The Athletes’ Gender Attitude towards Perceiving Gender Composition, Leadership and Membership during Cooperative Learning

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Abstract: This case study is primarily concerned with the attitude of athletes’ gender towards perceiving gender composition, leadership and membership in a cooperative learning group. A total of 98 Form 5 students at Bukit Jalil Sports School were randomly selected as the sample of the study. Questionnaire that containing 15 selected-response items was the only instrument used in this case study. Major findings of the study were that both male and female athletes preferred mixed-gender group than single-gender group. Both male and female athletes preferred to choose their group members than decided by teacher when working cooperatively in groups.

Keywords: Cooperative learning, gender attitude, leadership and membership

1.0 INTRODUCTION

The purpose of this research was to study the athletes’ gender attitude towards perceiving gender composition, leadership and membership when working cooperatively in small groups in Bukit Jalil Sports School or it was to find out what is the athletes’ gender attitude towards perceiving gender composition, leadership and membership when working cooperatively in small groups in Bukit Jalil Sports School?

Three hypotheses that are addressed to the issues of cooperative learning with respect to the gender, are:

a) More than half the female and male athletes prefer the mixed-gender groups (majority-female, majority-male, and equal representation groups) than single gender group (all male group).

b) Male athletes will be perceived as leaders by more than half of the female athletes and more than half of the male athletes in cooperative learning groups.

c) More than half of the male and female athletes prefer to choose their own members in a cooperative learning group than appointed by teacher.

Societies are made up of both males and females, not just males or females. Men and women have to work side by side to build a progressive and peaceful world. Men and women are like the wings of a bird. Without one of the wings, a bird could not fly. So does mankind. Without cooperation among males or females, human beings would be in great trouble. Human beings would extinct from this world. Therefore, cooperation among males and females to succeed in a project is essential. They always depend on each other in completing a task. That is why God made both men and women.

Being a professional coach in Malaysia, I had observed that the concept of cooperative learning had been encouraged by a number of coaches, and this teaching strategy had been widely used in most of the instructions in the oversea coaching program. Cooperative learning is an approach not only help athletes in their academic achievement but also help them to become a better coach. In future, they would be able to work cooperatively with other staff as well as their athletes. Ultimately, if they would implement cooperative learning concept in their instruction, their athletes would also benefit from their coaching.
strategies. However, there was a small number of coaches who were discouraging athletes to work in mixed-gender cooperative groups and left these to the issues of culture and religions. Other dilemmas that were faced by Bukit Jalil Sports School students were perceiving leadership and membership in mixed-gender group. Under what conditions and criteria a leader would be chosen in a mixed-gender group? Will the issues of gender affect the nomination of a leader?

This study will further explore the issues of gender and its effect on the attitude of sports athletes toward perceiving leadership and membership during cooperative learning in Bukit Jalil Sports School. As the professional coaches, all these issues are very important to us, and are significant to the essential steps of group processing.

2.0 LITERATURE REVIEW

2.1 Cooperative Learning

Cooperative learning is a very popular topic and there is a growing interest in this teaching strategy since long time ago. It is widely introduced to schools and higher institutions all over the world. Over 122 studies conducted between 1924 and 1981 provide clear evidence that cooperative learning experiences promote higher achievement than their competitive or individualistic counterparts (Slavin, 1989). Among other outcomes from these studies are the development of friendships between minority student, better peer relations, and enhanced self-esteem (Blaney, Stephen, Fosenfield, Aronson, & Sokers, 1977; Johnson & Johnson, 1981; Oickel 1980; Slavin & Karweit, 1981).

In cooperative learning, students perceive that they can attain their learning goals if and only if the other students in the same group also reach the mutual goals (Deutsch, 1962; Johnson & Johnson, 1989). Thus, cooperative learning group work that incorporates both group rewards and individual accountability not only forces students to take responsibility for their own mastery of the material, but also makes the students responsible for their classmates’ mastery (Slavin, 1990). Students work in cooperative learning groups have to contribute and help each other. Everyone is encouraged to participate and listen to others with care. They ‘sink and swim together’. By right, there should not be any group members who are under-participants, over-participants, or non-participants. Everyone has his or her own role in this form of grouping. Brighter students’ learning is enhanced by their efforts to help and teach the others, meanwhile the low ability student’s benefit from the one-to-one attention or even many-to-one attention.

Cooperative-learning groups have also been found to equalize the status and respect of all group members, regardless of gender (Glassman, 1989; Johnson, Johnson, & Stanne, 1986). It helps to reduce the gap between men and women; brighter students and less capable students; different races; and different nationalities. Learning social skills may be particularly important in adolescence, a period when the need to belong conflicts with the need to be recognized as an individual (Wood, 1987). Not only that, according to Stahl and VanSickle (1992), every cooperative-learning strategy, when used appropriately, can enable students to move beyond the text, memorization of basic facts, and learning lower level skills. It develops higher level of thinking skills. Cooperative learning is also known to enhance peer interaction among students. Those who have the skill to work in-groups and have good communication skill are in great demand in workplace because human beings are not homogeneous. Every one of us is different and nobody is perfect. Some of us learn very fast, but some of us are slow learners; some of us have better knowledge and skill in certain subject than the others; some people are higher ability learners, while some of us are average- or low- ability learners. Therefore, students are more likely to experience diverse
cultures, attitudes and value systems when working in groups than studying alone which is the way people work in the real world (Sharan, 1980). Cooperative learning also links to increases in attendance, time on task, enjoyment of school and classes, and motivation to learn, as well as a decrease in dependence on the teacher (Augustine et al., 1989-90; Good, Reys, Grouws & Mulryan, 1989-90; Slavin, 1990; Wood 1987). Other important benefits of cooperative learning include more positive intergroup relations, improve race relations, as well as increased acceptance of mainstreamed children, and have also frequently been reported (Augustine et al., 1989-90; Madden & Slavin, 1983, Slavin, 1989-90; Stevens & Slavin, 1989-90). Miller (1992) conducted an action research experiment comparing individualistic and cooperative learning results in two seventh grade classrooms, and what he found was that retention scores slightly favored the cooperative learning method.

A recent study indicated those 7th- and 8th-grade pre-algebra students who used cooperative techniques not only score higher than the control group but also retained the information for a longer period of time (Duren & Cherrington, 1992). With all these positive findings support the use of this instructional method, questions are still remained, in what the condition the students will benefit the most. Does everyone have the same achievement? Does student work better in a single- or mixed-gender cooperative group? What type of group composition is the best? Male-male, female-female, equal male-female, female majority or male majority representative groups? Little attention has been given to whether group composition, especially gender of the majority in the group makes a difference in interaction patterns.

2.2 Gender Composition

Underwood, McCaffrey, and Underwood (1990) reported that when organizing groups, one of the popular criteria was gender. Research found that 81 per cent of teachers had preferred mixed-gender groups than the single-gender groups. Several recent studies have examined the effects of grouping composition according to gender and found that mixed-gender group is a better group composition in the cooperative learning setting, comparing to that of the single-gender group. For example, in Peterson and Fennema’s (1985) study, girls benefited more from involvement in cooperative mixed-gender group work than did boys, especially in terms of achievement gains on higher order mathematics tasks. In another study carried out by Atkins and Rohrbeck (1993), who examined the gender differences in individual and cooperative self-management training programs targeting mathematics performance has obtained similar results. Findings from a study involving 33 fifth graders revealed that girls in individual training condition improved significantly less than girls in cooperative condition and boys in individual condition. Boys in cooperative condition did not differ significantly from either boys in individual training or girls in cooperative training.

In a classroom study conducted by Ferganchrck (1993), she found that mixed-gender collaborative writing pairs can be used effectively in classroom to help Students Bridge the gender gap in their own writing. In the study of two fifth-grade reading groups, one comprised of all girls and the other of mixed-gender, a significant difference was found between these two groups by Evan (1996). The group of girls was more emotional in their observations and while the mixed-gender group was more action and plot oriented. In Pryor’s (1995) research related to the gender issues in-group work, he found out that in mixed-gender groups, both boys and girls collaborated well and were able to overcome gender stereotypes. In his interview with the students, one of the students said, “I think we have kind of mixed abilities which makes it … so that if it’s more mixed we can do more things … because we’ve all got different ways”.

145
According to the book ‘Gender Dimensions’ written by Allard & Wilson (1995), in an interview with a few kids in year 4 to 6, a boy told the interviewer that it is better for boys and girls to work together in cooperative learning group. So that, they can finish their work quicker by helping each other and contributing their ideas. However, some studies reported that single-gender cooperative group students perform better than mixed-gender cooperative group. For example, Dillow et al. (1994) claimed that female students (from middle school to college) interact and perform better when participating in single-gender groups. As girls move into adolescence, they become vulnerable to certain psychological losses – those of clarity, self-confidence, and voice. In all girls group, they are more likely to express themselves and elaborate their ideas. They don’t need to feel shy. Therefore, they feel more comfortable working together, thus building their confidence builds and developing positive self-esteem.

In the study of the effects of cooperative learning on perceived status to male and female pupils by Peterson, Johnson, & Johnson (1991), one of the conclusions made from the results of this study is that group composition in terms of gender is not a significant influence on the outcomes of cooperative efforts. The achievement of the students, either in single-gender or mixed-gender groups, has showed very little differences. Meanwhile during the verbal interaction, on the average, female members spoke more often to male members than vice versa. Another result from this study was that female and male group members were perceived by their counterparts to be leaders in proportion to their representation in the sample. Perceived leadership was not found to be related to sex, after group members worked together in cooperative learning groups.

A more complete picture of the dynamics of small group interaction can also be found in the study of Lee (1993) concerning the gender, group composition, and peer interaction in computer-based cooperative learning. The major aspects include: the specificity of the interaction categories, the use of verbatim video-recording along with the coding system as a procedure to collect data on peer interaction, and the differentiation between the kinds of mixed-gender groups in terms of the ration of females to males in the group, in addition to the inclusion of single-gender groups. Unfortunately, review of literatures do not generally spot mixed-gender cooperative groups perform better than single-gender cooperative groups. Further research is needed to clarify whether single- of mixed-gender cooperative group is more encouraging or vice versa.

2.3 Leadership

In recent decades, women have increasingly entered occupations and professions that were previously dominated by men. Yet our society still focuses on ‘masculine’ and ‘feminine’ qualities as if men and women must be evaluated in these terms (Scheafer & Lamm, 1998). Therefore, due to these cultural, religious and psychological norms, male perceived that female should not be dominant over male. Female also think they themselves should not be dominant over male. This is because the masculine stereotype of a leader is well established (Scheafer & Lamm, 1998). Men and women with different value system, cultures and work experiences have different ideal leadership expectations (Ayman, 1993). These factors affect the way a mixed-gender cooperative group to select its group leader. Factors affecting differences in leadership for men and women might be the time that the candidate spent in the group, the nature of the task, group composition and the norms in the work group.

Peterson, Johnson and Johnson (1991) cited that male subjects were more frequently perceived to be leaders (Borgatta & Stimson, 1963; Fennema & Sherman, 1977; Fox, 1981; Hoffman & Maier, 1961;
According to the expectation status theory, male group members were perceived as higher in status than female members when working on a cooperative task. Furthermore, male members would be perceived as group leaders more frequently than female members. ‘The longer the cooperative group meets, the stronger the status effects become’ (Peterson, Johnson and Johnson, 1991). Meanwhile, ‘social interdependence theory predicts that interaction within cooperative learning groups would result in a process of acceptance characterized by equal status of male and female students’ (Peterson, Johnson and Johnson, 1991).

Overall, male is more likely to be perceived as the leader in most of the cooperative learning group, but there are not enough studies regarding leadership perception in Malaysia. In a study about the legitimacy of leadership by Goldman and Frass (1965), they had leaders in male group selected by three methods: election through a group vote, appointment after selection in a measure of ability, or appointment randomly, plus a control condition without a leader. It was found that groups with leaders appointed for their competence performed best, following by elected leaders. The group with randomly appointed leaders showed poorer performance (Hollender, 1986). However, in summary, there was not enough past research that could prove that in cooperative group, members prefer their leader to be chosen through election, appointment, or voluntary.

2.4 Membership

One of the hottest issues concerning cooperative learning is about membership. According to Schmuk and Schmuk (1996), simply group students according to their ability or achievement would not necessarily result in effective group work or enhanced student learning. Meanwhile letting students organize their own ad hoc groups according to their emotional compatibility would be a better option in forming cooperative learning groups. This is because students can best judges who should work with to enhance their learning. But, if the students were given the chance to choose their own members in group, how would they choose their partners? They might choose friends in common or live nearby, have the same hobbies or interests and so on. Besides that, another important issue about membership in cooperative learning group is now often should groups be changed. Not many researches regarding this issue had been conducted. For more information about this issue, please refer to Heller and Hollabaugh (1992).

2.5 The Purpose of the Study

In conclusion, there are a lot of researches support the use of cooperative learning enhance the development of higher order thinking, increase learning, and promote pro-social behavior, but there is no definite result for the effects of gender in cooperative learning. Until now, there are still limited researches that discuss the group processes, group composition, gender composition and attitude of athletes toward leadership and membership in cooperative learning in a content area reading course at a school.

Therefore, the purpose of the present study is to find out the effect of athletes’ gender attitude towards perceiving the gender composition, leadership and membership when students work cooperatively in small groups in Bukit Jalil Sports School. I examined (a) the likelihood of male or female athletes whom preferred mixed-gender groups (majority-female, majority-male, and equal representation groups) than single gender groups (all male or all female groups), (b) the likelihood of male or female athletes were perceived as the leader in cooperative learning group with respect to gender, and (c) the likelihood of male or female to choose their own members in a cooperative learning group than other methods.
3.0 RESEARCH METHODOLOGY

3.1 Subjects

The subjects of this study were the Form 5 students who were enrolled in the Bukit Jalil Sports School. The subjects’ age ranged between 16 and 18 years old. A total of 100 athletes (50 female athletes and 50 male athletes) were selected randomly for this case study.

3.2 Research Design

The carefully planned and well-designed research to be used for this case study was ex post facto research, which took place over eight weeks, duration. At the end of the study I had to find out the athletes’ gender attitude towards perceived gender composition of cooperative learning groups, leadership and membership. The learning styles, the intelligence of the subjects, the cultural perception, and religious believes of individual student cannot be manipulated or measured.

3.3 Study Procedures

Firstly, I selected cooperative learning on gender effects as my main research topic. Then the statements of the problem were served as the guideline for this study. The definition of the research problem and variables were defined. Later the information about our cooperative learning was gathered from books, journals, periodicals and web side. I read and reviewed the information about my topic. I then went in detail and reviewed the topics of perceived leadership and membership.

After the review of the literature, I developed the sampling plan. The name lists for the 5 classes of Form 5 students who enrolled in the Bukit Jalil Sports School were obtained from the PALAPES Karate students. Later, each sample class’s name list was divided into two groups (female and male). Subsequently, 50 students from both male and female group were selected randomly as the subjects of the study. As for the following procedure, I constructed the instrument (questionnaire) for this study with the help of my advisor. Questionnaire was designed carefully so I can be certain of its reliable and validity.

To strengthen the reliability of the questionnaire, a pilot study was run on the 28th of August 2018 with 5 samples who had been chosen randomly from the third semester students from Ibrahim Sultan Polytechnic. No significant problem was found in the questionnaire. Hence the actual study was carried out on the 3rd of September 2018. The questionnaires were distributed to all the 100 athletes. The subjects were being assured that their responses would be kept confidential and were told not to discuss their answers with others. A total of 98 responses were gathered. 2 male subjects were absent on the day of data collection. Next, the collected data were tabulated and synthesized. Then, these data were analyzed and conclusions were drawn at the end.

3.4 Instrumentation

In this study, questionnaire was the only instrument that we used to gather the needed information. I designed a set of questionnaires that consisted of 15 selected-response items to assess athletes’ attitude towards gender effect upon cooperative learning. To avoid inconsistent answers, there was no open-ended
question. The first four items were about the athlete’s background and the rest of the items were asking athletes to identify their attitude towards perceived leadership and membership. The frequency of each item of the questionnaire was used as the dependent measure. Each individual had to work on their own. The test took 10 minutes.

Table 3.1: The number of items in part II

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of items in part II</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Gender Composition</td>
<td>1, 7, 14</td>
</tr>
<tr>
<td>ii) Perceived Leadership</td>
<td>3, 4, 5, 6, 11, 13</td>
</tr>
<tr>
<td>iii) Perceived Membership</td>
<td>2, 8, 9, 10, 12</td>
</tr>
</tbody>
</table>

A rating scale (Likert type) was used in Part II of the questionnaire. Subjects were required to respond to both the positively and negatively statements by circling either 1 for ‘strongly agree’, 2 for ‘agree’, 3 for ‘undecided’, 4 for ‘disagree’, or 5 for ‘strongly disagree’. As for Part III, it was a question seeking subjects’ opinion. If the subjects were working in groups, among four different group composition of cooperative learning groups, they were asked to choose only one answer. The four different groups were single gender group (all males or all females), majority-female group, majority-male group and equal representation groups (equal representation of male and female members).

3.5 Data Collection

Data of this survey were collected after the items from the questionnaire were answered by the subjects. Later the responses to the items in the questionnaire were put directly into the computer for tabulation and analysis.

3.6 Data Analysis

First, the collected data of the items of the questionnaire in Part II were tabulated and presented in the table of observed sample frequencies of responses towards perceiving gender composition, leadership and membership in cooperative learning group according to athlete’s gender. The percentage of the observed sample frequencies were also computed. Consequently, to examine individual category of the variables – gender composition, leadership and membership, a Chi-Square ($\chi^2$) test with contingency tables was carried out because the variables under study were subjected to non-parametric analyses. This statistic involves the comparison of observed and expected frequencies. If the $\chi^2$ value exceeds the tabled $\chi^2$ values with the significant level at .05, the statistical test was significant (Wiersma, 1995).

As for the items in Part III, the percentage frequency of athletes’ gender who preferred their preference group out of the four different gender composition groups were computed. A line chart was preformed in the percentage frequencies of athletes’ gender crossed with the gender composition. The pattern of the line gives an indication of the extent of relationship between the athlete gender composition (Wiersma, 1995).

4.0 FINDINGS AND DISCUSSIONS

The collected data were analyzed and the findings were reported for the total subjects (N = 98) across the 5 sample classes of Form 5. The study provided important information on student gender attitude towards
perceiving gender composition, leadership, and membership when working cooperatively in small groups in the Bukit Jalil Sports School.

**Frequency Distribution of Sample**

In response to questionnaire, the athletes were required to answer items focused on three major aspects of cooperative learning in respect of gender – gender composition, perceived leadership and perceived membership. Table 4.1 presents the frequency distribution of athletes’ perceptions towards various aspects of cooperative learning that were mentioned earlier.

**Table 4.1 Frequency Distribution of Students’ Perceptions towards Various Aspects of Cooperative Learning**

<table>
<thead>
<tr>
<th>Category</th>
<th>Gender Composition</th>
<th>Perceived Leadership</th>
<th>Perceived Membership</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>No</td>
</tr>
<tr>
<td>Work with same gender only</td>
<td>9</td>
<td>18.00</td>
<td>7</td>
</tr>
<tr>
<td>Comfortable with opposite gender</td>
<td>18</td>
<td>36.00</td>
<td>13</td>
</tr>
<tr>
<td>Too shy to work with opposite gender</td>
<td>11</td>
<td>22.00</td>
<td>5</td>
</tr>
</tbody>
</table>

**Hypotheses Testing Results**

This section discusses the outcomes of the Chi-Square ($\chi^2$) tests for independence on the hypotheses of this study. Three tests were computed and then tabulated in Table 4.2.

**Table 4.2 Contingency Table for Chi-Square Test**
Note: Expected frequencies were in parentheses.
Figure 4.1. Frequency of Male and Female Response in preferring not to choose the Group Members during Cooperative Learning

Figure 4.2. Percentage of Frequency in Various Gender Composition

Gender Composition
In this study, overall, majority of both male and female subjects preferred equal-representation group while working cooperatively in groups. Quite a large number of subjects felt more comfortable to work with a group of athletes composed of gender which had majority gender same as themselves. Meanwhile, there was a similar percentage of subjects preferred a majority opposite gender group, though this only represented a very small number out of the whole subject sample. Also, there were a representative number of subjects who would like to work in the group that consisted of single-gender which is the same as their own.

Research Project Recommendations
Based on athletes’ perception the following sections will provide suggestion on improving the formation of the cooperative group among athletes at Bukit Jalil Sports School. The following recommendations are based upon analysis done in the study.

i) Gender Composition in Cooperative Learning Group
When it comes to decision on gender composition of a cooperative learning group, equal-representation mixed-gender group composition was the most favorable group among the four types of gender composition group that was discussed. Therefore, coaches or teacher should not insist on their athletes to work in single-gender composition group only because most athletes find that it is more interesting to work with opposite gender and they can share different information and perceptions.

ii) Perceived Leadership
Coaches or teachers should let the athletes decided their leader through volunteer or election. The members of a group know more about their leader than the coach or teacher because it is very important that a leader would be able to accomplish the members’ needs.

iii) Perceived Membership
Coaches or teachers should also let the athletes choose their own group members instead of appointing them for a task. They are mature enough to make their own decisions. However, the groups should change often enough so that the athletes realize they can make any group successful and work with different people as well as different environments.
5.0 CONCLUSION

i) More than half of the female and male athletes of the Form 5 students at Bukit Jalil Sports School preferred the mixed-gender groups than single gender group. No significance different was found between the preference of males and females toward the group composition in regards to gender.

ii) Male athletes will only be perceived as leaders by more than half of the male athletes. Female athletes preferred female leaders more than male leaders. Therefore, the null hypothesis stated that male athletes will be perceived as leaders by more than half of the female athletes and more than half of the male athletes in cooperative learning has been rejected.

iii) More than half of the male and female athletes preferred to choose their own members in cooperative learning group than appointed by the coach/teacher. No significance different was found between the preference of males and females toward perceived membership.

REFERENCES


