

(Problem 1). Review the survey instrument and coding sheet provided and provide a critical analysis of the following issues:

- a. Do the variable labels appear reasonable given their operational measures? What labels would you change and why?
- b. How would you evaluate the measures themselves? Are they appropriate for a scientific study of employee empowerment and creativity in nursing homes?
- c. Based on the demographic variables measured, develop a profile of the responding sample. How is this profile likely to affect the validity of the study findings? That is, does it increase or decrease your confidence in the data? Why so?

(Problem 2). The analyst conceptualizes that there are four distinct empowerment “factors” (Section I,

items 1-27), and two distinct “creativity” factors (Section III, items 21-30) that nursing home employees encounter in their work. According to the conceptualization, empowerment factors are inherently different from creativity factors and the absence of one does not imply the presence of other. However, the empirical question is whether these conceptual distinctions are consistent with workplace perceptions of employees. You are asked to help test for this conceptual-empirical consistency and test the convergent and discriminant validity of empowerment-creativity distinction. Using a combination of exploratory and confirmatory factor analysis, analyze these issues. Be sure to provide and discuss a research analysis plan to address the following questions:

- a. Distinguish between exploratory and confirmatory factor analysis. How can this be employed in a complementary fashion in your analytical design?
- b. Is the data suitable for factor analysis?
- c. How many factors should be extracted? How do you account for the subdimensions? Should empowerment and creativity items be analyzed simultaneously?
- d. Do your factors satisfy convergent and discriminant validity conditions?
- e. Interpret and “name” the factors. How can these factors be used for further analysis?
- f. What conclusions do you draw from your results for managers, CEOs, nursing home workers and public policy officials?

(Problem 3). The empowerment and creativity of nursing home employees are critical outputs that have to be jointly maximized in any organizational setting. Many times, different factors influence creativity differently so that some empowerment factors might enhance creativity more than others. The researcher conceptualizes that the empowerment factors would influence creativity of employees differentially. Run a regression analysis that tests for these hypotheses. In addition to interpreting your results graphically and statistically, answer the following specific questions:

- a. State your hypotheses. What are the significant empowerment factors for creativity (use the factor “names” you have come up in Problem 2)? Which is the most significant? Least significant? (Check: will you use standardized or unstandardized coefficients?).
- b. Compute the direct effects of empowerment factors on employee creativity.
- c. What conclusions do you draw from your results for managers, CEOs, nursing home workers and public policy officials?