Moderators, or variables that alter the direction or strength of association between a predictor and outcome variable (Barron & Kenny, 1986), provide important functions in the research process. First, they offer ways of extending theory. As Whetten (1989) notes, moderators provide cues about when, where, how, and under what conditions relationships between constructs take place. Furthermore, the introduction of new moderators has the potential to meaningfully add to existing theoretical understandings (Colquitt & Zepata-Phelan, 2007) and represents maturity in a field of inquiry (Aguinis et al., 2001). From an empirical perspective, examination of moderators can help explain patterns of inconsistent findings (Frazier et al., 2004). That is, if the relationship between variables are significant in some settings, but not in others, these contextual determinants serve as potential moderators.

Despite the importance of moderators in the research and theory building process, researchers rarely employ them. In fact, Frazier et al. (2004) argued that most academics cannot properly articulate the definition or function of a moderator. Consequently, the purpose of this presentation is twofold: (a) first, I examine the use of moderators in sport management research, as represented in Journal of Sport Management publications; and (b) second, I provide a step-by-step approach to testing for moderation, with a particular focus on moderated regression analysis.

To achieve the first aim, I conducted a manual search of all issues of the Journal of Sport Management from 1987 to 2010 (the last full volume prior to the data analysis). Of the 455 articles published during that time, 38 (8.3%) examined interactions. However, in many of these articles, researchers did not explicitly note the potential for moderation in their research questions or hypotheses. Furthermore, three common errors were evident in these articles. The first and most regularly occurring error was categorizing continuous variables in order to run an analysis of variance rather than a moderated regression. This practice creates artificial groups, reduces statistical power, and reduces the sensitivity of the analyses (Frazier et al., 2004; MacCallum et al., 2002). A second error was not centering or standardizing the first order variables, an error results in multicollinearity (Cohen et al., 2003). Finally, among the researchers that correctly conducted a moderated regression, only one conducted a simple slope analysis to statistically assess the regression slopes at different levels of the moderator variable. Thus, the researchers described the nature of the interaction but did not statistically test the simple slopes (Cohen et al., 2003).

This review suggests that (a) tests for moderation are uncommon in the Journal of Sport Management, and (b) when tests are conducted, statistical errors are commonplace. Thus, as a way of remedying this situation and addressing the second objective of presentation, I will provide step-by-step directions for detecting moderation. In doing so, I will focus on moderated regression analysis, with a discussion of design, analysis, and interpretation of the results. In the discussion of design issues, I will highlight the importance of theory to guide the inclusion of moderators, scale reliability, and power. In the analysis discussion, I will focus on moderated regression, as outlined by Cohen et al. (2003), with a focus on both continuous and categorical moderators, standardizing the variables, creating product terms, and entry in the regression equation. Finally, with respect to interpretation, I will discuss plotting the interaction and computing the simple slope analysis (see Cohen et al., 2003), and in doing so, will share shortcuts I developed (and that are freely available on the Internet) that researchers can use to assist them in this process. I will draw from an existing dataset to illustrate this process.

Moderators provide a key means to better understanding relationships among constructs and extending theory. This presentation will provide sport management scholars with some of the basic tools to explore these possibilities and correctly analyze moderators’ effects in their quantitative data analyses.