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The "otemori" shift of group decision making: Are groups more selfish than individuals?

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The "otemori" shift of group decision making: Are groups more selfish than individuals?

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Abstract

"Otemori" is a Japanese term referring to a kind of selfish behavior. A person in charge demonstrates otemori by making a decision or an arrangement that suits himself/herself or his/her peers. For example, CEOs or members of an assembly tend to raise their own salary too much. In an experiment, participants were assigned to two-person groups (dyads). At first they read a questionnaire and made an individual decision about the amount of their own salary and their co-partner's salary. This was followed by a discussion within each group that led to a salary decision by consensus. Results indicate that only groups of peers, as opposed to groups of strangers, demonstrate the otemori shift. Peer groups set higher salaries than individuals do when setting their own salaries, but not when setting their co-partner's salaries. This is regarded as the otemori shift of group decision making. Groups composed of strangers do not demonstrate this otemori shift. This suggests that groups are more selfish than individuals if they are composed of peers.

Keywords: Otemori; Risky shift; Selfish shift; Group decision making

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1 Introduction

"Otemori" is a Japanese term referring to a kind of selfish behavior. It seems to have no English equivalent. A person in charge demonstrates otemori by making a decision or an arrangement to suit himself/herself or his/her peers.

Though it is a Japanese word, otemori is a universal phenomenon. For example, CEOs or members of an assembly tend to raise their own salary too much. The otemori phenomenon is observed not only in individual decisions but also in group decisions. There is a large amount of literature documenting and analyzing the difference or discontinuity between individual decision making and group decision making. In this paper I provide an experimental investigation of the otemori phenomenon in individuals and groups.

2 Related literature

2.1 Group risk attitude

Research demonstrates that risk attitude of groups are different from that of individuals. A surprising finding in this research is the group shift phenomenon. The literature on group shift in social psychology dates back to the early 1960s. Wallach and his colleagues used the "choice dilemma questionnaire" to investigate risk attitudes of individuals and groups (Wallach et al., 1962). They found that group consensus is more risk seeking than the average decision made by individuals prior to a group discussion. This phenomenon was termed "risky shift." Further experiments were performed and results indicated that risky shift phenomenon was not a robust phenomenon.

Moreover, some research found the opposite phenomenon: group consensus was more risk averse than the average decision made by individuals prior to a group discussion. This was termed "cautious shift." Generic terms for both shifts include "choice shift" and "group polarization." Many theories have been developed to account for choice shift. Pruitt (1971) noted that there were four theories that attributed choice shifts to the operation of widely held human values: diffusion-of-responsibility theory, familiarization theory, leadership theory, and value theory.

Diffusion-of-responsibility theory was advanced by Wallach, Kogan, and their collaborators (Bem et al., 1965, Wallach et al., 1964). It occurs when the responsibility for negative consequences can be psychologically shifted ("diffused") from one's own

shoulders to those of the other group members. Reduced anxiety makes it possible to accept the risky alternative at a lower probability of success (Pruitt, 1967). This theory only explains shifts toward risk, not shifts toward caution, and so may not be a promising theory for overall choice shift. However, it seems to be related to unethical decision making like otemori.

2.2 Group selfness

Some studies compared the decisions of individuals and groups through experiments using games, which imply that groups are more competitive, indiscreet, or selfish than individuals. This phenomenon is called "selfish shift."

Schopler and his colleagues conducted experiments of the prisoner's dilemma game (Schopler et al, 2001). In such experiments, the mean proportion of competitive choices of groups was .30 and that of individuals was .01, which indicated that groups were more competitive than individuals.

Bornstein and Yaniv conducted two experiments that compared the ultimatum game played by individuals with the same game played by three-person groups (Bornstein and Yaniv, 1998). The game-theoretic solution for the game was for player 1 (proposer) to propose to keep all but a single point and player 2 (responder) to accept this proposal. In both experiments, groups offered less than individuals, but, as indicated by the low rejection rate in both treatments, groups were also willing to accept less.

Bornstein and his colleagues conducted two experiments of the centipede game that compared individuals and three-person groups (Bornstein et al., 2004). Assuming that both sides are concerned only with maximizing their own payoffs, the game theoretic solution, derived by backward induction, was for the first mover to exit the game at the first decision node. Both experiments found that although neither individuals nor groups fully complied with this solution, groups did exit the game significantly earlier than individuals.

Though many studies demonstrate selfish shifts, the cause of selfish shift has not been investigated thoroughly. Ingroup favoritism and outgroup derogation may have some potential in explaining selfish shifts. Ingroup favoritism refers to people's tendency to automatically associate positive characteristics with ingroups. Outgroup derogation refers to people's tendency to automatically associate negative characteristics with outgroups.

2.3 Groupthink

A group composed of the brightest members can sometimes make a foolish decision. "Groupthink" is a term referring to such a phenomenon. It was coined by Janis in tribute to "doublethink," which appeared in George Orwell's novel "1984."

Doublethink is "a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' strivings for unanimity override their motivation to realistically appraise alternative courses of action" (Janis, 1972, p.9).

Janis extracted his original concept of groupthink from historical case studies (Bay of Pigs, North Korea, Pearl Harbor, Viet Nam, etc.) and cited four antecedents of groupthink (cohesion, insulation, lack of impartial leadership, and lack of methodical decision-making procedures). The concept of groupthink received remarkable attention from researchers in social psychology and management. Yet, despite the popularity, there are not many empirical investigations. Only about two dozen empirical studies have been conducted on the concept in the 25 years since its publication (Turner and Pratkanis, 1998).

Some antecedents cited by Janis have been called into question. For example, neither McCauley (1989) nor Tetlock et al. (1992) found group cohesion to be predictive of groupthink. There are some laboratory tests that investigated the effect of cohesion, but they have yielded weak or no support for the hypothesized relationships between cohesion and groupthink symptoms (Esser, 1998).

3 Hypotheses

This article sets three hypotheses:

- H1: When deciding their own salaries, groups will set higher salaries than individuals.
- H2: When deciding others' salaries, there will be no differences between the amount of salaries set by groups and that of individuals.
- H3: Groups composed of peers will demonstrate greater otemori shifts than groups composed of strangers.

H1 and H2 constitute the otemori shift. H3 is derived from diffusion of responsibility theory of risky shift and cohesiveness as an antecedent of groupthink. Though controversial, groups of peers may be more selfish than groups of strangers.

4 Experimental design and procedures

This experiment used the standard procedure of the choice dilemma questionnaire: two individuals first make individual choices, then jointly decide on a group choice for the same problem.

Subjects

222 undergraduates at Komazawa University participated in the experiment.

Procedure

128 participants were assigned to two-person groups of peers, and 94 participants were assigned to two-person groups of strangers. The participants read Questionnaire 1 and wrote down their individual responses. Then they read Questionnaire 2 and, after discussing with each other, wrote down their consensus response.

5 Results and discussion

Analysis 1

If the group's response (consensus response) was larger (i.e. higher salary) than both of the former individual responses, the phenomenon is termed "strong otemori shift." If the group's response (consensus response) is smaller than both of the former individual responses, it is termed "strong constraint shift."

A binomial test was used between the numbers of strong otemori shift and strong self-control shift. In regards to the participants' own salaries, groups of strangers indicated no significant differences while groups of peers showed more "strong otemori shifts" than "strong constraint shifts," but the difference was not significant (z=1.84,

p<.10). Fortheir co-partner's salary, there were no significant differences in either groups.

Analysis 2

The group's response and former individual response were compared for each participant. If the group's response was larger than his or her former individual response, it is termed "otemori shift." If the group's response is smaller than his or her former response, it is termed "constraint shift."

A binomial test was used between the numbers of otemori shifts and constraint shifts. For the participants' own salaries, only groups of peers demonstrated more otemori shifts than self-control shifts (z=2.01, p<.05). For their co-partner's salary, there were no significant differences in either types of groups.

Analysis 3

As an additional analysis, group responses and individual responses were compared using Wilcoxon's signed-ranks test. If a group's response was significantly larger than the individual responses, it is regarded as a kind of otemori shift.

For participants' own salary, groups of peers indicated significant otemori shifts (z=2.45, p=.014) while groups of strangers indicated no significant differences. However, for their co-partner's salary, only groups of peers indicated otemori shifts, but it was not significant (z=1.97, p=.061).

Discussion

Groups composed of peers set higher salaries than individuals for their own salary and did not exhibit otemori shift for their co-partner's salary. The groups of strangers displayed no shifts. In other words, only groups of peers demonstrate otemori shift while groups of strangers did not. Therefore, H1 is only partially supportedwhile H2 and H3 are supported. Otemori shift may be a phenomenon of peer groups, which implies that groups may be more selfish than individuals if the members are in close relationships with each other.

In general, people can talk more frankly with their peers than with strangers. Human's hidden selfishness may easily emerge in groups of a close relationship. This may have some connection to the diffusion of responsibility hypothesis of risky shift.

6 Summary and future plans

Data suggest that groups of peers tend to show "otemori" shifts and groups of strangers do not show "otemori" shifts. It would be beneficial to compare decisions among various types of groups. Cross—cultural comparison between individualist culture and collectivist culture would also be beneficial.

References

- Bem, Daryl J., Michael A. Wallach, and Nathan Kogan (1965). Group decision-making under risk of aversive consequences. Journal of Personality and Social Psychology, 1965, 1, 453-460.
- Bornstein, Gary, Tamar Kugler, and Anthony Ziegelmeyer (2004). Individual and group decisions in the centipede game: Are groups more "rational" players? Journal of Experimental Social Psychology, 40, 599-605.
- Bornstein, Gary and Ilan Yaniv (1998). Individual and group behavior in the ultimatum game: Are groups more "rational" players? Experimental Economics, 1, 101–108.
- Esser, James K. (1998). Alive and well after 25 years: A review of groupthink research. .

 Organizational Behavior and Human Decision Processes, 73, 116-141.
- Janis, Irving (1972). Victims of groupthink: a psychological study of foreign-policy decisions and fiascoes. Boston: Houghton, Mifflin.
- McCauley, Clark (1998). Group dynamics in Janis's theory of groupthink: Backward and forward. Organizational Behavior and Human Decision Processes, 73, 142-162.
- Pruitt, Dean G. (1971). Choice shifts in group discussion: An introductory review. Journal of Personality and Social Psychology, 20, 339-360.
- Schopler, John, Chester A. Insko, Jennifer Wieselquist, Michael Pemberton, Betty Witcher, Rob Kozar, Chris Roddenberry, and Tim Wildschut (2001). When groups are more competitive than individuals: The domain of the discontinuity effect. Journal of Personality and Social Psychology, 80, 632-644.
- Tetlock, P. E., Peterson, R. S., McGuire, C., Chang, S., & Feld, P. (1992). Assessing political group dynamics: A test of the groupthink model. Journal of Personality and Social Psychology, 63, 403–425
- Turner, Marlene E. and Anthony R. Pratkanis (1998). Twenty-five years of groupthink theory and research: Lessons from the evaluation of a theory. Organizational

- Behavior and Human Decision Processes, 73, 105-115.
- Wallach, Michael A., Nathan Kogan, and Daryl J. Bem (1962). Group influence on individual risk taking. Journal of Abnormal and Social Psychology, 65, 75-86.
- Wallach, Michael A., Nathan Kogan, and Daryl J. Bem (1964). Diffusion of responsibility and level of risk taking in groups. Journal of Abnormal and Social Psychology, 68, 263-274.

APPENDIX: QUESTIONNAIRE

*Original document was described in Japanese. This is a translated version with some minor changes.

Five years ago you and your friend Takashi found a sponsor and started Komadream Corporation, a video game production company. Now it has about fifty employees. Formally you are the chair and Takashi is the CEO, but both of you consider yourselves equal partners.

Takashi trusts you to determine the annual salaries of all the managers and employees, including you and Takashi. You are now considering the salaries of three key persons of the company: you, Takashi, and Ryota.

Ryota is the chief designer of "Eternal World," which was a blockbuster hit. Last year Komadream had gross sales of ¥5 billion, and "Eternal World" accounts for 60% of those sales. Of course, game creation involves teamwork, but the success of "Eternal World" was due to Ryota's outstanding ideas and imagination. You have to reward him for his contribution, which will also motivate other employees. If Ryota is not satisfied with his salary, he may be poached by a competitor.

You and Takashi have been running the company well. Both of you recognized Ryota's talent when he was just an obscure game designer. Both of you recruited him and provided him with a large amount of development funding. It was a bet-the-company decision. Additionally, both of you are persons of high reputation in the video game industry and have had some offers from headhunters. Neither you nor Takashi are shareholders of Komadream so you cannot expect capital gains or dividends. You and Takashi have a mutual agreement to receive the same salary.

There are no caps on the salaries, but they must be enough to keep talented persons at the company. On the other hand, you have to keep some retained earnings for the growth of the company. Moreover, the shareholders and bankers may object if the salaries are too high. For reference, the salary of the COO is fixed at \\$12 million because he was sent from the main financing bank with that condition.

Please write down the amount of the proper salaries for you (which is the same amount as Takeshi's salary) and Ryota.

For the first step, each of you considered the salaries individually. Now you are at the second step. Both of you are the co-heads of Komadream Corporation. Please discuss until you reach a consensus on the salaries.

Please note:

- $\cdot\,$ You do not need to stick to your former (individual) response.
- \cdot The consensus salary must be different from the average of each other's former (individual) response.