

LEARNING FAST: UNDERSTANDING MBA INTERNSHIP EFFECTIVENESS¹

GERARD BEENEN
Carnegie Mellon University
e-mail: gbeenen@andrew.cmu.edu

ABSTRACT

In a longitudinal study of 122 MBA interns, task Role Clarity at the start of internships was positively related to learning at the end. Additionally, less experienced interns learned most under high Role Clarity/low Autonomy, and least under low Role Clarity/low Autonomy.

MBA INTERNSHIPS AND LEARNING

This study investigates antecedents to learning in an MBA internship, defined as *a full-time job of 12 weeks or less, usually between the first and second year of a two year MBA program*. There is a lack of research on internships as a means for learning, hiring, and doing work, despite their importance for MBAs and employers. In this study, learning effectiveness refers to task learning, that is, *an MBA intern's self-reported positive change in competencies*. Task learning focuses on competencies important to MBA students and employers (GMAC, 2006) (e.g., technical skills, interpersonal skills, communication). This learning requires a person to encode, store, or use skills (Anderson, 2000), facilitated by practice and feedback.

Existing research on internships and newcomer socialization contribute little insight on learning in MBA internships. Research on internships focuses on undergrads (e.g., Taylor, 1988) with less prior experience and lower responsibility and pay. Newcomer socialization addresses how people adapt to new work roles (for a review, see Saks & Ashforth, 1997) in regular jobs over longer periods (e.g., 6-24 months). This has led scholars to call for research on internships (Saks & Ashforth, 1997).

TASK ROLE CLARITY, AUTONOMY, EXPERIENCE AND LEARNING

Role theory is a dominant paradigm in newcomer socialization and a useful starting point for understanding intern learning. Roles are expectations for an organizational position that are “sent” by a role set (e.g., supervisors) and “received” by the focal person (Ilgen & Hollenbeck, 1992)—here, an MBA intern. Unclear roles cause stress and impair performance (Kahn et. al., 1964). Role theory distinguishes between task *outputs* (task goals and standards) and *activities* (how work is accomplished) (Sawyer, 1992). *Task output clarity encompasses the task goals and standards expected of the intern*. I use the terms “task goals” and “task outputs” interchangeably (Sawyer, 1992). Two mechanisms explain why clear *task outputs* contribute to learning.

First, clear *task outputs* focus intern attention and effort on activities involving the practice of goal-directed skills (Locke & Latham, 1990: 311). Practice involves retrieval, development and execution of task plans—mental schemas that facilitate goal attainment (Locke & Latham, 1990: 294-313). When interns develop new plans or adapt stored plans to new situations, their focus of attention and effort is on practicing skills that help them attain task goals. Competencies are acquired as new task plans enter an intern’s repertoire. Since interns are motivated to produce work outputs that help them get a job offer or recommendation, they also

are motivated to clarify ambiguous outputs. Unclear outputs thus tend to divert attention to task clarification rather than learning.

Second, scaffolding describes how novices learn better when they are provided organizing frameworks for problem solving (Reiser, 2005). Task goals function as scaffolds that provide interns an organizing framework to select, develop and execute plans that aide learning (Siedel et al., 2005). Both mechanisms suggest the following hypothesis.

Hypothesis 1: Task output clarity is positively related to task learning.

Task output clarity describes *what* work is expected to be performed; *task autonomy* describes *how* work is expected to be performed. *Task autonomy* is *the amount of discretion the intern has to perform activities that accomplish task outputs*. Task autonomy can enhance learning by contributing to internalized work goals, task persistence (Sheldon et al., 2003), and role innovation (Nicholson, 1984). At the same time, MBA interns' amount of *prior experience* may influence how they respond to degrees of task output clarity and autonomy. For example, more experienced interns may have more effective frameworks acquired in prior employment that equip them to deal with unclear task outputs or high discretion (autonomy) work activities (Ashforth, 2001: 201-203). This suggests task output clarity, autonomy, and prior experience may affect learning inter-dependently. I will argue less experienced interns should benefit from autonomy only when task outputs are clear; more experienced interns should benefit from autonomy independent of task output clarity.

Consistent with the literature on autonomy and learning, and the earlier argument concerning task output clarity, high *task output clarity* and *task autonomy* should provide the best condition for task learning, regardless of prior experience (Sheldon et. al., 2003). A counter-argument based on Kanfer & Ackerman's (1989) Resource Allocation Model is that less experienced interns who lack appropriate task strategies for accomplishing goals will pay less attention to learning in their attempts to perform. This would suggest less experienced interns may learn more from having clear task goals when they also have lower task autonomy. Clear task goals in an internship, however, are more distal, complex goals than the proximal production goals used in the Kanfer & Ackerman studies. As long as task goals are clear, high autonomy should provide interns, regardless of experience, discretion to select, develop and execute task plans that are most instrumental to learning and goal achievement.

When task goals are unclear, intern attention and effort should be directed away from learning and toward clarifying the nature of task outputs. When task autonomy also is low, less experienced interns should learn more than experienced ones for two reasons. First, they have fewer task plans, so they should be more likely to develop new plans as they complete assigned activities, and as a result, to practice and develop new task skills. Second, scaffolding suggests less experienced interns need more structure than more experienced interns. Low task output clarity means there is no scaffold for learning in the form of clear task goals (Siedel et. al., 2005). Low autonomy provides a structured set of activities that serves as a less optimal scaffold. Interns with more experience need less structure because they have a larger plan repertoire.

The low task output clarity and high autonomy condition resembles conventional views of role ambiguity (Kahn et. al., 1964; Rizzo et. al., 1970). Under this condition, less experienced interns should experience more ambiguity than experienced ones due to smaller task plan repertoires. More experienced interns should learn more than less experienced interns for two reasons. First, low output clarity and high autonomy provide the greatest opportunity for role

innovation because the intern potentially can decide both what activities to perform, and what outputs to complete. More experienced interns should be more proficient at this because of their larger task plan repertoire (Ashforth, 2001). Second, the availability of scaffolds is limited in this condition since neither task outputs nor activities offer organizing frameworks. More experienced interns should be relatively less reliant on scaffolds.

The preceding argument suggests interns learn most when both task output clarity and autonomy are high. With low task output clarity and high autonomy, however, more experienced interns learn more because they are more able to engage in role innovation, defining their role's scope and activities (Ashforth, 2001).

Hypothesis 2: There will be a three-way Task Output Clarity X Task Autonomy X Prior Experience interaction consisting of a two-way Task Output Clarity X Task Autonomy interaction for less experienced MBA interns, and a Task Autonomy main effect for more experienced MBA interns.

METHODOLOGY

122 class of 2007 MBA interns from three schools comprise the study sample. Interns completed surveys about three weeks after their start date (time 1) and two weeks after their end date (time 2). Six point scales were used anchored by *Strongly Disagree* and *Strongly Agree*. *Task output clarity* ($M=4.14$, $SD=1.18$) was measured at time 1 with two items adapted from Rizzo et al.'s role ambiguity scale (1970) (Cronbach alpha = .65).² *Task autonomy* ($M=4.58$, $SD=1.18$) was measured at time 1 with three items adapted from Hackman & Oldham's (1975) job autonomy subscale (Cronbach alpha = .81). *Prior experience* ($M=5.68$, $SD=2.88$) was measured as years between completing an undergraduate degree and starting an MBA degree. *Task learning* ($M=4.62$, $SD=.86$) was measured at time 2 with seven items developed for this study, based on competencies expected of MBA grads (GMAC, 2006) (Cronbach alpha = .86). Principal component analysis with varimax rotation indicated the three scales loaded on independent factors. Schools were dummy coded to control for differences between MBA programs. Sex did not correlate with any variables and was not retained as a control.

RESULTS

Hypotheses were tested with hierarchical linear regression. Controls were entered in step one, *task output clarity* in step two, two moderators and two-way interaction terms in step three, and the three-way interaction term in step four, all with centered variables (Aiken & West, 1991; Dawson & Richter, 2006). *Task output clarity* had a positive coefficient with a significant change in R-squared when it was added to the model ($F(1,118)=22.52$, $p < .001$; 15.7% learning variance explained). H1 was supported. For H2, three conditions should be met. 1) The three-way interaction coefficient should be positive and significant; 2) slopes for high and low *task autonomy* for low *experience* interns should be significantly different and the *Task Output Clarity X Task Autonomy* coefficient should be positive and significant; 3) *task autonomy* coefficient should be positive and significant. The three-way interaction term was significant when added to the model ($F(1,112)=7.57$, $p < .01$; 4.5% of learning variance explained). Slopes for high and low *task autonomy* were significantly different ($t=-2.47$, $p < .05$), but the coefficient for *Task Output Clarity X Task Autonomy* was negative and significant ($t=-3.67$, $p < .001$)—

opposite of predicted. Less experienced interns learned most with high *task output clarity/low task autonomy*, and least with low *task output clarity/low task autonomy*. The coefficient for *task autonomy* was positive, though not significant. H2 was disconfirmed.

DISCUSSION

As H1 predicted, task output clarity had a main effect on task learning. An alternative explanation is MBA interns who were attracted to their employers reported more learning to reduce the dissonance of a negative experience (Festinger, 1957). Counter to this, interviews with participants prior to starting their internships indicated most had a tentative interest in employment with their summer employers. H2 results were significant, though opposite to prediction. Less experienced interns learned most with high task output clarity/low autonomy, and least with low task output clarity/low autonomy. This may be introducing prior experience as a boundary condition to previous research on autonomy and learning. This finding also is consistent with the earlier counter-argument that goals divert attentional focus from learning if a person lacks needed task plans (Kanfer & Ackerman, 1989). For example, it may be that since less experienced interns have a smaller task plan repertoire, high autonomy requires them to develop so many new task plans that their activities become less efficient and learning is impaired. This is supported by findings that challenging task goals are less effective when people lack task strategies and view goals as threatening rather than challenging (Drach-Zahavy & Erez, 2002). Lower autonomy may have provided less experienced interns a set of activities that kept their attentional resources more focused on learning. The least learning occurred with low task output clarity and low autonomy. Having a rigid set of activities without a clear understanding of their purpose is evidence of “micromanagement”. Prescribing activities when work goals are unclear can stifle an intern’s initiative to develop new task plans that contribute to learning. Alternatively, low output clarity and autonomy may block opportunities to engage in *role innovation*, which otherwise contributes to individual learning. Low task output clarity plus high autonomy provided the greatest opportunity for role innovation as both outputs and activities were open-ended. Low autonomy may stifle interns’ initiative for role innovation as they focused more on performing short-term activities to get a favorable evaluation, and less on defining and pursuing long-term outputs that may have helped them learn more.

This study has three limitations. First, participants may not represent the population broadly, although the schools in this study are in the first (i.e., top 10) through third tiers (i.e., top 50) of MBA program rankings. Second, self-reported learning may represent perceptual bias rather than objective skill changes. To address this, I focused on learning that occurs with practice and reflection, and corresponds to objective skill changes (Kirsner & Spelman, 1998). Third, this study relied on task plans and scaffolds as explanations that were not measured directly. Even so, results are consistent with the task plan construct (Locke & Latham, 1990), with limitations of challenging goals (Drach-Zahavy & Erez, 2002; Kanfer & Ackerman, 1989), and the logic of scaffolding (Seidel et. al., 2005) and role innovation (Nicholson, 1984).

This study makes three contributions to theory. First, it tests a more specific definition of role clarity (King & King, 1990). Second, it suggests experience may be a boundary condition on the learning benefits of autonomy. Third, it raises interesting issues about tradeoffs between task clarity and structure, skill learning, and employee selection in an internship. For example, structured activities and outputs may help less experienced interns learn, but also require more employer resources (e.g., management time and attention). Also, intern roles that are too

structured may reduce the validity of an MBA internship as a managerial selection tool, since managerial roles are inherently dynamic and ambiguous.

In practical terms, this study suggests less experienced MBAs who respond constructively to task ambiguity and autonomy may learn more in their internships. Employers who clearly define task outputs should be more likely to complete work that is of tangible value, and to have interns with positive learning experiences. MBA educators can help students make the most of their internships by communicating the findings of this study, with results for less experienced interns potentially applicable to a larger population of undergraduate interns.

ENDNOTES

1. Special thanks to the Graduate Management Admissions Council (GMAC) Management Education Research Institute (MERI) for their generous support of this research.
2. To address low reliability, I used a five item *task output clarity* scale at time 2 (Cronbach Alpha = .90) that loaded on one factor with time 1 scale items. I ran duplicate models with both the time 1 and 2 scales with no differences in results. I report only results of the time 1 scale.

REFERENCES

- Aiken, L.S., & West, S.G. 1991. *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Anderson, J.R. 2000. *Learning and memory: An integrated approach*. New York: Wiley.
- Ashforth, B.E. 2001. *Role transitions in organizational life: An identity-based perspective*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Dawson, J. F., & Richter, A. W. (2006). Probing three-way interactions in moderated multiple regression: Development and application of a slope difference test. *Journal of Applied Psychology*, 91: 917-926.
- Drach-Zahavy, A., & Erez, M. 2002. Challenge versus threat effects on the goal-performance relationship. *Organizational Behavior and Human Decision Processes*, 88: 667-682.
- Festinger, L. 1957. *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Graduate Management Admissions Council 2006. *Corporate Recruiters Survey 2006 General Data Report*. <http://www.gmac.com/gmac/researchandtrends/>
- Hackman, J.R., & Oldham G.R. 1975. Development of the Job Diagnostic Survey. *Journal of Applied Psychology*, 60: 159-170.
- Ilgén, D.R., & Hollenbeck, J.R. 1992. The structure of work: Job design and roles. In M.D. Dunnette & L.M. Hough (eds.). *Handbook of Industrial and Organizational Psychology*, vol. 2 (2nd ed.), 165-207, Palo Alto, CA: Consulting Psychologists Press.

- Kahn, R.L., Wolfe, D.M., Quinn, R.P., Snoek, J.D. & Rosenthal, R.A. 1964. *Organizational Stress: Studies in Role Conflict and Ambiguity*. New York: John Wiley & Sons.
- Kanfer, R., & Ackerman, P.L. 1989. Motivation and cognitive abilities: An integrative/aptitude-treatment interaction approach to skill acquisition. *Journal of Applied Psychology*, 74: 657-690.
- Kirsner, K., & Spelman, C. 1998. Introduction and overview. In K. Kirsner, C, Spelman, M. Mayberg, et. al. (eds.), *Implicit and Explicit Mental Processes*, Mahwah, NJ: Lawrence Erlbaum Associates.
- Locke, E.A., & Latham, G.P. 1990. *A Theory of Goal Setting & Task Performance*. Englewood Cliffs, NJ: Prentice Hall.
- Nicholson, N. 1984. A theory of work role transitions. *Administrative Science Quarterly*, vol. 29: 172-191.
- Reiser, B.J. 2005. Scaffolding complex learning: The mechanisms of structuring and problematizing student work. *The Journal of the Learning Sciences*, 13: 273-304.
- Rizzo, J.R., House, R.J., & Lirtzman, S.I. 1970. Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15: 150-163
- Saks, A.M., & Ashforth, B.E. 1997. Organizational socialization: Making sense of the past and present as a prologue for the future. *Journal of Vocational Behavior*, 51: 234-279.
- Sawyer, J.E. 1992. Goal and process clarity: Specification of multiple constructs of role ambiguity and a structural equation model of their antecedents and consequences. *Journal of Applied Psychology*, 77: 130-142.
- Sheldon, K. M., Turban, D.V., Brown, K., Barrick, M., & Judge, T. 2003. Applying self-determination theory to organizational research. in J. J. Martocchio, G.R. Ferris (eds.), *Research in Personnel and Human Resources Management*, 22: 357-393, Amsterdam: Elsevier Science/JAI Press.
- Siedel, T., Rimmel, R., & Prenzel, M. 2005. Clarity and coherence of lesson goals as a scaffold for student learning. *Learning and Instruction*, 15: 539-556.
- Taylor, M.S. 1988). Effects of college internships on individual participants. *Journal of Applied Psychology*, 73: 393-492.
- Van Maanen J., & Schein, E. 1979). Toward a theory of organizational socialization. In B.M. Staw (Ed.), *Research in Organizational Behavior* , vol. 1: 209-264, Greenwich, CT: JAI Press.