Social Loafing in Group Work: Prevalence, Contributing Factors, and Consequences in Madda Walabu University

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The research is financed by Madda Walabu University Abstract

The general objective of this research was to see the prevalence, contributing factors and consequences of social loafing in MWU. Both quantitative and qualitative methods were employed to achieve the research objectives. The participants were: 277 2nd and 3rd-year students. The participants were selected using a stratified random sampling technique. To collect data regarding variables under the study, a self-report (rating) questionnaire adapted from Jassawalla, Malshe, and Shashittal (2008) and interviews were used. The results of percentage and frequency revealed that social loafing is prevalent in group works. Stepwise multiple regressions indicated that some variables such as evaluation methods, lack of skills, group size, and laziness have a significant contribution to social loafing. The frequency and percentage result indicated that there are negative consequences of social loafing. Independent T-test for group means difference revealed that there was a significant difference in female and male students in the consequences of social loafing and there was a significant difference between 2nd and 3rd-year students in their perception of the prevalence of social loafing. Based on the findings, conclusions and recommendations were made; directions for future research were indicated.

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Background

Social loafing has been found on a variety of tasks, including work-related tasks, physical tasks, cognitive tasks, and evaluative tasks. In academic settings, social loafing has been found, for example, on tasks that require generating ideas and working on group papers (Karau, 2012).

Research findings (Karau and Williams, 1993, 2001; and Dhashendra, 2011) recognized in any student group work, social loafing is exhibited by certain members being repeatedly absent, being disengaged and fulfilling their work commitments inadequately or not at all (Latane, Williams, & Harkins, 1979).

The perception that social loafing exists in group work contexts is universal among university students and undermines the potential effectiveness of group work (Piezon & Ferree, 2008). For example, in McCorkle, Reardon, Alexander, Kling, Harris, & Iyer's (1999) study, 65 percent of surveyed students reported that they had encountered social loafing within university-level group work. Similarly, in Hall & Buzwell's (2012) study 61 percent of the respondents reported the existence of social loafing in group work. Researches also indicated that the presence of social loafing reduces satisfaction in group work (Pfaff & Huddleston, 2003), reduces group cohesion, and harms the performance or output of a team (Schnake, 1991).

Social loafing is influenced by factors such as the degree to which group members' individual inputs can be identified and evaluated, the meaningfulness or personal relevance of the task, the degree to which each individual's inputs are unique and less redundant with those of other group members, group size (Latané, 1981; Karau, 2012; Kerr, 1989; Hindriks & Pancs, 2001; and Chidambaram & Tung, 2005), evaluation methods such as comparing groups with each other (Hurley & Allen, 2007), differing style among group members, the method of group formation, division of tasks among group members, and task difficulty (Hall & Buzwell, 2012; and Karau & Williams, 2001).

Deeter-Schmelz et al. (2002) found that as the size of the group increases, the number of incidents of participation per member decreases. Hechter (1987) also found that increased group size inhibits the ability of team members to both monitors and encourage each other. Aggarwal and O'Brien (2008) and Maiden and Perry's (2011) study also found that smaller group sizes reduced incidences of social loafing.

Social loafing is said to disappear when participants believe that their individual effort can be observed, measured or evaluated, resulting in them being held accountable for their contribution (Brooks & Ammons, 2003; Thompson & Thornton, 2007). For example, a perception that the distribution of rewards is fair has been shown to be negatively related to social loafing (Liden et al., 2004).

Another contributing factor to social loafing is the method of group formation (Hall & Buzwell, 2012; Manhenthiran & Rouse 2000; Pieterse and Thompson, 2010). Manhenthiran and Rouse (2000) discovered that

when students were permitted to pair up with at least one friend in a learning group, they were more likely to put forth more effort than students who were assigned to random groups. Bacon et al. (1999) and Strong and Anderson (1990) also argued for the self-selected group to reduce social loafing. However, others indicate some negative consequences of self-selection including groups being homogenous and lacking diversity and groups possessing inadequate skill sets among their group members. Similarly, it is reported that random team assignment is unfair (Bacon et al., 1998) and unpredictable. A study that compared the influence of self-selected and randomly assigned teams on social loafing, found no significant differences between the two methods of team formation (Aggarwal & O'Brien, 2008).

Researchers Karau & Williams, (2001) found that when people are given a difficult task, they work on it just as hard in a group as they would individually and social loafing decreases.

In general, researches (e.g., Hall & Buzwell, 2012) showed that social loafing is the greatest concern across all disciplines. However, despite most higher education instructors who are complaining about social loafer in group works or projects, research in the area of social loafing received comparatively less attention in Ethiopia. The relatively spare research on social loafing in higher education settings has left room for further research. First, much of the researches (Bacon, Stewart, & Stewart-Belle, 1999; Karau & Williams, 2001, Hall & Buzwell, 2012) has been conducted on western countries. Second, some of the findings, for example, on the effect of types of group formation and evaluation methods on social loafing have been contradictory. Some studies (Brooks & Ammons, 2003; Thompson & Thornton, 2007) reported a reduction in social loafing as a result of evaluation methods. However, Karau (2012) suggested that evaluation is not always sufficient to reduce or eliminate social loafing. Concerning group formation, some research (Manhenthiran & Rouse, 2000; Bacon et al. 1999; Strong & Anderson, 1990) argue that self-formed group reduces social loafing while others ((Bacon, Stewart, & Stewart-Belle, 1999) are against the use of self-formed group arguing that it lacks diversity.

Therefore, the current study helps us understand how group size, teacher's evaluation methods of students' group work, types of group formation, task difficulty, lack of skills, and lack of motivation affects students' social loafing. The research aims at investigating the prevalence, contributing factors, consequences of social loafing in educational settings.

Methods and Materials

Study Are

The current study conducted at Madda Walabu University (MWU). Madda Walabu University is one of the governmental universities in Ethiopia which is located 430 km away from the capital city Addis Ababa. The university has different colleges and schools in it.

Research Design

The researchers employed mixed research design (both qualitative and quantitative methods) to explore the prevalence, contributing factors, and consequences of social loafing in group work among Madda Walabu University 2nd and 3rd-year regular students.

Participants

The total population of this study was second and third-year undergraduate regular students at Madda Walabu University in the year 2016/2017. According to Madda Walabu University registrar data, in 2016/2017, 5959 students are attending their education from the second year and above. To make our sample representative of the whole population, stratified random sampling was used. The stratification was based on the year of study, department, and sex. The sample size for this study was determined by using Tabachnick and Fedell's (2007) suggestion to determine sample size when using stepwise multiple regressions which suggested a case-to-IV ratio of 40 to 1. Based on this, the final analyses were made on a sample of 277 respondents.

Measures

The current instrument is adapted from Jassawalla, Malshe, and Shashittal (2008). The survey includes items that could measure the prevalence, contributing factors, and consequences of social loafing in group work. It also included items that could measure what the team did to the social loafer, and what they recommend the professor to do. This survey of social loafing is on a 5-point Likert type scales which indicates 1 (strongly disagree), 2 (disagree), 3 (neither agree nor disagree or undecided), 4 (agree), and 5 (strongly agree). Jassawalla, Malshe, and Shashittal (2008) reported the Cornbrash's alpha of the four subscales ranging from 0.654 to 0.821 in their original paper. The items are randomized in the questionnaire to minimize the impact of order bias. A high score on the instrument indicates a high degree of social loafing, the variables under the study contribute high to social loafing, and the negative impact of social loafing is high. The pilot test result revealed that Cornbrash's alpha of the subscales of evaluation methods, laziness, group formation methods, and task difficulty were .66, .57, .82 and .51 respectively. Test-retest reliability for group size and lack of skills were 0.77 and 0.81 respectively. The interview

questions are semi-structured and have probing words. It is prepared by the researchers based on the Jassawalla, Malshe, and Shashittal (2008) Survey of Social Loafing in Classroom Teams.

Data Analysis

The quantitative data was organized, tabulated and analyzed by using, frequency, percentage, multiple regression, and t-test. In addition to this, qualitative data were analyzed by using narration in the way it supplements the quantitative analysis. Responses from the interviewee were analyzed thematically.

Ethical Consideration

Before distributing the questionnaires to the respondents the researchers asked the participants about their willingness to fill the questionnaires and permission to be interviewed. So based on this, the respondent has signed the consent form.

Results

Items Some members of my groups:			Disagree		Neither		Agree		S. Agree	
		Disagree		8				-		2
	Fq.	%	Fq.	%	Fq.	%	Fq.	%	Fq.	%
Are contributing less than I expected.	38	13.6	61	21.8	29	10.4	86	30.7	63	22.5
Do not do their share of work	42	15	78	27.9	32	11.4	79	28.2	46	16.4
Spend less time on the group work if others are present to handle the job.	47	16.8	49	17.5	28	10	95	33.9	58	20.7
Avoid helping others finish the group work as much as possible.	64	22.9	57	20.4	39	13.9	70	25	47	16.8
Are less likely to make a practical contribution to group work if other members are available to do this.	46	16.4	73	26.1	40	14.3	69	24.6	49	17.:
Did poor quality work	62	22.1	65	23.2	51	18.2	59	21.1	40	14.
Often miss, or arrive late at group meetings without prior notice to the whole group or the group leader.	60	21.4	58	20.7	37	13.2	71	25.4	51	18.2
Was mostly silent during the group meetings.	60	21.4	54	19.3	29	10.4	72	25.7	62	22.
Involved in conversations not related to group work.	75	26.5	47	16.8	30	10.7	63	22.5	62	22.
I came poorly prepared for the group meetings.	51	18.2	47	16.8	29	10.4	78	27.9	72	25.

Table 1 shows that 30.7% of students indicated that some members of their groups are contributing less than they expected. Moreover, 28.2% of students indicated that some members of their groups do not do their share of work. In addition, 33.9% of students revealed that some members of their groups spend less time on the group work if others are present to handle the job. 25% of students indicated that some members of their groups avoid helping others finish the group work as much as possible. 24.6% of students agreed that some members of their groups are less likely to make practical contributions to group work if other members are available to do this. 25.7% of the students revealed that some members of their group were mostly silent during the group meetings. And also, 27.9% of students agreed with some members of their group who came poorly prepared for the group meeting. At face value, these results may already indicate the prevalence of social loafing amongst the respondents. In addition to this, the qualitative results support the above quantitative findings as to the following: Some interviewees declared that they did not like group works because there are so many dependent (free-riders) in the group. They witnessed like "...this may waste our time to do our efforts strictly". This indicated that there is social loafing in group works. In accordance with the first ideas, they declared that:

"In our group works some members let alone to contribute to group work, they have no concern about the group works, some others engaged in conversation with others out of the agenda of the group works, some others use their cell phone or chat with Facebook rather than participating in the group works. While we ask them to contribute a piece of paper, they can't respond properly". In our group works, most of a time a burden is in one individual others are free-rider. Rather than contributing their effort of knowledge simply they give money for the group works. Those who came from poor families may try to do with the group members, but they have not enough skills and bits of knowledge about how to do group works. However, some students or members are presented at the time of group works but have not contributed anything to the group works. There are so many free-riders in our group that expected everything from the group leaders. They can't take responsibilities by themselves rather they transfer to group leaders. Some others came without any contribution and haven't commitments. In addition to this, they haven't interested to come earlier or they may come late (they are latecomers). If we give responsibilities to them they came with poor qualities of work".

	Sex	Ν	Mean	Std. Deviation	Т	Sig.
PSLTOTAL	Male	161	30.39	9.30	34	.44
	Female	115	30.78	9.63	34	
FSLTOTAL	Male	161	30.85	10.69	93	.06
	Female	115	32.07	10.77	93	
CSLTOTAL	Male	161	40.49	19.73	2.09	.003
	Female	115	36.20	11.28	2.28	

Table 2: the Summary	v result of T-test for	Student's Sez	x Difference	(N=276)

As table 2 depicted that an independent-samples *t*-test comparing the mean scores of the male and female students. Among the overall variables prevalence of social loafing, found no significant difference between the means of the two groups (t(274) = .44, p < .05). The mean score of the male students (M= 30.39; SD= 9.30) did not significantly different than female students (M=30.78, SD= 9.63). An independent t-test was calculated as the total factors that contributing social loafing, the result indicated that no significant difference between means of male and female students (t(274) = .06, p < .05). The mean score of male students (M= 30.85, SD= 10.69) did not significantly differ from the mean score of female students (M= 32.07, SD= 10.77). And also, among the overall variables of the consequences of social loafing found that there is a significant difference between male and female students (t(274) = .003, p < .05). That is, with regard to the consequences of social loafing, the mean score of male students (M= 36.20, SD= 11.28). This indicated that male students believe more than female students that social loafing has negative consequences. **Table 3: the Summary result of T-test for Student's Year of Study Difference (N=276)**

Table 5. the Sum	mary result of 1-test	Ior Student	s i cai oi bit	uy Difference (1) 2/0	,	
	Year	Ν	Mean	Std. Deviation	Т	Sig.
PSLTOTAL	Second Year	216	30.76	9.75	.54	.04
	Third Year	60	30.01	7.95	.61	
FSLTOTAL	Second Year	216	32.08	10.83	2.01	.08
	Third Year	60	28.96	9.82	2.12	
CSLTOTAL	Second Year	216	39.14	15.84	.78	.28
	Third Year	60	37.21	20.05	.68	

As table 3 depicted that an independent-samples *t*-test comparing the mean scores of first and second-year students. Among the overall variables prevalence of social loafing, found there is a significant difference between the means of the two groups (t(274) = .04, p < .05). The mean score of the 2nd year students (M = 30.76; SD = 9.75) significantly differed from 3rd year students (M = 30.01, SD = 7.95). This implied that 2nd-year students have encountered a higher prevalence of social loafing than 3rd-year students. An independent t-test was calculated on the total factors that contributing social loafing and the result indicated that no significant difference between means of 2nd and 3rd-year students (t(274) = .08, p < .05). The mean score of 2nd-year students (M = 32.08, SD = 10.83) did not significantly differ from the mean score of 3rd-year students (M = 28.96, SD = 2.12). And also, among the overall variables of the consequences of social loafing found that there is no significant difference between 2nd and 3rd-year students ((t(274) = .28, p < .05)). The mean score of 2nd-year students (M = 39.14, SD = 15.84) did not significantly differ from 3rd-year students (M = 37.21, SD = 20.05).

Stepwise multiple regressions were conducted to evaluate whether all the six variables were necessary to social loafing. At step one of the analysis evaluation methods entered into the regression equation and was significantly related to Social loafing, F(1,267) = 91.855, p<.000. The multiple regression coefficients were .256, indicating approximately 25.6% (25.3% adjusted) of the variance in social loafing could be accounted for by Evaluation method scores. At step 2 of the analysis, Lack of skills entered into the regression equation and was significantly related to Social loafing, F (2,266) = 61.834, p<.000. The multiple regression coefficients were 317, indicating approximately 31.7% (31.2% adjusted) of the variance of social loafing could be accounted for by Evaluation methods and Lack of skills scores. At step 3 of the analysis, Group size entered into the regression equation and was significantly related to Social loafing, F (3,265) = 45.968, p<.000. The multiple regression coefficients were.342, indicating approximately 34.2% (33.5% adjusted) of the variance of social loafing could be accounted for by Evaluation methods, Lack of skills scores, and Group size. At step 4 of the analysis, Laziness (lack of motivation) entered into the regression equation and was significantly related to Social loafing, F (4,264) = 36.844, p<.000. The multiple regression coefficients were.358, indicating approximately 35.8% (34.9% adjusted) of the variance of social loafing could be accounted for by Evaluation methods, Lack of skills scores, Group size, and Laziness (Lack of motivation). Team formation methods, Task difficulty, and Lack of interest in tasks did not enter into the equation. That is, none of these three variables adds further prediction.

Table 4. Stepwise Multiple Regression

Regression Coefficients

Variable/Model	В	SE B	β
Evaluation methods	.680	.271	.178 *
Lack of skills	1.594	.443	.235**
Group size	1.101	.381	.167**
Laziness (lack of motivation)	.658	.257	.170*

* *p* < .05. ** *p* < .01.

Looking at the regression coefficients (Table 4), all the four variables (evaluation methods, lack of skills, group size, and laziness) were independently significant in predicting social loafing. The standardized slopes (i.e., β coefficients) indicate that evaluation methods (β = .178, t= 2.512, p < .05), lack of skills (β = .235, t= 3.599, p<.001), group size (β = .167, t= 2.890, p<.01), and laziness (lack of motivation) (β = .170, t= 2.564, p<.05), were independently statistically significant in predicting job satisfaction. Of the four variables lack of skills had the largest effect (β = .235) on the students' social loafing.

Table 5: Summary Result of Consequences of Social Loafing i	fing in Grou	up Work
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Items:	SD		DA		Ν		AA	_	SA	
As a result of social loafing:	Fq.	%								
The group took longer than expected to complete its tasks	29	10.4	48	17.1	32	11.4	89	31.8	78	27.9
Other group members had to do more than their share of work.	41	14.6	30	10.7	40	14.3	88	11.7	77	27.5
Other group members were stressed, frustrated and angry.	51	18.2	44	15.7	52	18.6	79	28.2	50	17.9
The work had to be re-assigned to other members of the group.	64	22.9	40	14.3	40	14.3	71	25.4	60	21.4
The group's final presentation was not as high quality as that of other groups.	52	18.6	46	16.4	41	14.6	75	26.8	59	21.1
The group missed deadlines.	48	17.1	39	13.9	36	12.9	78	27.9	72	25.7
The group lacks satisfaction.	52	18.6	38	13.6	34	12.1	86	30.7	64	22.9
Members received an unfair grade result.	59	21.1	41	14.6	34	12.1	73	26.1	68	24.3
Members received a poor grade.	48	17.1	42	15	37	13.2	74	26.4	74	26.4
Groups divided and they lack unity.	42	15	37	13.2	36	12.9	73	26.1	86	30.7
Their group performances are decreased.	49	17.5	32	11.4	24	8.6	82	29.3	89	31.8

Table 5 shows that 31.8% of students indicated that as a result of social loafing, their group performances are decreased. Moreover, 30.7% of students indicated that as a result of social loafing groups are divided and they lack unity. In addition, 27.9% of students revealed that as a result of social loafing the group took longer than expected to complete its tasks. 27.5% of students indicated that as a result of social loafing other group members had to do more than their share of work. 26.4% of students agreed that as a result of social loafing members received poor grade.25.7% of the students revealed that as a result of social loafing the group missed deadlines. And also, 24.3% of students agreed with as a result of social loafing members received unfair grade results. At face value, these results may already indicate the consequences of social loafing amongst the respondents. The experiences of students regarding the consequences of social loafing using a 1 to 5 point Likert scale. The results were processed using descriptive statistics (Table 5).

Discussion

In this part, the result of this study is discussed (congruency and incongruence) with the researchers conducted in another setting by other scholars: generally with the review of the literature.

In our study the prevalence and magnitude of social loafing that reveals social loafing was found in group work. These results are consistence with the finding of a meta-analytic synthesis by Karau and Williams (1993, 2001) and research by Dhashendra (2011), social loafing was found consistently across all the studies and the

evidence indicated that individuals tended to engage in the phenomenon when working collectively. In a student team, this is exhibited by certain members being repeatedly absent, being disengaged and fulfilling their work commitments inadequately or not at all (Latane, Williams, & Harkins, 1979).

This study investigated the effect of evaluation methods, lack of skills, group size, laziness, methods of team formation, and task difficulty on social loafing in group work. The results indicate that the four variables (evaluation methods, lack of skills, group size, and laziness) were important in predicting social loafing independently and jointly. However, the other two variables (methods of team formation and task difficulty) were not important in predicting social loafing in group works. Evaluation methods, lack of skills, group size, and laziness positively correlated with social loafing. These findings indicated that the more individual contributions are assessed in group works, students lack skills to contribute to group work, the group size, and individuals tend to free-ride on the efforts of others (laziness) when working in a group, the more they involve in social loafing. This is in line with previous studies that provide support for positive relationship between not evaluating individual contribution in group work and social loafing (Brooks & Ammons, 2003; Hurley & Allen, 2007; Liden *et al.*, 2004; Thompson & Thornton, 2007), lack of skills and social loafing (Chidambaram & Tung, 2005), larger group size and social loafing (e.g., Belanger, Watson-Manheim & Jordan, 2002; Hindriks & Pancs, 2001; Jones, 1984; Karau, 2012; & Latane, 1981), and laziness or lack of motivation and social loafing (Paulus 1983 cited in Griffith, Fichman, & Moreland, 1989).

This result supports the claim that social loafing disappears when participants believe that their individual effort can be observed, measured or evaluated, resulting in them being held accountable for their contribution (Thompson & Thornton, 2007). That is, the potential evaluation of individual contributions to team-work has a particularly powerful impact on ensuring that each team member does a fair share of collaborative tasks (Brooks & Ammons, 2003). The qualitative data obtained through interview also supported the contribution of teachers' evaluation on group work as "If a teacher evaluates each individual effort or gives values for those who have great contribution in the group works, the social loafing may decrease. In addition to this, if a teacher informs the students that contents in the assignment or group works may be incorporated in their exam each member of the group tries to participate in the group works." This finding result is supported by Hurley & Allen, (2007) who suggested that evaluation in a group setting informs the quality of a person's work and reduces social loafing.

In our finding, a lack of skills is also another variable contributing to social loafing. Individuals who lack skill view their effort as being too small to make a difference given "others" who can contribute; thus, they withdraw effort from the group (Chidambaram & Tung, 2005). Similarly, in group work, social loafing occurs when strong team members excluding the contributions of weaker members (Pieterse & Thompson, 2010). As described by respondents in group works, those group members who believe they lack skills simply contribute money or papers rather than contributing their effort to the group works.

As expected a positive correlation was found between group size and social loafing in the current study. This may be explained by the Dispensability of Effort Theory. According to Dispensability of Effort Theory, during certain tasks, members might be reluctant to exert effort if they have an idea that their contributions are redundant or unneeded compared with those of other group members, or are immaterial to group performance (Hart, Karau, Stasson & Kerr, 2004). This theory seems to relate to group size. In other words, in larger groups, individuals generally believe they make less of a difference. That is, as the size of the group increases, the number of incidents of participation per member decreases (Deeter-Schmelz et al. 2002). Individuals may feel their contributions are more essential to the success of the process when they work in smaller groups than when they work in larger groups (Hindriks & Pancs, 2001).

There are also, positive correlation between laziness or lack of motivation and social loafing. Karau, (2012) suggested that the effects of the presence of others on task performance are mediated by a set of cognitive and motivational variables. Changes in group size simultaneously influence several motivational and cognitive variables that can then affect task performance. As described by interviewed respondents in group works "some members of the group let alone to make contribution to the group work, they have no concern about the group works; some others engaged in conversation with others out of the agenda of the group works, some others use their cell phone or chat with Facebook, some others simply they give money, and some others expected everything from the group leaders rather than participating in the group works.

Conclusion

Based on the major findings of the study, the following conclusions are drawn:

- 2nd and 3rd-year MWU students have encountered to social loafing. The result indicated that the prevalence rate of social loafing has higher and consistent with other research findings. This indicated that social loafing has an impact on students' group work in higher education.
- In different research findings, there are numerous factors that contribute to the increment of social loafing. Among those factors group size, evaluation system, group formation, task difficulties, lack of skill, and

laziness are considered as the major contributing factors. However, the finding of this research witnessed that factors such as group size, evaluation system, lack of skill, and laziness have a great contribution to the occurrence of social loafing in MWU. But methods of group formation and task difficulty have no significant contribution to social loafing.

- The existence of social loafing has its own impact on the general educational systems specifically in the learning-teaching process. The current research result witnessed, the presence of social loafing in the higher educational institute (MWU) has the following major consequences:
 - Lack of satisfaction with group members
 - Unfair grading of the student result
 - The group split and lack of cohesion

In addition to this, because of the presence of a social loafer, students waste their time waiting for others for a long time and missed the deadline for submitting the assignment. This decreases group cohesiveness takes a long time to finish the group work, and they may not generate new ideas. The student may get the knowledge that they should get from group work. It may be dangers for social loafers because they can't get knowledge if the exam incorporated the issues from the given group works.

Recommendation

Based on the research result the following recommendations are drowned:

- Social loafing may occur wherever. So each stockholder specifically teachers, has to play a role to reduce the magnitude and prevalence rate of the problem.
- Before, during and after each class the instructors should have given orientation for students about the effect of social loafing and the measure will be taken.
- Following up and guiding students' group work.
- The instructors should evaluate students in a fair manner.
- Give group work which is relevant, easily accessible, and related to the course.
- The group members and group leaders should not resist or tolerate those who did not give their contribution and not participate equally in their group work.
- All group members should participate equally and avoid domination.
- By any means motivate students to do their best and to show their ability in group work.
- Give clues, trained, show ways practiced, etc. for students to improve their lack of skills.
- Manage the group size based on the number of students in the classroom.

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