Generative work relationships as a source of direct and indirect learning from experiences of failure: Implications for innovation agility and product innovation

Abraham Carmeli [a,*], Ari Dothan [b]

[a] Coller School of Management, Tel Aviv University, Ramat-Aviv, Tel Aviv 69978, Israel
[b] Arison School of Business, Interdisciplinary Center Herzliya, Kanfei Nesharim Street, Herzliya 46150, Israel

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ABSTRACT

Organizations often experience failures when managing complex innovation projects. While experiences of failure can often lead to frustration and create a downward spiral, they are also a vital source for organizations to develop new knowledge and enhance innovation. This, however, depends on their capacity to learn from these experiences. Research indicates that organizations do not learn all they can from failures. This study implemented a micro-relational perspective and examines whether and why generative work relationships help facilitate both direct and indirect learning from experiences of failure and how these learning modes influence the innovation of small organizations. Multi-source data from 63 software firms in the ICT sector show that generative work relationships facilitate both modes of learning from failures. However, only learning from direct experiences of failure facilitates innovation agility, whereas vicarious learning from failure enhances product innovation (patent) outcomes. The implications for a micro-relational view of organizational learning and innovation are discussed.

1. Introduction

Learning is a vital process that underlies organizational innovation and outcomes (Brown and Duguid, 1991; Helfat and Raubitschek, 2000; Hsu and Fang, 2009). A large body of research has expanded on the myriad of elements that influence the rate at which firms learn, such as the proficiency of individual workers, the ability of firm members to leverage knowledge accumulated by others, and the capacity for coordinated activity within the organization (Reagans et al., 2005). In particular, scholars advocating a relational perspective toward learning have suggested that learning occurs through interactions between individuals and groups in which experiences, views and ideas are shared and built upon to create new knowledge (Gherardi et al., 1998; Elkjaer, 2003; Uzzi and Lancaster, 2003). As a socio-behavioral process, learning is a key enabler of positive change and adaptation to developing environments (Kozlowski and Ilgen, 2006; Kozlowski & Bell, 2007).

However, learning can take different modes and forms. Research has documented various learning processes such as learning from direct experiences (internal) and learning from indirect experiences (external) (see Argote, 2014; Bresman, 2010; Bruneel et al., 2010). Yet what is missing in this literature is a study of internal and external learning processes as regards specific foci, such as learning from direct experiences of failure or success and indirect experiences of failure or success. Here, we focused on learning from experiences of failure (also referred to as

learning from mistakes) which is has attracted growing interest among management scholars in recent years (Baum and Dahlin, 2007; Baumard and Starbuck, 2005; Sitkin, 1992). This interest has led to useful observations about learning from failures as a key to the creation of new firm patterns (e.g., Bingham and Haleblian, 2012), more crisis-prepared (Carmeli and Schaubroeck, 2008) and reliable systems (Roux-Dufort and Metais, 1999; Weick and Sutcliffe, 2007), and innovation (Anderson et al., 2014). However, despite these increasing efforts to unravel learning from failure in organizations, research indicates that "… organizations are not learning all they can from their failures" (Tucker and Edmondson, 2003, p. 68) and many are also unable learn efficiently from previous incidents (Cooke and Rohleder, 2006), or need to develop different mechansims to be able to learn from failure (see Desai, 2016).

This study contributes to the learning literature by examining both direct and indirect learning from experiences of failure. Most studies have dealt with direct experiences of failure (e.g., Antonacopoulou and Sheaffer, 2014; Carmeli, 2007; Carmeli and Schaubroeck, 2008; Tucker and Edmondson, 2003); a few have examined vicarious learning from failure (Baum and Dahlin, 2007; Bledow et al., forthcoming; Kim and Miner, 2007). Following recent research (e.g., Aranda et al., forthcoming; Kim and Rhee, 2017), we examine both learning modes simultaneously but also lay the groundwork for further theoretical elaborations by providing one of the first explorations of the claim that different learning modes may have different performance implications. This is theoretically important as scholars noted that "learning from failure is perhaps not as straightforward as some analyses have assumed" (Antonacopoulou & Sheaffer (2014, p. 6). The emerging

* Corresponding author.
E-mail addresses: avic@post.tau.ac.il (A. Carmeli), aridotan@idc.ac.il (A. Dothan).