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# Resilience of sustainability- and financially-driven organizations

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#### Running Head: Performance Feedback and Organizational Resilience

#### **Resilience of Sustainability- and Financially-driven Organizations**

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#### **Resilience of Sustainability- and Financially-driven Organizations**

#### Abstract

To answer key questions concerning how negative and positive financial performance gaps motivate organizations to build more resilient systems, we develop a conceptual process model to reveal the process by which financially- and sustainability-driven organizations can translate these negative and positive financial performance gaps into organizational resilience. We specify the different modes of search behaviors that these organizations pursue when encountering negative and positive financial performance gaps. We then theorize that vicarious search is likely to encourage limiting behaviors whereas internal search is likely to foster promotion behaviors. Finally, we explain how both promoting and limiting behaviors can be helpful in improving organizational resilience. In this way, we hope to advance research that connects and integrates relatively disparate realms and, more specifically, to contribute to the sustainability, resilience, and performance feedback literatures.

Keywords: Performance feedback gap, resilience, sustainability, learning, search.

Organizational resilience, conceptualized as the capacity of an organization to absorb strain and rebound from difficulties or setbacks in a resourceful and strengthened manner (Sutcliffe & Vogus, 2003) or in ways that enable adaptation and growth through experiencing adversity (Stephens et al. 2013), is an issue that has attracted growing interest among communities of scholarship and practice (Carmeli & Markman, 2011; van der Vegt et al., 2015). Organizations often experience performance gaps, either negative or positive. Focusing on firms' financial performance, the behavioral theory of the firm describes managers as interpreting the gap between the actual financial performance and the targeted financial performance of their organizations along two lines: 1) comparative (whether focal rivals perform better or more poorly), and 2) historical (whether the performance measures are higher or lower than those achieved by the organization in previous focal periods) (Cyert & March, 1963:123). While scholars are also interested in additional performance gaps' dimensions (such as social or environmental performance), this paper focuses on firm's reaction to its financial performance gaps.

A performance feedback lens suggests that the gap between the targeted (aspirational) and the actual financial performance is a lever that determines a firm's responses or actions, such as change in strategy, market portfolio, bundle of resources and capabilities, value chain activities, in terms of both breadth and depth (Bromiley, 1991; Greve, 1998b; Lant, 1992; Vidal & Mitchell, 2015). This paper addresses an important type of performance resulting from financial feedback gaps, that of multi-dimensional resilience (financial, environmental and social), which has yet to be fully developed in the extant literature (Carmeli & Markman, 2011; Hamel & Välikangas, 2003; Mallak, 1998; van der Vegt et al., 2015). When experiencing adversity some organizations respond poorly and lack the capacity to adapt and grow from difficulty. For example, scholars have shown that organizations often respond poorly to disruptive innovation (Henderson, 2006), and that some react to declining financial performance with efforts that are rather limited in their success (Marcus & Nichols 1999). Indeed, recent research documented both external and internal barriers to inhibit the capacity to bounce back from discontinuous changes and adapt (Halkos, Skouloudis, Malesios, & Evangelinos, 2018). Nonetheless, we know that other organizations flourish through adversity (Carmeli & Markman, 2011) utilizing it as a learning platform to enhance their reliability (Weick et al., 2008) and bolster innovation (Carmeli & Dothan, 2017). Organizations also enjoy positive financial performance gaps and react by crafting strategic change policies that strengthen their favorable position (Chen & Miller 2007) by cultivating their coping and adaptive capacities.

We seek to advance the literature by exploring why and how both positive and negative financial performance gaps act as platforms for inducing responses that aim to enhance the organization's coping and adaptive capacity that make up organizational resilience. We theorize that such responses are likely to vary depending on the organization's identity and orientation, that is, whether they are financially and sustainability driven. This theoretical nuance is important because it allows us to expand on the process by which financially- and sustainability-driven organizations go about translating financial performance gaps into organizational resilience. To clarify, financially-driven organizations tend to focus on addressing the interests of shareholders, whereas sustainability-oriented organizations tend to take a broader approach and engage in financial, social and environmental activities that serve the interests of more diverse groups of stakeholders. Acknowledging the fact that organizations are seldom purely financially-or purely sustainability-oriented, we attempt to use this dichotomy in order to better understand

extreme behavioral positions that they may assume. Most organizations are assumed to be located at some specific point on the continuum linking the two extremes. Furthermore, it helps scholars to more precisely delineate the types of responses that different organizations adopt in the face of negative and positive performance gaps, and to better understand how these responses enhance organizational resilience. This advances the literature of responses that organizations can adopt to effectively cope with and adapt their systems following adverse situations (Kreibich, Müller, Thieken, & Merz, 2007).

As such, this paper aims to contribute to the literature by offering a socio-cognitive perspective that helps elucidate the process by which performance feedback gaps can be translated into higher levels of organizational resilience. We start by asserting that in a learning context a firm's top management team is likely to decide which search mode should be pursued, based on the gap between the firm's aspirations to attain acceptable performance and its actual performance levels. Learning can develop in extreme situations (Kim, Kim, & Miner, 2009) and a key issue concerns how organizations create new knowledge capabilities to better address and manage these events. Following previous research (Baum, Li, & Usher, 2000; Katila, 2002), we hope to gain a better understanding of a firm's response to performance gaps by distinguishing between internal search and vicarious (external) search. Internal search refers to efforts that aim to obtain knowledge that resides within the organization, whereas vicarious search refers to efforts that aim to access and locate knowledge residing either with the competitors in the industry in which the organization operates or outside it (Katila, 2002). We further advance this line of research by elaborating on the conditions in which negative and positive performance gaps influence internal and vicarious search behaviors for financially-driven and sustainabilityoriented organizations. In addition, we attempt to shed light on the mechanisms through which

particular modes of search behaviors enhance organizational resilience. To this end, we integrate a group engagement model (Tyler & Blader, 2002) to explain why and when internal search is likely to facilitate promoting behaviors that are aimed at achieving the desired ends. Our theorizing follows accumulated research on how people react to procedural justice and expected outcomes (Blader & Tyler, 2009; Tyler & Blader, 2000; Tyler & Blader, 2003). We suggest that the choice to search internally will encourage the task group assigned to address the gap to engage in *promoting* behaviors, whereas the vicarious search is likely to engender engagement in *limiting* behaviors aimed at ensuring that the non-task group members refrain from "undesirable" actions. We then elucidate the constellation of promoting and limiting behaviors and draw boundary conditions concerning their ability to improve the organizational resilience.

Insert Figure 1 about here

In developing our conceptual process model, presented in Figure 1, we adopt a mechanism view (Gross, 2009) to reveal and specify the socio-cognitive mechanisms and conditions by which negative and positive financial performance gaps can help create a more resilient organizational system. This paper is organized as follows. First, we discuss performance gaps and the search choice stages, and explain why negative and positive performance gaps relate to different modes of search (internal and vicarious). We then discuss how pressures for legitimacy influence these performance gap-search mode linkages, following with a discussion of the engagement phase and an attempt to reveal why and when groups adopt promoting or limiting behaviors. Finally, we theorize about types of group behaviors that task and non-task groups should engage in to translate these search modes into higher levels of organizational resilience.

#### THEORY DEVELOPMENT

#### **A Performance Feedback Lens**

The research on performance feedback is rich and spans the individual (Kluger & DeNisi, 1996), unit (Gaba & Joseph, 2013), organization (Greve, 1998b; Greve, 2003b), and industry levels (Schimmer & Brauer, 2012), as well as focal points, such as alliance preferences (Baum et al., 2005). Performance feedback gaps can be both positive and negative and are assessed comparatively along both historical and social aspiration levels (Greve 2003a). Organizations set performance goals along their multiple dimensions (Cyert & March, 1963: 123) and adapt them, accounting for prior year's goal, prior year experience, and prior goals of selected reference groups. The behavioral theory of the firm suggests that the difference between the current goal level and goal level at the previous period catalyzes a process of learning from experience that alters the goals organizations set and pursue (Argote & Greve, 2007). As Augier and March (2008: 2) concluded: "... the firm is seen as a system of rules that change over time in response to experience, as that experience is interpreted in terms of the relation between performance and aspirations and in terms of multiple, conflicting goals."

Performance feedback theory defines aspirations as being composed of historical aspirations (a function of the firm's past performance) and comparative "social" aspirations visà-vis a relevant reference group (e.g., Fiegenbaum & Thomas, 1995). The reference group may be the industry average, the industry leader, or firms in the industry that have a size comparable to the focal firm's (e.g., Bromiley & Harris, 2014; Washburn & Bromiley, 2012). The performance measures used in performance feedback studies include an entire range of long- and short-term variables. Return on assets and R&D expenditure (Miller & Chen 2004) are the most widely used short-term performance measures, but long-term performance measures like market share (Baum et al., 2005), the organization's positioning (Greve, 1998b), attitude towards risk (Iyer & Miller, 2008), learning (Kim & Miner, 2007), organizational growth (Greve, 2008), exploration and exploitation (Lee & Meyer-Doyle, 2017), capabilities and resource reconfiguration (Dothan & Lavie, 2016) have been studied as well.

In the fields of strategy and management, scholars have noted that the performance feedback that firms receive from the market is a vital source of information for executives in their efforts to maintain viability and prosperity (Cyert & March 1963). When gaps are identified they often drive managers to engage in learning from performance feedback and initiate *search* for solutions (Greve 2003a). In particular, managers are more inclined to pursue strategic changes with gradually increasing negative performance gaps, but they are more reluctant to make changes when performance exceeds the aspiration level (Greve 2003b). Research shows that while organizations aggressively search for solutions if their performance falls below their aspirational levels, they also engage in search behaviors when their performance is above their aspirational level as managers strive to maintain the leading position of their organizations (Boyle & Shapira, 2011), as well as to enhance their own standing (Audia, Brion, & Greve, 2016).

Negative performance gaps may result from a gradual or sharp decline in organization's performance vis-à-vis its competitors. Gradual decline can be attributed to a loss of relative efficiency in operations (Young & Tilley 2006), competitors' superior technological or marketing performance (Eisenhardt, Furr, & Bingham, 2010), or a structural adaptation to new environmental conditions, as in the case of mergers and acquisitions (Cool & Schendel, 1987; Doz 2002). In this case, management adjusts the level of its aspirations in the course of its decision cycle based on considerations of the organization's previous performance and its

previous aspiration level (Washburn & Bromiley 2012), thereby mitigating the gap between its aspirations and performance. Sharp decline, however, comes from unforeseen jolts (Grønhaug & Falkenberg, 1989). The case of Nokia illustrates an industry leader that rapidly lost its dominance in the marketplace as the rival, Apple, introduced a superior product (i.e., iPhone 2) (Alcacer, Khanna, & Snively, 2014). Positive performance gaps may result from a gradual or sharp increase in the organization's performance vis-à-vis its competitors. The case of Nucor Steel demonstrates how a disruptive innovation can generate a remarkable success by revolutionizing the industry in which it operates in a relatively short period of time (Winter, 2000). Other examples of swiftly creating positive performance ahead of aspirations include such companies as Mobileye, the developer of a driving assistance system (Shashua, Gdalyahu, & Hayun, 2004) acquired by Intel, as well as Waze, the navigating application acquired by Google. However, performance gaps are interpreted by managers, and have, accordingly, a cognitive dimension: gaps that are considered as large by some managers may be considered as negligible by others.

Managerial decision patterns resulting from crisis are particularly relevant to studies of resilience, as organizations may encounter several types of significant setbacks [e.g., climatic distress and natural catastrophes, industrial accidents, devastating product recalls, information technology breaches and data security violations, virally disruptive social media trends, and the threat of terrorism (Williams et al., 2017: 733)]. Research on crisis management makes the distinction between crisis as an *event* and crisis as a *process*. In the case of an event, the organization will attempt to readjust and recover in order to bring the system back into alignment (Pearson & Clair, 1998: 66). In the case of a process, the literature suggests that there is a "genealogy of crises that may be potentially tracked long before the acute phase [which] is the

ultimate moment of a continuous cumulative process of organizational failures" (Roux-Dufort, 2016: 27; see also Williams et al., 2017). Milburn, Schuler and Watman (1983) distinguish, for example, between internal and external antecedents, moderators of the antecedents to a crisis and responses at the individual and at the organizational levels, all spread out in time. Managerial decisions resulting from performance feedback are essential in building organizational resilience, since "resilience can be facilitated by learning from experience with adversity, and this learning – as individual organizational members encode new information, adjust mental models, and encode new knowledge into organizational routines – can be direct or vicarious" (Madsen & Desai, 2010). Thus, we can distinguish between resilient organizations that are flexible and possess strong adaptive capabilities to stiff and brittle organization that are unable learn and adapt their mental models. Brittle organizations can be pushed out of equilibrium by both discrete shocks and by the accumulation of minor gradual crises (Rudolph & Repenning, 2002). In what follows, we elaborate on how organizations respond to performance feedback gaps by engaging in different search behaviors.

#### **Performance Feedback Gaps and Search Modes**

Behavioral theorists specify that performance gaps elicit *search behavior*. Search can be defined as activities aimed at solving organizational problems, broadly defined (Cyert & March, 1963). Search activities can be diverse and include attempts to make a change in the firm's market position (Greve, 1998b; Park, 2007), repositioning in a strategic group (Schimmer & Brauer, 2012), investment in R&D (Chen & Miller, 2007; Greve, 2003a), product innovation (Greve, 2007; Yayavaram & Chen, 2015), acquisitions (Gaba & Bhattacharya, 2012; Iyer & Miller, 2008), and alliance formation (Baum et al., 2005), among others.

The literature points to two main modes of search: 1) *internal search*, where organizations seek solutions internally using their previous experiences and existing knowledge bases, and 2) *vicarious (external) search*, where organizations seek solutions outside the boundaries of the organization by learning from external sources such as suppliers, competitors, and customers (Adner & Kapoor, 2010; Afuah, 2000; Rosenkopf & Nerkar, 2001). As mentioned above, we refer to both inter-industry and extra-industry search (Katila, 2002). Both internal and vicarious search modes are learning processes that involve observation, the extraction of information from those observations, and making decisions regarding the performance of the behavior (Bandura, 1971). They can be exploitative or explorative; for example, experiential learning can be directed towards exploration or exploitation, and vicarious learning can enable acquisition of knowledge about how others explore and exploit. Internal search involves a reflection on past experiences, often through experiential learning that elicits change and adaptation, whereas vicarious search involves learning by imitating, copying, and matching the behaviors and actions of others (Bandura, 1977).

We theorize that when experiencing a positive financial performance gap, organizational leaders develop confidence in the ability of the organization and its members to address issues (Bandura 1977), and thus they are more likely to encourage members to exercise their talents in the search for solutions [our focus here is on motivational mechanisms, but we acknowledge other cognitive mechanisms such as error detection and learning from failure that are also important for building resilient organizations (see Weick & Sutcliffe, 2007; Weick, Sutcliffe, & Obstfeld, 1999)]. In addition, the choice of implementing an internal search derives from previous experiences with success, which elicit beliefs and convictions that this past success is the result of superior decisions, capabilities, and practices (Audia, Locke, & Smith 2000). When

managers communicate the message that members' skills and abilities are valued, they instill a sense of mutual respect and trust in members about their capacity to drive the organization to a higher level of performance.

The decision to pursue vicarious search, that is, to seek external knowledge, enables managers to leap over organizational boundaries and gain new specialized insights (Alexiev et al. 2010). This mode of search opens up possibilities for new learning and knowledge exchange and integration (Kaplan, Murray, & Henderson 2003) and is likely to be pursued when the performance gap is too large and internal solutions are not likely to suffice. For example, when organizations observe that competitors have developed superior technological know-how, they are likely to either seek alliances with or acquisitions of other organizations as a means to bridge the gap. This often entails structural reorganization and reconfiguration of resources (Anand, 2004; Anand & Singh, 1997; Karim & Kaul, 2015). When organizations decline, they often downsize, which undermines job security or employment stability (Cameron, 1998; Freeman & Cameron, 1993). Learning scholars provide evidence that when organizations turn to vicarious search they can improve various outcomes, including their learning effectiveness through, for example, learning from near-failures of other organizations within the industry and in other industries (Kim & Miner, 2007), lowering accident costs (Baum & Dahlin, 2007), and helping new entrants in acquiring new knowledge bases that enable them to become competitive (Posen & Chen, 2013).

#### A Contingent Link: Financially- and Sustainability-driven Organizations

Still, we believe that these linkages are more complex and contingent. Specifically, an organization will seek ways to gain legitimacy, defined as a generalized perception or assumption that its conduct and actions "are desirable, proper, or appropriate within some

socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995: 574). This is because it actively attempts to justify "to a peer or superordinate system its right to exist..." (Maurer, 1971: 361)].

Poor financial performance is likely to lead to a loss of legitimacy because shareholders will seek other investment alternatives, and customers and suppliers may switch to other competing organizations. When organizations face significant and repeated negative performance gaps, they attempt to economize (Williamson, 1991) by cutting costs (e.g., layoffs and salary reductions). However, drawing on identity theory we argue that this depends on the organization's identity (which reflects the "core, distinctive and enduring qualities" [e.g., the values, norms and orientation the members of the organization collectively believe in and stand for (Albert & Whetten, 1985)]. The strength of the organization's identity guides organizational behaviors and actions (Gioia, Schultz, & Corley, 2000) such that organizations become either more financially-driven or sustainability-driven entities and their quest to garner legitimacy while responding to performance feedback gaps is likely to differ.

Specifically, financially-driven organizations underscore the achievement of financial goals while caring less for their social and environmental responsibilities, whereas sustainability-oriented organizations strive for their actions to be perceived as legitimate among multiple stakeholders with concerns for financial as well as societal and environmental standards; that is, the triple bottom line is addressed (see Van Marrewijk, 2003). They tend to consider profits as means for making positive societal and environmental change (see also Stubbs, 2017). Sustainability-oriented firms maintain their values in terms of the efforts they make in caring for their people and the environment by enforcing these preferences in the way they do business. Our conceptualization expands on stakeholder theory (Freeman, 1984), which is interpreted in its

normative aspect (Brickson, 2005) to indicate that each group of stakeholders has its own set of "legitimate interests." Thus, "each group of stakeholders merits consideration for its own sake, and not merely because of its ability to further the interests of some other group, such as the shareholders" (Donaldson & Preston, 1995: 67). Following this line of thinking, we view the interests of shareholders and stakeholders are representing interests that do not necessarily coincide. We assume that while shareholders are more focused on the firm's financial performance and financial resilience, the other stakeholder groups may have a different set of interests aimed to meet the needs of the present generation without compromising the ability of future generations to meet their own needs (Brundlandt, 1987; Hall, Daneke, & Lenox, 2010). As such, sustainability-oriented organizations 'adopt and enact a more humane, ethical, and transparent way of doing business' (Van Marrewijk, 2003). These organizations develop a deep sense of social responsibility such that they continuously shape and refine policies and practices that meet the economic, social, and environmental performance expectations of their stakeholders or constituencies (Aguinis & Glavas, 2012; Rupp et al., 2006).

Table 1 illustrates the four patterns of search that an organization, depending on its distinct identity or orientation, is likely to pursue when considering both performance gaps and pressures for greater legitimacy. Cell A in Table 1 depicts a scenario in which an organization experiences a positive financial performance gap and enjoys a high of level of legitimacy; in this case, both a sustainability- and a financially-oriented organization is likely to interpret its actions favorably and thus reinforce the course of action it developed and pursued successfully, and thus continue to enact internal search (Proposition 1a). Conversely, Cell C in Table 1 depicts a scenario in which an organization experiences a negative performance gap and also suffers from poor legitimacy; in this case, both a sustainability- and a financially-oriented organized performance gap and also suffers from

likely to interpret its actions as insufficient or inappropriate and thus is likely to seek a change in its course of action and engage in intensive vicarious search (Proposition 1b). Cell B in Table 1 indicates a more complex scenario where the organization enjoys a positive performance gap but suffers from poor legitimacy; in this context, a sustainability-oriented organization will mainly tend to engage in vicarious search (as part of its effort to gain legitimacy from multiple stakeholders) whereas a financially-oriented organization will mainly engage in internal search. This is because the organization's performance satisfies one of the most influential stakeholders - its shareholders (Proposition 1c). Cell D in Table 1 depicts another complex scenario wherein the organization experiences a negative performance gap but enjoys a high level of legitimacy; in this context, we posit that a sustainability-oriented organization is likely to engage in a moderate level of internal search whereas a financially-driven organization will mainly engage in vicarious search (Proposition 1d). This is because financially-driven organizations are mainly concerned with satisfying shareholders' needs and meeting their return on equity expectations; and thus they focus on searching externally, due to shareholder pressures, for responses to their financials. However, sustainability-driven organizations will adopt a more holistic approach to their activities, and even if they face negative financial performance their most important issue is whether they sense that their courses of actions are legitimate in the eyes of multiple stakeholders. For example, if their financial performance is below aspirations while their actions are legitimate, they are likely to keep relying on internal resources to improve their position as part of the belief they developed in their organizational system. Even if their sustainability performance does not meet their aspirational level they will engage in internal search because of their long-term goal of satisfying multiple stakeholders through a coherent social mission. To illustrate this situation, consider an organization whose managers convey the following message:

"we understand that we are below our aspirational level but we are pursuing a transcendent mission...this mission is not about a quarterly or yearly performance but about who we are as an organization."

Insert Table 1 about here

On the basis of the above logic, the following propositions are formulated:

Proposition 1. Modes of search are determined by the organization's need for legitimacy, its identity (whether it is financially- or sustainability- driven) and performance gaps. Proposition 1a. When organizations experience a positive financial performance gap and enjoy a high of level of legitimacy, both sustainability- and financially-oriented entities are likely to undertake internal searches to find solutions to their problems.

Proposition 1b. When organizations experience a negative financial performance gap and concomitantly suffer from poor legitimacy, both sustainability- and financially-oriented entities are likely to engage in intensive vicarious searches aimed at finding solutions to their problems.

Proposition 1c. When organizations enjoy a positive financial performance gap but suffer from poor legitimacy, sustainability-oriented entities are likely to engage in vicarious search, whereas financially-driven entities are likely to mainly engage in internal search to find solutions to their problems.

Proposition 1d. When organizations experience a negative financial performance gap but enjoy a high level of legitimacy, sustainability-oriented entities are likely to engage in a moderate level of internal search whereas financially-driven entities are likely to mainly engage in vicarious searches to find solutions to their problems.

#### **Search Modes and Group Engagement**

Once organizations have chosen whether to search internally or externally, they need to assign task groups or units to find solutions for the observed performance gaps. Other non-task groups serve mainly in a supportive role in the search activity. Thus, organizations need to enhance both task and non-task group members' engagement in the process of identifying, configuring, and applying knowledge to address the negative or positive financial performance gap. Behavioral theorists have noted that organizations often set up groups (or work subunits) as a platform to address such gaps (Cyert & March, 1963).

When empowering a certain work unit to seek and find solutions to its burgeoning problems, organizational leadership needs to attend to the motivational basis of both task and non-task group members. The group engagement model (Tyler & Blader, 2000; Tyler & Blader, 2003), which deals with "the psychological basis of people's engagement with their groups, organizations, and societies" (Blader & Tyler, 2009: 445), specifies people's two basic reactions to encounters with their group or organization, which in turn influence their degree of engagement (Blader & Tyler, 2009; Tyler & Blader, 2000). Studies that draw on social identity theory (Abrams, 1992; Hogg & Abrams, 1988; Tajfel, 1978; Tajfel & Turner, 1986) as well as social comparison theory (Festinger 1954) argue that members compare their group with other groups (generating what is termed "relative pride"), but also compare themselves to other members within their own group (creating what is termed "relative respect") (Tyler & Blader, 2002: 815). Here we refer to the evaluative component of social identity theory that focuses on the relative pride of the group vis-à-vis other groups, which refers to the "assessment of group's general worth and status" as compared with others (Blader & Tyler, 2009: 445). Both task and non-task group participants cooperate as explained above based on three judgments, namely the degree to which decisions made lead to favorable outcomes for participants (self-interest), the degree to which decisions made lead to fair outcomes for the participants, and the degree to which decisions are made through a fair process (Tyler & Blader, 2000: 8). In all these cases, albeit differently, group members react to procedural justice and economic outcomes. They fully understand that the quality of their group membership is essential in determining the extent to which the group can satisfy the quest to develop and maintain a positive social identity (Blader & Tyler, 2009; Tyler & Blader, 2000; Tyler & Blader, 2003). Nevertheless, task groups and non-task groups exhibit different behavioral patterns, contingent on the mode of search.

Organizations that attempt to address performance gaps by engaging in internal search send cues indicating the high worth and favorable status of the work group assigned to pinpoint solutions to the gap problem. When organizations pursue vicarious search, however, their level of trust in the capacity of their members to solve problems internally (utilizing direct experiences) is perceived as being relatively weak. From a behavioral perspective, we suggest that engaging in vicarious search in response to a negative performance gap sends a message of mistrust in the system and the ability of its members to meet or exceed aspirations.

In the case of an internal search decision, following Tyler and Blader (2000), we posit that the task group will not only engage in mandatory (in-role) behaviors but also exhibit discretionary (extra-role) behaviors as part of the members' efforts to maintain their relative pride (e.g., Clarke & Mahadi, 2017). Yet it is important to note that the work groups engaging in vicarious searches are tasked with researching and benchmarking the industry, suggesting the organization values the work they are assigned to do, which will lead to promoting behaviors of their group as well, namely "behaviors that help the group to achieve its goals." These promoting behaviors are guided by the group's understanding of its contribution to the successful accomplishment of the task at hand, such that members are encouraged to exert efforts above the norm to enable effective implementation of the choice selected from the search activity (see Tyler & Blader, 2000: 30).

Limiting behavior, on the other hand, is defined as the extent to which group members refrain from engaging in "undesirable behaviors," which is often enforced by group rules that direct members away from actions that may hinder the full functioning of the group (Tyler & Blader, 2000). We expect to witness this type of behavior at various levels in those groups that were not assigned to the search task. Specifically, the non-task groups must exhibit some level of limiting behaviors because of the support needed from their members in implementing the solution discovered by the task team (see Tyler & Blader, 2000: 6-7). For example, Polaroid's managerial team responded to the emerging digital imaging technology by efforts directed to develop "new technical capabilities" (Tripsas & Gavetti, 2000: 1153), but this choice was challenged by other groups of members who believed that this emerging technology was more fundamental and required, for example, the development of market capabilities. Not only was the choice poor, but the non-task groups were reluctant to harness their resources and capabilities to support the chosen course of action, an indication that groups not assigned to a task, internally or vicariously, may sense that the organization does not appreciate their capacity to skillfully seek a solution elsewhere, which is likely to lead to limiting behaviors. Specifically, we suggest that if the way the search mode decision not to task them with search was made is perceived as fair we can expect more discretionary (deference) behaviors. Further, if the decision-making process is not perceived as fair but the expected outcomes are viewed as positive for the group, members

will exhibit mandatory (compliance) behaviors (Tyler & Blader, 2000: 7). When task groups are the primary agents, others (non-task groups) are put in the back seat; but if the non-task groups do not exhibit limiting behaviors it is unlikely that the task group, regardless of its intrinsic quality, will be able to implement the search choice effectively. This is because all units within the organization must at least accept (if not actively support) the proposed solutions so that they can be implemented throughout the system effectively. Based on this logic, the following propositions are formulated:

Proposition 2a. When organizations address performance gaps through internal search, designated work groups exhibit promoting behaviors. The extent to which the choice of an internal search is perceived as fair and the associated potential economic outcomes are high determine whether the groups will exhibit both discretionary (extra-role) and mandatory (in-role) promoting behaviors.

Proposition 2b. When organizations address performance gaps through vicarious search, work groups are likely to exhibit limiting behaviors. The extent to which the choice is perceived as fair and the associated potential economic outcomes are high determine whether the groups will exhibit discretionary (deference) rather than mandatory (compliance) limiting behaviors.

#### **Group Engagement and Organizational Resilience**

We also theorize that group engagement is likely to cultivate organizational resilience, defined as "the capacity to rebound from adversity strengthened and more resourceful" (Sutcliffe & Vogus, 2003: 97). Other definitions have been in terms of the belief that an organization "can absorb and cope with strain," and has the "capacity to cope, recover and adjust positively to difficulties" (Carmeli, Friedman, & Tishler, 2013: 149). The facets of organizational resilience to which we relate here are: 1) societal and environmental resilience, and 2) financial resilience.

We reason that resilient organizations are better able to cope with challenges and thus rebound from societal and environmental and financial difficulties, and to adapt and grow. This captures the notion that organizations face different demands and pressures from different stakeholders who exert influences on the system that serve their individual requirements and needs (for example, investors are likely to underscore the achievement of financial outcomes whereas regulatory organizations will be more interested in the extent to which the organization meets regulatory standards). Here, we adopt a "developmental approach" to resilience, which assumes that organizations develop this capacity over time, rather than merely responding to specific shocks, while continually addressing and handling pressures, tensions, and disruptive events (Sutcliffe & Vogus, 2003: 96). Put differently, rather than a fixed property of an entity, responses are adjusted to align with new circumstances (see also Staudinger et al., 1993), such that the coping and adaptive capacity are transformational in nature and enables an organization to grow from difficulties (Carmeli et al., 2013).

Promoting behaviors create at least three motivational mechanisms – positive energy, meaningfulness, and potency – that contribute to greater resiliency. In terms of positive energy, a group assigned the challenge of addressing a performance gap is likely to develop a sense of eagerness that underlies its actions (Dutton, 2003). Such group members develop a sense of transcendence and meaningfulness that emanates from being part of a social category and from engagement in something that is greater than themselves (Pratt & Ashford, 2003). Finally, group potency involves a collective confidence among members in their abilities to carry out the mission effectively (Guzzo et al., 1993).

We reason that these mechanisms allow the group to help the organization cope and adapt to jolts and difficulties. Groups energized by positive emotions (Fredrickson, 2001) are more willing and able to explore new opportunities. As Fredrickson (2003: 172) puts it, "organizational transformation becomes possible because each person's positive emotion can be reverberated through other organizational members" (contagious emotions), creating an upward spiral that can broaden habitual modes of thinking and acting such that groups and their members become more flexible, adaptive, and creative problem-oriented entities (Fredrickson 2003), which affects the ways the organization, as a whole, approaches and acts upon challenges.

Second, a sense of meaningfulness is likely to develop because members feel they have been assigned an important task that reflects on their group and its status (Hackman & Oldham, 1976). Positive collective meaning enhances the motivation and capacity to learn and create new knowledge in the face of adverse events. It also facilitates higher levels of collaboration and coordination as well as more effective decision-making processes (see Dutton & Glynn, 2008), all of which are conducive to organizational resilience. This relational lens has been demonstrated in previous studies that show that organizations adapt to turbulence through relational coordination (Gittell, 2003). Further, recent research showed that social relationships helped farmers in rural communities to build organizational resilience in response to severe an externally induced setback (i.e., extreme weather) (Tisch & Galbreath, 2018), as well as intraorganizational relationships that facilitate more rapid decision-making processes such that they create greater response flexibility to adverse events (Sullivan-Taylor & Branicki, 2011).

Third, as social cognitive theory (Bandura, 1976; Bandura, 1997) suggests, human agency can be extended to collective agency such that a shared belief in the collective power of the group to achieve its goals is developed. This collective agency underlies the group's potency through the shared intentions, knowledge and skills of its members (as well as) the "interactive, coordinated, and synergistic dynamics of their transactions" (Bandura, 2001: 14). Further, research indicates that belief in a group's potency motivates its members to act (make significant efforts to complete tasks effectively) (Lester et al., 2002), makes them more satisfied with the group functioning, and positively influences group outcomes (Zaccaro et al., 1995). This often occurs because the efficacious beliefs build more trusting relationships and foster constructive collaborative efforts that facilitate adaptation (Larson & LaFasto, 1989). Studies across different types of groups have shown that "the higher the perceived collective efficacy…the stronger their staying power in the face of impediments and setbacks" (Bandura, 2000: 78) and "their resilience to stressors" (Bandura, 2001: 14). Thus, we posit that the group assigned to address a given problem is likely to lead the way in the face of setbacks and help the organization to cope, adapt, and grow from the adverse experience.

## Proposition 3a. Promoting behaviors enhance organizational resilience through positive energy, a sense of meaningfulness and collective potency.

The groups not assigned the leadership role in finding responses to the issue at hand must continue their operations through recurrent practices to keep the organization functioning. If they lose their interest or motivation, the difficulties are likely to escalate because the organization may become highly fragmented and unable to operate harmoniously. Second, and more importantly, once the assigned task group has managed to craft a response strategy, the other groups in the organization must demonstrate a high level of cooperation to effectively carry out the proposed course of action. If one or more groups display "undesirable behaviors" (Tyler & Blader, 2000) they can impede the functioning of the organization in general and hamper the viability of the response strategy and its corresponding actions in particular. Thus, we posit that

promoting behaviors of the task group must be combined with at least some compliance or adherence on the part of the non- task groups to the proposed program of enhancing organizational resilience, and that deference of the non-assigned task groups will contribute to the effort. We theorize about two key mechanisms – justice and trust. When the non-task groups perceive that the assignment and allocation of resources to the task groups is fair and when they trust the ability of the task groups to carry out the mission they are likely to adhere to the course of action chosen by the organization. Thus, organizations need to harness compliance of the nontask groups.

Proposition 3b. The positive link between task group promoting behaviors and organizational resilience depends on the non-task group limiting behaviors. Proposition 3b(1). When the non-task groups exhibit compliance or adherence to the proposed response strategy we expect a positive but moderate level of organizational resilience.

Proposition 3b(2). When the non-task groups exhibit a high level of deference towards the proposed response strategy we expect an enhancement of organizational resilience. Proposition 3b(3). When the non-task groups exhibit neither types of limiting behaviors (compliance or deference), the result will be low levels of organizational resilience.

Insert Table 2 about here

#### DISCUSSION AND IMPLICATIONS

Organizational strategies decay at an accelerated rate (Hamel & Välikangas, 2003). Competitive advantages built up with substantial effort erode (McGrath, 2013), due to the emergence of more uncertain, unstable, volatile, and complex conditions that pose new challenges and hurdles. A focus on resilience can help understand how organizations and their managers cope with these difficulties, despite their bounded capacity to anticipate and plan for every challenge.

This paper adopts a mechanisms view (Gross, 2009) that integrates the organizational learning from performance feedback theory, identity theories, and the group engagement model to reveal a process by which financially- and sustainability-driven organizations differentially utilize performance gaps to enhance organizational resilience. We summarize a set of theoretical arguments that are discussed in Table 2. In particular, we advance a socio-cognitive perspective that reveals how macro-level (organizational level) influences can translate into macro-level outcomes, through a meso-level (team-level) effect. We delineate a process in which a team-level process is a key to translating performance feedback at the organizational level into organizational resilience. This process model suggests that negative and positive sustainability performance gaps trigger different modes of search behaviors, depending on the extent to which the course of action of the organization is perceived as legitimate. The model then depicts how these search modes facilitate different types of group engagement, which in turn influence the capacity of the organization to bounce back from difficulties, to adapt and grow (i.e., its resilience).

This study makes several theoretical contributions. We extend the behavioral theory of the firm that focuses on the process of decision implementation stages to financial performance feedback, rather than on the decision-making process that has been focal in performance feedback studies (Greve, 1998a; Greve, 2003b). Greve and other researchers (e.g., Baum et al., 2000; Chen & Miller, 2007; Iyer & Miller, 2008) support the argument that when firm performance falls below its aspiration level, managers gradually increase search (Gavetti et al., 2012), with the aim of finding "satisficing" solutions (Simon, 1997) that are designed to translate into improved outcomes. This paper may help reveal the mechanisms by which this process unfolds and may build higher levels of organizational resilience. We believe that our approach advances theory in three ways.

First, we show why the search choice in response to adverse situations (e.g., Rivera & Clement, 2019) is more complex than envisioned in most studies, and, more specifically, why a particular mode of search depends on the organization's legitimacy as well as on its identity or orientation - that is whether it is financially driven or sustainability driven. We theorize about a firm's response to its multiple aspiration levels. As the behavioral theories of the firm indicate, firms have multiple simultaneous goals, and multiple performance measures along these dimensions (Cyert & March, 1963: 114). Managers must prioritize their decisions concerning various performance goals by selecting the appropriate levels of managerial attention they devote to each one (Blettner et al., 2015; Lee & Meyer-Doyle, 2017; Ocasio, 1997, 2011). The sustainability literature defines an overall conduct standard for organizations to ensure that in their attempts to meet the needs of the present generation, they do not compromise the ability of future generations to meet their own needs (Brundlandt, 1987; Hall et al., 2010). This is a complex set of goals which most managers believe mutually contradict each other, since investments made in environmental and social performance negatively affect the organization's financial performance dimension (Ambec & Lanoie, 2008). Integrating research on legitimacy allows us to formulate a typology of what and when search modes firms tend to utilize. Categorizing organizations as either financially oriented (i.e., being primarily concerned with their bottom line), or sustainability oriented (caring about the ability of future generations to meet their own needs by attending to current societal and environmental needs), we elaborate a

theory on the typical types of search in situations of poor or high legitimacy of the method chosen. This theoretical advance also sheds light on competitive moves, that is, the ways organizations respond to positive evidence as well as to difficulties or setbacks, by adopting the performance feedback lens. However, rather than solely focusing on financial performance gaps, this paper highlights other facets (i.e., sustainability performance considerations) that have rarely been incorporated in the literature (DesJardine & Bansal, 2017).

Second, we not only provide an explanation of why search modes are adopted, but also how these modes of search can be realized. We expand on the group engagement model to reveal how internal (local) search and vicarious search can be pursued effectively. This is of theoretical importance since we point to a solution implementation mechanism for the chosen search modes; we specifically suggest that once a search mode is chosen, the organization assigns a work group or unit to carry out the activity, while ensuring that other groups or units within the organization, despite not being in the forefront, can influence the implementation efforts. We offer a first linkage between search modes and the group engagement model (Tyler & Blader, 2002; Tyler & Blader, 2000) by explicating why internal search is likely to encourage promoting behaviors whereas vicarious search is likely to foster limiting behaviors. We also contend that in specific situations, limiting behavior is a more suitable and advisable behavioral type. Specifically, we allude to a constellation of albeit substantially different efforts that should be cultivated for effective search activities. This suggests that the context in which a particular search mode is utilized also influences the type and level of engagement of the task and non-task groups; some conditions foster task group engagement in promoting behaviors and some conditions also facilitate the engagement of the non-task groups in limiting behaviors – particularly deference, which is discretionary in nature.

Third, we contribute to the literatures on group engagement and organizational resilience by revealing mechanisms governing the social identity and social comparison processes that are conducive to building higher levels of organizational resilience. We identify different sociopsychological mechanisms (positive energy, collective meaning, and potency) through which promoting behaviors contribute to organizational resilience. We further elaborate on the notion that although search tasks are often assigned to certain groups, there needs to be some level of cooperation with the non-task groups in the pursued course of action, including some work routines that must be followed. This suggests that building organizational resilience is a complex endeavor that involves different levels of engagement throughout the organization. More specifically, there is a tendency to think in terms of fostering higher levels of work engagement, and in particular augmenting promoting behaviors over limiting behaviors. However, this paper offers a different perspective by claiming that not all groups or units need to exhibit the same level of engagement and that not all need to display promoting behaviors; rather, the combination of different levels and forms of engagement enables organizations to rebound from adverse events and shape a more resilient system. Through this perspective we contribute to a deeper understanding of behavioral patterns in organizational hybridity - organizations that combine multiple identities (Ashforth & Reingen, 2014; Battilana & Dorado, 2010; Battilana & Lee, 2014).

This conceptual paper also offers some implications for practice. First, managers should determine the identity of the organization and fully comprehend the pathway through which its orientation can translate performance feedback gaps into the development of strategic capabilities such as organizational resilience. While managers can shape and reshape norms and values this is a rather complex endeavor that requires a deep-level understanding of both the

orientation and the situation (negative or positive performance gap) to determine the pathways to building or enhancing resilience. Second, managers should also empower members to engage in promoting behaviors in order to cultivate resilience but should not overlook the importance of members' limiting behaviors. Our paper alludes to different groups involved in the task of recovering from setbacks and the need to harness the non-task groups (which often represent a large part of the organization) to support the quest for resilience. Finally, when encouraging promoting behaviors the organization has chosen to focus on and allocate resources to an internal search, which can foster intrapreneurship behaviors and potentially limit the costs associated with vicarious search. However, it is also important to realize that even engaging in internal search may involve vicarious learning and thus it is vital for the task group to include members with strong and rich networks organizationally and professionally.

#### LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

This paper leaves some unanswered questions that call for further research. Integrating research on legitimacy and identity theory to explain how negative and positive performance gaps lead to different modes of search is promising. However, future efforts can be directed to the study of pressures in the face of financial and sustainability performance gaps. Pressures in the case of the social and environmental issues may be even more compelling than those exerted in the case of financial deficiencies. For example, in the case of an extremely positive financial performance gap, there is reason to believe that formal forces will become more pronounced, since the community will raise its expectations that the firm will devise more proactive environmental and societal strategies. Formal pressures differ significantly across cultures and may impact the search responses of the organization to remedy its financial and sustainability gaps. In addition, identity theorists have noted the process by which organizations transform and

cultivate their identities (Bartunek, 1984). This opens new questions regarding why organizations that are driven by financial considerations become more sustainability oriented, and vice-versa. For example, research points to changes in an organization's identity following an acquisition (Clark et al., 2010). We can envision that a change in management teams can bring about these changes, as well as bottom-up influences that derive from front-line employees and middle-level managers who promote a different agenda for the organization. Yet, this line of research is promising as it can help in reflecting on how multiple influences across external and internal forces (individual, group, organization, institutions) shape the identities of organizations to guide their responses to performance gaps to enhance organizational resilience. While our work describes the interactive effect of formal and informal pressures on the financial- and the sustainability-driven organization, it represents boundary conditions, as typical organizations are located on a continuum between the two.

We do not aim to unravel all the processes and activities that can contribute to building organizational resilience. The study of organizational resilience is still in its infancy and it is rather common for theory at this stage to be fragmented and to evolve through different theoretical perspectives and approaches. Thus, our paper should not be seen as aiming to capture the confluence of enablers and inhibitors of organizational resilience. Instead, we have tried to build on this fragmentation and integrate often disparate theory and research to help advance this literature. We do not believe that at this premature stage of theory development scholars need to attempt building an overarching theory, but rather should seek more coherent, yet focused, theorizing that reveals the ways organizations enhance their resilience.

In addition to theorizing on organizational resilience, we believe that some efforts to expand on the psychology literature of individual resilience would be helpful. Although considerable research has been done in psychology, it is unclear to what extent, and how, we can derive insights and translate individual-level processes into organizational-level practices that may be conducive to organizational resilience. Here, we have alternated between organizationaland group-level processes. We believe that a micro-level approach to the study of organizational resilience can shed further light on the ways in which individual efforts translate into higher levels of resilience at the organizational level; for example, it would be very useful to draw on strategic leadership theory and examine how a CEO's personality affects organizational resilience (Buyl, Boone, & Wade, 2017). Since strategic leadership theory looks at processes in which personality, traits, or leadership behaviors of CEOs influence organizational outcomes, it is important to better understand how these traits and behaviors influence individual employees and how their actions and behaviors contribute to or inhibit the capacity of the organization to rebound from setbacks, to adapt and grow. The basic premise in organizational learning from performance feedback theory is that firms react further to the feedback interpretation by their managers, drawing on the reaction to the risk of individuals (Kahneman & Tversky, 1979), and on their limited attention span (Ocasio, 1997) derived from their bounded rationality (Simon, 1991), and on notions of self-enhancement, self-verification and self-evaluation. Yet due to the complexity of the firm, macro-level behavior cannot be simply attributed to motivation at the individual level, that is, to that of a manager. Hence, we believe that theory can be elaborated to the extent that scholars can shift between levels of theorizing and analysis to more fully capture the macro-, meso-, and micro-levels and the constellations in which they enhance or impede organizational resilience.

This also raises some methodological challenges. First, collecting data from multiple respondents across diverse organizations may prove challenging. For example, collecting data to

capture the different parts of the model would involve the complex procedure of obtaining responses from senior managers, middle-level managers and group members. Second, a process model implies the need to collect data longitudinally. For example, to capture different situations that organization experience, changes in their identity and the implications for building strategic capabilities one needs to take an evolutionary approach involving a longitudinal qualitative study. Third, because the model implies traveling between levels of analysis it creates additional challenges with regard to the study of macro to micro to macro phenomena. Further, assessing the multi-dimensionality of each performance expectation of multiple stakeholders can be done in different ways, but managing diverse and often opposing demands for organizations from

different stakeholders can prove challenging to many organizations.

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		Performance	
		Negative	Positive
Legitimacy	High	Sustainability-oriented: Internal Search Financially-oriented: Vicarious Search D	Sustainability-oriented: Internal Search Financially-oriented: Internal Search A
	Poor	Sustainability-oriented: Vicarious Search Financially-oriented: Vicarious Search C	Sustainability-oriented: Vicarious Search Financially-oriented: Internal Search B

Propositions	Arguments	Theoretical Lenses and Constructs
Proposition 1. Modes of search are	Positive and negative performance vs.	Performance feedback theory (performance
determined by the organization's need for legitimacy, its identity (financially or	aspirations gaps determine local or vicarious search activity.	gaps, aspirations, search, reference groups)
sustainability driven) and performance gaps.	Managerial search decisions are also shaped by the organization's need for legitimacy. Legitimacy from whom: sustainability- oriented organizations attempt to satisfy the	Corporate social responsibility (crisis management) Stakeholder theory (stakeholders, shareholders)
	needs and desires of multiple stakeholders, whereas financially-driven organizations cater mainly to the needs of shareholders.	Organizational legitimacy) Learning theories
<ul> <li>Proposition 2a. When internal search is the choice for closing performance vs. aspirations gaps, designated work groups exhibit promoting behaviors. If the choice is perceived as justifiable and the associated potential economic outcomes are high, the groups will exhibit both discretionary (extrarole) and mandatory (in-role) promoting behaviors.</li> <li>Proposition 2b. When vicarious search is the choice for closing performance vs. aspiration gaps, work groups are likely to exhibit limiting behaviors. If the choice is perceived</li> </ul>	A decision to perform internal search sends cues that members' skills and abilities are valued, generating promoting behaviors. Groups assigned to perform the search experience relative pride vis-à-vis other groups. Groups that are not assigned to a task, internally or vicariously, may sense that the organization does not appreciate their capacity to skillfully search for a solution elsewhere, which may lead to limiting behaviors.	Group engagement model Social identity theory Social comparison theory
as justifiable and the associated potential economic outcomes are high, the groups will exhibit discretionary (deference) rather than mandatory (compliance) limiting behaviors. Proposition 3a. Promoting behaviors enhance	Promoting behaviors create at least three	Resilience
organizational resilience through positive	socio-cognitive mechanisms – positive	

Table 2. Propositions, Arguments, and Theoretical Lenses and Constructs

energy, a sense of meaningfulness and collective potency	energy, meaningfulness, and potency – that contribute to higher levels of resilience.	Positive emotions theory Social cognitive theory
Proposition 3b. The positive link between task group promoting behaviors and organizational resilience depends on the non- task group limiting behaviors.	Groups that were not assigned to search activity and thus do not assume a leadership role may nonetheless play a significant role by exhibiting compliance behaviors that are needed to support the task group.	
Proposition 3b1. When the non-task groups exhibit compliance or adherence to the proposed response strategy the influence on organizational resilience will be positive but moderate.		
Proposition 3b2. A high level of deference of the non-task groups towards the proposed response strategy will enhance organizational resilience.		
Proposition 3b3. When the non-task groups exhibit neither type of limiting behaviors (compliance or deference), the result will be low levels of organizational resilience.		

#### Figure 1: Research Model

