



## The Relationship of Group Cohesiveness to Decision Making on Consuming Electronic Cigarettes in FISH UNJ Female Student

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**Abstract.** This study examines the relationship between group cohesiveness and decision-making to consume e-cigarettes among female students at the Faculty of Social Sciences (FIS), State University of Jakarta (UNJ). Group cohesiveness is defined as the strength of bonds between group members, encompassing interpersonal attachment, shared goals, and group activities. The study adopts a quantitative approach using bivariate analysis methods, including normality tests, linearity tests, simple linear regression, t-tests, and chi-square tests, to analyze the influence of group cohesiveness on decision-making. The results reveal that while group cohesiveness has a positive relationship with the decision to consume e-cigarettes, the effect is not statistically significant. Key findings highlight that group cohesiveness is characterized by emotional closeness, social interaction, and a sense of belonging. However, decision-making regarding e-cigarette consumption is influenced more by individual comfort and social dynamics within the group. The study concludes that group cohesiveness, though important for fostering a sense of belonging and interaction, does not significantly drive the decision to consume e-cigarettes. This research underscores the need for educational programs to raise awareness of the positive and negative impacts of group cohesiveness and the health risks associated with e-cigarette use. Specific initiatives targeting female students are recommended to mitigate the adoption of risky behaviors influenced by peer groups.

**Keywords:** Group Cohesiveness, Decision-making, E-cigarette



## I. INTRODUCTION

### 1.1. Background

Group cohesiveness describes the level of cohesiveness and attachment among members. Factors such as background, interests, and shared experiences can influence this level of cohesiveness. According to Me David and Harori, group cohesiveness includes three aspects: interpersonal attachment among members, interest in group activities and goals, and the extent to which the group meets the personal needs of members.

Group cohesion, or cohesiveness, is the degree to which members feel connected as a unit. Various factors can contribute to this cohesiveness, and it can lead to the achievement of shared goals. The basics of cohesiveness include structural integration, interpersonal attraction, and shared values among members.

Group cohesiveness refers to the strength of the bonds that hold members together, whether positive or negative. Some groups have strong, stable bonds, while other groups may experience weak bonds, resulting in a loss of sense of community and eventually members drifting apart.

Humans are social creatures who tend to live in groups. A group is a collection of two or more people who interact with each other and influence each other. The level of attraction between group members indicates group cohesion. With the formation of a group, there is interaction between members in the group, then a group process occurs. The group process is the interaction between group members and how one group member influences another. The state of the group is not determined by the motivation, role of its members or group structure, but rather by the group process. This is related to group cohesion, namely the attention of group members, how group members like each other. In groups that last a long time, members

are more attracted to the group than other groups and there is also a sense of mutual attraction between its members. Cohesiveness is influenced by the attractiveness of the group and its members, social interaction and the extent to which the group can meet the needs or goals of individuals. The formation of cohesiveness will then affect the behavior of its members.

Groups that have high cohesiveness usually consist of individuals who are motivated to build togetherness and tend to have effective group activities, members are cooperative and close and respect each other to achieve goals. However, if avoidance occurs, it is usually due to low levels of closeness. Groups with low cohesiveness do not have interpersonal attraction among their members. There is usually a sense of hostility and aggression, and there is actually a feeling of pleasure when other members make mistakes.

Smoking is a common habit in society, and is a serious threat to global health. In Indonesia, the prevalence of smoking among adolescents continues to increase, and cigarettes have caused millions of deaths worldwide. The negative impacts of cigarettes come from the harmful content of tobacco, and efforts to reduce this problem have led to the use of Electronic Nicotine Delivery Systems (ENDS) or Electronic Non Nicotine Delivery Systems (ENNDS), such as e-cigarettes.

E-cigarettes were initially seen as a safer alternative to quitting conventional smoking. The content of formaldehyde and acetaldehyde, carcinogenic and toxic compounds produced by e-cigarettes, is indeed lower compared to conventional cigarettes. However, there is still much debate about the safety of e-cigarettes, and their impact on health cannot be ignored. Studies show that the proportion of e-cigarette users in Indonesia is quite high, especially among teenagers.

Although e-cigarettes are promoted as a smoking cessation aid, strong scientific evidence is lacking. The nicotine content in e-cigarettes remains addictive, toxic to fetal development,



and harmful to adolescent brain development. In addition, e-cigarettes can also cause heart disease and chronic obstructive pulmonary disease (COPD).

Factors influencing e-cigarette use include age, gender, knowledge, perception, product availability, economic situation, and social support. The increasing trend of e-cigarette use, especially among adolescents, is also influenced by lifestyle factors and media influence.

The development of technology has brought about major changes in various aspects of life, including health and lifestyle. One example is the emergence of vape, or electronic cigarettes, which have become an interesting phenomenon among students. Vape, short for "vaporizer", is an electronic device that produces vapor that is inhaled by its users. Vape uses liquid that is heated by electricity and produces vapor that contains nicotine or other substances, such as flavored liquids or THC oil.

Although vaping is considered safer than conventional cigarettes, the dangers it poses are still real. One aspect that needs to be considered is the increasing use of vaping among women, who were previously more identified with conventional cigarettes. This phenomenon needs to be studied further, especially among female students, who should have higher knowledge and awareness of health.

Research on the motives for vaping among female students is important to understand the factors that drive vaping among young women. This will help in designing more effective prevention and education strategies to reduce vaping and protect the health of the younger generation.

In the Faculty of Social Sciences (FIS) of the State University of Jakarta (UNJ), this phenomenon has begun to be seen prominently, especially among female students. In everyday life on campus, social factors play an important role in shaping a

person's decision to try or consistently consume e-cigarettes. One of the social factors that is often mentioned is group cohesiveness, namely the extent to which members of a group have attachment, unity, and commitment to the norms or values that apply in the group.

With this phenomenon, it is important to examine more deeply how group cohesiveness can influence female students' decisions to consume e-cigarettes in the FIS UNJ environment. Are they motivated by a sense of belonging, or are there other factors that influence it? This study is expected to provide a clearer understanding of the relationship between group cohesiveness and the decision to consume e-cigarettes in female students, as well as provide a basis for campuses to design more effective strategies in managing student behavior related to e-cigarette use.

## 1.2. Literature review

Based on the background of the problem that has been presented above, the problem identification can be formulated as follows:

1. Based on the National Center for Health Statistics, the use of e-cigarettes is currently highest among adults aged 18–24 years (11.0%), with data for women (10.3%) not being statistically significant.
2. Group cohesiveness refers to the level of solidarity, closeness, or attachment among group members. The issue that can be identified is how this relationship or influence of group dynamics affects an individual's decision to consume e-cigarettes.

## 1.3. Method

This research method uses a quantitative method with a focus on testing variables X (group cohesiveness) and Y (consumption decisions). This study uses a bivariate data analysis method that aims to analyze the influence between the group cohesiveness variable and the consumption needs variable. The bivariate data



analysis used is simple linear regression. There are basic assumptions that need to be done when a study uses simple linear regression analysis, namely by conducting normality tests and linearity tests. The next data analysis method is the bivariate data analysis method. Bivariate analysis is, the relationship between two variables can be described in the form of a cross table

## II. RESEARCH RESULTS AND DISCUSSION

### 2.1. Research Results

The results of the mean analysis per variable and indicator state that group cohesiveness has a higher average than the decision to consume e-cigarettes. This is because fairly high group cohesiveness is not always proportional to the decision to consume.

#### 2.1.1. Normality Test Results

The normality test in this study is used to determine whether the distribution of the population of data owned is normal or not. The following is a table of normality test results.

**Table 2. Normality Test Results**

| Tests of Normality    |                                 |    |       |              |    |       |
|-----------------------|---------------------------------|----|-------|--------------|----|-------|
|                       | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |       |
|                       | Statistic                       | df | Sig.  | Statistic    | df | Sig.  |
| Kohesivitas Kelompok  | 0.112                           | 56 | 0.080 | 0.964        | 56 | 0.000 |
| Keputusan Mengonsumsi | 0.223                           | 56 | 0.000 | 0.869        | 56 | 0.000 |

a. Lilliefors Significance Correction

The data shows that the distribution of group cohesiveness is normally distributed because the significance value is  $0.080 > 0.05$ , while the decision to consume e-cigarettes is not normally distributed because the significance value is  $0.000 < 0.05$ .

#### 2.1.2. Linearity Test Results

The linearity test in this study uses ANOVA which aims to see how the influence between the group cohesiveness variable and the consumption decision variable.

**Table 3. Linearity Test Results**

| ANOVA Table                        |                |    |             |       |       |
|------------------------------------|----------------|----|-------------|-------|-------|
|                                    | Sum of Squares | df | Mean Square | F     | Sig.  |
| Keputusan Between Groups           | 73.417         | 15 | 4.894       | 0.572 | 0.879 |
| Mengonsumsi * Kohesivitas Kelompok | 26.968         | 1  | 26.968      | 3.151 | 0.083 |
| Deviation from Linearity           | 46.449         | 14 | 3.318       | 0.388 | 0.971 |
| Within Groups                      | 342.298        | 40 | 8.557       |       |       |
| Total                              | 415.714        | 55 |             |       |       |

The relationship between group cohesiveness and the decision to consume electronic cigarettes has a linear pattern that is not significant, because the data shows that the relationship between group cohesiveness and the decision to use is linear (3.151) with significance (Sig. .083). For the linearity deviation (.388) it does not show significance (Sig. .971).

## 2.1.3. Results Simple Linear Regression Test

This study also uses a simple linear regression test which aims to determine the influence that occurs between the group cohesiveness variable and the consumption decision variable. The following are the results obtained from the simple linear regression test.

**Table 4. Simple Linear Regression Test Results (Coefficients)**

| Coefficients <sup>a</sup> |                      |                             |            |                           |       |
|---------------------------|----------------------|-----------------------------|------------|---------------------------|-------|
| Model                     |                      | Unstandardized Coefficients |            | Standardized Coefficients | Sig.  |
|                           |                      | B                           | Std. Error | Beta                      |       |
| 1                         | (Constant)           | 3.486                       | 2.323      |                           | 1.500 |
|                           | Kohesivitas Kelompok | 0.161                       | 0.083      | 0.255                     | 0.058 |

a. Dependent Variable: Keputusan Mengkonsumsi

The results that can be taken from the test above are that the value of the group cohesiveness coefficient is 0.161 which has a positive relationship to the decision to consume electronic cigarettes. But it is not significant because Sig. 0.058 > 0,05, which means there is no strong evidence that group cohesiveness influences the decision to consume e-cigarettes.

## 2.1.4. T-Test Results

The t-test in this study was used to

determine whether the group cohesiveness variable influences the consumption decision variable. The results of the t-test are as follows.

**Table 5. T-Test Results (Coefficients)**

| Coefficients <sup>a</sup> |                      |                             |            |                           |       |
|---------------------------|----------------------|-----------------------------|------------|---------------------------|-------|
| Model                     |                      | Unstandardized Coefficients |            | Standardized Coefficients | Sig.  |
|                           |                      | B                           | Std. Error | Beta                      |       |
| 1                         | (Constant)           | 3.486                       | 2.323      |                           | 1.500 |
|                           | Kohesivitas Kelompok | 0.161                       | 0.083      | 0.255                     | 1.935 |

a. Dependent Variable: Keputusan Mengkonsumsi

The results show that the group cohesiveness variable has a t-value of 1.935 with a significance of 0.058 > 0.05, which means that the effect of group cohesiveness on the decision to consume e-cigarettes is not statistically significant at the 95% confidence level.

## 2.1.5. Results of Determination Coefficient Test

The determination coefficient test in this study is used to measure how much influence is obtained between the group cohesiveness variable and the consumption decision variable.

**Table 6. Results of the Determination Coefficient Test**

## Model Summary

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .255 <sup>a</sup> | 0.065    | 0.048             | 2.68310                    |

a. Predictors: (Constant), Kohesivitas Kelompok

The test results show that the R Square value is 0.065, which means that the group cohesiveness variable only explains 6.5% of the variation in the decision to consume e-cigarettes in FISH UNJ female students.

### 2.1.6. Chi Square Test Results

The Chi-Square test is used to test the hypothesis of the difference between two or more proportions. The test results will conclude whether all proportions are the same or different. The calculation of the Chi-Square Test uses the formula in statistics or with SPSS (Wibowo, 2017). The following are the results of the chi square test.

**Table 7. Chi Square Test Results**

| Chi-Square Tests             |                      |     |                                   |
|------------------------------|----------------------|-----|-----------------------------------|
|                              | Value                | df  | Asymptotic Significance (2-sided) |
| Pearson Chi-Square           | 103.006 <sup>a</sup> | 135 | .981                              |
| Likelihood Ratio             | 94.388               | 135 | .997                              |
| Linear-by-Linear Association | 3.568                | 1   | .059                              |
| N of Valid Cases             | 56                   |     |                                   |

a. 160 cells (100.0%) have expected count less than 5. The minimum expected count is .04.

Based on the Chi-Square test results table, the Pearson Chi-Square value is 103.006 with a degree of freedom (df) of 135 and an asymptotic significance value (2-sided) of 0.981. This shows that there is no significant relationship between group cohesiveness and the decision to consume e-cigarettes in FISH UNJ female students, because the significance value (p-value) is much greater than 0.05.

The Likelihood Ratio value of 94.388 with the same df, also produces a significance value of 0.997, which further supports the conclusion that there is no significant relationship. In addition, the Linear-by-Linear Association result of 3.568 with a p-value of 0.059 is close to the significance limit, but still not strong enough to conclude that there is a linear relationship between the variables.

## 2.2. Discussion

### 2.2.1 Discussion of Group Cohesiveness on the Decision to Consume Electronic Cigarettes among FISH UNJ Students

Group Cohesiveness is a condition where in a group there is an interest or motivation of individuals towards each other. This happens because of the influence of the relationship patterns carried out by its members. According to



Festinger, Schacter and Back (in Meinarno & Sarwono; 2018) stated that cohesiveness is influenced by the attractiveness of the group and its members, social interaction and the extent to which the group can meet the needs or goals of individuals. Group cohesiveness can occur to build togetherness, cooperative and close members with each other so as to achieve a goal.

The results of the study prove that the dimensions of the Group Cohesiveness variable with the highest mean value are shown in the sense of belonging dimension. In this case, it shows the importance of friendship in a group and the existence of attachment in individuals. There are 2 (two) indicators in this dimension, namely feeling like you have strong bonds with friends and peers is important.

The indicators in this dimension are calculated equal to the mean of 3.36% have strong ties with friends. This is shown that there is a deep bond that makes individuals part of a group. The friend indicator is important, showing the importance of the role of friends in the lives of individuals and groups. This is evidenced by the answers from the average respondent who agree that they feel that having strong ties and friends is very important.

Next, the dimension with the highest

mean value is emotional closeness. This shows where individuals feel comfortable and accepted among group members. There are 2 indicators in this dimension, namely close to friends and feeling accepted by friends. The highest indicator in this dimension is close to friends, individuals feel a close relationship and can be seen from intense communication. This can be proven in the average answer of respondents who agree that they feel close to their friends.

The next indicator is feeling accepted by friends. Individuals feel accepted and recognized as part of a group. This is evidenced by the average respondent's answer who agrees that they feel close to their friends.

Next is the dimension of social interaction where the individual is involved in intense group activities. There are 2 indicators in this dimension, namely feeling comfortable when with friends and often gathering with friends. The mean number of this indicator is calculated to be the same, namely 1.98%. The indicator is feeling comfortable when interacting with friends. Where there is comfort when communicating or doing activities together with friends. This can be proven by the average answer of respondents who agree that there is comfort when interacting with friends. The next indicator is often gathering with friends. Individuals interact directly by gathering and doing activities with group friends. This is shown by the average answer of





respondents who indicate that they often gather with friends. It can be seen from the explanation that group cohesiveness greatly influences individuals based on the dimensions of group cohesiveness according to McDavid and Harari.

## **2.2.2 Discussion of Decision Making to Consume Electronic Cigarettes among FISH UNJ Students.**

Decision Making is a determinant of choices from various options. Each individual or group will make decisions even though the goals taken are not always clear and will be a problem. Decision making is intended to achieve goals through implementation. The purpose of decision making is divided into 2, namely: Single goals, this goal only concerns 1 (one) problem and Multiple goals, this goal concerns more than 1 (one) problem that is contradictory or not contradictory.

In this study, the dimensions of social influence, group interaction, comfort and adaptation, and group influence on habits. Through the overall research results that have been conducted, it states that the decision making to consume electronic cigarettes in FISH UNJ students is negative. This can be seen from the results of calculations and measurement results in the study.

The research results prove that the dimension of the Decision Making variable

with the highest mean is group interaction dimension. Individual involvement in group activities that influence individuals in decision making. There are 2 (four) indicators, namely being involved in the same activities as group friends and feeling that decisions taken by the group are often the result of joint discussions.

The highest indicator in this dimension is being involved in the same activity as group friends. Where individuals often interact directly by doing activities with group friends. This is evidenced by the average respondent's answer which indicates agreement. Then the indicator feels that the decision taken by the group is the result of a joint discussion. where at the time of decision making, there is a discussion first. This is evidenced by the average respondent's answer which indicates agreement

The next dimension is the dimension of social influence. Where individuals are influenced by the group in decision making and adapt to be accepted by the group. There are 4 (four) indicators in this dimension, namely friends' opinions in decision making are very important, friends' behavior is very influential, feeling the need to follow the habits of friends in the group to remain accepted, when friends try something I also want to try. The highest indicator in this dimension is that friends' opinions in decision making are very important. Where it is proven in the average respondent's





answer which shows that agreeing with the statement of friends' opinions in decision making is very important. The lowest indicator in this dimension is the need to follow the habits of group friends in order to remain accepted. Individuals adapt to follow group habits in order to remain accepted. This is proven and the average respondent's answer which shows that they do not agree with the statement of following the habits of group friends in order to remain accepted.

Then the next dimension is group comfort. Where there is a feeling of comfort when adjusting to doing the same activities as group habits. There are 2 (two) indicators in this dimension, namely feeling comfortable when around friends who are consuming e-cigarettes and feeling comfortable when consuming e-cigarettes with friends. The indicator with the highest mean in this dimension is feeling comfortable when around friends who consume e-cigarettes. This is evidenced by the average answer of respondents who indicate disagree and strongly disagree, the mean is the same. The next indicator is feeling comfortable when consuming e-cigarettes with friends. This is evidenced by the average answer of the mean respondents, namely by indicating strongly disagree.

The last dimension is the influence of

groups on habits. Where individuals are influenced by the decision to try certain habits. There are 4 (four) indicators, namely being interested in trying e-cigarettes, starting to consume e-cigarettes because friends also consume them, finding it difficult to stop using e-cigarettes because of the influence of friends, and getting pressure from group friends to consume e-cigarettes. The highest indicator in this dimension is trying e-cigarettes and consuming e-cigarettes with the same mean calculation, namely 1.47%. This is evidenced by the average respondent's answer which shows the statement that they strongly disagree. The indicator with the lowest mean value is getting pressure from group friends to consume e-cigarettes. This is evidenced by the average respondent's answer which shows the statement that they strongly disagree.

## **2.2.3 Discussion of the Relationship between Group Cohesiveness and Decision Making to Consume Electronic Cigarettes in FISH UNJ Female Students**

Group Cohesiveness is the interest between members to contribute to solidarity and promote common goals. Group cohesiveness occurs during every activity. Group cohesiveness occurs because of the influence of the relationship patterns carried out by members which refer to the strength of the bond to unite between members, both positive and negative.



The results of the research that have been processed, in the group cohesiveness variable (X) the highest frequency of "strongly agree" is in the statement "friends are very important". Most respondents answered strongly agree to the statement. Therefore, it can be concluded that friends are very important in group cohesiveness. While in the decision-making variable statement (Y) shows the highest frequency of strongly agree is in the statement "I often engage in the same activities as my friends". Most respondents answered strongly agree to the following statement. Therefore, it can be concluded that members are often involved in the same activities as their group mates in decision making.

In this study, researchers use conformity theory. Where there is high cohesiveness in a group, there is conformity between its members. This happens so that members can adjust to maintain good relationships and can be accepted by the group. In groups that have high conformity will influence other individuals to achieve goals in decision making.

### III. CONCLUSIONS AND RECOMMENDATIONS

#### 3.1. Conclusion

Based on the research results that have been studied and presented, the conclusion of the study entitled "The Relationship between Group Cohesiveness and Decision Making to

Consume Electronic Cigarettes in FISH UNJ Female Students" is that individuals as group members have a high sense of cohesiveness where group members have a feeling of closeness to each other, have a sense of attachment to group friends and are intense in communicating. Overall, it explains that group cohesiveness can influence individual decisions.

#### 3.2. Suggestion

Based on the research results that have been studied and presented. The suggestions that can be submitted for the future are:

1. There are educational programs for students regarding group cohesion regarding the positive and negative impacts of group cohesion in order to make individuals more aware in groups and in decision making.
2. A health program was held where consuming electronic cigarettes would have dangerous impacts, especially on women, in order to make female students aware and reduce the negative impacts in making risky decisions.

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