

THE EFFECT OF INDIVIDUAL SOCIAL LOAFING AND INCENTIVE
STRUCTURE ON TEAM PERFORMANCE
(AN EXPERIMENTAL LABORATORY)

Apriwandi^{1}, Obsatar Sinaga², Roeshartono Roespinoedji³*

^{1,3}Widyatama University, Indonesia

²Padjadjaran University, Indonesia

[¹Apri.wandi@widyatama.ac.id](mailto:Apri.wandi@widyatama.ac.id)

Apriwandi, Obsatar Sinaga, Roeshartono Roespinoedji. The Effect of Individual Social Loafing And Incentive Structure on Team Performance-- Palarch's Journal of Archaeology of Egypt/Egyptology 17(10), 1298-1308. ISSN 1567-214x

Keywords: incentive scheme, tournament incentive, social loafing, performance team.

ABSTRACT

This study examines the effects of social loafing and incentive schemes in monitoring team performance. Sixty participants did multi-task, which consisted of three sub-tasks that simulated the demands of teamwork in solving the problem. One of the tasks involved in solving the symbol code. The results provide evidence of the effects of social loafing and incentive schemes in monitoring team performance. Subjects in the experimental group treatment in the form of group goal-setting training. The results of the study showed that there was no tendency of group members to reduce their contribution to team assignments. Besides, through individual incentive schemes and tournaments showing interactions with social loafing behaviour. Groups with different incentive schemes show lower team performance than tournament incentives. These results provide evidence that social loafing values can occur through individual stimuli in teams.

Keywords: incentive scheme, tournament incentive, social loafing, performance team.

INTRODUCTION

This study intends to investigate whether the tendency of individual social loafing can improve team performance in conditions of unique incentive structures and tournaments. The investigation also looked at whether the existence of different social organizations became a moderating relationship between incentive structures and team performance. Management accounting literature provides a mixed picture of the impact of providing incentives on performance, and there is no evidence of giving monetary or non-monetary incentives to improve performance (Bailey, Brown and Cocco, 1998; Fesler, 2003). Besides, Kohn (1996) said the incentive or reward system failed. Might

be caused by at examined the relationship between program incentives and problems with productivity, morale in the workplace, so that motives were more related to individual and psychological behavioural theories in the workplace. Compensation is considered to be extrinsic motivation and does not change attitudes underlying behaviour so that they do not create a commitment to creating value or action. Other researchers prove that there is no incentive relationship in the form of salary plus bonuses with performance in selecting incentive contracts that present incentives in the way of rewards and penalties (Lent and Bouwens, 2006; Chirch, Libby and Zhang, 2008).

Performance appraisal and motivating employees are essential factors in the long-term success of many organizations. Naranjo-Gil's (2012) reconciling the literature of economics, which considers group incentive systems to not affect their employment compared to individual incentive systems. But the behavioural research examines incentives to motivate employee control system effects at all organizational levels. Based on the group can increase motivation and be more effective because it is a group structure agreement. Many accounting kinds of literature builds performance evaluations from the perspective of agency theory, which has an impact on the incentives of Xu and Tuttle (2005).

Young et al. (1993); Libby and Thorne (2009) examined the effect of group incentives on group performance in a cooperative and non-cooperative environment. The results of their research are contrary to theoretical predictions that cannot prove differences in group performance depending on the incentive structure for assembly lines. However, higher group performance under group incentives in teams and moreover it shows group incentives to increase the ability of organizations to implement task strategies. Young et al. (1993) suspect that providing group incentives to motivate cooperation and interaction between group members may be valid only in situations that lead to collaboration. Naranjo-Gil (2012) proved that the team's performance improved on collectivist organizations compared to individuals' teams. Cognitive orientation significantly influences team performance, under agency theory predictions that explain team productivity increases with individual incentives rather than group incentives. Because individuals tend to be more concerned with interests, and collectivists are more concerned with group interests more effectively by showing group incentives.

Companies design various forms of incentive systems for managers as a form of performance evaluation Libby (2003), Alhgren et al. (2007) and Naranjo-Gil (2012) Farrel (2014) Lazear and Rosen (1981). Hannan et al. (2008) used a tournament incentive scheme and compared it with individual incentives at the group performance level. And much of the accounting literature suggests an incentive system in influencing performance with the pattern of each motivation by adjusting the theoretical predictions used. In this research, the researchers emphasized individual incentive schemes versus tournament incentives. The choice of this scheme researchers assumes in the performance of groups each individual cooperates and competes to achieve organizational goals. So that researchers use individual incentives and tournaments based on management accounting literature and behaviour.

The phenomenon that arises in teamwork always happens if one team member does not participate in the meeting and has a reason not to contribute. Everyone in the team is angry and dealing with the behaviour of team members before the task is handed over. Schippers (2014) assumed that the tendency for social loafing is detrimental to team performance, not always unfavourable as explained by the theory of social aversion, social compensation. Although social hostility has been confirmed to hurt team performance, sometimes team members decide to work harder to compensate for members' reluctance. As a result, team members can choose to work more hard to pay for their colleagues' reluctance and especially when working on important or large-value tasks. Social loafing is a phenomenon where a person works less than his performance when they work in a group rather than they work alone (Karau and Williams, 1993).

This research contributes to management accounting literature in several ways. First, try to show some clarity on how incentive schemes based on targets affect the implementation of team assignments. Second, trying to combine social and economical psychological theory by investigating whether social aversion is a motivational factor that can influence the behaviour of team members. Third, exploring the right alignment between incentive schemes and social reluctance in teams as a form of issue in social psychology literature.

THEORY AND HYPOTHESIS DEVELOPMENT

Research in accounting and other fields has found that monetary incentives often do not improve individual task performance. Many factors may influence the relationship between financial incentives and individual task performance, for example, Fesler, (2003) subjects performing complex tasks under two types of fixed-wage compensation contracts and piece rates, Naranjo-Gil (2012) incentive systems (individuals and groups) and cognitive orientation.

Organizations can be structured to determines how to operate and do it. Team-based structures require a unique system of organizational control using a group incentive system that can enhance collaboration, motivation and endeavours, Naranjo-Gil (2012) and Kelly 2010. Team structures in large organizations are respected as organizations that are less hierarchical, less structured than structures traditional (such as functional or division). A team is a group that is a group of individuals - ideally with skills that complement each other and work in synergy to achieve common goals.

Teams can change and adapt to carrying out activities to achieve group desires and organizational goals. Besides, the sides can be used to improve individual communication, collaboration or increase productivity. Kim and Vikander (2015) investigate the choice between single and team-based incentives in the principal-agent framework. Their research shows that in relational contracts, there are various parameters of core values that favour team incentives rather than individual motivations. Team incentives raise moral hazard problems, but they can also reduce leadership problems for smoothing bonus payments over time.

In the management control system, the leader ensures that all parties in the organization behave according to the goals of the incentive organization used as a control tool. Individual-based incentives, leaders promise bonus agents every time the agent solves a problem. The interpretation is that the entire team is rewarding every time the team succeeds.

Incentive Scheme, Social Loafing and Team Performance

Social loafing is the right theory used to describe relationships between individuals in groups. This theory explains the tendency of someone in a group to reduce or avoid group workloads by showing well off time when they need to work hard. When people feel unappreciated in their team. Social loafing also occurs because of the perception that other workers in the group do not equitably share the group's duties. As for social loosening, it provides clarity at the dispersion level of member responsibility and the size of the contribution or performance of group members.

Chen and Kanfer (2006); Schippers (2014) proposes personality factors play a role in predicting other team members react with social aversion or with compensation. The incentives predict that group motivation will occur when less capable members work harder than their peers to cover up the shortcomings.

Researchers assume subordinates do not exert effort to complete work, because there is no moral hazard problem under individual incentives, even though subordinate know if they will not get a bonus if they do not complete the task. Kim and Vikander (2015) stated that compared to offering individual incentives, team incentives have the effect of (1) team incentives giving each team member the opportunity to free-rider on the work of others in one team, (2) team incentives allow smooth overtime bonus payments rather than individual incentives, although a little, but bonuses are obtained regularly. Both of these effects lead to the immoral attitude of each individual in a group related to the incentive structure. Individuals assume that they can get a bonus if they do not work because other team members can complete work that creates moral hazard problems. Leadership provides incentives to ensure that all members of the work team, as well as supervision of team members who do not contribute by reducing their team bonuses. However, social norms cannot eliminate the problem of free riders, despite individual or team incentive structures. That is, as agency theory predicts group incentives, without proper control, tends to damage the productivity of team groups. Schippers (2014) tests the social loafing relationship with team performance through the characteristics of personal desire.

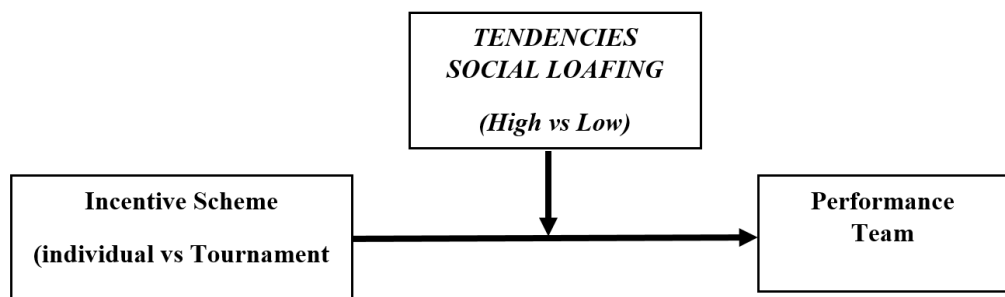
Research proves there is no relationship between the personal characteristics of team members influencing the tendency of social loafing in team performance. However, at the level of complexity, the trend for social loafing to decline and to improve team performance. So that the hypotheses that researchers propose include;

H1: Team performance will be high with a tendency for low social loafing rather than high social loafing.

Another problem arises when organizations must face the choice of basing retirement rewards on individuals or groups, as organizations may attempt by designing the most practical and effective reward system for personnel in the organization. Ahlgren et al. (2007) assume making decisions about incentive systems based on individuals or groups often balancing between on the one hand, that group-based rewards hold back individual motivation especially because individuals can easily lose enthusiasm for how to contribute to overall performance. Besides that, another factor is if the reward system must be built on the achievements of short or long term bonuses.

Various incentive schemes that influence the relationship between financial incentives and performance. Incentive schemes have psychological attributes that can determine relationships with performance. Latham and Pinder (2005) developed a framework for the theory of work motivation on needs, character, cognition and how these three forms of impact in the context of motivation, the culture of a country, work design and model of person-environment fit. Besides that, there is no incentive relationship in the form of salary plus bonus with performance in selecting incentive contracts that present incentives in the way of rewards and penalties (Lent and Bouwens, 2006; Chirch, Libby and Zhang, 2008). But Naranjo-Gil's (2012) research proves that positive team performance improvement is related to individual incentives and collective team orientation, and the effectiveness of incentive systems designed to look at the cognitive orientation relationships of team members. Young et al. (1993) investigated the effect of group incentives on group performance in a cooperative and non-cooperative environment, the results of his research could not prove to prove that group incentives with collective conditions enhance higher group performance. Libby and Thorne (2009) demonstrate that no differences in incentive structures can improve group performance. Hannan et al. (2008) connect individual incentives and tournaments with performance, rather different incentives that provide the best feedback on performance compared to the tournament scheme. Based on some research related to incentive schemes related to team performance, the hypotheses that researchers propose include:

H2; The relationship between individual incentive structures and tournaments will be moderated by social loafing on the team. So that subjects in groups with high social loafing will perform better with different incentives, and issues in organizations with low social loafing will perform better with tournament incentives.



EXPERIMENT DESIGN

This research is an experimental 2x2 design. Experiments are studies involving the involvement of researchers manipulating several variables, observing and observing their effects (Hartono, 2005). According to Nahartyo (2009), the experiment is a research design to investigate a phenomenon by manipulating a condition or condition through a particular procedure and then observing the results of the engineering and interpreting it. Researchers do not just take measurements, but also intervene in each research process by controlling independent variables that affect changes in the dependent variable. Independent variables are given treatments or manipulated, which ultimately observes the effects on the dependent variable.

Independent variables are incentive structures (individual or tournament) and social loafing (high versus low) tendencies — dependent variable team performance. For personality psychology content researchers use instruments that George (1992) developed by Schippers (2014) regarding social loafing trends using four measurement items. This questionnaire assesses the extent to which team members tend not to put much effort into the task when other team members are also working on it. Questionnaire items include "I postponed my responsibilities assuming for other team members", "I place less effort than other team members", "I prefer to let the other team members do the work if possible," and "I give a little effort on assignments when other team members do work". A higher score on this scale indicates higher social aversion. This questionnaire was given to all experimental subjects and was filled before the experimental assignment stage in the form of a role-play.

Subject

Subjects are students of the Faculty of Economics and Business, Gadjah Mada University majoring in Accounting with the criteria that the respondents have already participated in advanced management accounting courses, which were voluntarily asked to take part in the experiment. The reason for using accounting students as a business actor is a legitimate methodological choice, but researchers must consider the complexity of their research (Nahartyo, 2009). Therefore, experimental tasks that the researcher designs can be easily mastered and understood by students. In addition, the criteria that have been conveyed assume that students already understand the budgeting process and practice in the field, so that respondents already have sufficient ability in decision making, behaviour and abilities that are equated with managers and employees in the process of actual company activities. Participants will be divided into four groups, each of which will be treated randomly in each treatment.

Experimental Procedure

The number of researchers considers five people to be ideal because researchers believe subjects enjoy participating in experiments is 30 minutes. After the laboratory experiment, the items were given compensation of IDR 20,000 plus bonus incentives that were obtained individually or tournament in the experimental activities. Also, subjects were given payment for food and souvenirs as mementos from the research team.

Materials needed for theatrical play activities (Charades) include; stopwatch, small table and chair (placed in front of the room), small notepad pads, pens/pencils, paper, index cards for writing sentences, names, phrases. And individual prizes and tournaments in the form of cash and merchandise while the room settings can accommodate all participants and facilitators.

Experimental Task

This experiment uses the Charade method. The aim of the game is for a member of the player's team to act as a word, idea, person's name, film and so on. Before the match, each team will write the words that will be displayed on the card for the other side (the more challenging to guess the words, the better) and describe the words in the envelope to the referee. The teammate must guess the answer within the facilitator's specified time (usually short). Every word is determined or the choice of the opponent. Team members demonstrate and shout if the answer approaches the hidden word/sentence. The answer is usually by nodding or shaking, repeating and or repeating the action that demonstrated until the team member understood. Every game begins by asking whether it is an object, person, place, and so on. When a team member gets the correct word, the performer or referee shows an index card that contains the actual word.

Referees need time records and mediate in cases of disputes between teams. Scores must be approved by both sides and winners based on the correct guesses. The referee controls the game, including the opposing team is not allowed to do anything to frustrate the other team in the game, and the guessing member has the opportunity to do acting.

Incentive structure (manipulation)

The two levels of incentive schemes are manipulated as follows: (1) Individual incentive schemes are paid Rp 5,000 for each correct guess during a Charade. (2) Tournament incentive schemes are paid a bonus of Rp500,000 if they pro the total performance for each game session is above 70%; otherwise, they receive compensation. The gift is calculated if all members participate in a complete game each session. Each scheme is given in stages in this experiment; all teams or individuals in the team are treated equally on the incentive scheme.

RESULTS AND DISCUSSION

Subjects

Gadjah Mada University students were asked voluntarily in experimental participation. The design of the experimental conditions and team collaboration are determined randomly. The participants were allocated to the experimental conditions randomly. In total, 75 subjects participated in this exploratory study and as many as 60 items provided data that could be processed.

Manipulation Checks

Checks for treatment of incentive schemes and social neglect are carried out by giving several questions with choice answers. The question aims to find out whether the subject understands the treatment given by the researcher. Based

on the answers to the subject, it can be seen that they experienced internalization in the experimental treatment.

Hypothesis testing

The results of the hypothesis testing of this study can be seen in table 1. The hypothesis one predicts that team performance will be high with a tendency for low social loafing rather than high social loafing. In this study, a comparison of team performance between two social loafing treatments concerning performance during working with team members was random during the experiment. The H1 test results with one way ANOVA showed that the average subject performance at the time of working in teams was not influenced by social loafing behaviour of 0.333 ($p > 0.05$) significance value 0.566. There is no difference in team performance between high social loafing and low social loafing. Hypothesis 1 is not supported.

Hypothesis 2 predicts the relationship between individual incentive structures and the tournament will be moderated by social loafing on the team. So that subjects in groups with high social loafing will perform better with different incentives, and items in organizations with low social loafing will perform better with tournament incentives. The test results show that there are differences in team performance between individual incentive schemes and tournament schemes with a significant level of 0.00 ($p < 0.05$). This means that tournament incentive schemes produce higher performance than individual incentive schemes. The results of this test are consistent with hypothesis 2, which tests the interaction between social loafing and incentive schemes. Contrary to hypothesis 1 that is not supported, which explains that there is no social loafing on the results of testing this experiment, but related to hypothesis 2 is supported. Thus providing compelling evidence that individual incentive schemes and tournament incentive schemes motivate social loafing and improve performance.

Table 1. Tests of Between-Subjects Effects					
Dependent Variable: Performance					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4242.667 ^a	3	1414.222	49.162	.000
Intercept	300758.400	1	300758.400	10455.101	.000
Incentive Scheme	2306.400	1	2306.400	80.176	.000
Social Loafing	9.600	1	9.600	.334	.566
Social loafing * Incentive Scheme	1926.667	1	1926.667	66.976	.000
Error	1610.933	56	28.767		
Total	306612.000	60			
Corrected Total	5853.600	59			
<i>a. R Squared = ,725 (Adjusted R Squared = ,710)</i>					

The test results provide empirical evidence for the effectiveness of incentive schemes indicating that performance increases are caused by incentives from individuals to tournaments. In addition to further strengthening the results of

hypothesis testing, the researcher made an observation that the team's performance was not influenced by the demographic factors of the subject or other events that occurred during the experiment.

CONCLUSION

The contribution of members in a group is an important key in achieving common goals. The tendency of organizational members to reduce their contribution (social loafing) is a threat that often accompanies as the team members increase. One way to reduce the tendency of social loafing is to make individual inputs easily identified and evaluated and provide incentive stimuli for the success of a group. The effectiveness of group or team goals in mitigating social loafing behavior among members of the work group. This study confirms the research of Naranjo-Gil (2012). In his research provides evidence of increased team performance on collectivist teams compared to individualism teams. Because of the tendency of individuals to interest personal interests even in a work team. The collective attitude between team members is difficult to observe if team members are more concerned with individual rewards.

Every individual in a group contributes and becomes an essential key in achieving common goals. The tendency of organizational members to reduce their contribution (social loafing) is a threat that often accompanies as the team members increase. Myers (2012) social loafing is a tendency for individuals to spend less effort when individuals collect individual efforts to achieve a group goal. One way to reduce the tendency of social loafing is to make individual inputs easily identified and evaluated and provide incentive stimuli for the success of a group—the effectiveness of team goals in mitigating human laziness among workgroup members. The tendency of group members to play a passive role in group activities significantly affects individuals and groups within the organization. This study confirms the research of Naranjo-Gil (2012). In his research provides evidence of increased team performance on collectivist teams compared to individuals' teams because of the tendency of individuals to interest personal interests even in a work team. The collective attitude between team members is difficult to observe if team members are more concerned with individual rewards. Social loafing behaviour harms the organization, including a decrease in motivation, responsibility and passivity in teamwork.

Overall, this research shows that teamwork can be maximal by providing incentives with tournament schemes. This study provides new insights into mitigating social loafing behaviour in team assignments. This study further explains the relationship between group member participation and performance. Through active participation, group members can improve group performance when participants have good working attitudes and significant needs for achievement. On the other hand, the relationship between member active participation and job performance is negative when participants have a poor work attitude and lack of achievement and are more concerned with individual rewards. This finding also contributes to the planning and accounting-based incentive control system concerning results related to

employee work. The results of the study indicate that the impact of the control system acts through group or team level variables.

This study has several limitations. First, the results must be interpreted within the limitations of the generalization of the study. The participants volunteered to participate in this study, and the subject was very difficult to control during the experiment. Because, non-responsive bias may exist. The demographic composition of this study and individual differences in achievement scores, attitudes, and work performance can influence results; these factors have not been investigated in this study. Performance measurement must, ideally, be carried out at various time points, not just in one time period as happened in this study.

Second, this research is carried out solely using student subjects, even though students can become managers of company management. The hope is that further research uses the company's real management team. In addition, there may be factors in the workplace that are specific to the participating departments; Therefore, carefulness is needed in generalizing the results.

REFERENCES

- Ahlgren et al., 2007. Individual versus Team-Based Reward System; A Study on How Organization Argue for Their Choice. Spring Term. School of Business, Economics and Law. Goteborg University.
- Bailey, Brown and Cocco. 1998. The effects of Monetary Incentive on Worker Learning and Performance in an Assembly Task. *Journal of Management Accounting Research*. Vol. 10
- Bownes and Lent. 2006. Performance Measure Properties and the Effect of Incentive Contract. *Journal of Management Accounting*, Vol. 18, No.1, pp 55-57
- Bruggen and Moers. 2007. The Role of Financial Incentive and Social Incentive in Multi-Task Setting. *Journal of Management Accounting Research*. Vol. 19 pp 25-50
- Chen, G., & Kanfer, R., 2006. Toward a systems theory of motivated behaviour in work teams. *Research in Organizational Behavior*, 27: 223–267.
- Church, Libby and Zhang. 2008. Contracting framing and Individual Behavior; Experimental Evidence. *Jurnal of Management Accounting Research*. Vol. 20 pp153-168
- Fessler. 2003. Experimental Evidence on the Links among Monetary Incentives, Task Attractiveness, and Task Performance. *Journal of Management Accounting Research*. Vol. 15. pp. 161–176
- Ghozali. 2008. *Structural Equation Modeling. Metode Alternatif dengan Partial Least Square Ed. 2*. Badan Penerbit Universitas Diponegoro. Semarang
- Hannan, Krishnan & Newman. 2008. The Effects of Disseminating Relative Performance Feedback in Tournament and Individual Performance Compensation Plans. *THE Accounting Review*. Vol. 83 No. 4
- Kim and Vikander. 2015. Team-Based Incentives in Problem-Solving Organizations. *Journal of Law, Economics, and Organization*. Vol.31(2): 548-566

- Libby and Thorne. 2009. The Influence of Incentive Structure on Group Performance in Assembly Lines and Teams. *Behavioural Research in Accounting*. Vol. 21, No. 2. pp. 57–72
- Karau, S. J., & Williams, K. D., 1993. Social loafing: A meta-analytic review and theoretical integration. *Journal of Personality and Social Psychology*, 65: 681–706.
- Nahartyo, E., 2012. *Desain dan Implementasi Riset Eksperimen ed 1*. UPP STIM Yogyakarta
- Schippers. 2014. Social Loafing Tendencies and Team Performance: The Compensating Effect of Agreeableness and Conscientiousness. *Academy of Management Learning & Education*, 2014, Vol. 13, No. 1, 62–81.
- Samuel, Kaplan and Cianci. 2014. The Moderating Effect of the Incentive System and Performance Measure on Managers and Their Superiors Expectations about the Manager Effort. *Behavioral in Accounting Research*. Vol. 25 No. 1
- Young, S. M., J. Fisher, and T. M. Lindquist. 1993. The effects of intergroup competition and intragroup cooperation on slack and output in a manufacturing setting. *The Accounting Review* 68 3: 466–481.
- Xu and Turtle. 2005. The Role of Social Influences in Using Accounting Performance Information to Evaluate Subordinate: A Causal Attribution Approach. *Behavioral Research in Accounting*. Vol 17 pp.191-210