Moving the Pendulum Back to the Middle: Reflections on and Introduction to the Inductive Research Special Issue of Journal of Business and Psychology

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Abstract This special issue of the *Journal of Business and Psychology* contains a diverse set of 13 papers that adopted an inductive approach. In addition to setting the stage for the special feature, the case for inductive research is broached. The papers in the special feature used a variety of approaches, both qualitative and quantitative, that shared the characteristic that they did not report tests of deductive theory-driven hypotheses. Rather these papers presented exploratory findings that were not limited by an explicit a priori theoretical framework. The special issue heeds calls that the field needs more inductive research to serve as the basis for theory. It is hoped that it will inspire editors of other journals to be more accepting of good inductive papers that report novel findings.

Keywords Deductive research · Deductive theory · Inductive research · Inductive theory · Special issue

Over the past 60 years, psychology has evolved from the largely atheoretical and data-driven era of behaviorism to the theory-driven hypothesis testing days of today. Organizational research has followed this trend, moving from empirical demonstration and exploratory approaches to

deductive theory-based hypothesis confirmation. Whereas the almost exclusive focus on the deductive approach has come under criticism (Hambrick 2007; Locke 2007), if anything the field's response to calls for a more balanced approach has been to double-down on the requirement for deductive theory testing in every paper. Even papers reporting meta-analyses, that just a few years in the past were largely descriptive snapshots of an area of research, now contain theoretical frameworks and hypothesis tests, often because this is what editors and reviewers demand.

There is no disputing that theories can be useful. They can help organize and synthesize what we know about a phenomenon. A good theory can help us predict and control future events. Furthermore, theories need to be tested, so for every theory we should expect to find a number of tests to confirm or disconfirm the theory's predictions. Unfortunately, in these days of over-reliance on theory generation, many if not most of our theories have been under-tested and receive few if any empirical tests beyond the original paper in which they appeared (Kacmar and Whitfield 2000).

However, there can be drawbacks when we demand that we base our science entirely on theory. By providing frameworks, theories can focus our approaches in certain directions to the exclusion of others, and discourage us from exploring new ways of thinking. If all of our studies must be based on a priori theory, there is no room in the literature for reports of new phenomena for which there are no theories, or for new ways of viewing phenomena that fail to fit any preconceived theoretical frameworks.

Another drawback to an over-emphasis on theory is that it has created a literature in which post hoc theorizing is routinely presented as tests of a priori hypotheses, leading to confirmation bias in which almost all papers report significant findings (Fanelli 2010). By requiring deductive approaches, top-tier journals create the climate in which

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Table 1 Topic areas and methodology

Topic(s)	Author/title	Keywords	Methods
Pre-entry/ selection	Karim, M. N., Kaminsky, S. E. Cheating, reactions, and performance in remotely proctored testing: an Exploratory experimental Study	Remote Proctoring Internet-based Testing Unproctored Testing Enhanced selection	Data were gathered using a between- and within-subject experimental design. Participants ($n = 582$) were asked to complete cognitive ability tests online. The researchers manipulated both proctoring/non-proctored and searchable tests/non-searchable tests. In addition to the focal variables, the researchers also directly assessed dropout rates, test performance, and participants' perceived tension and invasion of privacy
	Burns, G. Christiansen, N. D., Morris, M. B., Pariard, D. A., Coaster, J. A. Effects of applicant personality on resume evaluations	Personality Judgment Applicant Personality Resume Evaluation Hireability Perceptions	Hypotheses were tested using data gathered from two studies. In Study 1 ($n = 266$), participants assessed resume cues regarding their relationship with personality and hireability. In Study 2 ($n = 122$), human resource personnel evaluated each resume with regards to both personality and hireability. Data were analyzed using multilevel regression, while controlling for participants' rating multiple cues
	Bangerter, A., Corvalan, P., Cavin, C. Storytelling in the selection interview? how applicants respond to past behavior questions	Storytelling Mixed-methods Communication Narratives Behavioral Questions	Both qualitative and quantitative data were gathered. First, data from real job interviews ($n = 62$) were qualitatively assessed for the prevalence of five types of applicant responses to past behavior interview questions. Second, these data were coded based on the narrative content of stories. Finally, the researchers assessed both the relationship between applicant characteristics and response type and the relationship between response type and hiring recommendations
	Kantrowitz, T. M., Dainis, A. How secure are unproctored pre-employment tests: analysis of inconsistent test scores	Unproctored Testing Selection Cognitive ability Testing Cheating	Data were gathered from job candidates ($n = 4,026$) who were asked to complete an adaptive cognitive ability test under both unproctored and proctored conditions. Participants completed an unproctored screening test first, followed by a proctored confirmation test. Paired samples t tests were used to identify cheating behaviors in the unproctored versus proctored tests
Stress/coping/ persistence	Clark, M. A., Michel, J. S., Early, R. J., Baltes, B. B. Strategies for coping with work stressors and family stressors: scale development and validation	Work-family Inductive Research Mixed-methods Coping strategies	Both qualitative and quantitative data were gathered. First, interviews ($n = 50$) were content analyzed in order to generate a comprehensive list of coping strategies. Second, data from three different samples ($n = 402$) were used to establish the content validity of the work stressor and family stressor coping strategy scale. Finally, the researchers gathered convergent, discriminant, and criterion-related validity evidence from two additional samples ($n = 300$)
	Fila, M. J., Paik, L. S., Griffeth, R. W. Disaggregating job satisfaction: effects of perceived demands, control, and support	Job demand-Control support Theory Job satisfaction Facets Inductive	Survey data were gathered from employees of a public human services organization ($n = 343$). The authors used a series of t tests for dependent correlations between each demand, control, and support variable. These analyses were used to evaluate differences in effect size between each job satisfaction facet and stressors/resources

Table 1 continued

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	Williams, M., Emich, K. J. The experience of failed humor: preliminary implications for interpersonal affect regulation	Inductive Humor Persistence Affect regulation	Two waves of data were collected from undergraduate students ($n = 127$). During Phase 1, participants completed individual difference and demographic items. During Phase 2, the same participants were randomly assigned to one of two conditions: the failed humor narrative condition or the successful humor narrative condition. Following the narrative conditions, participants answered questions regarding their state affect, self-esteem, and humor self-efficacy
Performance/ counterproductive behaviors/turnover	Becker, T. E., Marique, G. Observer Effects without demand characteristics: an inductive Investigation of video monitoring and performance	Video monitoring Performance Inductive research Grounded theory	Data were gathered using an experimental design. Two experiments were conducted. In Experiment 1 ($n = 75$), an inductive approach was taken. In Experiment 2 ($n = 139$), a partially inductive approach was taken. Across both experiments, the researchers manipulated participant's awareness of being video recorded, while they completed a motor task
	Spector, P., Zhou, Z. E. The Moderating role of gender in relationships of stressors and personality with counterproductive work behavior	Counterproductive Work behaviors Gender Job stressors Relational Aggression	Survey data were gathered from participants ($n = 915$) recruited from university classes. Participants responded to questions regarding their job stressors, personality characteristics, and counterproductive work behavior. Moderated regression analyses were used to assess the interaction of gender, personality, and stressors on both counterproductive work behaviors and relational aggression
	Woo, S. E., Allen, D. G. Toward an inductive theory of stayers and seekers in the organization	Turnover Intentions Job search Individual Differences Latent class Analysis	Data were gathered using an online survey. Participants ($n = 408$) were asked to respond to questions regarding their employment history, personality characteristics, current work experiences, and turnover-related cognition and behavior. Multinomial logistic regression analyses were used to assess the probability of attitudinal and dispositional characteristics predicting participants' membership in different latent class clusters
	Markham, S. E., Markhalm, I. S., Braekkan, K. F. A Visual illustration of induction in multilevel methods: the problem of leaders awarding countervailing merit components	Within-and-Between analysis (WABA) Merit raise Temporary bonus Permanent raise	Multilevel data were gathered from managers and professionals ($n = 71$) embedded within supervisory units ($n = 21$) at a large manufacturing plant. In addition, merit pay and salary data were gathered from organizational records. Within-and-between analysis was used to examine the relationship between raises and bonuses at the individual and group level
Harassment/safety climate	Bergman, M. E., Payne, S. C., Taylor, A. B., Beus, J. M. The shelf life of a safety climate assessment: how long until the relationship with safety-critical incidents expires?	Safety climate Leading and Lagging Aggregation Indictors Measurement	Mutlisource data were gathered from employees ($n = 7,467$) working for a large chemical manufacturing company and from incident records ($n = 14,000$). Employee survey data were linked to incident records, which were selected from 2 years prior and 2 years following the survey period. OLS regression was used to examine safety climate as a leading and lagging indicator of safety

Table 1 continued

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	Kath, L. M., Bulger, C. A., Holzworth, R. J., Galleta, J. A. Judgments of sexual harassment court case summaries	Sexual harassment Judgment analysis Policy capturing Brunswikian Approach	Data were gathered from jury-eligible adults ($n = 55$). Over the course of several days, participants were asked to make judgments regarding 50 one-page case summaries. Raters coded potential factors included in the case summaries that could influence judgments. Judgment analyses were conducted to examine the relationship between potential factors, or “cues”, and participant judgments of sexual harassment

authors are encouraged, and in many cases editors and reviewers explicitly ask for, post hoc theorizing. This occurs even though post hoc theorizing is a practice deemed unethical by the Journal Editor Ethics code (Author 2014).

Although the *Journal of Business and Psychology* welcomes inductive research at any time (e.g., Ho 2012), this special feature provides a home for papers that were not driven by theory and allows authors to present their research as exploratory. The special issue heeds Locke’s (2007) call for an inductive approach that allows publication of papers that do not deductively test theoretically derived hypotheses. The introductions of these papers summarized what is known about their topics and then addressed research questions. The purpose was to provide new insights into phenomena and to show us how constructs are related. The papers here provide insights into organizational phenomena unconstrained by hypothesis tests that largely must be confirming. The insights these papers provide will hopefully provide raw material for future theories.

One of the surprising things we learned in serving as editors for this special issue is that the deductive approach is so firmly entrenched in our collective consciousness that many authors struggled without the framework of theory. Some of the papers submitted failed to capture the spirit of the inductive approach at all. In some cases, authors just submitted the usual deductive papers, perhaps because they were rejected by other journals for not having strong enough theory. These papers had hypotheses based on some theoretical framework and were not a good fit for the special issue. In other cases, papers had introductions that contained theory and arguments leading to some hypothesized relationships, but the hypotheses were just unstated. Perhaps these papers had been submitted elsewhere, and the authors just deleted the hypotheses without refocusing the introduction in a more inductive way. The ideal paper was positioned as addressing an important research question. Although background on the topic was provided, the background did not lead to the expectation that results should come out in a particular way. Rather it led to uncertainty about what to expect in the results.

The special issue contains 13 inductive papers that cover a variety of topics, and the authors applied various methods including qualitative. In Table 1, we list all of the papers grouping them into topic area. We also note the methodology used.

This special issue had two goals. The first was to provide a home for good inductive papers that would contribute to our literature in significant ways. This answers Locke’s (2007) call for inductive papers that can provide the raw material for future theories. The second was to demonstrate the value of the inductive approach, to be a proof of concept. We hope that this special issue will motivate editors at other journals to change their policies and welcome high quality inductive papers. The past 60 years has seen the pendulum swing from induction and emphasis on empiricism to deduction and the almost total rejection of exploratory approaches today. It is time to let the pendulum swing back to the middle where both deduction and induction are equally valued. Hopefully, this special issue will be a small step in that direction.

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