PSY 992: A Multilevel Theory (MLT) Approach to Team Effectiveness
Fall 2018

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Office Hours: Monday 12:30-1:30 or by appointment

Overview of Course

Meta-Theoretical Focus. This doctoral level seminar will examine organizational psychology and behavior (OPB) from the perspective of complex adaptive systems; that is, as dynamic top-down and bottom-up processes that unfold over time across multiple interacting levels. The primary orientation of the course is theoretical and conceptual. The goal is to help you to learn to think about phenomena in social/organizational systems across levels and time. We will consider methodological issues (how to design multilevel research) and analytical concerns (how to analyze multilevel data) from a conceptual perspective. However, it is a theory oriented course and does not address “hands on” data analyses. Helping you to develop a grounding in the basic concepts of MLT and their application in research design is the first instructional goal of the seminar.

Substantive Focus. Because teams (meso) are at the juncture of the higher-level organizational or system context and the lower-level (micro) individual person elements that comprise the system, teams will constitute our substantive focus. The rise of interest in MLT coincided serendipitously with the rise of interest in team effectiveness. This focus of the seminar is designed to provide you with a substantive foundation – theoretical and empirical – in the scientific literature for understanding work group and team effectiveness. The second instructional goal of the seminar is to characterize the state-of-the-art of the science and to identify areas of needed theoretical and research advance. A challenge of the shift of work structure to the team level is that most human resource theories, methodologies, and interventions are oriented toward selecting and managing individuals. However, OPB in a team context creates a task and social context that entails an interplay across levels over time. Theory and methods that are individual-level or team-level only are incomplete and inadequate. The seminar project will provide you with an opportunity to apply the theoretical and substantive concepts to a research topic of interest that is in need of advancement. This will provide a mechanism to crystalize seminar learning points.

Conduct of Course

The class will be conducted as an active learning seminar: I have provided a conceptual organization, foundational readings, and identification of key issues in this syllabus, and I will provide scholarly guidance throughout the seminar. Seminar participants are expected to play a major role in class discussions to elucidate conceptual issues, identify research needs, and discuss research approaches. In addition, class members will have an opportunity to explore a team topic in depth though the development of a research project or conceptual review/extension of a topic of their choice. Students will present their project to the class for comment, discussion, and critique. An initial short presentation at mid-semester will provide an opportunity for early feedback. A final presentation of the project at the close of the seminar will provide another opportunity for project feedback. Final copies of the project papers are due to me one week following your final presentation.

Course Evaluation

(1) 30% -- participation in class discussions
(2) 20% -- class presentation
(3) 50% -- written paper

The paper will be a research proposal or a review, critique, and extension of the literature on a topic of your choice relevant to work teams. All topics will be approved by the instructor. Although length is not the standard on which the papers are judged, it is the most frequent question raised by students. In the past, such papers have tended to run 30 pages in length (excluding references). It is worth emphasizing that quantity is not a substitute for quality.

Course Readings

The syllabus provides the reading list. Arrangements to get copies of the readings will be discussed during the first class meeting. Bring your laptop computer to the first class meeting.
Schedule

08/29  Session 1: Course Organization, Structure, and Overview

        Note: We meet on Wed one time only for the 1st class!

09/03  Labor Day – No Class

09/10  Session 2: System Concepts; Basic Framework; Units; & Early MLT

        One page summary of your proposed project is due in class at 2 PM.

09/17  Session 3: Multilevel Constructs; Aggregation; & Analytics

09/24  Session 4: Key Team Considerations: Context, MLT, Team Types, Tasks, and Time

10/01  Session 5: Team Effectiveness: Cognition, Motivation / Affect, & Behavior

10/08  Session 6: Team Processes: Emergence, Emergent States, & Interaction Dynamics

10/15  Session 7: Initial Project Presentation to Class for Feedback

        Your PPT with feedback listed at the end is due to me (via email) by 5 PM 10/16.

10/22  Session 8: Team Formation, Socialization, & Development

10/29  Session 9: Team Learning & Adaptation

11/05  Session 10: Team Composition, Diversity, & Human Capital

11/12  Session 11: Team Leadership

11/19  Session 12: Presentations by Students (3)

        Final copies of papers presented in Session 12 are due 11/26 at 2PM

11/26  Session 13: Presentations by Students (3)

        Final copies of papers presented in Session 13 are due 12/03 at 2PM

12/03  Session 14: Presentations by Students (3)

        Final copies of papers presented in Session 14 are due 12/10 at 2PM
Student Project Presentations

10/15  Session 7: Initial Project Presentations to Class for Feedback

Plan on a **15 minute PPT** presentation highlighting the core elements of your project (Research Project: core contribution, rationale, model, method and measures; Conceptual Project: core contribution, literature review / critique, model or theoretical framework you are proposing). **Five minutes for Q & A** following your presentation. **Identify a classmate to take notes for you in advance; incorporate the feedback at the end of your PPT file; email me your PPT file by 5 PM on 10/16 for my review and records.**

11/19 – 12/3  Sessions 12-14: Final Project Presentations

**Total presentation time is 60 minutes maximum** for each presenter. Plan on 45 minutes for your presentation, time for Q & A (10 min.), and a short break (5 min.). Plan to load your Power Point slides on the computer at the beginning of class so transitions are seemless.

**Final copies of project papers are due to me one week following your presentation.**

11/19  Session 12: Presentations by Students (3)

**Final copies of papers presented in Session 12 are due 11/26 at 2PM**

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11/26  Session 13: Presentations by Students (3)

**Final copies of papers presented in Session 13 are due 12/03 at 2PM**

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12/03  Session 14: Presentations by Students (3)

**Final copies of papers presented in Session 14 are due 12/10 at 2PM**

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Sessions & Readings

Session 1: Course Organization, Structure and Overview

We will discuss an overview of the seminar. We will go through the syllabus to cover course goals, provide a detailed description of course requirements (discussion participation, initial presentation, final presentation, and final project paper). Scheduling assignments will be made and readings will be arranged.

Session 2: System Theory Concepts; A Basic Framework; Units of Theory and Measurement; & Early Perspectives on MLT

Project -- One page write-up due @ 2:00 PM (Bring hardcopy, send me & class electronic copy)
Project -- Topic identification (class round robin discussion of initial project ideas)

Organizational System Theory


Katz & Kahn represent one of the very earliest efforts to systematically incorporate “systems” thinking into the understanding of OPB. How are the principles of general system theory expressed in Katz and Kahn? Identify key system characteristics. How do Katz and Kahn embody the general systems concepts in the context of the organization? Are the systems concepts merely metaphors, or are they more than that? How can system concepts influence or shape research on OPB? How can they be represented in OPB research? Think: constructs, processes, and levels.

Optional - A Basic Framework


Describe the dominant paradigms (world view as expressed in research) for I/O psychology, social psychology, ergonomics, and sociology. Arrange them in a hierarchy based on the level of phenomena they tend to address in theory. What are the limitations of each paradigm from a systems perspective? Select the paradigm that best characterizes your major area of study. What kinds of issues (not generally examined) need to be included in research designs for the paradigm to better incorporate the realities of organizational behavior? What are the key units, levels, and concepts in the basic framework?

Units of Theory and Measurement


Identifying meaningful collective units or entities and determining how to assess-capture-represent unit level phenomena are at the core of MLT and research. What is the unit problem in organizational research? How can units be identified and theoretically justified? What effects do the choices regarding units of theory (focal units) vs. units of measurement have on statistical interpretation? What is the appropriate priority between theoretical and statistical concerns? Articulate a justification for your prioritization. Select a higher level organizational construct of interest to you – what are the appropriate units of theory, measurement, and analysis?
Early Perspectives on Multilevel Theory


Contrast the two approaches represented in these readings (i.e., Rousseau vs. Klein, Dansereau et al.). What are the key differences in these perspectives … or do you see them as essentially the same? Pay attention here … these differing conceptual perspectives are also linked to differing analytical perspectives (i.e., HLM/MRCM vs. WABA). The differences between them are largely unknown for researchers learning about MLT post 2000, but the differences drove vigorous debates in the literature throughout the 1990’s. Occasionally, they still pop up and those who are not familiar with the differences are clueless. Can the differences between the perspectives be reconciled?

Session 3: Multilevel Constructs; Aggregation; & Analytics

Multilevel Constructs


As you should discern by now, one of the primary challenges of ML research is how to think about and represent constructs that are assessed at one level of analysis but are intended to represent a construct at a different level of analysis. Chan presents a measurement typology of composition models that summarized practices that had been expressed in the literature (or were under development at the time; Indeed, it essentially comes directly out of this seminar, as David was in the seminar when we had mapped these approaches as part of our sensemaking process). The typology’s more basic types of composition have been “standards” in the literature. Morgeson & Hofmann begin to focus attention on issues of emergence that go beyond the relatively static practices that have come to characterize composition or similarity based conceptualizations. Note that because Chan focused on a measurement framework, the taxonomy provided a very useful citation for authors seeking to justify their approach (#1267), whereas Morgeson & Hofmann have not been cited nearly as much (#510).

Issues of Aggregation and Agreement


Issues of aggregation and agreement/reliability have been at the heart of many vexing and spirited debates in the levels literature during its formative years. Indeed, early on, these concerns were dominant. Many of the debates between the “WABA-ites” and “James-ians” can be traced these issues. This set of readings traces the line of one such debate -- this one focused on assessing agreement in climate research -- as a vehicle to draw out the key issues. The basic line of development here is: James identifies the problem; James develops an index; Kozlowski uses the index; Schmidt & Hunter take issue with the index and its use; Kozlowski & Hattrup and James respond; Bliese tries to put the agreement problem in perspective. I recognize that this is a large set of papers to read; the goal is to pull out the main points, without getting lost in details or going down the rabbit hole! Read with the goal of uncovering the central points of contention in the evolution of the debate: What are the statistical issues in this debate? What are the conceptual issues? How do the statistical issues relate back to the composition theory of climate? What issues should have primacy, statistical or conceptual? So, how *should* one justify aggregation?

### Analytical Approaches for Multilevel Data


At the time the MLT book was developed, there had been a vigorous and ongoing conflict between the developers and users of Within And Between Analysis (WABA) and other investigators who either used (a) OLS regression coupled with aggregation / disaggregation procedures or (b) newer multilevel modeling procedures developed in the 1990’s (Hierarchical Linear Modeling [HLM] or Multilevel Random Coefficient Modeling MRCM]). The book – especially the chapter by Klein et al. – helped to clarify the procedures. One consequence being that WABA fell to the wayside. As such, I no longer cover it but you can relive the past with the optional readings if you have an interest.

Explain the differences between contextual analysis and ANCOVA for examining group level effects: basic models, what each reveals, what type of question each is best suited for. Now consider HLM. Hofmann et al. (2000) explain the basics. How does HLM (aka Multilevel Random Coefficient Modeling) differ (does it differ?) in its assumptions? Are all these analytic approaches simply interchangeable, or are there larger differences in their underlying conceptualization of the way the data variance maps onto system thinking? How do these analytic systems link back to the “levels theories”? To what extent is theory driving the analytic systems, or is it the other way around? Do you see these analytic approaches as essentially equivalent? Or, are there specific questions or models to which each is best suited to address?
Optional Analytics


Session 4: Key Considerations: Context, Levels, Task Interdependence, Team Types, and Time

One of the big challenges to understanding team effectiveness is that teams, by definition, involve individuals behaving in an interactive context which they in part enact; multiple units or levels of theory, data, and analysis (individual, team, organization); and the emergence of higher level phenomena (e.g., team processes and performance) via complex dynamics and over time. Team phenomena emerge interactively in context, across levels, and over time. Kozlowski and Klein synthesized a set of meta-theoretical principles for MLT to guide theory building and research. The explosion of multilevel theory and research in the literature over the past several years suggests that we were successful in clarifying many of the vexing sources of confusion. Moreover, the nature of the team task and, hence, the type of team involved, set constraints on team processes and dynamics. These complex conditions need to be represented and captured in theory and research. Throughout this course, we shall see how these ideas are being incorporated in theory and (somewhat more slowly) incorporated in research. The readings below are designed to provide you with a conceptual overview of these concerns. To a large extent the issues we consider here will need to be mapped onto the more topical readings we consider later in the seminar.

Organizations as Multilevel Systems: Contexts, Levels, and Emergence


Task Interdependence


[Read pp. 18-19: Task Complexity]

Time


In the early 1990’s it was observed that small group research was on the decline in social psychology, but on the rise in organizational psychology and organizational behavior. One consequence of this disciplinary shift in the locus of theory and research is that there have been several reviews conducted over the last decade or so as researchers have endeavored to organize, structure, and make sense of this vast literature. As Kozlowski and Ilgen (2006) note, there has been over a half century of research conducted on small groups and teams. We know a lot, but much of the literature has been isolated in pockets. The literature on groups and teams is immense and diffuse. Several large scale reviews of this literature have been conducted in an effort to comprehend what we know and where we should go. This session is an effort to provide a “big picture” as a point of departure, with more specific topics in the course illuminating underpinnings in more depth. I have started you with an early review that deliberately focused on field studies only and then a chronological sequence of reviews that were oriented on embracing the broader literature.

Pay attention to the organizing themes or framework used by each of the reviews, as it tends to drive the content and conclusions. Be prepared to discuss the key take-aways and advances of each review. As you review the reviews, pay attention to what we know and where we should go for research advances. Given that these reviews span two decades, have we made progress? If so, where? Where are advances stuck? Why are they stuck? What needs to be done to push forward?


The chapter above updates:


Session 6: Team Processes: Emergence, Emergent States, and Interaction Dynamics

Last week we examined several reviews of the team effectiveness literature. Much of that research literature is based on McGrath’s IPO model. Although that framework is a useful heuristic, it has a static quality. Team processes are a “box” in the model, although processes by their very nature are dynamic. This is clearly recognized by virtually everyone (at least theoretically), although it is widely ignored in research. Therein lies an inherent conundrum for the science of teams (indeed, all of organizational science as this is a very broad based problem). In the team effectiveness arena, at least, some of us are trying to change this state of affairs. This session is devoted to the dynamics of team processes and the emergence of team phenomena.
Start with a conceptualization of “team processes” based on the Kozlowski and Ilgen (2006) review framework. What are the cognitive, motivational / affective, and behavioral “processes” that they identified as having sufficient research support to serve as core process factors?

Be prepared to draw a conceptual contrast between team processes (Marks et al; Cronin et al; Kozlowski) and team process perceptions (i.e., “emergent states”). What are team processes? Are team process perceptions and process dynamics the same things, different things, related in some way (related how?). Why have team processes been studied indirectly, rather than directly for so long? What are some of the ways by which processes can be directly investigated?

Select a team process of interest and be prepared to sketch a research design (setting, subjects, data collection method) to study it. What are key issues for you to consider in your methodology?


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**Session 7: Initial Project Presentations to Class for Feedback**

Plan on a 10 minute PPT presentation highlighting the core elements of your project (Research Project: core contribution, rationale, model, method and measures; Conceptual Project: core contribution, literature review / critique, model or theoretical framework you are proposing). **Five minutes for Q & A following your presentation.**

*Identify a classmate to take notes for you in advance; incorporate the feedback at the end of your PPT file; email me your PPT file by 5 PM on 10/16 for my review and records.*

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**Session 8: Team Formation, Socialization, and Development**

In some instances, existing teams acquire new members to maintain themselves or grow. Socialization constitutes the process by which new members learn about and are assimilated by the existing group, as discussed in Moreland and Levine. This is largely regarded as an individual-level process that occurs in a group context (the team socializing the individual). Interestingly, although there is a large and growing literature on newcomer socialization, the group context has largely been ignored.

In other instances, entire teams may be formed anew. Here the team must grope toward defining its social processes -- values, norms, and attitudes -- and its task interactions without the benefit of an existing structure. We can consider this an instance of team development; a process that involves individuals and the team as a collective. Most models of team development are consistent with Tuckman’s classic model that describes the stages through which teams progress. Gersick takes a
somewhat different perspective on the process of team development, and the role of time in that process. Although often regarded as competing models, Chang et al. show support for both perspectives. Kozlowski et al. view the processes of team development and performance as entwined and emergent, with phase transitions (similar to stages, but not exactly...how are they different?) and shifts in the focus of development across levels. Finally, socialization and development are informal processes. The last papers are meta-analyses that evaluate team training generally and team training in contexts where lives are at stake. Training tends to be skill-based. The last meta-analysis focuses on team building, which lies somewhere between training and development; formal, but targeted on improving processes.

If you were to make use of the best ideas and findings from socialization, development, and training, what would you craft to guide the evolution of effective teams?


Session 9: Team Learning and Adaptation

“...the creation of an adaptive team necessitates learning the capabilities that underlie team performance, developing collaboration and coordination skills to effectively combine member resources, and adapting capabilities, coordination, and performance to meet unexpected and novel challenges (Kozlowski, Gully, Nason, & Smith, 1999). It is a process of knowledge and skill compilation among team members that is shaped by organizational system factors that characterize the context (i.e., top-down influences), by actions of the team leader (i.e., team level factors), and by interactions among members (i.e., bottom-up emergence) as the team develops its capabilities over time. Thus, our perspective is a multilevel one that simultaneously considers individuals; the team, its embedding task, and organizational context; and the interplay among these multiple levels over time as team adaptive capabilities develop, emerge, and manifest” (Kozlowski & Bell, 2008).

We will consider this perspective – which has threaded through this course – with reference to alternative perspectives on what it means for teams to learn, perform, and adapt. As you read, consider the perspectives that underlie Edmondson et al. and Kozlowski & Bell; DeShon et al. and Chen et al.; Grand et al. Develop a perspective / framework to capture the concept of team learning. What is it? Is it a process? Is it an outcome? Is it a construct? What is it? What is team adaptation? Is it the same as learning? If not, how is it different?
Finally, consider the notion of adaptation in Burke et al. and LePine. What is adaptation and how is it different than learning (Is it different?)?


Session 10: Composition, Diversity, & Human Capital

Teams are influenced by the individual characteristics of their members (e.g., member demographic characteristics; knowledge, skills, abilities; personality characteristics, values, attitudes, and motivation). Member characteristics are the primary concerns of team composition and diversity. Of interest, these two literatures (team composition vs diversity) are largely distinct. However, in both cases, the constellation of characteristics possessed by team members are viewed as inputs or resources that team members bring to the team that can be applied to goal accomplishment. Team member characteristics are assets / resources for task accomplishment or they are impediments to team processes and impede task accomplishment. Naturally, having good theory and data to guide how teams should be composed would be an important applied asset. As it stands, team selection is still largely based on individual selection, which does not focus on maximizing team effectiveness.

Given all the many ways in which individuals may differ, how can the researcher conceptualize composition in a meaningful way? What do we know about the effects of team composition on team effectiveness? What are some of the more compelling research gaps and future directions that need to be addressed going forward? How might that be accomplished?


Session 11: Team Leadership

Now that we have examined the theory and research relevant to work teams, it is time to consider the role of leaders in team development, performance, and effectiveness. Leadership is a vast and diverse literature. There are many competing conceptual frameworks, leading to little apparent agreement as to the nature of this concept. This breadth and diversity is reflected in the extensive review by Day. Where does a focus on team leadership fit in this vast literature (Skim so you are familiar, but focus primarily on the team leadership aspects and Day’s Discussion section)?

We then turn our attention to more focused readings that attempt to consider leadership in more limited contexts relevant to teams. Hackman & Walton take a functional perspective on team leadership. What is the essence of the functional approach? Kozlowski et al. build on these perspectives to develop a dynamic theory of team leadership. In what sense is the theory dynamic? They focus on the need for team coherence (shared understanding), and the role of the leader in building (developmental role) and utilizing (task contingent role) coherence. Hackman and Wageman build a theory of team coaching. Is this a variant of team leadership? How similar/different is this perspective to the theory by Kozlowski et al.? Map the specific similarities and those areas where the theories differ. Kozlowski et al. (2009) provide a review/critique of the foundations of functional leadership and iterate their theory. What is different here? Where does the Morgeson et al. (2010) effort fit in this evolving perspective? Finally, Kozlowski et al. (2016) provide a recent review of “team-centric” leadership. Going back to Day’s ‘future research themes,’ how well is the theory and research hitting the themes? Where is extension most needed?


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Session 12: Student Presentations (3)

Session 13: Student Presentations (3)

Session 14: Student Presentations (3)

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End of Course
Policies

Final Grades

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<td>A (4.0)</td>
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<tr>
<td>B+ (3.5)</td>
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Make-Up Policy

All assignments and exam must be completed when scheduled. Unless prior permission has been obtained, NO late or makeup assignments or tests will be accepted or given. Permission may be granted for those who contact the instructor prior to the scheduled date, and provide valid documentation related to the absence either before or after the absence.

Attendance

Attendance is not mandatory but strongly encouraged, and it will influence your participation grade. You are expected to be aware of any changes in dates of assignment or tests. Ignorance will not be accepted as an excuse.

Religious Holiday

The official university policy is as follows:

*It has always been the policy of the University to permit students and faculty to observe those holidays set aside by their chosen religious faith.*

*The faculty and staff should be sensitive to the observance of these holidays so that students who absent themselves from classes on these days are not seriously disadvantaged. It is the responsibility of those students who wish to be absent to make arrangements in advance with their instructors. It is also the responsibility of those faculty who wish to be absent to make arrangements in advance with their chairpersons, who shall assume the responsibility for covering their classes.*

As Michigan State University has become increasingly multicultural, the incidence of conflicts between mandatory academic requirements and religious observances has increased. In the absence of a simple and dignified way to determine the validity of individual claims, the claim of a religious conflict should be accepted at face value. Be aware that some degrees of observance may have a more extensive period of observance. Instructors may expect a reasonable limit to the number of requests by any one student. Some instructors attempt to cover all reasons for student absences from required academic events such as quizzes or exams with a blanket policy, e.g., allowing the student to drop one grade or two quizzes without penalty. If this is meant to extend to religious observances, the instructor should state this clearly at the beginning of the term. If instructors require make-up exams, they retain the right to determine the content of the exams and the conditions of administration, giving due consideration to equitable treatment.
Misconduct

Cheating, plagiarism, or other forms of academic dishonesty will result in failure of the course. The official university policy is as follows:

The principles of truth and honesty are fundamental to the educational process and the academic integrity of the University; therefore, no student shall:

- claim or submit the academic work of another as one’s own.
- procure, provide, accept or use any materials containing questions or answers to any examination or assignment without proper authorization.
- complete or attempt to complete any assignment or examination for another individual without proper authorization.
- allow any examination or assignment to be completed for oneself, in part or in total, by another without proper authorization.
- alter, tamper with, appropriate, destroy or otherwise interfere with the research, resources, or other academic work of another person.
- fabricate or falsify data or results.

Incomplete Policy

The official university policy is as follows:

The I-Incomplete may be given only when: the student (a) has completed at least 6/7 of the term of instruction, but is unable to complete the class work and/or take the final examination because of illness or other compelling reason; and (b) has done satisfactory work in the course; and (c) in the instructor’s judgment can complete the required work without repeating the course.

Provided these conditions are met, the instructor electing to give an I-Incomplete files an Agreement for Completion of (I) Incomplete at the time course grades are due. This agreement specifies what the student must do, and when, to remove the I-Incomplete. The department or school office gives a copy to the student, and retains a copy for at least one year.