed at; increased urge to stay in the group due to awareness of the importance of the group; growing sense of togetherness in the group due to awareness about the importance of building togetherness; the emergence of a sense of emotional attraction to the group because it has known the group and there is an awareness of the importance of processing together in the group; and the emergence of a willingness to work together in groups because of awareness about the importance of building togetherness and awareness about the importance of processing together in groups.

This is in line with Lewin's opinion (in Cummings and Worley, 2009) which reveals that the emergence of new behavior as a form of behavior change occurs because the working group has undergone changes marked by improvements after training, which in this case is team building training. Each working group that participates in team building training is introduced to the new behaviors needed to realize group cohesiveness.

The concept used in the implementation of team building training is the concept of group formation based on Tuckman's opinion (in Sule and Kurniawan, 2010) which directs the training process at the stage of group development into a more effective group. Group cohesiveness will begin to form when it has entered the third stage in the group development stage, namely the norming stage. Tuckman (in Sule and Kurniawan, 2010) reveals that the norming stage is the stage where group cohesiveness begins to develop significantly. Open exchange of information often occurs, as well as acceptance of differences of opinion, as well as efforts to achieve mutually agreed goals. This stage shows the emergence of interest, commitment, and feelings towards the identity of the friendship group in it.

The characteristics of employees who tend to be homogeneous are also one of the important factors that support the success of team building training in improving group cohesiveness. Based on the distribution of research data explained that all subjects have the same educational background and the same average working period, all subjects also have the same cultural background. This similarity certainly facilitates the process of communication between individuals to realize group cohesion.

Mr. Shane and Glinow (2010) revealed that groups that have similar or homogeneous characteristics tend to be easier to be cohesive compared to groups that have different or heterogeneous characteristics. Members of groups that are in homogeneous groups that have similar backgrounds, make it easier for them to work objectively and easily perform roles in the group.

The results of a follow-up analysis of the influence of team building training on aspects of group cohesion mentioned that team building training is greater in terms of "group attractiveness" aspects compared to aspects of "social strength", "unity in groups" and aspects of "cooperation in groups". This suggests that specifically team building training has an impact on increasing an individual's attractiveness to the group on production operator employees at CV. IM.

The reason for the high change in the aspect of "group attractiveness" cannot be separated from the characteristics of team building training itself which results in harmonious group dynamics in the implementation process. Team building training in its implementation techniques invites all participants interactively to carry
out the learning process in the form of fun activities. The goal is to create a positive perception in the participants that the group they belong to is an interesting, fun, and constructive group.

Based on the results of a group interview on August 12, 2021, with 3 employees of production operators at CV. IM who had participated in team building training which was also the subject of this study concluded that in team building training they were given knowledge through simulation and games to be able to know and understand about the importance of group building and how to do it in the world of work. This learning ultimately becomes a provision for them in interacting at work times. They revealed that after training the atmosphere of interaction between employees became more fluid and more comfortable. Tolerance, mutual understanding, and work-related cooperation become more pronounced than before training that is more individually impressed and indifferent.

As explained in the theory of behavior change according to Roger (in Notoatmodjo, 2014) that new behavior will be formed when a condition causes an individual to have awareness (awareness), have interest (interest), give rise to acceptable consideration (evaluation), the existence of testing of the effectiveness of a condition (trial) and ultimately give rise to new actions (adaption). Team building training in this case is a learning process that provides knowledge about the importance of effective group formation to bring new awareness (awareness), interest (interest) and consideration (evaluation) in employees. Furthermore, through simulation as a method of learning employees will be facilitated to feel learning through experience (trial) and action (adoption).

As also explained by Lawrence Green (in Notoatmodjo, 2014) that behavior is determined or formed based on predisposing factors that manifest the nature of knowledge, attitudes, beliefs, beliefs, and values embraced. The opinion, it can be explained that the condition in which a group has a low level of cohesiveness is due to the absence of predisposing factors in group members in accordance with what is needed to be a cohesive group. Team building training in this case is an effort to shape behavior change through planned changes that are directed to meet the needs of predisposing factors needed in building cohesive groups. This planned behavior change emphasizes the learning process factor (alignment between knowledge, understanding and expertise with the environment) rather than exogenous factors (manipulation of systems and environment) as the target of its change strategy (Notoadmodjo, 2014).

Initially this condition is characterized by a lack of knowledge, attitudes, beliefs, beliefs, and values about the importance of building cohesiveness and togetherness in the group to succeed the purpose of working together. Through team building training, individuals in the group are given new knowledge, understanding and experience regarding the importance of building cohesiveness and togetherness in the group, where the objectives of this training are aligned with the characteristics of a cohesive group. Ultimately, individuals in a group have the knowledge, attitudes, beliefs, beliefs, and values necessary to be a cohesive group. Through strategic methods and media of change and structured according to the objectives of behavior change, team building training in this study is ultimately able to change less cohesive behavior to be more cohesive.

CONCLUSIONS AND SUGGESTIONS

This research aims to find out how effective team building training is to group
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Cohesiveness in production operator employees on CV. The results of hypothesis tests in this study prove that team building training has effectiveness in improving group cohesiveness in production operator employees on CV. IM, where the average cohesiveness value of the group in the experimental group is greater than the control group with a significant difference in average values. Team building training is a means of learning that provides new knowledge, understanding and experience related to the importance of building cohesiveness and togetherness in the group, where the purpose of this training is in harmony with the characteristics of a cohesive group, so that employees who are initially lacking in terms of knowledge, attitude, trust, beliefs, and values are important in building cohesiveness and togetherness in the group can become more cohesive.

To the next researcher, using experimental research models by adding the amount of data retrieval after intervention. This advice is given because in this study only used 1 posttest, so it is less able to answer how strong the effectiveness of the intervention in the period. Through periodic posttests, such as after a month and after 3 months, researchers can find out the level of stability of the effectiveness of the intervention given.

REFERENCES