# Are organisational defensive routines harmful to the relationship between personality and organisational learning?

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## ABSTRACT

This paper examines the interaction effect between a selection of personality traits — i.e. conscientiousness, openness to experience and neuroticism — and organisational defensive routines (ODRs) on organisational learning. The data sample included 351 employees from a wide range of industries in the UK. In line with the current literature, we hypothesized that ODRs act as a moderator between selected employee personality traits and learning. Though the findings do not support our hypotheses on the moderation effects, we could isolate an unexpected positive link between ODRs and organisational learning which merits attention and further research. Implications for the theory and limitations of the study are discussed.

## 1. Introduction

Academics and practitioners have long agreed that organisational learning contributes to organisational competitiveness. This important role for organisations has stimulated many attempts to define the meaning of organisational learning (Kim, 1993; Popova-Nowak & Cseh, 2015) and to identify the factors affecting organisational learning (María Martínez-León & Martínez-García, 2011). Theorists often adopt a cognitive approach to explain how organisations can learn (Chadwick & Raver, 2012) through individuals, yet limited empirical studies have investigated how individual factors influence organisational learning. Simon (1991, p.125) generalised two mechanisms of how organisations learn – i.e. "(a) by the learning of its members or (b) by ingesting new members who have knowledge the organization didn't previously have". Each one of the two creates collective learning that is grounded in individuals. Consequently, individuals play a decisive role in organisational learning, but very little empirical research has explored how individuals *affect* learning in organisations. This paper selected personality as a stepping stone to understand how individual differences can affect organisational learning, thereby contributing to the understanding of micro-foundations related to organisational learning.

Personality has been studied previously to understand its effect on learning. For example, Klein and Lee (2006) studied 157 students and concluded that learning goal orientation relates positively and significantly to conscientiousness and openness to experience. Knowledge sharing and knowledge acquisition, as components of organisational

learning, can be influenced by individuals' personality traits (Matzler, Renzl, Mooradian, von Krogh, & Mueller, 2011). Hence, our assumption is that personality traits might have an impact on organisational learning. Many organisations use psychometric tests (e.g., Big Five Dimensions) in personnel selection to identify the best candidates, but still fail to reach their expected learning outcomes (Francesca & Staats, 2015). We apply organisational defensive routines (hereafter ODRs) to explain this puzzle.

ODRs are defined as 'actions or policies that prevent individuals or segments of the organization from experiencing embarrassment or threat' (Argyris, 1990, p. 25). Argyris (1990) contends that organisational defensive routines exist in most organisations, and these routines can guide individuals to self-censor certain ideas automatically and subliminally. When employees in organisations routinely withhold ideas about important problems from their superiors, this can thwart organisational learning and hamper organisational change (Morrison & Milliken, 2000). We expect that the level of ODRs can influence the relationship between personality traits and organisational learning.

This paper makes three contributions to the literature. First, we provide empirical evidence on the relation between personality traits and organisational learning. Second, we theoretically and empirically integrate ODRs into the model, thereby extending knowledge on a particular set of routines that is likely to be a barrier to organisational learning. Hence building on recent advances in research on routines (see special issue of Organization Science, 2016) we emphasise the importance of micro-foundations of organisational routines while

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simultaneously underscoring the dynamic nature and performative aspects of organisational routines. Third, the results are of relevance for researchers and practitioners alike as they strive to improve organisations' learning capabilities.

## 2. Theoretical framework

### 2.1. Organisational learning

Learning is the key to organisational competitiveness (Dodgson, 1993); it is a component of organisational absorptive capacity (Cohen & Levinthal, 1990; Kim, 1993); and it is a determinant of organisational performance (Jiménez-Jiménez & Sanz-Valle, 2011). Results of current studies leave very little doubt about the positive effects of learning on organisational survival (Jiménez-Jiménez & Sanz-Valle, 2011). Due to its importance, academics have been tackling organisational learning from various angles. Dodgson (1993) reviewed institutional learning in different industries and perspectives and showed that one of the research trends in the area attempts to understand its outcomes. For example, learning is considered to produce a positive outcome which enhances competitiveness. Another trend is to understand organisational learning from its procedural aspects (Dodgson, 1993). Yet others attempt to capture the factors contributing to institutionalised learning. For example, individuals' positive emotions, such as comfort and excitement, can benefit organisations by helping them exceed their learning expectations (Shipton & Sillince, 2012). Individuals' contributions to learning in organisations has also been analysed from the perspective of cognitive structure in Cohen and Levinthal's (1990) seminal work about absorptive capacity. Managers' cognitive limitations and limited ability to share knowledge impact negatively on absorptive capacity (Volberda, Foss, & Lyles, 2010).

Others describe absorptive capacity as the process by which knowledge is acquired, interpreted, disseminated and integrated in organisations (Huber, 1991). Because of the differences in philosophical stances (Easterby-Smith, Snell, & Gherardi, 1998), the understanding of organisational learning is still diverse and lacks consensus. This mystification of institutional learning creates a challenge when attempting to measure it. Arthur and Aiman-Smith (2001, p. 739) summarised this point very well when they stated that "operationally defining and measuring organizational learning in empirical research has proven to be excruciatingly hard to do." Huber's concept of organisational learning is different from absorptive capacity as referred to by Cohen and Levinthal (1990). Absorptive capacity emphasises the recognition, assimilation and exploitation of knowledge. Huber's model, however, considers prior related knowledge as part of the multi-faceted knowledge acquisition process. Huber (1991) also posited that organisational memory plays a crucial role to ensure that organisations retain the knowledge they hold. This aspect, however, has limited resonance with Cohen and Levinthal's concept of absorptive capacity.

Researchers also tried to identify how organisations learn from processes (e.g., Crossan, Lane, & White, 1999; Huber, 1991). Although terminologies differ, the way the process is defined is similar (Pérez López, Peón, & Ordás, 2005). In this paper, we adopt Huber's model with its four dimensions: *knowledge acquisition*, *knowledge distribution*, *knowledge interpretation* and *organisational memory*. The model maintains a broad view of learning that is capable of capturing the multifaceted characteristics and inter-linked processes across levels, and has been tested empirically (Jiménez-Jiménez & Sanz-Valle, 2011; Pérez López et al., 2005). The model has been selected because it provides a structure on which to understand organisational learning. In the following, we review these four elements of the model in an attempt to make them more relevant to recent developments in the literature.

For Huber, *knowledge acquisition* refers to the process where knowledge is absorbed from internal elements and external organisations. Knowledge that is gained internally could be from employees, founders' knowledge, and archival data. Individuals who have accumulated substantial prior knowledge could have higher absorptive capacity to acquire and assimilate new knowledge (Cohen & Levinthal, 1990). Knowledge gained externally is mainly derived from imitating competitors or by recruiting new members to organisations (Huber, 1991; Levitt & March, 1988). Mergers and acquisitions are examples of organisations that enhance or reduce opportunities for organisational learning on a large external scale. Exposure to external knowledge affords more opportunities to acquire new knowledge, but unless the new knowledge is internalized and extensively practiced by employees, this condition is not sufficient on its own (Kim, 1993; Zahra & George, 2002). This is consistent with the more traditional views of cognition, where there is a neat distinction between internal and external resources (Simon, 1979). More recent views of learning, cognition and knowledge consider these clear-cut distinctions very difficult to use when explaining how knowledge works in practice (Clark, 2008). In fact, any distinction between internal and external knowledge forms is arbitrary and the knowledge acquisition process is more a cognitive exchange where internal and external resources 'interplay' (e.g., Clark & Chalmers, 1998). Huber's 'acquisition' can be interpreted to include these more current aspects.

*Knowledge distribution* refers to the fact that knowledge usually spreads among members in the team and between departments (Huber, 1991) and it refers to tacit and explicit knowledge. These have been reviewed extensively in the literature (Matzler et al., 2011). Explicit knowledge is about rules and procedures that can be documented in organisations to guide employees' behaviour. This kind of knowledge is easily replicated and distributed in organisations. However, according to the proponents of this approach, the majority of the organisations' knowledge is 'stored' in individuals' heads and it is tacit (Kim, 1993). It is challenging for organisations to access tacit knowledge because it is difficult to locate its source and to initiate knowledge sharing. This is because, in a very traditional view based on neoclassic economics, people who share knowledge could face the risk of losing their competitive advantage over other people (Borges, 2013). Instead, a more prosocial view of individual knowledge sharing can be based on a distributed or systemic view of cognition (e.g., Hutchins, 1995). Individuals in an organization share 'information' because they treat each other and the external artifacts as external cognitive resources (Hutchins, 1995). This leads them to behave pro-socially when relying and benefitting from each other's information; in short, cooperation and altruistic behaviours are more likely to emerge (Secchi, 2011) provided the appropriate cognitive abilities develop (Hutchins, 2014).

*Knowledge interpretation* is about conferring meaning to knowledge and this depends on a series of factors that lie on the continuum between organisational and individual characteristics. An example of how interpretation of ideas, thinking, behaviour, practices, or processes occurs is given by studies of intra-organisational diffusion processes. These studies point out how organisational routines, culture, peer social identity, individual attitudes and cognition are particularly relevant for information interpretation to emerge (e.g., Fiol & O'Connor, 2003; Secchi & Gullekson, 2016). Intensity of social interaction between individuals and teams could improve understanding of new external knowledge (Jansen, Van Den Bosch, & Volberda, 2005).

*Organisational memory* refers to "stored information from an organization's history that can be brought to bear on present decisions" (Walsh & Ungson, 1991, p. 61). It is a repository of organisational knowledge, and contains formal procedures, informational databases and shared mental models (Huber, 1991). It plays a decisive role in the process of organisational learning because what is learned has to be stored in organisational memory, and this makes learning resources available to the wider organisational community (Huber, 1991). According to this view, some organisational knowledge is stored explicitly in the form of rules and procedures; some is stored in members' minds. Thus, organisational memory is a construct that embodies both individual and organisational levels (e.g., Hodgkinson & Healey, 2008). On the one hand, organisational memory is much more dynamic than