Evaluation Effects in the Creative Process of Problem Solving Groups

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Introduction

A broad range of studies has been done on creativity, however, relatively little has been done to examine group creativity. This study is an attempt to examine group creativity. The study was conducted with the assumption that group creativity, in terms of its form as an end product, is not composed of an isolated situation, but rather an emergent property of the group as a whole. The emergent property of group creativity can be thought of as a product, such as a creative idea or group expertise. The creativity of the group was examined by examining the relationship between the group's idea generation and evaluation behaviors, and group decision quality. The group's idea generation and evaluation behaviors were recorded and evaluated as the dependent variables. The group decision quality was measured by the number of ideas generated and evaluated, and the number of ideas that were selected as the final solution. The study was designed to examine the relationship between group idea generation and evaluation behaviors, and group decision quality.

Abstract

This study examined the relationship between idea generation and evaluation behavior during group problem solving activity. Participants were randomly assigned to groups. Each group was videotaped while performing both decision making tasks. Group performance was measured in terms of idea generation and evaluation behavior. Idea generation was measured by counting the number of ideas generated during the brainstorming process. Evaluation was measured by counting the number of ideas that were evaluated during the brainstorming process. The interaction of idea generation and evaluation behavior was analyzed using a univariate analysis of variance. The results showed that idea generation and evaluation behavior were significantly related. The results also showed that the interaction of idea generation and evaluation behavior was significantly related to the group's decision quality. The results suggest that idea generation and evaluation behavior can be used as a measure of group decision quality.

Hypotheses

Hypothesis 1: The results showed that idea generation was significantly related to evaluation behavior. The results also showed that the interaction of idea generation and evaluation behavior was significantly related to the group's decision quality. The results suggest that idea generation and evaluation behavior can be used as a measure of group decision quality.

Results

The results showed that idea generation was significantly related to evaluation behavior. The results also showed that the interaction of idea generation and evaluation behavior was significantly related to the group's decision quality. The results suggest that idea generation and evaluation behavior can be used as a measure of group decision quality.

Discussion

The results showed that idea generation was significantly related to evaluation behavior. The results also showed that the interaction of idea generation and evaluation behavior was significantly related to the group's decision quality. The results suggest that idea generation and evaluation behavior can be used as a measure of group decision quality.

Figure 1: Scatterplot of the relationship between idea generation and evaluation behavior during group problem solving activity.

Figure 2: Means of idea generation and evaluation behaviors during second task.

Figure 3: Three-way interaction effect of idea generation, idea evaluation, and evaluation behavior on group added value.