



INDIVIDUAL PRESENTATION PROPOSAL
2004 APA Annual Convention

Proposal ID: ind23433

- 1. Title of presentation:** Task performance and mood: Role of feedback, gender, and self-esteem
First index term: 34.3 personnel
Second index term: 48 Personality
- 2. Principle author:** John R. Aiello, PhD
Mailing address: Dept of Psychology, Rutgers University, 53 Ave E, Piscataway, NJ 08854-8040
E-mail address: jraiello@rci.rutgers.edu
Phone/Fax number: 732-445-2592 (office), 732-744-1140 (home), 732-445-0036 (fax)
Affiliation: Rutgers University, New Brunswick, NJ
Membership status: APA Member
- 3. Coauthors:**
(1) Joshua M. Feinberg, PhD St. Peter's College, Jersey City, NJ
- 4. Accommodation request:** None
- 5. Preferred mode of presentation:** Poster Session
- 6. Special equipment will be used in presentation:** None
- 7. Summary to be posted on the APA Web site:** No
- 8. Division to submit this proposal:** 14 - Industrial and Organizational

Task performance and mood: Role of feedback, gender, and self-esteem

Attempts to clarify the impact of feedback on performance have not been conclusive. The literature (see Ilgen, Fisher, & Taylor, 1979; Kluger & DeNisi, 1996) reflects that confusion remains as to whether feedback leads to an increase, decrease, or no change in performance. In attempting to establish a theory, studies have explored feedback sign, feedback style, and the interaction of feedback with intervening variables such as mood, and self-esteem. However, it is hard to interpret this research on feedback because the nature of the feedback has typically not been well specified, and kept consistent throughout the study. Perhaps the inconclusive findings are due to the presence of contaminants that result when factors are poorly defined. Kluger and DeNisi's literature review and meta-analysis found these inconsistencies to be significant obstacles to development of a coherent theory and offer their FIT as a preliminary attempt to compensate for the short-comings of previous research.

The present study evaluated the impact on performance and mood of feedback versus no feedback, comparative versus absolute feedback, positive versus negative feedback, and the differential responses resulting from an individual's level of self-esteem.

Methods

In order to study the effects of comparative and absolute feedback, four conditions were created:

In the first condition, participants did not receive any feedback. In the second condition, participants received only absolute feedback (the Number Correct). In the third condition, participants received both absolute feedback and [bogus] comparative feedback indicating that compared to others who had performed the task, they had performed at the 35th percentile. In the fourth condition, participants received both absolute feedback and [bogus] comparative feedback indicating that compared to others who had performed the task, they had performed at the 85th percentile.

The participants in this study consisted of 130 undergraduate students from general psychology classes. The experiments were conducted in a group setting in a computer lab. In each session, there was a "supervisor" who guided them through the task instructions, and an "assistant" who was responsible for distributing data sheets and questionnaires to the participants.

The task used in this study was a computerized data entry task. The program consisted of three stages: one practice session, and two task sessions. At the end of each task session, questions were distributed in a paper-and-pencil format. For those conditions containing feedback, the feedback message was displayed on the screen after the first task session. After the second task session, only the number entered correctly was displayed on the screen. The questionnaires included the Rosenberg (1965) Self-Esteem scale, which was given to the participants before the study began, and the Mano (1992) Mood Circumplex scale, which was distributed after the first and second task sessions. A Post-Experimental questionnaire was distributed after the second Mood Circumplex scale.

Results and Discussion

Task Performance A three-way analysis of covariance with a median-split of Self-Esteem, Feedback Condition (the four feedback conditions outlined above), and Gender as independent variables, and task performance as the dependent variable, was conducted. Scores for the first data entry session were used as covariates for scores from the second session to eliminate any practice effects.

The analysis of covariance indicated a significant main effect for Feedback Condition on the

Performance. The Percentage of Correct Responses was lowest for participants who received No Feedback ($M = .87$), as compared to participants who received the Number Correct ($M = .94$), participants who received the Number Correct/ 35th Percentile ($M = .93$), and participants who received the Number Correct/ 85th Percentile ($M = .91$), $F(3,98) = 2.809$, $p < .05$

Mood Three-way analyses of variance with the eight subscores of the mood circumplex scale as the dependent variables indicated several interesting interactions. A variety of moods were affected by feedback. For example, those participants who were the most bored over all were those with Low Self-Esteem receiving No Feedback ($M = 4.86$), and those with Low Self-Esteem receiving the Number Correct/35th percentile ($M = 4.86$). The least bored were Low Self-Esteem people receiving the Number Correct/85th Percentile ($M = 3.42$), $F(3,99) = 7.089$, $p < .05$. Participants were the least calm when receiving either No Feedback ($M = 4.00$) or the Number Correct ($M = 4.01$), and the most calm when receiving the Number Correct/35th Percentile ($M = 4.58$), or the Number Correct/85th Percentile ($M = 4.43$), $F(3,99) = 4.865$, $p < .05$

Post-Task Scales Seven scales were created in order to cluster the data for the Post-Task Questionnaire. Two illustrative examples of the results of the three-way analyses of variance include: men who received the Number Correct/35th Percentile experienced a low negative emotional reaction ($M = 2.49$), but Women under this condition experienced a high negative emotional reaction ($M = 2.08$). Men who received No Feedback experienced the most negative emotional reaction ($M = 1.90$), but Women under this condition experienced the least negative emotional reaction ($M = 2.67$). However, Women who received the Number Correct/85th Percentile experienced an equal level of negative emotional reaction equal to Women receiving No Feedback ($M = 2.67$), $F(3,97) = 3.181$, $p < .05$.

The present data indicated that feedback of any kind (i.e., positive or negative comparative, absolute) enhanced performance as compared to no feedback at all. This result supports conclusions by Ammons (1954), and Karl, O'Leary-Kelly, and Martocchio (1993). Though feedback does increase performance, its interaction with other variables (e.g., self-esteem) moderates its impact. Both men and women who had High Self-Esteem did not perform as well in the condition where they were told that they had performed at the 85th Percentile. In this case, the positive feedback did not significantly increase performance because it apparently precipitated little need to try harder (Mesch, Farh, and Podsakoff, 1994). On the other hand those who had Low Self-Esteem, showed the greatest increase in performance in this condition, and were also more interested in the task overall than were those with High Self-Esteem. This supports research that concludes that people with Low Self-Esteem are more motivated when receiving positive feedback (Kernis, Brockner, and Frankel 1989). It also helps clarify the role that feedback sign has on performance. The interaction with self-esteem shows that positive feedback may not always result in increased performance.

References

- Ammons, R.B. (1956). Effects of knowledge of performance: A survey and tentative theoretical formulation. *The Journal of General Psychology*, 54, 279-299.
- Ilgen, D.R., Fisher, C.D., & Taylor, M.S. (1979). Consequences of individual feedback on behavior in organizations. *Journal of Applied Psychology*, 64, 359-371.
- Karl, K.A., O'Leary-Kelly, A.M., & Martocchio, J.J. (1993). The impact of feedback and self-efficacy on performance in training. *Journal of Organizational Behavior*, 14, 379-394.

Kernis, M.H., Brockner, J., & Frankel, B. (1989). Self-Esteem and Reaction to Failure: The Mediating Role of Overgeneralization. *Journal of Personality and Social Psychology*, 57(4), 707-714.

Kluger, Avraham N., & DeNisi, Angelo (1996). The effects of feedback interventions on Performance: A historical review, a meta-analysis and a preliminary feedback intervention theory. *Psychological Bulletin*, 119(2), 254-284.

Mesch, D.J., Farh, J.L., & Podsakoff, P.M. (1994). Effects of feedback sign on group goal setting, strategies, and performance. *Group and Organization Management*, 19, 309-333.