
Learning Agility: Not Much Is New

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As pointed out by DeRue, Ashford, and Myers (2012), experience is a funny thing. The same people witnessing the same event may learn wildly different things. Some will learn lessons that positively affect their lives, others will learn nothing, and others may even learn lessons that detract from their development. DeRue et al. identify learning agility as a key factor in a person's ability to learn from experience and define learning agility as "the ability to come up to speed quickly in one's understanding of a situation, and move across ideas flexibly in service of learning both within and across experiences." DeRue et al. also propose a theoretical framework of learning

agility that builds on ideas put forth by Lombardo and Eichinger (2000). DeRue et al.'s framework incorporates the antecedences, underlying cognitive and behavioral processes, contextual factors that affect these processes, and the outcomes or effects of learning agility. We agree with DeRue et al. that the study of how people learn from experience and apply that new knowledge across a range of situations is a valuable area of future research; however, we disagree that learning agility has been largely ignored by the academic community both before and since the introduction of the term by Lombardo and Eichinger. On the contrary, we believe that learning agility has been studied under a host of aliases and fear that the new model of "learning agility" proposed by DeRue et al. is simply a case of repackaging old wine in new bottles.

Building on the ideas of Lombardo and Eichinger (2000), DeRue et al. suggest

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that the two key components of learning agility are speed, which captures how fast people can learn from experience, and flexibility, which captures how well people can apply what they know across situations. In their argument, learning agility is related to general mental ability (or *g*) but narrower than *g*. General ability can be defined as information processing capacity and efficacy (Carroll, 1993), which “involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience” (Gottfredson, 1997, p. 13). In this definition at least, we see reference to both speed (learn quickly and efficiently) and flexibility in comprehending complex ideas. Moreover, empirical studies (e.g., Beier & Ackerman, 2005) have shown that *g* is a determinant of how efficiently people learn from experience. As such, one of the main components of what DeRue et al. define as learning agility is simply cognitive ability. In summary, it is unclear how much variance a test of learning agility as described by DeRue et al. would account for in learning from experience over and above measures of *g*.

Investment Theories of Learning and Development

DeRue et al. might counter our argument about cognitive ability and learning agility by asserting that learning agility is more than cognitive ability because it implies a willingness to learn from experience (i.e., it includes a volitional component). Indeed, in their model of the antecedents of learning agility, DeRue et al. highlight the importance of goal orientation and Openness to Experience as intellectual drivers of self-development. Here again we fail to see the novelty of this approach. Investment theories of adult intellectual development, for example, have long highlighted the cognitive and noncognitive antecedents of learning and development, which include cognitive abilities and noncognitive factors such as interest and attitudes (Ackerman, 1996; Cattell, 1987). The idea behind these

theories is that attentional resources will be invested in acquiring knowledge in specific domains in alignment with a person’s general interest in that domain and their general interest in learning. The knowledge acquired through experiences will then be brought to bear to solve new problems in the domain of interest (i.e., it will facilitate the learning and application of new information within that domain; Beier & Ackerman, 2005; Beier, Campbell, & Crook, 2010). Studies on investment theory have used a combination of ability and attitude (personality and motivational) assessments as determinants of the investment of cognitive resources across an array of domains. Here again we question whether an assessment of learning agility would make any unique contribution to the prediction of learning from experience.

Informal Learning

One unique aspect of learning agility may be its focus on learning in situ. That is, in the model posited by DeRue et al., learning is driven by individual factors (as opposed to being mandated by the organization) and is affected by contextual factors such as the organizational climate and opportunities for challenge afforded by the environment. Indeed, the model set forth by DeRue et al. resembles the dynamic model of informal learning on the job depicted by Tannenbaum, Beard, McNall, and Salas (2010). As defined by these researchers, informal learning is the unstructured, experiential learning process driven by people’s choices and intentions (Marsick & Volpe, 1999). Like the learning agility framework proposed by DeRue et al., Tannenbaum et al.’s model of informal learning includes contextual variables such as climate and culture in addition to the individual characteristics discussed above (i.e., cognitive and noncognitive factors that drive knowledge acquisition including personality and motivational traits). Unlike DeRue et al.’s model of learning agility, Tannenbaum et al.’s theory of informal learning does not specifically address the speed at which people

acquire knowledge. Nonetheless, informal learning theory does focus on people's ability to use their knowledge and experience across an array of situations (including novel ones) to learn new things.

Individual Adaptability

The theoretical constructs discussed earlier are each a component of what DeRue et al. call learning agility, but arguably none capture the entirety of their construct as much as recent theory on adaptability and adaptive performance does (I-ADAPT theory; Ployhart & Bliese, 2006). The I-ADAPT theory conceptualizes adaptive performance (meaning both adaptive task performance and adaptive contextual performance) as a relevant outcome in dynamic performance environments. Individual adaptability, defined as "an individual's ability, skill, disposition, willingness, and/or motivation, to change or fit different task, social, and environmental features" (Ployhart & Bliese, 2006, p. 13), is conceptualized as a representation of the individual differences (i.e., knowledge, skills, abilities, and other factors, KSAOs) that are necessary for adaptive performance across contexts. The impact of individual adaptability on adaptive performance is posited to be through mediating processes that include situation perception and appraisal, strategy selection, self-regulation and coping, and knowledge acquisition. Environmental characteristics are also included in the model, placing their constraints and requirements on the adapting process.

There are eight facets of individual adaptability proposed by Ployhart and Bliese (2006), and learning adaptability is arguably that which most resembles learning agility as proposed by DeRue et al. This subfacet includes consideration of a person's desire to learn new things as well as their assessment of how quickly they catch on to new material (i.e., it captures the noncognitive aspects of learning agility). The comparison between the I-ADAPT theory and the learning agility model proposed by DeRue et al. raises questions about what a consideration

of learning agility would add to the prediction of learning from experience over consideration of individual adaptability and cognitive ability. Consider, for example, that people high on individual adaptability will maintain the knowledge and skills that are applicable across situations and learn new knowledge and skills quickly in the process of learning from change-related experiences. Individual adaptability includes the speed and flexibility components of learning agility but expands upon them.

Conclusion

DeRue et al. are correct in their proposition that additional research is needed in the area of learning agility. That is, although industrial–organizational psychologists know a lot about how people learn in formal training environments, we know relatively little about how people learn from experience in their day-to-day life and the KSAOs and environmental influences that contribute to this knowledge acquisition. Nonetheless, the models we discuss above provide ample theoretical foundation for examining learning from experience, and we question the need to add another. Although the original conceptualization of learning agility as put forth by Lombardo and Eichinger (2000) predates the theories of informal development and adaptability discussed above, further extension of learning agility theory, such as that proposed by DeRue et al., should be considered to the extent that it adds to these models. In summary, we warn against theory and construct proliferation and call for further synthesis of research and theory to understand the person and environmental influences on learning from experience.

References

- Ackerman, P. L. (1996). A theory of adult intellectual development: Process, personality, interests, and knowledge. *Intelligence*, 22, 227–257.
- Beier, M. E., & Ackerman, P. L. (2005). Age, ability, and the role of prior knowledge on the acquisition of new domain knowledge: Promising results in

- a real-world learning environment. *Psychology & Aging*, 20, 341–355.
- Beier, M. E., Campbell, M., & Crook, A. E. (2010). Developing and demonstrating knowledge: Ability and non-ability determinants of learning and performance. *Intelligence*, 38, 179–186.
- Carroll, J. B. (1993). *Human cognitive abilities: A survey of factor-analytic studies*. New York, NY: Cambridge University Press.
- Cattell, R. B. (1987). *Intelligence: Its structure, growth, and action*. New York, NY: Elsevier Science.
- DeRue, D. S., Ashford, S. J., & Myers, C. G. (2012). Learning agility: In search of conceptual clarity and theoretical grounding. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 5, 258–279.
- Gottfredson, L. (1997). Mainstream science on intelligence: An editorial with 52 signatories, history, and bibliography. *Intelligence*, 24, 13–23.
- Lombardo, M. M., & Eichinger, R. W. (2000). High potentials and high learners. *Human Resource Management*, 39, 321–329.
- Marsick, V. J., & Volpe, M. (1999). The nature and need for informal learning. In V. J. Marsick & M. Volpe (Eds.), *Informal learning on the job* (pp. 1–9). Baton Rouge, LA: Academy of Human Resource Development.
- Ployhart, R., & Bliese, P. (2006). Individual adaptability (I-ADAPT) theory: Conceptualizing the antecedents, consequences, and measurement of individual differences in adaptability. *Advances in Human Performance and Cognitive Engineering Research*, 6, 3–39.
- Tannenbaum, S. I., Beard, R. L., McNall, L. A., & Salas, E. (2010). Informal learning and development in organizations. In S. W. Kozlowski & E. Salas (Eds.), *Learning, training, and development in organizations* (pp. 303–331). New York, NY: Routledge Academic.