GETTING THE MOST FROM MBA INTERNSHIPS: PROMOTING INTERN LEARNING AND JOB ACCEPTANCE

GERARD BEENEN AND DENISE M. MROUSSEAU

MBA internships are commonly used for training and recruiting management talent. Yet, research overlooks what makes them effective. A longitudinal study investigates the relationships that goal clarity, autonomy, and prior experience have with MBA intern learning and job acceptance intentions. Results show learning partially mediates the relationship of goal clarity to job acceptance intentions, and that less experienced MBA interns learn more under conditions of high goal clarity and low autonomy (i.e., when their roles are more structured). We discuss how role structures and learning can inform effective training and recruiting of interns, and management of short-term workers in general. © 2010 Wiley Periodicals, Inc.

Keywords: goal clarity, autonomy, learning, MBA internships, job acceptance intentions

Internships are temporary work arrangements that employers use to train and select future employees (Baron & Kreps, 1999). About 75% of American college students participate in internships (Coco, 2000), an arrangement employers find to be a useful recruiting tool (National Association of Colleges and Employers [NACE], 2006). Even during economic downturns, employers use internships to expand their future talent pool (Lhuby, 2008). In particular, MBA internships are a valuable, cost-effective source of management talent in organizations. They function as a "10-week interview" in which employers and candidates evaluate one another ("MBA Journal: Summer Internship," 2004). In the United States, more than 30,000 full-time MBA students participate in internships annually (Graduate Management Admissions Councils [GMAC], 2006), and use in international MBA programs is growing (e.g., "INSEAD 2008 Employment Statistics," 2009, p. 38). Despite their prevalence, surprisingly little research exists on MBA internships. Instead, the sparse internship literature focuses on undergraduates (see, e.g., Gruman, Saks, & Zweig, 2006; Taylor, 1988). In contrast to MBA interns, undergraduate interns typically have little prior work experience and lower responsibilities. The existing literature has also been limited

Correspondence to: Gerard Beenen, Mihaylo College of Business & Economics, California State University, 800 N. State College Blvd., Fullerton, CA 92381, Phone: 657-278-4858, E-mail: gbeenen@fullerton.edu.

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to investigating the internship's impact on postgraduation job prospects and career plans (see, e.g., Callanan & Benzing, 2004; Feldman & Weitz, 1990; Taylor, 1988). Research has not investigated how the structure of the internship role may be related to the important outcomes of learning and job acceptance.

Our study seeks to bridge these gaps. It addresses the fundamental question, "How is the structure of MBA intern roles related to intern learning and job acceptance?" Using a longitudinal sample of MBA interns from three business schools, this study tests hypotheses regarding three factors relevant to MBA intern learning: 1) the clarity of the task goals to be accomplished during the internship, 2) the intern's autonomy in pursuing these goals, and 3) the intern's prior work experience. We develop and test the hypotheses that the intern's attention and effort can be more focused on learning when task goals are clear—contingent on the intern's prior level of experience and autonomy in the job. We also investigate the link that learning has with MBA interns' intentions to accept full-time job offers from their internship employer.

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MBA internships share attributes with broader forms of contemporary employment. Professionals increasingly take on short-term jobs as consultants or independent contractors in which they must learn and perform concomitantly (see, e.g., Arthur & Rousseau, 1996; Barley & Kunda, 2004). Such jobs typically entail ever-greater performance pressures requiring their occupants quickly to acquire additional skills needed to do the job (Rousseau, 2006). As such, with the MBA internship as our context, this study also seeks to explicate how fast learning can be facilitated in contemporary, short-term, performance-pressured work. Figure 1 displays the framework developed and tested here.

Goal Clarity, Learning, and Job Acceptance Intentions

Role theory is the dominant paradigm for understanding how people learn new jobs and responsibilities (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007; Saks & Ashforth, 1997), providing a useful starting point to understand how on-the-job learning occurs. Roles are expectations associated with an organizational position. They are "sent" by a role set (e.g., supervisors, coworkers, and clients) and "received" by the role occupant (Ilgen & Hollenbeck, 1992)—in this study's context, an MBA intern. Unclear roles cause stress (Jackson & Schuler, 1985; Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). Stress, in turn, reduces the would-be learner's available attention to process new information and respond to novel task demands (Kanfer & Ackerman, 1989).

Role theory further distinguishes task *goals* from task *activities* (Kahn et al., 1964, p. 94). Task goals refer to the work products to be completed (Locke & Latham, 1990, 2002), while activities are the specific task strategies used to accomplish these goals. For example, completing a marketing report by the end of a 10-week internship is a task goal. Interviewing clients, analyzing population data, and creating summary tables are the specific activities associated with that goal. Though task goals and activities are rarely studied as separate role dimensions (King & King, 1990; Sawyer, 1992), the distinction is important for MBA interns who have only a short amount of time to learn and show how they can perform. Here we focus on task goal clarity as a specific factor in structuring a new role to facilitate learning. The MBA internship may cause variations in role structure to be more impactful than for other forms of work because the intern tends to be highly motivated to obtain specific outcomes (e.g., new skills, a potential job offer; Ashforth, 2001).

Task goal clarity in this context is the extent to which the MBA intern understands what work products he or she is expected to produce and the standards by which those products will be evaluated. When task goals
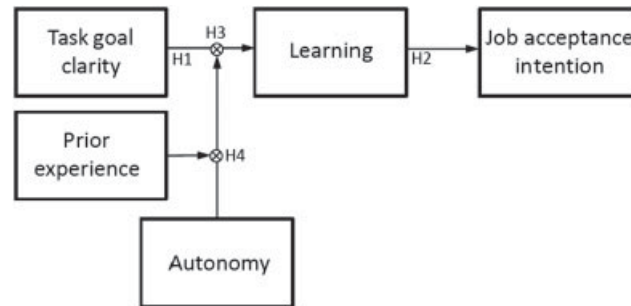
FIGURE 1. Hypothesized Relationships

are well understood, the intern's attention and effort are better able to focus on relevant activities and develop the skills the work products require. An MBA intern, for example, may need to figure out how to build an appropriate spreadsheet model when the task goal is to complete a marketing analysis. The present study focuses on task learning: that is, positive change in task-related skills (Anderson, 2000). Task learning is a facet of the broader learning domain in which individuals build knowledge regarding themselves, their environment, and others through experience and reflection (Bandura, 1986). Task skills may be enacted, as in the case of creating a spreadsheet model for the first time, or latent, in the form of insights on how to analyze a particular market niche. When task goals are unclear, uncertainty and stress are expected to impair the interns' ability to learn by making it difficult to identify, acquire, and perform appropriate activities to accomplish the task (Jackson & Schuler, 1985; Saks & Ashforth, 1997). Task goal clarity provides scaffolding, meaning the task structures and organizing frameworks that help learners select, develop, and execute activities that constitute learning (Seidel, Rimmele, & Prenzel, 2005). Goal clarity can provide learning scaffolds through the work design itself, as in the case of well-specified work products that aid learning by doing (Eraut, 2007), or via interpersonal support mentors provide that helps identify appropriate activities (Lankau & Scandura, 2002). In general, novices learn better when they are given task structures that guide problem-solving activities (Reiser, 2005). Task goal clarity is the task structure on which the present study focuses.

Job acceptance intentions in this paper's context refer to the MBA intern's belief in his or her likelihood of accepting a full-time job offer with the internship employer. MBA interns who learn more from their internship are expected to be highly motivated to accept a job offer from their employer in contrast to those who learn less. This is particularly likely in the case of acquiring task knowledge, where expanding one's skills on the job can signal a compelling future and generate commitment to the organization (Hornung, Rousseau, & Glaser, 2009; Rousseau, Hornung, & Kim, 2009). In contrast, other forms of learning can either positively or negatively impact one's motivation to accept a job offer, depending on the knowledge acquired (Gundry & Rousseau, 1994; Holton, 1996). Learning about the structure of an organization, for example, may make it a less (or more) attractive place to work. Job acceptance intentions are known to predict actual job acceptance and indicate how attractive an employer is to a job candidate (see, e.g., Cable & Judge, 1996). Organizations that provide MBA interns with more task learning opportunities are likely to be attractive employers for several reasons. First, developing skills meets individual intrinsic needs for competence and autonomy. Employers providing this opportunity, therefore, are more desirable places to work (Sheldon, Turban, Brown, Barrick, & Judge, 2003). Second, learning opportunities during internships signal the potential for similar opportunities

in future, full-time positions. Interns are motivated to remain with an employer where learning opportunities are anticipated (Ng, Butts, Vandenberg, DeJoy, & Wilson, 2006). Third, learning enhances prospects for advancing in one's career with a particular employer (Fugate, Kinicki, & Ashforth, 2004; Hall, 2002; Rollag, Parise, & Cross, 2005). Thus, employers who offer task learning opportunities should be more attractive to MBA interns.

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To summarize, task goal clarity is expected to help MBA interns learn. It does so by focusing their efforts and attention on task-related activities, thus expanding their skill repertoire. Learning, in turn, is expected to strengthen interns' job acceptance intentions by making the employer a more attractive place for them to launch their postgraduation careers. Thus, for MBA interns we hypothesize:

Hypothesis 1: Task goal clarity is positively related to learning.

Hypothesis 2: Learning is positively related to job acceptance intentions.

Autonomy and Learning

Autonomy is the freedom or discretion MBA interns have to carry out assigned task goals (Hackman & Oldham, 1980). It is an important dimension of effective job design (Hackman & Oldham, 1975, 1980) and psychological empowerment (Spreitzer, 1996). Autonomy can enable learning by strengthening individual commitment to task goals (Locke & Schweiger, 1979), enhancing intrinsic motivation and task persistence (Sheldon et al., 2003), and providing opportunities to take on new responsibilities (Parker, 1998). Studies that combine specific assigned goals (a form of task goal clarity) with worker participation (a form of autonomy) report a positive association with worker productivity gains, which correlate with and possibly indicate learning (Campbell & Gingrich, 1986; Miller & Monge, 1986).

This body of previous research gives rise to the hypothesis that high autonomy will strengthen the positive effect of task goal clarity on learning through the mechanisms noted: that is, goal commitment, goal internalization and persistence, and taking on new responsibilities (Locke & Schweiger, 1979; Parker, 1998; Sheldon et al., 2003). Low autonomy, in turn, should undermine these enabling mechanisms, thereby diminishing the positive effect of task goal clarity on learning. Unclear task goals combined with high autonomy lead to ambiguity in both task goals and the activities appropriate to accomplishing goals (Kahn et al., 1964; King & King, 1990; Rizzo, House, & Lirtzman, 1970). Low goal clarity means that an important scaffold for learning is missing—clear goals (Seidel et al., 2005). Low autonomy under these conditions reduces some ambiguity: it provides alternative support for learning as structured activities. Although interns in these conditions may not precisely understand their task goals, learning can still occur as the interns perform prescribed activities.

We note that prior research linking high autonomy with learning has focused on how *experienced* workers learn on the job. As such, the brevity of the internship may be a boundary condition, impeding the typical benefits of autonomy on learning. Workers familiar with their responsibilities tend to have high task goal clarity. In contrast, MBA interns are likely to experience wide variations in task goal clarity. Their roles entail new settings with unfamiliar responsibilities to be fulfilled in a limited time. Autonomy in the context of MBA intern learning, therefore, may not offer the same advantages as it does for regular full-time employees. For example, MBA interns who have a lot of autonomy may not learn well if they are unsure of their task goals. We propose, therefore, an alternative hypothesis regarding the interaction effect of task goal clarity and autonomy on learning.

Because MBA interns have only eight to 12 weeks to fulfill their responsibilities, roles

with a lot of autonomy can divert their attention from learning and toward finding ways to get a job done. This autonomy can lead interns, particularly those who lack appropriate task strategies, to be ineffective at searching for such strategies (Kanfer & Ackerman, 1989). High autonomy may cause interns to develop an array of new task plans of varying quality and appropriateness (Locke & Latham, 1990), which impairs efficiency and learning as they perform tasks (Drach-Zahavy & Erez, 2002). Lower autonomy, on the other hand, could provide interns with more complete scaffolding (Seidel et al., 2005). It may focus interns' attention and effort on prescribed activities and procedures, thereby allowing them to learn while effectively completing work products.

Research on short-term training supports this alternative view with its finding that directive supervisor feedback leads to greater performance gains (i.e., correlates with and potentially indicates learning) than does participative feedback (Hillery & Wexley, 1974). Though not identical to variations in autonomy, directive versus participative supervisor feedback can generate differences in the autonomy learners experience in their roles. Directive supervisor feedback can translate into control over how work gets done for learners who are responsive to feedback, structuring on-the-job behavior more in line with supervisor direction. In contrast, participative feedback provides more opportunities for subordinates to influence the way their work is done, supporting greater job autonomy. Indeed, a worker can experience limited autonomy and little learning when a supervisor directs him or her to engage in seemingly meaningless activities. In the present context of MBA internships, however, it is more likely that the structuring that limits an intern's autonomy is intended to be functional given the value employers seek to gain from internships (Baron & Kreps, 1999; NACE, 2006, p. 22). By implication, lower autonomy is expected to facilitate learning in short-term situations by directing a worker toward using more effective task strategies.

In summary, prior research has suggested higher autonomy should strengthen the relationship between goal clarity and learning. In a short-term job, however, it is possible that higher autonomy may divert attention and effort away from learning and toward figuring out how to get the job done. We thus pose two competing hypotheses regarding how goal clarity and autonomy in an MBA intern's role structure are related to learning.

Hypothesis 3a: Autonomy moderates the relationship of task goal clarity and learning. Consistently with research on regular workers, the relationship is expected to be stronger when autonomy is high and weaker when it is low.

Hypothesis 3b: Autonomy moderates the relationship of task goal clarity and learning. Consistently with research on short-term training, the relationship is expected to be stronger when autonomy is low and weaker when it is high.

Experience and Learning

Experience is defined here as the level of full-time work experience an individual has prior to the MBA internship. Unlike typically inexperienced undergraduate interns, MBA interns differ in their levels of experience (Dreher & Ryan, 2004). Among recent full-time MBA program applicants, 24% had less than three years of experience; 62% had three to 11 years; and 14% had more than 11 years (GMAC, 2006). Experienced MBA interns have been exposed to more work settings, tasks, projects, and work roles than have inexperienced ones (Tesluk & Jacobs, 1998). Consequently, they should possess a larger repertoire of skills and task activities than their less experienced counterparts. These differences should influence how MBA interns respond to variations in autonomy. Faced with more discretionary task activities, experienced MBA interns should have a

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greater number of interpretive schemas. These are mental representations of tasks and related activities that help workers make sense of their responsibilities (Ashforth, 2001, pp. 201–203). Having an array of interpretive schemas helps people identify more effective ways to learn new work roles and accomplish task goals.

Task goals can impair learning when people lack appropriate task strategies because of inexperience (Kanfer & Ackerman, 1989). Attention and effort are diverted from learning and toward searching for ways to complete tasks for which individuals lack the skills or experience necessary to perform well (Ashforth, 2001). Less experienced MBA interns tend to have a smaller repertoire of skills and activities than do more experienced ones. Their limited repertoires should make it difficult to respond effectively to task goals, because less experienced workers lack the necessary scaffolding to learn and perform well in novel environments (Seidel et al., 2005). High autonomy is thus expected to exacerbate the difficulties that less experienced workers face.

On the other hand, experienced MBA interns with a larger skill set and activity repertoire are more likely to develop appropriate task strategies for accomplishing goals. Consequently, they are disposed to experience the learning benefits of high autonomy (Locke & Schweiger, 1979; Parker, 1998; Sheldon et al., 2003) because of their capacity to allocate attention and effort to learning better (Kanfer & Ackerman, 1989). Consistently with the logic of scaffolding, experienced MBA interns require less structure to learn and perform their roles, because they are enabled by the larger repertoire of skills and activities their prior experience provides.

In summary, less experienced MBA interns should learn more than their more experienced counterparts under conditions of low autonomy. In contrast, those with more prior experience should learn more than their less experienced counterparts under conditions of high autonomy. This implies a three-way interaction among task goal clarity, autonomy, and experience.

Hypothesis 4: The relationship between task goal clarity and learning will be stronger for less experienced interns with low autonomy, and stronger for more experienced interns with high autonomy.

Method

Sample

Representing the class of 2007, 110 MBA interns composed this study's sample across three full-time MBA programs in the midwestern United States (16% response rate). Respondents were 66% male and 34% female, compared to the schools' population of 73% male and 27% female ($t = -1.66$, *ns*). Participants reported a mean of 5.6 years between their undergraduate degrees and the start of their MBA program compared to 5.2 years for the population ($t = 1.52$, *ns*). Table I displays descriptive statistics for study participants.

Procedure

Participants were recruited through e-mails from each program's career service director. Prior to starting the internship (time 0), 140 participants completed a structured phone interview, followed by a brief self-report survey. The interview and time 0 survey included questions about their job search process, internship, and job acceptance intentions with their employer. Study participants also provided copies of their resumes. An e-mail with an Internet link to a self-report survey was then sent 21 days after the internship start date (time 1), and within 14 days following the end date (time 2). As an incentive, participants were enrolled in a $100 lottery after survey completion and a $100 bonus lottery for completing both surveys. Of 140 MBA interns who completed the time 0 interview and survey, 110 completed both surveys (1 and 2) for a 79% retention rate.

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Measures

With the exception of Experience and Job Acceptance, all variables studied here were measured using a 6-point scale without a midpoint (1 = Strongly Disagree, 6 = Strongly Agree) in order to require respondents to take a position on each item. Our role expectations, Goal Clarity and Autonomy, are measured from the perspective of the focal person (King & King, 1990), the intern.

Independent and Moderator Variables

A Goal Clarity scale (Cronbach's alpha = .90) was developed to distinguish task goals from activities (King & King, 1990; Sawyer, 1992). Its four items included two adapted from the Rizzo et al. (1970) "role output" subscale and an additional two that were developed for this study. The Goal Clarity scale was completed at time 2. (See Table II for items for this scale as well as for Autonomy and Learning as described later.)

Autonomy was measured at time 1 so that it would be more independent of the Goal Clarity variable, the effects of which it was expected to moderate. Autonomy (Cronbach's alpha = .80) was assessed using Hackman and Oldham's (1975) 3-item job autonomy scale. This measure taps individual control over how work is done, as opposed to other facets of autonomy such as control over work hours, work location, or other aspects external to the task itself (Morgeson & Humphrey, 2006). We chose this facet of autonomy to be consistent with the study's focus on task goals and learning task-related skills.

Experience was operationalized as the number of years between the intern's undergraduate degree and starting the MBA program. This information was obtained from the participants' resumes at time 0, prior to starting their internship. It constitutes an indirect experience measure because periods of unemployment may be included. It has the advantage, however, of incorporating time for life experiences relevant to participants' skill development (e.g., volunteer work, travel).

Dependent Variables

A 7-item Learning measure (Cronbach's alpha = .89) using the previous 6-point scale was developed for this study. It represents skills employers use as important selection criteria for MBA graduates (GMAC, 2006). Administered at time 2, this scale assessed learning that occurs through explicit practice and reflection and therefore should correspond to objective changes in skills (Kirsner & Speelman, 1998).

Job acceptance intentions were operationalized using a single-item probability measure obtained at both time 0 and time 2. Designed to be user-friendly, this format permitted respondents to state their intentions explicitly, while avoiding the cognitive burden of redundant questions. Note that acceptance intentions may be influenced by factors unrelated to the internship experience *per se*, particularly an attractive salary and work location. To control for these factors, the measure was worded, "If you were offered a full-time job with your internship employer in a satisfactory location and for satisfactory pay, how likely would you be to accept it (0 = no chance of accepting it; 100 = completely certain you would accept it)?"

TABLE I Participants by School				
	Male	**Female**	**Prior Experience (years)**	**Total Responses**
School 1	71%	29%	M = 5.79 S = 3.03	56
School 2	61%	39%	M = 5.51 S = 1.71	49
School 3	40%	60%	M = 5.34 S = 2.80	5
Total	66%	34%	M = 5.53 S = 2.53	110

TABLE II Factor Loadings for Goal Clarity, Autonomy, and Learning Scale Items			
Scale and Item	F1	F2	F3
Goal Clarity			
1. I knew what the criteria would be for my performance evaluation.	.32	.67	
2. I was given clear objectives about what I needed to accomplish in my internship.		.92	
3. I was given clear descriptions of work deliverables I needed to complete in my internship.		.83	
4. I received a clear explanation of what I needed to accomplish in my internship.		.82	
Autonomy			
1. I have limited flexibility in how I do my work. (reversed)			.55
2. I have the freedom to decide how to do my work assignments.			.83
3. I have a lot of flexibility in how I complete my work.			.92
Learning			
1. I developed my interpersonal skills.	.70		
2. I improved my oral communication skills.	.72		
3. I learned how to think strategically about business problems.	.72		
4. I improved my technical skills in my specialty area (e.g., fin., mktg., ops.).	.61		
5. I developed skills or knowledge that I learned in my MBA program (e.g., fin., mktg., ops.).	.67		
6. I learned new skills or knowledge that are important for my career development.	.87		
7. I didn't learn anything new during my internship (reversed).	.69		

Notes: N = 110. Principal axis factoring with varimax rotation. Loadings < .30 not shown. F1–F3 = Factor 1–Factor 3. F1, F2, and F3, respectively, account for 38.1%, 16.5%, and 14.3% of variance with eigenvalues > 1.

Control Variables

The participating business schools differed in their rankings and relative strengths. They reflected the first (i.e., top 10) through third tiers (i.e., top 50) of popular MBA program rankings (i.e., *BusinessWeek* and *U.S. News and World Report*). One program emphasized marketing and general management, another financial and operational analysis. To control for school differences, two dummy variables represented School 2 and School 3. Interns who were initially predisposed to accept a full-time job offer with their employer (e.g., due to a firm's reputation; Turban & Cable, 2003) may be inclined to accept an offer when their internship ends. To account for this possibility, interns' job acceptance intentions at time 0 were also used as a control in the regression models (Edwards, 1994). Sex was controlled for, given prior research showing gender differences in perceptions of firm attractiveness (Williamson, Lepak, & King, 2003).

Scale Validity

Because new scale items were developed for Goal Clarity and Learning, an exploratory factor analysis (EFA, principal axis factoring with varimax rotation) was conducted on the study sample (N = 110) to ensure the discriminant validity of the Learning items relative to items for Goal Clarity and Autonomy (Anderson & Gerbing, 1988). Each of the scales loaded on three independent factors as expected (Table II; eigenvalues ranging from 5.34 to 2.01) comprising 69% of total variance. A fourth factor (eigenvalue of .92) accounted for less than half the variance of the third factor (6.6% vs. 14.1%), suggesting three factors were appropriate. A confirmatory factor analysis (CFA) using AMOS 7 further assessed construct validity (Anderson &

Gerbing, 1988). Model fit statistics for a three-factor model (N = 110) were acceptable given the study's small sample (Hu & Bentler, 1999), including comparative fit index (CFI = .933), Tucker-Lewis index (TLI = .918), root mean square error of approximation (RMSEA = .085; 90% CI between .061 and .108), and standardized root mean square residual (SRMR = .065). Neither a one- nor a two-factor model fit well.

Hypothesis Testing

Table III displays correlations for all variables, means, standard deviations, and reliability coefficients of all noncategorical variables. Using a five-step procedure, Hypotheses 1, 3, and 4 were tested with hierarchical linear regression using SPSS 15 (Table IV). In step one, Learning was regressed on the school dummy variables, Autonomy and Experience. Autonomy and Experience were included in step one to control for any effects they may have on the dependent variables and to isolate the effects of the independent variable and interaction terms on the dependent variables in subsequent steps. Goal Clarity was entered in step two (Hypothesis 1), the Goal Clarity by Autonomy interaction term in step three (Hypotheses 3a and b), the remaining two-way interaction terms in step four, and the Goal Clarity by Autonomy by Experience three-way interaction term in step five (Hypothesis 4). All interaction terms were calculated with centered variables (Aiken & West, 1991; Dawson & Richter, 2006). Hypothesis 2 was tested using a two-step procedure (Table V). Job Acceptance was regressed on the school dummy variables, Autonomy, Experience, and Goal Clarity in step one. Learning was added in step two.

Results

H1 predicted Goal Clarity to be positively associated with Learning. Goal Clarity had a positive coefficient ($\beta = .41$, $p < .001$) with a change in R^2 ($F_{(1, 103)} = 20.60$, $p < .001$) that explained 15.5% of the variance in Learning. H1, therefore, was supported.

H2 predicted Learning would be positively associated with Job Acceptance Intentions. With the controls, Autonomy, Experience, and Goal Clarity in the model, Learning had a positive coefficient ($\beta = .22$, $p < .05$) with a change in R^2 ($F_{(1, 101)} = 6.30$, $p < .05$), accounting for 3.8% of the variance in Job Acceptance Intentions. H2 was thus also supported. To explore further the relationship between Learning and Job Acceptance Intentions, the study sample was divided by a median split into low and high Learning groups. Those with above median Learning scores had higher mean Job Acceptance Intentions at time 2 than those with below median Learning ($M = 69.8$ vs. $M = 48.4$). In other words, those who learned more were 21.4% more likely to intend to accept their employer's job offer than those who learned less. For above versus below median learners, we observed an 8.9% difference in Job Acceptance Intentions at time 0 ($M = 78.3$ vs. $M = 69.4$). Controlling for pre-internship Job Acceptance Intentions, above median Learning was associated with a 12.5% greater willingness to accept a job with the internship employer.

A mediation analysis was conducted to test whether Learning mediated the relationship of Goal Clarity to Job Acceptance Intentions. To test for mediation, the independent variable should be positively related to both the mediator and the dependent variable. The independent variable's effect should disappear (full mediation) or be weakened (partial mediation) when the mediator is added to the model (Kenny, Kashy, & Bolger, 1998). Table V shows that Goal Clarity was positively related to Job Acceptance Intentions ($\beta = .31$, $p < .001$) in step one. This relationship weakened ($\beta = .21$, $p = .02$) when Learning was added in step two. A Sobel test also supported Learning as a mediator in the relationship between Goal Clarity and Job Acceptance intentions (2.20, $p < .05$). Thus, Learning partially mediated the relationship between Goal Clarity and Job Acceptance Intentions. Though Autonomy had an indirect effect on Job Acceptance Intentions ($\beta = .18$, $p = .04$), a Sobel test did not support Learning as a mediator in this relationship (1.22, *ns*).

TABLE III   Means, Standard Deviations, Correlations, and Reliability Coefficients Among Variables

	M	S	1	2	3	4	5	6	7	8
1. Task Goal Clarity	4.13	1.16	(.90)							
2. Autonomy	4.54	1.02	0.05	(.80)						
3. Years Experience	5.57	2.56	0.05	–0.19*	---					
4. Learning	4.62	0.85	0.42***	0.17	0.09	(.89)				
5. Job Accept Intent t2	59%	32.4	0.32**	0.14	0.14	0.40***	---			
6. Job Accept Intent t0	74%	20.7	0.12	0.01	0.15	0.18	0.46***	---		
7. School 2	---	---	0.01	–0.09	0.01	–0.14	–0.07	–0.17	---	
8. School 3	---	---	–0.18	–0.13	–0.24*	–0.06	0.05	0.01	–0.20*	---
9. Sex (1 = male)	66%	---	0.17§	0.01	0.17†	0.04	–0.04	0.09	–0.07	–0.12

Notes: N = 110. All significance levels are two-tailed. Reliability coefficients displayed along the diagonal.
†$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$.

TABLE IV Summary of Hierarchical Regression for Variables Predicting Learning (Hypotheses 1, 3, 4)

Step and Predictor	1	2	3	4	5
1. Control variables					
Job acceptance intent (time 1)	.15 (1.53)	.10 (1.17)	.08 (.99)	.08 (.99)	−.02 (−.23)
School 2	−.10 (−1.05)	−.11 (−1.18)	−.14 (−1.64)	−.13 (−1.50)	−.16 (−1.81)
School 3	−.03 (−.32)	.03 (.35)	.01 (.14)	.02 (.24)	−.02 (−.19)
Sex	.00 (.02)	−.06 (−.62)	−.07 (−.80)	−.07 (−.79)	−.04 (−.47)
Prior experience	.10 (.94)	.10 (1.01)	.08 (.89)	.08 (.92)	.09 (.95)
Autonomy	.17† (1.70)	.16† (1.76)	.05 (.56)	.05 (.56)	.04 (.48)
2. Predictor variable (Hypothesis 1)					
Goal clarity		.41*** (4.54)	.40*** (4.82)	.40*** (4.62)	.42*** (4.91)
3. Two-way interaction term (Hypothesis 3)					
Goal clarity X autonomy			−.34*** (−3.89)	−.34*** (−3.89)	−.35*** (−4.01)
4. Other two-way interaction terms					
Goal clarity X prior experience				−.05 (−.55)	−.12 (−1.30)
Autonomy X prior experience				−.01 (−.15)	.02 (.25)
5. Three-way interaction term (Hypothesis 4)					
Goal clarity X autonomy X prior experience					.21* (2.12)
R^2	.08	.23***	.33***	.33***	.36***
Adjusted R^2	.03	.18	.28	.27	.29
ΔR^2		.16***	.10***	.00	.03*

Notes: N = 110. Coefficients are standardized. T ratios are displayed in parentheses below each coefficient.

†$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$.

H3 predicted Autonomy would moderate the relationship between Goal Clarity and Learning. For H3a to be supported, the two-way Autonomy × Goal Clarity interaction must be both significant and positive. Alternatively, the coefficient should be significant and negative to support H3b. Figure 2 plots the results of the two-way interaction. Adding the two-way interaction term in step three resulted in a significant change in R^2 ($F_{(1,102)}$ = 15.16, $p < .001$), explaining 10% of the variance. In support of H3b, the coefficient was negative and significant (β = −.34, $p < .001$). Goal Clarity thus had a stronger positive relationship with Learning when Autonomy was low and a weaker relationship when Autonomy was high. H3b was thus supported and H3a rejected.

H4 predicted a three-way interaction of Goal Clarity, Autonomy, and Experience. For H4 to be supported, the three-way interaction term must be significant and positive. Figure 3 plots these results. After entering other possible two-way interactions in step four (Aiken & West, 1991), the three-way interaction term entered at step five was significant (β = .21, $p < .05$) with a change in R^2 ($F_{(1,99)}$ = 4.49, $p < .05$) that explained 2.9% of

TABLE V	Summary of Hierarchical Regression for Variables Predicting Job Acceptance Intentions (Hypothesis 2)		
Step and Predictor	**1**	**2**	
1. Control variables			
Job acceptance intent (time 1)	.42***	.39***	
	(5.00)	(4.81)	
School 2	.03	.06	
	(.38)	(.68)	
School 3	.15†	.14†	
	(1.71)	(1.67)	
Sex	−.12	.13	
	(−1.53)	(1.07)	
Prior experience	.15†	.13	
	(1.74)	(1.50)	
Autonomy	.18*	.14	
	(2.07)	(1.70)	
Goal clarity	.29***	.21*	
	(3.46)	(2.42)	
2. Predictor variable (Hypothesis 2)			
Learning		.22*	
		(2.51)	
R^2	.34***	.38***	
Adjusted R^2	.30	.33	
ΔR^2		.04*	

Notes: N = 110. Coefficients are standardized. T ratios displayed in parentheses below each coefficient.

†$p < .10$, *$p < .05$, **$p <. 01$, **$p < .001$.

the variance in Learning. H4 was thus supported.

Slope Difference Tests

Post hoc tests for differences between specific pairs of slopes (Table VI) probed the nature of the three-way interaction (Dawson & Richter, 2006). The slope tests indicated significant differences between high and low levels of Experience for low levels of Autonomy ($t = –2.08$, $p < .05$; slopes 3 and 4 in Figure 3), between high and low levels of Autonomy for low levels of Experience ($t = –4.85$, $p < .001$; slopes 2 and 4 in Figure 3), between high Autonomy and Experience, and low Autonomy and Experience ($t = –3.16$, $p < .01$; slopes 1 and 4 in Figure 3), and between high Autonomy and low Experience and low Autonomy and high Experience ($t = –3.02$, $p < .01$; slopes 2 and 3 in Figure 3). This suggests the interaction was due to the sensitivity of low Autonomy to variations in Goal Clarity, especially

for less experienced interns. That is, the most learning occurred when less experienced interns had higher Goal Clarity and lower Autonomy. The lowest learning occurred when less experienced interns were low in both Goal Clarity and Autonomy. Interns with other levels of Experience and Autonomy were less impacted by Goal Clarity.

Discussion

Findings in the present study have important implications for management practices associated with MBA internships. Managers should consider the importance of learning to a successful internship. To enable learning, the intern's task goal(s) should be well specified, and the potential impact of intern autonomy and prior experience on learning should be weighed. Our results also inform managing short-term workers in general, particularly where specific skills and knowledge are important to effective performance.
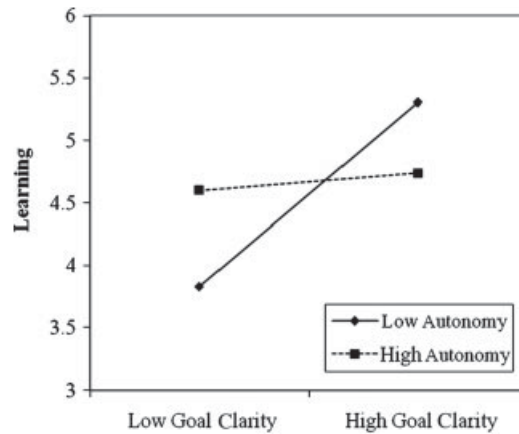
FIGURE 2. Goal Clarity X Autonomy Two-Way Interaction (Hypothesis 3)

The MBA Internship

Learning during the internship appears to be a critical factor in an MBA student's intentions to accept a regular job offer from a summer employer. Yet, the conditions that promote learning during an internship can differ from those that create a good learning environment for regular full-time employees. Learning during full-time employment occurs over a period of months, if not years, allowing employees to familiarize themselves with the employer's goals and expectations. In contrast, MBA interns must learn quickly, with less time to develop the familiarity and understanding that provide the scaffolding for acquiring new skills and activities. Task goal clarity is a potentially important predictor of MBA intern learning. Our results suggest that goal clarity helps learners direct their efforts effectively. Given the varied circumstances in which an employer can create an internship, agreeing on task goals is likely to vary among managers, HR representatives, colleagues, and others whom interns encounter on the job. Given the potentially inconsistent messages MBA interns are likely to encounter from these messengers, it may behoove an intern's immediate supervisor to be especially diligent in specifying task goals and ensuring a shared understanding of those goals. Setting clear task goals, our results suggest, is a critical feature for an effectively structured internship.

Employer practices are also important to MBA intern learning. Interviews with interns and employers conducted in the aftermath of our study uncovered one employer's exemplary practice—structuring its MBA internships to promote learning. This employer's interns participated in a process of defining the internship's goals. Interns discussed and refined these goals with their primary supervisor. Throughout the internship, goals were revisited in meetings with the supervisor and relevant coworkers. When the internship concluded, goal accomplishment was used as a major component of the intern's performance review. MBA interns who worked for this employer reported that this process was both challenging and useful for their learning. Even in firms with less systematic processes, task goal clarity can be achieved via efforts by the intern's immediate manager to establish clear deliverables. This includes work products and evaluation standards, for example, a report with specific objectives aimed at a particular audience. The role structuring process may also be enabled by identifying requisite skills and activities for the MBA to master, such as interviewing internal clients or diagnosing a performance problem.

Identifying the appropriate level of autonomy or discretion is the second feature our study suggests is important for structuring an internship for learning. Given the short time frame MBAs have to learn on the job, interns
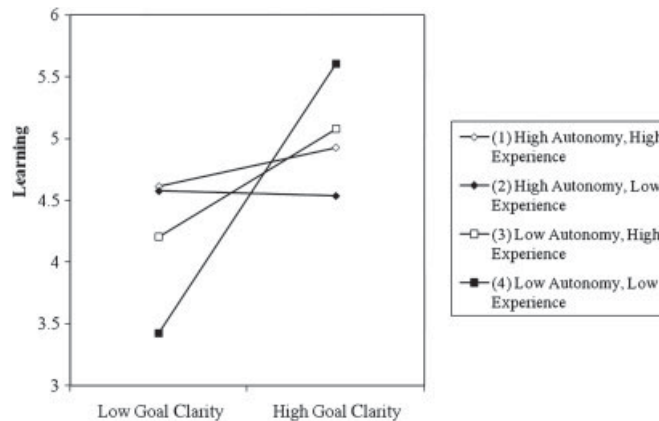
FIGURE 3. Goal Clarity X Autonomy X Prior Experience Three-Way Interaction (Hypothesis 4)

differ from the regular workers studied previously in their capacity to benefit from autonomy. This finding is consistent with prior research on short-term training. When limited time exists to learn new skills and activities, directive supervisor feedback can result in greater performance gains than participative feedback (Hillery & Wexley, 1974). MBA interns typically have eight to 12 weeks to learn new activities and fulfill their responsibilities. Too much autonomy can divert attention from learning. Instead, the intern is likely to direct considerable effort searching for ways to get the job done. Rushing to complete a task at hand can undermine learning by downplaying the value of dead ends and alternative strategies. When lower autonomy reflects the developmental direction that supervisors and coworkers provide, interns' learning is likely to be better supported (Seidel et al., 2005).

If a lack of appropriate structure makes learning in short-term roles more difficult, the effects of too much autonomy are even more pronounced when workers are less experienced. Less experienced people have a limited repertoire of skills, activities, and related capacities for problem solving and task planning (Ashforth, 2001; Locke & Latham, 1990). Holding high goal clarity constant, less experienced interns reported more learning when autonomy was low than did their more experienced counterparts. For more experienced interns, goal clarity had a positive rela-tionship with learning, while autonomy had none. Interns provided with clear task goals appeared to need a base level of prior experience to reap autonomy's learning benefits.

As in the case of the exemplary employer described earlier, setting internship goals with one's supervisor to ensure appropriateness and understanding combines the best of autonomy with goal clarity. Participating in setting one's own goals may provide sufficient autonomy in work settings where learning needs to occur quickly. Goals are not only better understood in such cases, but likely to be effective in identifying appropriate task activities and acquiring new skills.

The antithesis of the enabling role structure described previously is a supervisor who dictates what the intern is supposed to do day to day (low autonomy) without explaining why (low goal clarity). The least learning occurred where both goal clarity and autonomy were low—an effect pronounced for those with little prior experience. A combination of rigid activities and not understanding their purpose can stifle learning.

The management practices that best promote learning may differ from those suited to use internships as screening devices for employee selection. An employer who primarily values the existing skills an intern possesses is likely to send different signals than an employer seeking an intern with the capacity to learn and perform. Where

TABLE VI Slope Difference Test for Goal Clarity X Autonomy X Experience (Hypothesis 4)		
Slope Pair Tested	**T**	**P**
(1) High autonomy/high experience and (2) high autonomy/low experience	.79	*ns*
(1) High autonomy/high experience and (3) low autonomy/high experience	−1.21	*ns*
(1) High autonomy/high experience and (4) low autonomy/low experience	−3.16	< .01
(2) High autonomy/low experience and (3) low autonomy/high experience	−3.02	< .01
(2) High autonomy/low experience and (4) low autonomy/low experience	−4.85	< .001
(3) Low autonomy/high experience and (4) low autonomy/low experience	−2.08	< .05

recruits value learning opportunities, potential employers benefit when their internship practices signal an attractive, compelling, and skill-enhancing future with the organization (Hornung et al., 2009; Ng et al., 2006; Rousseau et al., 2009). Employers whose supportive, highly structured roles promote intern learning are likely to allocate considerable resources to feedback, guidance, and mentoring. Employers using the internship as a screening device are more likely to create assignments that challenge the intern's skills, risking poor performance to evaluate those skills. The former arrangement may reduce an employer's ability to use the intern's performance as a screening device, while the latter can make internship learning more difficult.

We suggest that if the internship is used to identify MBAs who already possess sought-after skills, using intern performance as a selection criterion may undercut the employer's ability to attract people who may be highly motivated to learn. Employers seeking to hire highly motivated and ambitious MBAs may be well advised to use standardized tests and structured interviews to determine the skills that recruits possess. Doing so better positions employers to use internships for learning opportunities that signal to interns an attractive future with the firm. This should improve the firm's ability to recruit intern candidates.

Managing Short-Term Workers

Our findings have implications beyond MBA interns to newcomers in contemporary, short-term professional work arrangements. Short-term workers doing consulting or project work may learn better and faster when their employers provide degrees of autonomy commensurate with their prior experience. Experienced consultants and other contingent workers may learn the essentials of their short-term role through a combination of clear goals and high autonomy. In contrast, where short-term workers are less experienced, as is often the case for temporary or seasonal employees, a different work structure is required. Well-specified activities and clear task goals can help inexperienced short-term workers learn. Consequently, this structure is also likely to facilitate their overall performance. In contrast to experienced workers who benefit from greater autonomy, inexperienced workers require more employer resources to structure their tasks and the work situation appropriately. As such, more management time and attention are needed to provide directive feedback and learning opportunities for inexperienced short-term workers. Alternatively, more effort may be required at first to design work environments in which short-term workers can quickly learn to perform effectively. Such is the case in firms that depend on short-term employees' performing effectively. McDonald's Corporation, for example, has more than 300% employee turnover in its restaurants. Highly structured roles and work environments (e.g., well-designed visuals guiding workers in proper procedures for making and serving food) help workers learn their jobs quickly.

The least learning occurred where both goal clarity and autonomy were low—an effect pronounced for those with little prior experience. A combination of rigid activities and not understanding their purpose can stifle learning.

Highly structured roles and work environments (e.g., well-designed visuals guiding workers in proper procedures for making and serving food) help workers learn their jobs quickly. In contrast, when short-term workers are professionals responsible for more complex knowledge work, fast learning is more difficult to enable by workplace design. Instead it may be better achieved by high levels of goal clarity coupled with autonomy commensurate with the individual's experience.

In contrast, when short-term workers are professionals responsible for more complex knowledge work, fast learning is more difficult to enable by workplace design. Instead it may be better achieved by high levels of goal clarity coupled with autonomy commensurate with the individual's experience.

Because contemporary workers can expect variations in goal clarity as they enter new and short-term roles, individuals should prepare themselves for task settings with unclear goals or higher than expected autonomy. Role playing, case studies, and reflecting on prior experiences are some of the strategies that workers can use to prepare for new short-term roles. From the outset of a short-term job, seeking goal clarity by gathering information regarding expectations from important stakeholders can be critical to both performing and learning effectively.

Limitations, Future Research, and Contributions

This study has several limitations. Foremost is the fact that causality cannot be determined, although two design features increase confidence in the causal direction our hypotheses imply. Autonomy was assessed at time 1, prior to the outcomes of learning and job acceptance, which were measured at time 2. Job acceptance was measured at both times 0 and 2, permitting our analyses to investigate effects on changes in job acceptance probability. Some alternative explanations can also be considered and rejected. Although clear task goals appear to help MBA interns develop skills on the job, an alternative expla-

nation is that interns attracted to their employer report more learning, consistently with both cognitive dissonance (Festinger, 1957) and the observed higher learning means associated with preinternship (time 0) above median job acceptance intentions. Our learning outcome analyses, however, controlled for initial job acceptance probabilities, ruling out response bias as an explanation. Indeed, participant interviews prior to their internships indicated most were interested in future employment with their summer employer. Thus, an alternative causal order for the goal clarity–learning relationship is unlikely.

Representativeness is also a concern. As noted in the sample description earlier, respondents' demographics are reasonably comparable to their school's MBA population, most of whom undertook an internship. Also, as noted, participating schools were drawn from the first through third tiers of popular MBA programs. As such, we believe that our sample is representative of the broader population of MBA interns. Further, the short-term nature of MBA internships may be representative of a broader array of short-term professional work arrangements (e.g., short-term project assignments, job rotations, and highly skilled contingent workers).

Most of our measures are self-report, raising concerns regarding common method bias. The interaction effects that compose some of our major findings, however, are less subject to such bias than are main or direct effects. Furthermore, our prior experience variable was obtained from student resumes and not surveys. Prior experience constitutes an indirect measure of task skill repertoire, though it is an indicator easily available to a prospective intern's employer.

Perceptual bias is another factor, particularly with respect to the learning measure, where an indicator of objective skill change would be preferred. Nonetheless, explicit forms of self-reported learning where particular skills are specified have been shown to correspond to objective skill changes (Kirsner & Speelman, 1998). These limitations can be addressed by measuring skill level changes

over time, and comparing them with other indicators of learning.

Last, some potentially relevant factors were not assessed. We used implicit task plans, strategies, and activities to explain observed effects, yet these were not measured. Because our results are consistent with the task plan and strategy constructs (Locke & Latham, 1990) and with the logic of scaffolding (Siedel et al., 2005), future studies should measure these constructs directly to test whether our explanations are confirmed. Further, this study focused on task goal clarity, while task goal difficulty may also be a factor in both intern learning and performance. Further investigating the relationship between goal difficulty and relevant outcomes for internships and other short-term work would be informative.

Conclusion

This study makes three contributions. First, it highlights the importance of task goal clarity and autonomy in structuring MBA internships for both learning and job acceptance. Second, it demonstrates the potentially important relationships task goal clarity has with learning in short-term roles (Bauer et al., 2007; Bauer, Morrison, & Callister, 1998; Saks & Ashforth, 1997). This, itself, is an underinvestigated outcome. Third, it suggests that inexperience can limit the benefits autonomy provides to learning. In doing so, the study calls attention to the trade-offs among goal clarity, autonomy, and skill learning in the context of MBA internships.

MBA interns are likely to benefit from a well-structured internship where their supervisor and related others set clear task goals and provide guidance regarding the skills and activities needed to complete work products. Structuring an MBA intern's role should take into account the individual's prior experience in determining how much autonomy or ongoing review and feedback are required. The

trend among contemporary employers such as Genentech and Time Warner (www.simplyhired.com) to incorporate mentoring into the MBA internship is consistent with our recommendation that a high-quality relationship providing mutual goal setting and adjustments to task structuring may be optimal for both intern and employer.

Our findings have implications beyond MBA interns to other newcomers in short-term professional work arrangements. Short-term workers can learn better and faster when their employers provide degrees of autonomy commensurate with their prior experience (e.g., more autonomy for more experienced interns). Given the least experienced newcomers in this study learned less under higher autonomy, these findings are particularly relevant for "millennials" (i.e., those born in the 1980s). This includes current undergraduates and those now entering full-time MBA programs (Gloeker, 2008), who have little prior experience. There may well be a sweet spot in structuring MBA internships and other short-term professional jobs characterized by comparable demands—where clear task goals can be achieved by supporting learning in a fashion commensurate with the worker's (in)experience.

Acknowledgments

GERARD BEENEN is an assistant professor of Management at the Mihaylo College of Business and Economics, California State University, Fullerton. He completed his Ph.D. in organizational behavior and theory at Carnegie Mellon University. His research interests include workplace motivation and learning, alternative work arrangements, the learning-performance tension in short-term work settings, and bridging the gap between management research and practice.

DENISE M. ROUSSEAU is the H. J. Heinz II University Professor of Organizational Behavior and Public Policy at Carnegie Mellon's Heinz College of Public Policy and Management and Tepper School of Business. She completed her Ph.D. at the University of California, Berkeley. Her research interests include evidence-based management and decision making, psychological contracts in organizations, changing employment relations, and human resource management and strategy.

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