

## Abstracts

### Cooperation for Problem-Solving: The History of Quality Circles in Japan

**Shinichi Ogawa** (Yokohama National University)

The aim of this paper is to review the history of quality circles (QCs) implemented by Japanese firms, thereby identifying factors that have enabled QCs to be sustained in Japan for a long period of time. In this paper, QCs refer to continuous activities by groups composed of a small number of members belonging to the same workplace, with the goal of solving problems in operations. QCs originated from quality control in Japan during the early 1960s. They became widespread from the latter half of the 1960s among Japanese firms, and also attracted attention abroad in the 1980s. Despite a decline in their implementation rate from the 1990s on, quite a few firms continue to employ QCs as of 2020. QCs are implemented by utilizing standardized and simplified problem-solving tools and procedures. This visualization of problem-solving promotes information sharing among staff members and enables them to refer to excellent cases from other firms and industries. There are several means of diffusion and promotion for QCs, such as specialized journals and books, training programs provided by firms and diffusion organizations, and in-house and external conferences for presentations. Cooperation between firms located in the same region also contributes to sustaining QCs.

### Team Effectiveness and Its Determinants: From a Psychological Perspective

**Hiroyuki Yamaguchi** (Kyushu University)

This article reviews current teamwork research from the perspective of social psychology, and especially group dynamics and organizational science, aiming to clearly identify the concept of team effectiveness and to examine what variables in team activities affect and build up team effectiveness. After clarifying that team effectiveness is understood as the degree to which the team's performance achieves its goals, it is revealed that developing measurement indicators for qualitative performance such as production of creative ideas will be an important issue for future team effectiveness research. Referring to the IPO and IMO models presented by previous studies, I identify main variables that affect team effectiveness and present a hypothetical model that can comprehensively illustrate their interaction dynamics. Lastly, considering future research on team effectiveness, as the formation of virtual teams will become popular in the near future, it is evident that the effects of team diversity on team effectiveness will become important objects of research. I also demonstrate that it is necessary to examine changes and growth of team members as well as changes and development at the team level as fresh indicators of team effectiveness.

### Teamwork: An Organizational Economics Perspective

**Akifumi Ishihara** (The University of Tokyo)

This paper reviews advantages and disadvantages of teamwork in organizations from an organizational economics perspective. While traditional Japanese firms, especially in manufacturing sectors, have utilized teamwork among workers and achieved high productivity, U.S. firms that introduced teamwork have not necessarily achieved as high a level of productivity as such Japanese firms. Thus, despite its potential benefits, teamwork does not necessarily work well, and so, in introducing teamwork, it is necessary to identify environments and conditions in which teamwork functions properly. Among various potential inefficiencies in organizations, we focus on incentive problems, which are one of the most important problems in economics, and consider moral hazard where workers' effort level is not observable. First, we consider an environment with multiple workers and compare independent evaluation, whereby each worker is individually evaluated, with group evaluation, in which the workers are evaluated as a team. The comparison gives us an insight into the effect on mitigation of moral hazard from the viewpoints of statistical properties of performance measurements, coordination, long-term relationships, monitoring, and incentives to help.

Next, we point out a problem with a lack of provision of effort when only aggregated performance measurement among workers in a team is observable. To clarify the source of the inefficiency and remedial action, we discuss team size, budget-breaking, and team composition.

#### Conflict Management Framework

**Takt Shishido** (Musashino University)

The development of conflict studies has been driven by the results of meta-analyses since the 2000s. The aim of this study is to develop a framework on conflict management based on the findings in meta-analyses in 2003, 2012, and 2013 as well as in recent studies of conflict. The framework is composed of three parts—Distinguishability, Prospects, and State/Process—and shows that we should focus on all three for effective conflict management.

#### The State of Collaboration in Japanese Companies: Focusing on the Relationship between the Team and the Individual

**Hajime Ohta** (Doshisha University)

The state of collaboration in Japanese companies has been a topic of discussion in recent years. The teamwork which had been a strength of Japanese companies was based on the homogeneity of the team members. However, the advantages of teamwork based on homogeneity have been lost due to changes in the environment, such as the transition from an industrial society to a post-industrial society, globalization, and the advancement of women in the workplace. Currently, teamwork based on heterogeneity is required. Teamwork based on heterogeneity is said to have advantages in terms of creativity and in bringing vitality to an organization. However, whether or not its strengths are realized depends on various conditions surrounding the organization and the team, one of which is the method of integrating the organization and individuals. I have presented two models: direct integration and indirect integration. In the traditional former model, individuals pursue the same purpose as the organization when they participate in collaboration. On the other hand, in the latter model, the purposes of various individuals are integrated with the goals of the organization by external mediators such as markets, customers, and society. Research on white-collar workers who belong to major corporations nationwide indicates that indirect integration is more effective than direct integration in terms of both productivity and individual satisfaction in highly specialized occupations. It has also been found that the role of infrastructure is important for organizations.

#### Workgroup Diversity and Performance: A Review of the Literature and Directions for Future Research

**Tomohiko Tanikawa** (Ritsumeikan University)

The purpose of this paper is to review existing research on the relationship between workgroup diversity and performance, and to provide future research directions. In recent years, there has been a growing interest in workforce diversity from both academic and practical perspectives, especially as a source of performance improvement. However, existing studies have provided inconsistent findings about the relationship between workgroup diversity and performance. Moreover, it has been pointed out that the research has been stagnating in recent years. Therefore, in order to promote the development of research fields, it is necessary to confirm the current state of the research area and to present the direction of future research. To achieve these objectives, this paper reviews the most recent quantitative empirical studies published in major journals. The results confirmed the inconsistent relationship between workgroup diversity and performance, as noted in existing research. Furthermore, in terms of recent research trends, I confirmed that various personal attributes were used, some theories were intensively adopted, and mediating variables associated with mainstream theories and moderating variables across levels of analysis were used. Based on this review, this paper indicates that future research should include perspectives on disparity and inequality, which have been neglected in existing

research. Furthermore, I suggest that specific directions should include revisiting demographic personal attributes, integrating the perspective of disparity and inequality into theoretical explanations, and including variables related to disparity and inequality in mediating and moderating variables.

Space Design and Physical Practices in Non-territorial Offices: Achieving Creative Teamwork through Fluid Relocation

**Shintaro Matsunaga** (Nagano University)

**Osamu Umezaki** (Hosei University)

**Makoto Fujimoto** (The Japan Institute for Labour Policy and Training)

**Shingou Ikeda** (The Japan Institute for Labour Policy and Training)

**Itaru Nishimura** (The Japan Institute for Labour Policy and Training)

**Naonori Akiya** (Yamaguchi University)

The development of team creativity using free thinking by knowledge workers has become a goal of Human Resource (HR) practices in many companies. One of the ways to achieve these goals is space design in non-territorial offices. This study aimed to analyze the impact of non-territorial offices on team creativity and to understand physical practices of managers in such offices through observation and ethnomethodology. As a result of this analysis, two major points were revealed. First, even within the overall free address system, we observed that there was a loose agreement on the use of space, and that the office was divided into areas where there was a lot of interaction between people from different departments and areas where there was no such interaction. Second, the managers physically situated employees in such a way that maintained their visibility within the team and consequently promoted teamwork that did not rely solely on face-to-face contact. Moreover, there was a propagation of inter-departmental interaction in the office. In other words, the non-territorialization of the office leads to “de-localization” but also causes various problems of work co-ordination. Hence, “re-localization” was created by the use of fixed seats. In addition, efficient managers used physical techniques to keep their teams working creatively in a fluid workplace.