

# Chapter 100

## Newly Created Heterogeneous Groups: The Time to Adjust to Significant Race and/or Gender Differences

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### ABSTRACT

*The primary purpose of this study is to investigate the influence of racial and gender diversity on group process and problem solving in an academic setting. The importance of this dynamic is its value in preparing students for the workplace. The supposition is if heterogeneous groups had enough time to resolve group process conflicts, they could significantly increase their performance on group tasks (Davis, 2012). Moreover, their later performance on tasks should exceed the performance of the homogeneous groups (Davis, 2012). However, how much time, as well as tasks, does it take heterogeneous groups to start to exceed the performance of the homogenous groups? Data for the study was collected from upper-level undergraduate male and female students registered in a sixteen-week business course taught by one instructor at a large university in a metropolitan city in the northeastern United States. There were five racially mixed groups of seven members in the four sections of the course. During this period, group members met frequently for a series of case analyses. Only balanced heterogeneous groups significantly enhanced their groups' performance on complicated problem-solving tasks over time. They exceeded the performance of all homogeneous groups, except that of the Black American female homogeneous groups. Ultimately, the academic grades of the balanced heterogeneous groups as well as their individual members were in the upper half of all grades issued.*

### INTRODUCTION

It is imperative to have job applicants possessing superior levels of teamwork knowledge, skills, and abilities (KSAs) (Chen et al., 2004). In addition, it is vital to have university courses projected to

cultivate these teamwork KSAs (*ibid.*), especially to enable students to be productive employees in a diverse workplace. Davis (2012) investigated the effects of racial and/or gender diversity on the type of group problem solving.

DOI: 10.4018/978-1-4666-9624-2.ch100

The primary purpose of this study was to investigate the time of adjustment, where there is a positive influence of racial and gender diversity on group process (the effect of group actions/interactions over time on individual group members) and problem solving by:

1. Analyzing group performance on a series of difficult problem-solving tasks of significant importance to group members.
2. Utilizing a longitudinal design in which the communication within, and performance of homogeneous and heterogeneous groups were contrasted.

Davis (2012) concluded that if the assignment was a one-time group assignment, whereby, the group did not have enough time to make adjustments, then the homogenous group seems to do better than the heterogeneous group. However, if there were a multiple group assignment, and the group did have enough time to make adjustments in the group process over time, then the heterogeneous (diverse) group seems to do better than the homogeneous group as a whole, except for the homogenous black female group. Diverse groups are those having gender, ethnic, and national differences among members; therefore, being called heterogeneous groups, whereas homogenous groups contain members from one gender, ethnic, or national group.

This research attempts to answer the question: At what time does a high level of racial and/or gender diversity formulate a positive consequence on group communication and group problem solving?

## **REVIEW OF RELATED LITERATURE**

Early work on group effectiveness focused primarily on simple output success. For example, Shea and Guzzo (1987) describe group effectiveness as the “production of designated products or service per specification” (p. 29). However, in this con-

ceptualization, there is no mention of the likelihood that a team can “burn itself up” because of inequality or disruptive relations, leaving members reluctant to remain working in them (Hackman & Oldham, 1980:169). Thus, there would be no output. The ability of the group to function successfully is a determinate of output.

Homogeneous groups tend to value their similarities, rather than the differences that would exist in heterogeneous groups; this is an attitudinal and perceptual bias (Brewer, 1979) as well as an expression of ethnocentrism. Even though heterogeneous groups, formed by gender mix or personality profile differences, have experienced more process problems than homogeneous groups (Anderson, 1971; Feldman, Sam, McDonald, & Bechtel, 1980; Hoffmann, 1959; Hoffmann & Maier, 1961; Mitchell & Fao, 1969; Nemeth, 1986; Steiner, 1972; Triandis, Hall, & Evans, 1965), they also have been more effective at solving complex problems (see Shaw [1983] for an extensive review). This demonstrates how often debate and opposition in groups can lead to positive conversation and knowledge. Even though it was defined in earlier group problem solving research (Adler, 1991), diversity based on racial and national differences seems to restrict group process, Davis (2012) states that these newly created heterogeneous groups in this study did not have enough time to adjust to significant race and nationality differences. Therefore, it was likely that this kind of diversity was a short-term obstacle to effective group process and performance, whereby, addressing how a collectivity of individuals develop into a successful team (Davis 2012).

**Hypothesis 1a:** Newly created heterogeneous groups will have less effective communication processes than newly created homogeneous groups.

**Hypothesis 1b:** Newly created heterogeneous groups will function less effectively on difficult problem-solving assignments than newly created homogeneous groups.

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