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# The Effects of Types Performance Feedback and Perceived Competence on Task Interests

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## Introduction

In learning setting, performance feedback is the important factor in determining the learner's interests and motivation. Most research on feedback (e.g. Narciss, 2004) has focused on the relationship between the types of feedback and level of performance. However, in order to optimize the effect of feedback, it is necessary to delineate the interactive effect between types of feedback and individual characteristics on intrinsic motivation. The purpose of this study is to find the effective types of performance feedback on intrinsic motivation, and to investigate the interactive effects between types of performance feedback and individual difference variables (perceived competence, performance goal orientation) on task interest and performance satisfaction.

## Method

### Participants

Participants were 133 undergraduates (40 males and 93 females).

### Design

The 2 (high or low perceived competence)  $\times$  2 (high or low performance orientation)  $\times$  3 (gain, lose, or combination of the feedback) factorial design was used.

### Materials, Procedures & Measures

The experimental materials were a spurious web-based critical thinking test. To manipulate the level of competence during practice session, the differential feedbacks were provided depending on the condition. For high competence condition, the score of 91-95 points and the top 7-8% rank standing were provided, whereas 65-69 points and the rank of bottom 30% were provided for low competence condition.

The three types of performance feedback conditions were the gain condition, the lose condition, and the combination of gain and lose. In the gain condition, two medals (reinforcement) were provided for success and nothing was lost for failure. In the lose condition, no additional medal was provided for success and two medals were taken for failure. The combined condition (gain + lose) obtained two

medals for success and lost two medals for failure. Task interests and performance goal orientation were assessed. Cronbach  $\alpha$  coefficient was relatively .68 and .67 respectively.

## Result

We compared the students evaluation under two conditions (high and low group of perceived competence) and found that the rating of expected performance percentile rank was significantly different ( $t = -8.27, p < .01$ ) between the high perceived competence group (23.4%) and the low perceived competence group (44.6%).

There was a significant interaction effect on task interest between perceived competence and performance feedback ( $F(2, 121) = 4.47, p < .05$ ), revealing that participants with high perceived competence had higher task interest in gain and combined condition, whereas the participants with low perceived competence showed lower task interest in the lose condition. The main effect of performance goal orientation was significant ( $F(1, 121) = 4.58, p < .05$ ), indicating participants with high performance goal orientation was more interested in task.

## Conclusion

It was found that the highly competent students preferred the gain and the lose condition to the gain & lose condition, while the low competence students showed greater interests in task in the gain condition and the gain & lose condition. It is concluded that the gain type feedback would enhance the task interests and performance satisfaction particularly for low competence students.

## Acknowledgement

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## Reference

- Narciss, S. (2004). The impact of informative tutoring feedback and self-efficacy on motivation and achievement in concept learning. *Experimental Psychology, 51*(3), 214-228.