TOWARD A COGNITIVE VIEW OF SIGNALING THEORY:
INDIVIDUAL ATTENTION AND SIGNAL SET INTERPRETATION

ABSTRACT

Research on organizational signaling tends to focus on the effects of isolated or congruent signals, assuming highly rational responses to those signals. In this study, we theorize about the cognitive processes associated with the attention paid to and interpretation of multiple, often incongruent signals that organizations send to consumers, financiers, and other stakeholders who make organizational assessments. Contributing a cognitive perspective of signal attention and interpretation, alongside the introduction of signal sets, we provide a more complete picture of how organizational signaling unfolds in the field. Our research opens new frontiers for future inquiry into the cognitive foundations of signal attention, multi-signal interpretation, and incongruent signals.

Keywords: Consumer Evaluations; Initial Public Offering; Merger and Acquisition; Signal Attention; Signal Interpretation; Signaling Theory

INTRODUCTION

Signaling theory (Spence, 1974) has proven to be an impactful theoretical lens to understand how organizational outsiders, such as prospective consumers or equity investors, go about assessing the quality of a business (e.g., Certo, 2003; Drover et al., 2017; Miller and Triana, 2009; Plummer et al., 2015; Reuer et al., 2012; Stuart et al., 1999). This perspective argues that because organizational quality cannot be directly observed, decision makers must rely on information signals thought to correlate with quality (Bergh et al., 2014; Pollock et al., 2010). This means that evaluators search for signals, such as the founder’s credentials, that can be used to make inferences about an organization’s underlying quality. As such, signaling theory has proven to be useful in the organizational realm because it explains how a venture’s attributes and actions communicate signals to outsiders about its quality and potential (cf. Higgins and Gulati, 2006; Hsu, 2007; Kirsch et al, 2009; Nam et al., 2014; Park and Patel, 2015).
The vast majority of research on organizational signaling tends to investigate the ways in which a positive signal—in isolation—influences the decision making of external constituents (Connelly et al., 2011; Stern et al., 2014). Here, the assumptions that underpin signaling theory—namely, that signals are noticed and/or attended to by almost everyone and that individuals respond in ways that correspond to the valance of a given signal—imply high rationality (Kim and Jensen, 2014; Park and Patel, 2015; Pollock and Gulati, 2007). As a result, research on organizational signaling offers little insight into how and why signals are attended to and how multiple (often competing) signals are interpreted. Because cognitively processing multiple, often conflicting, signals is both complex and challenging, we presently lack robust theory explaining how such signals are interpreted by the receiver. These considerations highlight the need for a rich, theoretically consistent cognitive foundation for better understanding how decision makers process multiple organizational signals.

In this paper, we take a step in this direction by introducing a new theory and associated propositions to investigate the attention individuals pay to and their interpretations of multiple signals. Adopting a dual process explanation (Jonas et al., 1997; Maheswaran and Chaiken, 1991; Sengupta and Johar, 2002), we theorize about the cognitive mechanisms individuals employ as they allocate attention to organizational signals, exploring why certain types of signals may differentially capture attention. Here, we explore how attentional control influences both the volume and types of signals individuals attend to. As multiple signals become available for further processing, we introduce the concept of signal sets and in turn identify three forms of signal sets that decision makers can encounter in their organizational assessments: uniform congruence, imbalanced incongruence, and balanced incongruence. We then shift focus to individuals’
interpretation of these signal sets, drawing again on the dual process explanation for judgments and decisions to explore the key mechanisms (e.g., judgmental confidence) underlying the cognitive processes associated with the various signal sets.

Our cognitive approach to delineating the dynamics of signal attention and interpretation arises from the need to better understand multi-signal environments and makes several contributions to the literature. First, management scholars are increasingly relying on Spence’s (1973) articulation of signaling theory to explain phenomena like stakeholder decisions and behaviors. While clearly useful, signaling theory’s future applicability to areas that management scholars study is limited because of the aforementioned focus on the ways in which a lone signal in isolation (Bergh et al., 2014; Kim and Jensen, 2014; Park and Patel, 2015) or the unidirectional congruence of multiple signals (e.g., Pollock et al., 2010; Stern et al., 2014) influences the decision making of external constituents. As management researchers move to explore increasingly complex environments where multiple signals with competing valence (positive and negative signals) are the norm, it becomes problematic because signaling theory research, as formulated by Spence and those who followed, does not adequately explain how individuals allocate attention to or interpret multiple signals. It is particularly silent on what happens when multiple signals are of competing valence. We address this gap via new conceptualizations regarding how and why individuals uniquely attend to certain organizational signals from the many signals available and introduce the cognitive mechanisms that set the stage for their mental processing of multiple signals.

This leads to our second contribution: the application of the heuristic-systematic model as a dual process framework that underpins attention to organizational signals. Challenging the
assumption that signals are noticed equally by everyone, our theory accounts for the role of different modes of cognitive processing and the ways variations in attentional control (i.e., bottom up, top down) influence both the volume and nature of signals individuals attend to. Doing so adds depth to our understanding of this oft-neglected stage that precedes signal interpretation and lays the groundwork for our third contribution. Here, we explore individuals’ interpretation of multiple organizational signals as they flow into what we introduce as signal sets. The application of the heuristic-systematic model generates new insights regarding what happens cognitively when a decision maker faces multiple signals that are in some cases congruent, but more importantly, our approach addresses those situations in which signals are incongruent—a context individuals in the field commonly experience (cf. Cohen and Dean, 2005; Healy and Palepu, 2001).

In sum, addressing signal attention and interpretation within multi-signal environments, we advance a cognitive perspective that has the potential to energize future conceptual and empirical research across a range of disciplines. The outcome is a new understanding not only in the specific context of organizations and management but also in the broader domain of signaling theory such that the tradition of Spence’s original formulation is extended through a cognitive lens.