**Abstract**

The present study examines the association between dysfunctional team behavior and team performance. Data included measures of teams' dysfunctional behavior and negative affective tone as well as supervisors' ratings of teams' (nonverbal) negative emotional expressivity and performance. Utilizing a field sample of 61 work teams, the authors tested the proposed relationships with robust data analytic techniques. Results were consistent with the hypothesized conceptual scheme, in that negative team affective tone mediated the relationship between dysfunctional team behavior and performance when teams' nonverbal negative expressivity was high but not when nonverbal expressivity was low. On the basis of the findings, the authors conclude that the connection between dysfunctional behavior and performance in team situations is more complex than was previously believed--thereby yielding a pattern of moderated mediation. In sum, the findings demonstrated that team members' collective emotions and emotional processing represent key mechanisms in determining how dysfunctional team behavior is associated with team performance.

Cole, M. S., Walter, F., & Bruch, H. (2008). Affective mechanisms linking dysfunctional behavior to performance in work teams: a moderated mediation study. *Journal of Applied Psychology, 93*, 945-958.

**SPSS dataset:**

* Predictors (Xs)
  + dysfunc – score of team’s dysfunctional behavior, negative scores are more dysfunctional.
  + negtone – score of team’s negative affective tone, where negative scores are more negative tones.
  + negexp – scores of negative emotional expressivity, where negative scores are more negative emotion expressions.
* Outcome (Y)
  + perform – team performance scores, where positive scores are better team performance.

1. Screening:
   1. Assume the data is accurate with no missing values. You will want to screen the dataset using all the predictor variables to predict the outcome in a simultaneous multiple regression. This analysis will let you screen for outliers and assumptions across all subsequent mediation and moderation analyses.
   2. Outliers
      1. How many high (outlier) residual scores do you have for studentized residuals (traditionally deleted residuals match)?
      2. What is your leverage cut off score?
      3. How many leverage outliers did you have?
      4. What is your Cook’s cut off score?
      5. How many Cook’s outliers did you have?
      6. What is your Mahalanobis df?
      7. What is your Mahalanobis cut off score?
      8. How many outliers did you have for Mahalanobis?
      9. How many total outliers did you have across all three variables?
      10. Delete them!
   3. Multicollinearity
      1. Include a correlation table of your X variables.
      2. Do your correlations meet the assumption for multicollinearity?
   4. Linearity
      1. Include a PP Plot.
      2. Is linearity ok?
   5. Normality
      1. Include a residual histogram.
      2. Is normality ok?
   6. Homogeneity/Homoscedasticity
      1. Include a residual scatter plot.
      2. Is homoscedasticity ok (since this one is more important)?
2. Mediation
   1. Use dysfunction scores as a mediator for the relationship between negative affective tone predicting team performance. Include all the output from PROCESS.
   2. Is path a significant? List the coefficient value in APA style.
   3. Is path b significant? List the coefficient value in APA style.
   4. Is path c’ significant (remember you don’t want it to be)? List the coefficient value in APA style.
   5. Is path c significant? List the coefficient value in APA style.
   6. What is the indirect effect? Does the confidence interval cross zero?
   7. What is the effect size of the indirect effect?
   8. Is the Sobel test significant? List the test in APA style.
   9. Include a write up of the results from your analysis.
      1. Include a short description of variables/analysis.
      2. Include all the path coefficients you listed above.
      3. Include the results of the indirect test with confidence interval.
      4. Include the Sobel test to determine if significant mediation occurred.
      5. Include a picture of the mediation (triangle diagram).
      6. Include a table of the model F values for each model test (should be 3).
3. Moderation
   1. Use negative emotional expression as the moderating variable between negative affective tone predicting team performance. Include all of the PROCESS output.
   2. Is the overall model significant? List the *F* value in APA style.
   3. Are the main effects significant? List the coefficient values in APA style.
   4. Is the interaction significant? List the coefficient value in APA style.
   5. Is the interaction significant for all levels of your moderating variable using the standard deviation groups?
   6. Using the Johnson-Neyman output where are the zones of significance?
   7. Create a line graph of the interaction.
   8. Include a write up of the results from your analysis.
      1. Include a short description of the variables/analysis.
      2. Include the model *F* value and effect size.
      3. Include the main effects and interaction coefficients from above.
      4. Include the figure created above.
      5. Explain the interaction by listing the simple slopes for each of the low, average, and high groups for your moderator. Are they all significant? What do they mean (explain like you would a correlation)?