

Thomas D. Fletcher

Research Statement

Industrial/Organizational (I/O) psychology is an applied discipline concerned with the development and application of practices and principles of psychology to address workplace issues. My research within I/O can be described as both substantive and methodological. My substantive interests focus on motivation broadly defined. Methodological interests cover topics as varied as behavioral and psychological measurement, structural equation modeling and multilevel analysis. I would characterize myself as an applied researcher that utilizes current theory and advances methodology as needed to address current applied problems.

Substantive Interests

My core research interests involve the study of motivation applied to the workplace. Specifically, my interest in motivation includes the role of interpersonal relationships at work, the influence of climate perceptions (esp. competitive climate), the role of personality in moderating the effects of climate perceptions, individual level citizenship performance, and other workgroup/team issues. I have developed specific interests over the last several years in three interrelated but distinct areas: citizenship performance, workgroup/teams, and competition. In some respects, these three areas represent outcomes, mediators and antecedents respectively.

Citizenship Behavior/Performance. Most research on citizenship performance tends to treat citizenship performance as an outcome variable. In a paper recently presented at the annual meeting of the *Academy of Management*, I outlined the mediational role and multilevel nature of citizenship performance by focusing on the beneficiaries of the behaviors. This paper was submitted for review in 2005. It was subsequently rejected and awaiting my revisions to submit elsewhere. This paper establishes one program of research that I aim to pursue. Namely, I intend (a) to put together metrics for the full multilevel model of citizenship performance (b) to integrate research in ethical behavior and volunteerism with that of citizenship performance, and (c) to empirically establish the linkages to organization and group level outcomes that have previously only been proposed in the literature. To achieve these ends, I have two second year doctoral students (Kim Perry and Jake Fisher) becoming emerged in the appropriate literature. Both of these students are developing theses for the Master's degree based in whole or in part from ideas that I planted from the above-mentioned paper. Kim Perry has proposed her thesis. Jake Fisher is expected to propose Spring 2007. I have submitted a grant to the UMSL Research Award to fund a comprehensive empirical meta-analysis to facilitate testing of the theoretical model I have developed. This grant was not funded, but I was asked to revise and resubmit it. I am also chairing a doctoral dissertation (Ann Marie Schreiber) where the outcome variables are citizenship performance. Ann Marie is investigating the impact of the traits optimism and pessimism on performance. Ann Marie is currently on a leave of absence.

Team/workgroup issues. I have been instrumental in three projects involving the study of geographically distributed teams (i.e., virtual teams). In a collaboration involving scholars from I/O psychology, computer science, and engineering management, we sought to understand the team processes needed in distributed engineering, ultimately developing a model of engineering team effectiveness. Ideas generated from the engineering project lead to my Thesis where I investigated the influence of communication modality on team processes. A version of this paper was published in *Journal of Computer Mediated Communication* in 2006. As part of a team of organizational researchers interested in trait predictors of leadership emergence (e.g., personality, emotional intelligence) in traditional and virtual decision-making groups, I have developed a longitudinal database consisting of virtual and collocated teams. I intend to examine perceptions of team processes over time in these traditional versus virtual groups. I currently have a student (Wanyi Ma) working with this database in preparation for manuscript submissions. There will be two core papers from these data.

Competitive work climate. A perennial topic underlying research involving interpersonal relationships such as teamwork and citizenship performance is that of cooperation versus competition. My interest in competition involves the interaction of climate perceptions (e.g., level of structured competition) with personality variables (e.g., competitiveness, achievement orientation). In 2004, I presented a paper examining the congruence of trait and climate competitiveness in influencing job initiative and stress at *Academy of Management*. This paper has been requested numerous times from individuals in the field. An alternate version of this paper was submitted to *Journal of Organizational Behavior*. Having received positive reviews, I was invited to revise and re-submit this manuscript. I anticipate a resubmission March 2007.

In my doctoral dissertation, I examined the interactive effects of trait competitiveness and competitive climate on instrumental and affective coworker support. To continue this line of research, I have one doctoral student (David Nusbaum) assisting me in collecting data on trait competitiveness. This data collection is complete. These data will assist in situating the competitiveness construct within the broad Five-Factor model of personality simultaneously distinguishing achievement motivation from competitiveness. With these data, I have submitted one manuscript to the *Academy of Management* conference. I expect to submit a version of this for publication March 2007. Nusbaum is also developing a Thesis investigating the role of likelihood of winning in determining motivation under differing competitive arrangements. He is expected to propose March 2007.

I received a grant from the UM Research Board to develop a new measure of climate. In the previous year I have (1) constructed a new multidimensional scale measuring five aspects of a competitive climate, (2) finished collecting data on a first sample, (3) analyzed those data and made necessary revisions to the measure, and (4) nearly finished collecting data on a confirmatory sample. I have submitted a grant to the UMSL Research Award to fund another data collection effort in an organizational sample with established workgroups. It is expected that (1) a manuscript will be submitted based on these data in 2007, and (2) a grant will be submitted to NSF in February 2008 based on this new scale. I also anticipate submitting a NSF career award (July 2007), but it will not benefit from a third data collection. I also submitted a proposal to NIH in their loan repayment program (LRP) December 2006, "Overall impact of competitive work environments on well-being." This proposal details this program of research covering two years.

Methodological Interests

I enjoy collaborating and utilizing skills that stretch the boundaries of my competence. Since I believe substantive research questions should drive the choice of methodology, my core methodological interests involve regression-based procedures appropriate for I/O research. Such methods include but are not limited to *structural equation modeling*, *polynomial regression*, and *multilevel random coefficient modeling*. Most of the methodological work that I have done has been in response to concerns that have developed while collaborating with others. This "as needed" or "skills on demand" approach has (1) lead me to develop micro-programs of methodological research relevant to substantive topics, (2) allowed me to gain new insight on progressive methodologies further increasing my collaborative potential, and (3) ensured that the methodologies studied have applied implications.

Consulting/collaborative work. Recent collaborative work includes (1) assisting Robert Calsyn with the analysis of longitudinal data on homelessness and the effects of treatment on various outcomes, (2) assisting Joseph Pickard in his UMSL Research Award analyzing reasons for seeking religious services, (3) finalizing model testing with ODU researchers for a model that we developed and have been funded by NSF to collect data and test, "Climate for Opportunity and Inclusion: Improving the Recruitment, Retention and Advancement of Women and Minorities in IT," and (4) assisting Lois Pierce and her colleagues in a grant proposal to NIH, "The Center for Health Equity in Missouri."

For the Calsyn project I have provided individualized instruction to his RA (Jennifer Cunningham) and oversight on multilevel analysis. The manuscript for this project will be submitted Spring 2007. The graphical methods for assessing change and mediation demonstrated in this paper will likely be of interest to many across social science disciplines. In collaborating with the ODU research group, I have submitted several manuscripts over the last year (authorship order varies).

Methods research. In the last two years I have several methodological products. My doctoral dissertation (defended March 29, 2005) involved the investigation of two methods for the improvement of the detection of interactions within structural equation modeling (SEM): the use of item parceling and latent variable scores. I have submitted this to *Psychological Methods* for review. I will present study 2 from this manuscript at *Academy of Management* August 2007. I have been nominated by the Research Methods Division for the William H. Newman award for this manuscript (finalist notified at the conference). In May 2006, I presented a study that I conducted on the use of partial covariances in SEM as a means to statistically control for covariates at the *Society for Industrial and Organizational Psychology*. This paper has been posted on my website and has been requested or downloaded over 600 times since May. (Requests have come from more than 10 countries, and from numerous individuals at various granting agencies including NIH). This paper was submitted for publication in the Fall of 2006.

I have presented a manuscript at *Academy of Management* in 2006 on assessing distal mediation. This paper was submitted to a special issue on mediation in *Organizational Research Methods*. It was rejected. However, the paper has been requested numerous times and well received by the discussant at the *Academy* session; J. Cunningham and I are going to re-write this manuscript late spring 2007.

Future methods research. I am currently training students via my doctoral level courses to assist in my quantitative methods research. I have secured a developmental leave grant from the UMSL Office of Academic Affairs to create programs to simplify the complex computations and instructional technologies for improving student understanding of these complex methodologies. To this point, 14 instructional videos have been constructed. In addition, I have published a package called *Applied Psychometric Theory* to the Comprehensive R Archive Network. Individuals are already using this package worldwide (based on individual queries by users). I will present a workshop March 2007 on the practice of Monte Carlo Simulations. Having taught Quantitative Methods II, Psychometric Theory and Quantitative Methods III, several students have emerged as promising candidates for research assistance in this area. As an exemplar, I will present a simulation study on the use of parcels in SEM at the *Society for Industrial and Organizational Psychology* in April 2007 that I conducted with Kim Perry, an I/O PhD student. This simulation compares a method of item parceling that I developed to a well-known method of item parceling.