HOW CAN COMPLACENCY MOLD MANAGERIAL DECISIONS? THE ROLE OF PERCEPTIONS IN STRATEGIC DECISION-MAKING

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Abstract

This paper addresses how managers react to attainment discrepancies in their firms' performance. Scholars have generally argued that only when performance drops below a predetermined aspiration level firms present a search and change behavior in order to fix this dropping performance. In particular, prior research assumes that organizations compare their performance against preset aspiration levels proceeding from their peers' performance or their own performance in prior years when determining the urgency of engaging in organizational change. However, empirical evidence on this issue is ambiguous and inconclusive. We tackle this puzzle by studying the executives' complacency (or cognitive interpretations) with objective results of the firm to determine when the company will decide to change and the magnitude of those changes. Using a sample of 137 medium-sized firms, we do find that the combination of objective results with the managerial perception of them, allows us to obtain a better understanding of the performance feedback literature. Thus, organizational change will be (only) enhanced in front of low managerial levels of complacency with organizational results, disregarding the sign of the objective performance feedback obtained by the firm. Moreover, in our research, we go one step further in analyzing several executives' characteristics that may affect this managerial complacency.

Keywords: Complacency with Firm Results, Performance Feedback, Intended Change, Perceptions

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1. INTRODUCTION

The study of the strategic response of organizations to performance feedback has aroused the interest of a substantive stream of scholars (Greve, 2003; Shinkle, 2012) since Cyert and March (1963) started to research the reasons why organizational change was promoted. The most prominent perspective in this research area is the behavioral theory of the firm (BTF) (Cyert & March, 1963), which has heavily inspired organizational behavior literature. This theory anticipates that organizations set goals and adjust their behavior in response to performance cues. More specifically, the BTF contemplates that the organization's decision-makers pursue a search and change behavior (only) after perceiving negative performance feedback - i.e., when performance is below a predetermined aspiration level, which is generally delineated from the average of its peers' performance or from its own performance in previous years — a postulation which has been extensively accepted and proved in the literature (Shinkle, 2012). Nevertheless, without regard to the prevalence of the BTF-inspired view, scholars have also found some ambiguous evidence that supports contrary assumptions. For instance, there are some findings in the literature which suggest that organizational change behavior is instigated by positive performance feedback instead of by negative one, as proposed by the "organizational slack" (Daniel et al., 2004) or the "capability cue" perspective (Chatterjee & Hambrick, 2011). In the same vein, scholars have also carried out studies where negative performance feedback is not related to higher organizational change behavior, but lower one ("threat-rigidity" perspective, Staw et al., 1981).

These findings emphasize the lack of results concordance with this assumption and highlight the necessity to go into depth and identify potential factors that influence the translation of performance feedback cues into subsequent organizational behavior actions (Jordan & Audia, 2012). Inspired by this, the present study accentuates the relevance of evaluating the effects of executives' perceptions and cognitions in strategic decision-making processes (Ocasio, 1997), something which has unusually been under investigation despite, along the literature, it is profoundly argued that these interpretations work as perceptual filters of the actual state of things (or reality) and may largely help to disentangle the reasons why strategic change is promoted (Cho & Hambrick, 2006; Elsbach & Kramer, 1996; Hambrick, 1994; Lawrence, 1997; Staw, 1980). Thus, taking the latter into account a company could be performing poorly (e.g., below the average of its industry) according to informed outside observers, but whether their managers unrealistically "assess their own performance as positive, then performance feedback theory's critical prediction that low performance induces the decision-maker to intensify problem-solving responses is less likely to hold" (Jordan & Audia, 2012, p. 214), which would contradict the BTF assumptions and would open future directions for research.

In this vein, to supplement organizational behavior research and integrate apparently contrary findings about performance feedback consequences, we dig deeper into its underlying mechanisms in multiple ways. To begin, we study the managerial magnitude of intended strategic changes instead of the actual or realized changes as the outcome variable of interest. As the successful implementation of strategic changes is complex and strongly context-driven (Hailey & Balogun, 2002), studying the change intentions enables us to test the effects of performance feedback with less noise (Labianca et al., 2009; Lohrke et al., 2006; Schillebeeckx et al., 2016). Besides, this measure allows us to gather a wide understanding of change, considering different domains where managers pursue to implement change, as well as the grade or depth of change in each of them.

Secondly, we directly tap into the managerial cognitive interpretations of performance, through the complacency with firm performance shown by the company decision-makers. Managers who are highly complacent or conformed with their (objective) organisational performance will lack the motivation to initiate strategic changes. They are steeled in their perception of the validity of the current strategy (Gordon et al., 2000), leading to a perception of oversatisfaction (Greve, 2003), and generating inertial responses (Labianca et al., 2009). Thus, our baseline expectation is that the higher managerial complacency with performance, the lower the magnitude of intended strategic changes their managers will intend to implement, and vice versa (that is to sav. a low managerial complacency with performance, would, on the contrary, generate a high magnitude of intended strategic changes by their managers).

Additionally, to further explore the underlying mechanisms by which performance feedback cues lead to certain organizational strategic reactions, in this research we take one step back to analyze the triggers of such managerial complacency with firm results. To do so, we study the influence of executives' characteristics in the formation of this variable. Prior literature about the upper-echelons view (Hambrick & Mason, 1984) has likewise focused its attention on this aspect highlighting the importance of analyzing organizations' decision-makers, more particularly their characteristics when explaining the outcomes, strategic decisions and behavior adopted by a firm (Bantel & Jackson, 1989; Buyl et al., 2014; Hambrick & Mason, 1984). Similarly, as widely recognized by this literature stream, research seems to agree in determining that the study of these characteristics will be critical to delineate their perceptions (Hambrick & Mason, 1984) which, in the last instance, will rule the change actions carried out by the organization (Cho & Hambrick, 2006; Hambrick & Mason, 1984; Sánchez-Peinado et al., 2010). Hence, in line with these suppositions, in this study, we focus our attention on assessing the influence of diverse executives' characteristics on the level of managerial complacency with firm results. In particular, we analyze the top management team (TMT) functional diversity, TMT educational diversity and TMT tenure, anticipating a negative relationship between the first two variables and the level of managerial complacency with firm results while a positive one with the last variable. That is, we expect that decision-makers which hold greater breadth of perspectives, higher levels of information computations, less steady routines and fixed habits to produce less complacent evaluations or conformist evaluations (Bantel & Jackson, 1989; Cho & Hambrick, 2006; Eisenhardt & Schoonhoven, 1990; Haleblian & Finkelstein, 1993; Olson et al., 2006; Randel & Jaussi, 2003). In this way, in our research, we integrate Hambrick and Mason's (1984) upper-echelons perspective with Cyert and March's (1963) BTF research.

We empirically test our theoretical framework in a sample of 137 medium-sized Spanish firms. Our results support our propositions. Extending the conventional performance feedback theory, we do find that BTF's change reasoning is kept against managers who are not complacent with firm results. Hence, we anticipate that the magnitude of the strategic intended change of the firm will be enhanced (just) in front of low managerial levels of complacency with organizational results, disregarding the sign of the objective performance feedback obtained by the firm. This conjecture would confirm that perceptions with results also drive firms' strategic intended change behavior instead of being merely based on "visible" measures of performance feedback. Furthermore, we contribute to performance feedback literature by disclosing some of the antecedents or triggers of managerial complacency with firm results.

The rest of this paper is structured as follows. Section 2 reviews the theoretical background and hypotheses design. Section 3 explains the methodology that has been used to conduct the research. Section 4 presents the findings and Section 5 discusses them. The last, Section 6 concludes the paper with the limitations, research implications and recommendations for future studies.

2. THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

2.1. Performance feedback and organizational change: The BTF and alternative perspectives

When and how executives make the decision to engage in organizational change is both theoretically and practically consequential as shown by its deep study across a wide set of organizational and behavioral theories. In particular, this variable is frequently associated with performance implications, which emphasizes the relevance of understanding the reasons why managers make such decisions (Gavetti, 2012).

The dominant perspective in this domain is the BTF (Cyert & March, 1963). This theory, established under several assumptions of the Carnegie School such as bounded rationality, backwards-looking orientation and rule-based adaptation (Cyert & March, 1963; Gavetti et al., 2012; March & Simon, 1958; Shinkle, 2012), contemplates that firms (and their managers) determine their strategic behavior as a result of assessing its performance feedback, following simple decision rules. The latter has been operationalized in the organizational behavior literature in many different ways (Short & Palmer, 2003); however, most studies consider organizations use some form of preset aspirations in order to determine whether their performance feedback is positive or negative (Chen, 2008), and, therefore, decide if they should change. In particular, this stream of literature anticipates that when perceiving negative performance feedback, that is to say, when performance drops below a particular aspiration level — usually drawn as a firm peer's

performance ("social comparison performance feedback") or firm performance in prior years ("historical performance feedback") — organization decision-makers will start a "problemistic search" behavior through which they will attempt to find solutions to improve this dropping performance (Cyert & March, 1963). In particular, these solutions may be related to different issues such as strategic change (Greve, 2003; Lant et al., 1992), increase in risk-taking (Bromiley, 1991) or innovation (Bolton, 1993), etc. Accordingly, "problemistic search" generally involves deviations from the main organization's activities (Greve, 1998).

Following BTF's assumptions, a wide range of scholars have empirically proposed and proved this negative relationship between performance feedback and change (or search) behavior (Greve, 2008; Shinkle, 2012). However, despite the validity and dominance of this theory in the performance feedback research, opposite results have been similarly found (Bowen, et al., 2010). For instance, several researchers have put forward alternative theoretical positions which confront the BTF precepts, proposing a positive (and not negative) relationship between those variables; the latter has been deeply supported by the "organizational slack" perspective (Daniel et al., 2004), the "threat-rigidity" perspective (Staw et al., 1981) or the "capability cue" perspective (Chatterjee & Hambrick, 2011). In line with the "organizational slack" perspective, it is stated that positive performance feedback may be perceived as an increase of excess resources of organizations, also called "slack", which in turn might be used to increase the organizational change and search behavior (Daniel et al., 2004). Similarly, the "threat-rigidity" perspective suggests that when facing a threat — such as a proximal discontinuance situation or a simple negative performance feedback — organizations might decrease their change and search behavior (Miller & Bromiley, 1990; Staw et al., 1981; Wiseman & Bromiley, 1996). However, the "capability cue" perspective (Chatterjee & Hambrick, 2011) dives more into psychological aspects of decision-making processes articulating that performance feedback is seen by firm managers as an indicator or a "cue" of its current level of ability to perform a certain level of former performance. In this sense, this perspective argues that "when a person receives negative or positive feedback in a domain of central importance to his or her psychological self-concept (such as its level of capacity to obtain a certain performance), it spills over and influences his or her sense of potency in multiple domains" (Chatterjee & Hambrick, 2011, p. 206). Therefore, these "cues" will encourage or discourage managerial self-confidence in their abilities when respectively positive or negative performance is previously perceived. Thus, positive performance feedback will increase managers' selfconfidence in their abilities and stimulate their risk propensity and change behavior. Nevertheless, negative performance feedback will have contrary effects, decreasing the managerial confidence in their own capacities and their will to change and innovate (Chatterjee & Hambrick, 2011).

Our study is inspired by the existence of these inconsistent results along with the call for a reconciling perspective made by some scholars such as Chatterjee and Hambrick (2011) and Jordan and Audia (2012). Additionally, this research is motivated by the "questionable premise established"

in the existing performance feedback literature, which suggests that researchers understand how managers make strategic change decisions [...] by assessing organizational performance feedback" (Shinkle, 2012, p. 448), and more concretely, by comparing the current performance obtained by the firm with their previous aspirations. However, as Shinkle (2012) and Mahto and Khanin (2015) claim, this statement is somewhat pretentious and other factors, such as managers' perceptions of these results, will also need to be under consideration to better understand strategic decision-making processes.

2.2. Decision-makers as performance feedback evaluators

The lack of analytic precision when predicting of performance impact feedback organizational behavior is argued to be one of the main determinants of the existing incongruences in the literature (Greve, 2003). In fact, the traditional performance feedback theory suggests that decisionmakers subjective assessment of organizational performance must be analyzed and understood "as it really is" and not simply discerned as an inherent "specification of the situation" (March & Simon, 1958, p. 172). Nevertheless, practically most of the studies in this literature stream show performance feedback as a mere objective element that compares the organization's current performance with its past or peers' performance (understanding these values as previously default aspiration levels by the organization).

We argue that as performance feedback research is essentially a cognitive theory (Labianca et al., 2009; Shinkle, 2012), a more comprehensive model of how decision-makers assess organizational performance and respond to it must definitely go beyond this objective assumption. Hence, following Jordan and Audia's (2012) recommendation, in this paper, we extend the understanding of the theoretical component that concerns performance assessment by identifying a broader range of cognitive strategies in it. With this, we aim to more precisely understand whether (and when) strategic change is (or is not) promoted within organizations (Elsbach & Kramer, 1996).

However, some steps have been taken in this sense lately. For instance, Jordan and Audia (2012) argue that decision-makers may generate "fake" positive assessments of objective low performance when seeking to improve their self-image by assessing this performance as "satisfactory", and, therefore, falsely aligning their perceptions with the "observed" performance. This, in turn, would diminish behavioral responses to poor performance due to "the gap between desired performance and "actual" performance is minimized, reducing or even eliminating the perception of performance problems" (Jordan & Audia, 2012, p. 214), which would contradict BTF-conventional reaction of decisionmakers to negative performance feedback. Similarly, Labianca et al. (2009) propose that strong performers sometimes have higher intentions to change if they actively strive for even higher performance levels in the future, therefore, generating a modification of their aspirations. In the same vein, Haleblian and Rajagopalan (2005) suggest that it is not appropriate

to apply the same standard to determine aspirations for all organizations, as aspirations can themselves fluctuate across managers in varying organizations. The latter is supported by the original work of Cyert and March (1963), which states that decision-makers hold the chief subjective influence on performance assessment and, therefore, may critically distort this evaluation process. In a relative vein, Jordan and Audia (2012) argue that this consideration is especially important for advancing performance feedback theory, since it may help to "assess performance as accurately as we can" (p. 128). Building on these precepts we argue that the impact of performance feedback on strategic change and the causal processes behind it need to be considered more fully.

However, in this sense, Bertrand and Mullainathan (2001) warn us that the secluded study of subjective variables would be almost as bad as the isolated study of the objective ones as it would also cast serious doubts on organizational behavior literature because of a simple reason: its measurement error appears to correlate with the evolution of individual or societal characteristics and behaviors (thus, for instance, a drop in reported racism over time may merely reflect an increased acceptancy or reluctance to report such racism).

2.3. Managerial complacency with performance and strategic intended change

"In all life one should comfort the afflicted, but verify, also, one should afflict the comfortable, and especially when they are comfortably contentedly, even happily wrong". — John Kenneth Galbraith, 1989

Galbraith's (1989) oft-quoted statement, commonly referred to as complacency, has been studied in areas of the literature. approached theoretically, research has focused on its influence over assessment processes, arguing about its potential effects on subsequent actions. In discussing complacency connotation, several scholars have indicated that this variable might be understood as a kind of conformism or a feeling of quiet pleasure or security, while unaware of some potential danger or threat (Chowdhury & Lang, 1996; Petit, 2011). However, as pointed out by Kawall (2006) this variable "is not as easily recognized as cruelty, dishonesty, and those vices which lead to distinctively vicious forms of behavior. Instead, it works quietly, an often-subtle drift into an easy selfsatisfaction with one's efforts and accomplishments (no matter how meager)" (p. 343). The latter seems problematic insofar as it could cause some confusion among scholars when linking appropriate or justified feelings of satisfaction as instances of complacency. In fact, as stated by Kawall (2006), surely good or outstanding performance might generate some level of satisfaction but this ought not to be seen as complacency. Conversely, complacency seems to require that one be confused or blurred with its level of achievement, leading to excessive satisfaction (Kawall, 2006). That is to say, complacent evaluations will exhibit high levels of satisfaction despite objectively the results obtained do not reflect the same threshold.

Deepening in its effects, Miller and Chen (1996) indicate that the range of actions and the search

knowledge of competitive alternatives adopted by a firm are influenced (and restricted) in part by the complacency of the decision-makers of the firm. Similarly, Sánchez-Peinado et al. (2010, p. 75) establish that "the intentionality of strategic change is closely related (among other factors) to how managers perceive and interpret the environmental changes" and to their "level of complacency with the firms performance", which would specifically reduce this will. In a similar vein, Villagrasa et al. (2018) argue that highly complacent managers with their organization performance will lack the motivation to initiate strategic changes. They will be steeled in their perception of the validity of the current strategy (Gordon et al., 2000), avoiding change and following inertial responses (Labianca et al., 2009). As Miller and Chen (1996) say: "Success can make managers so complacent, so content with the status quo, that they resist change" (p. 3). Similarly, Labianca et al. (2009) talk about being "lulled into complacency" (p. 439). Based on these arguments, we expect a lower magnitude of intended strategic changes by complacent managers with their firms'

One illustration of this situation would occur when despite a firm obtains a relatively low objective performance against its peers or historical results (which according to BTF-view would motivate to take remedial actions to "solve" the problem of poor performance), managers present a great acceptance or complacency with the results achieved due to, for instance, a fail to diagnose a convulsive and problematic situation where the firm is heading, full of (hidden) dangers and intricacies (or at least for their managers). This situation would generate a maintenance (instead of increasing) of the will to change in the different domains of a firm due to the managerial complacency and conformism shown with these results would eliminate the feeling of urgency to "solve" the problem of low performance (Kawall, 2006; Miller & Chen, 1996).

The contrary situation would happen when a firm that achieves a relatively objective high performance (which regarding BTF-logic would not feel the urgency to develop a changed behavior) gets a little complacent or non-conformist evaluation by its managers due to, for example, their elevated ambition and expectations. In this case, this situation would enhance (instead of reducing) the motivation to change in the different domains of a firm in order to remedy this "problematic" peculiarity. Hence, this circumstance would be explained by the "unpredicted" low levels of managerial complacency obtained despite the positive figures shown by the objective performance.

Supporting our study, Gordon et al. (2000) theoretically point out that change in situations of bad results is not direct, but depends on the level of complacency that the managers face with that situation. In fact, they argue that the objective results are an indicator of the degree of adjustment between the business strategy and the conditions imposed by the environment and serve as a warning system for stakeholders (including managers) on the validity of the current strategy (Gordon et al., 2000). However, as long as those responsible for driving change are not dissatisfied with the results achieved by the company (or show a little complacency with them) there may not be enough

incentive to act (Sánchez-Peinado et al., 2010). In a similar vein, Ocasio (1997) advocates that managers' decisions will depend to a high degree on how they perceive reality and how much they feel the necessity to react.

Consequently, in this research we relax assumption that strategic reactions organizations to performance feedback (exclusively) driven by the traditional objective measurement of firm performance (which could be positive or negative regarding the objective results of the firm against its peers or historical) promoted by the BTF-inspired research, arguing that they will also depend on executives' perceptions and cognitions with the current results obtained by the firm, i.e., managerial actions will likewise be affected by their own insights of the reality (Ocasio, 1997). Therefore, in order to better grasp the translation of performance feedback cues into subsequent organizational intended actions (Jordan & Audia, 2012) we propound to combine both streams and specifically look for the existent differences between the objective measurement of the performance obtained by the firm and the managers' complacency (or perception) over it. In other words, we specify that by appending managerial judgments to objective results we will shed light on the understanding of the enterprises' adaptive processes eliciting a more meaningful answer from performance feedback cues. Accordingly, we postulate:

H1: There will be a negative relationship between the level of managerial complacency with firm results and the magnitude of intended strategic changes.

2.4. Antecedents of the managerial complacency: The effect of TMT characteristics

To further understand the mechanisms by which performance feedback cues generate specific reactions in organizations, in this study we take one step back to assess the effects of managers' characteristics on the resulting level of managerial complacency with firm results. Prior literature about the upper-echelons perspective has likewise focused its gaze on this aspect arguing that the analysis of organizations' key role players, and specifically their characteristics, is essential in explaining organizational strategic decisions and behavior (Hambrick & Mason, 1984). Similarly, the extant literature on this area seems to agree in determining that the study of these characteristics will be decisive in outlining their perceptions (Hambrick & Mason, 1984) which, ultimately, will rule the change actions followed by the organization (Cho & Hambrick, 2006; Sánchez-Peinado et al., 2010).

In line with these assumptions, in the present research, we particularly focus our attention on assessing the influence of several managerial characteristics, such as TMT functional diversity, TMT educational diversity and TMT tenure, on the level of managerial complacency with firm results obtained. Specifically, we take this set of variables as its study has previously received extensive regard in the literature about organizational attention and reaction (Buyl et al., 2012; Díaz-Fernández et al., 2015; Escribá-Esteve et al., 2009; Messersmith et al., 2014).

2.4.1. TMT functional diversity

Upper-echelon research determines that diversity in team composition, i.e., the heterogeneity or inequalities between team members, is related to the breadth of perspectives and perceptions shown by its members (Wiersema & Bantel, 1992; Yokota & Mitsuhashi, 2008) and, generally, it is regarded as an important explanatory factor of organizational outcomes (van Knippenberg et al., 2004). Thus, according to prior studies, it is argued that the knowledge base of a heterogeneous team will play a crucial role in using broader fields of vision, processing bigger amounts of information and producing more precise assessments (Cho & Hambrick, 2006; Haleblian & Finkelstein, 1993). Similarly, several scholars show that higher heterogeneity will generate greater levels of innovation and will improve the cognitive resources and capabilities of a team to solve problems (Bantel & Jackson, 1989; Eisenhardt & Schoonhoven, 1990).

Nevertheless, other authors demonstrate that this variable certainly hampers interaction (Williams & O'Reilly, 1998), enhances the occurrence of conflicts (Wagner et al., 1984), decreases strategic consensus (Knight et al., 1999) and deteriorates group cohesion (O'Reilly et al., 1989), therefore, constraining the wideness of views and interpretations in the decision-making processes. In this sense and due to the lack of consistency of results, Hambrick et al. (1996) research brings light to this issue arguing that despite the existence of both positive and negative factors, the benefits of team heterogeneity outweigh its costs significantly (which suggests a global positive effect of this variable).

Following this approach, next we focus our attention on the study of TMT functional diversity. This variable, defined as the variety of job-related knowledge derived from different functional experiences, is argued to improve access to external information (Aguilar, 1967), increase attentiveness to various environmental sectors (Daft et al., 1988) and bring "different but complementary knowledge and expertise to the teams" (Bunderson, 2003, p. 458). Moreover, the diversity in the functional background is expected to influence TMT problem-solving and decision-making processes (Bunderson, 2003) embracing, in this way, wider and assessments due to differences in perspectives and opinions. Consequently, teams with higher levels of functional diversity will be more aware of the environment and the circumstances which surround the organization and will generate more complete interpretations of the reality (Starbuck & Milliken, 1988) which, in turn, will imply obtaining less complacent evaluations and more sifted analyses. Taken together, our second hypothesis runs as follows:

H2: Top management team functional diversity will be negatively associated with the level of managerial complacency with firm results.

2.4.2. TMT educational diversity

Educational diversity has been argued to provide an indicator of the variety of skills, knowledge and cognitive processes embedded in a managerial team (Bantel & Jackson, 1989; Boeker, 1997; Wiersema & Bantel, 1992). More particularly, upper-echelon research has usually related this variable to increments of cognitive abilities and overall problem-solving skills of the group (Bunderson, 2003; Hambrick et al., 1996). Similarly, prior literature establishes that teams with a higher educational diversity will tend to be more efficient at addressing vast information from varying categories in their information processing (Day & Lord, 1992) and will study the industry environment, assess the strengths and weakness of firms, and weigh the pros and cons of strategies more in-depth than homogeneous teams will do (Olson et al., 2006).

Thus, following the prior approach, we argue that teams with more diversity in the educational background will generate wider perspectives and richer interpretations of reality (Starbuck & Milliken, 1988) which, in turn, will imply generating less complacent evaluations. In sum, we hypothesize:

H3: Top management team educational diversity will be negatively related to the level of managerial complacency with firm results.

2.4.3. TMT tenure

Although upper-echelon research highlights the relevance of assessing TMT's characteristics to easier understand strategic decision-making processes, there is no single characteristic that has been sufficiently analyzed to completely understand its entire effects. However, managerial tenure is one of the most significantly studied variables, both from a theoretical and pragmatic point of view (Pfeffer, 1983). In this sense, prior literature has extensively set out its effects on: 1) the commitment to the status quo, 2) the perceptions towards risk, and 3) the diversity of information analysis.

In the first place, it is expected that longer-tenured executives have stronger bias and are more committed to the status quo and non-action processes (Hambrick & Fukutomi, 1991). This behavior is sustained in the literature by arguing that managers with long firm services tend to closely adhere to industrial recipes, inertia and dominant logic (Escribá-Esteve et al., 2009; Geletkanycz & Hambrick, 1997; Pla Barber et al., 2010) and hardly abandon them (Newell, 1997). Likewise, these responses are supported by the fact that as executives spend time in the organization, they start being convinced by the wisdom of the organization's way of proceeding (Wanous, 1980) and become more committed to their own prior actions — even if they are not triumphant (Staw & Ross, 1987).

The second main effect highlighted by the literature is the influence that this variable has on the attitude towards risk. In this issue, scholars predict that as these individuals have most surely struggled for years to achieve their positions and usually are well established (e.g., in their work, family, friends, communities, etc.) they will have much more to lose than to gain by taking superfluous risks (Coffee, 1988). Therefore, as tenure increases, risk perceptions will become more restricted and managerial risk-averse actions will be pursued more frequently (Coffee, 1988).

Thirdly, it is argued that as key decision-makers get longer firm services they tend to limit and restrict their information processing (Miller & Friesen, 1984) due to, over time, these individuals develop fixed habits, rely more on past experience instead of on new stimuli (Katz, 1982) and generate

more steady routines and structures (Miller, 1988; Miller & Friesen, 1984). Consequently, Hambrick and Fukutomi (1991) argue that longer-tenured managers will be more easily satisfied with the actions and results performed by the firm.

In short, teams with greater tenure will generate more biased analyses, less number of perspectives and opinions, less information processing about the environment and larger levels of satisfaction (Hambrick & Fukutomi, 1991; Katz, 1982; Miller & Friesen, 1984) which, in turn, will imply obtaining more conformist and complacent assessments. This leads to the following hypothesis:

H4: Top management team tenure will be positively associated with the level of managerial complacency with firm results.

3. METHODS

3.1. Sample

To examine the proposed hypotheses, we used multiple hierarchical regressions on a sample of 137 Spanish medium-sized firms (over 100 and up to 500 employees). This dataset contains subjective data obtained by sending questionnaires to the chief executive officers (CEOs) of each organization (who previously received a pre-notice letter explaining the baseline of our research and assuring them of total confidentiality) and objective data collected from the SABI Informa database (Bureau Van Dijk), the most important source of business, accounting, and financial information in Spain. Our sample was made up of medium-sized firms because we wanted it to be as representative as possible of all Spanish companies, of which about 99.9% are medium-sized firms. These companies are large enough to have a formal organizational structure and pre-established decision-making processes. However, they usually lack the excess resources, organizational structure, and support functions that larger companies have for their daily operations. Consequently, managers are even more relevant in these firms (Lubatkin et al., 2006). We selected a random sample of 1,000 medium-sized firms, of which 60% were from the manufacturing sector and the remaining 40% were from the service sector. In addition, due to the significance of family ownership in this study, we checked for a balance of this factor in our sample. Hence, we found a similar percentage of and non-family firms (55% family 45% non-family organizations).

In total, 190 filled questionnaires (out of 1,000) were received (representing a not-inconsiderable response rate of 19%). Of this figure, we got to eliminate a total of 7 firms for reasons of incompleteness. However, testing our hypotheses required a combination of subjective and objective data from organizations. Thus, we complemented the information gathered from the questionnaires (representing subjective data) with organizations' financial statements (representing objective data) from the SABI Informa Database. Consequently, we had to exclude 46 firms from our final sample because they did not have full information available (i.e., because they did not have either subjective or objective data). Eventually, the sample included full information from 137 firms (representing a valid response rate of 13.7%). Among them, 57.66% were family firms, whereas 42.34% were non-family firms, which is fairly close to the composition of our original sample of 1,000 organizations.

However, for the sake of completeness, we developed a comparison t-test between them (family vs. non-family firms), which did not show significant differences between both groups (p < 0.05) (full analyses can be requested from the authors). This would mean that our results would not be biased towards (only) one type of business such as family businesses, a typology of organization that is much more conservative in their way of operating and assessing change (in fact, these managers hold biased prospects, showing a higher conservatism and inertia in departing from established business practices) (Berrone et al., 2012; Chrisman & Patel, 2012; Gómez-Mejía et al., 2007).

Additional verifications about the final sample were conducted. Thus, we also performed other comparison t-tests between early versus late respondents, and between the sectoral distribution of the original versus the final sample. No significant differences were observed between both groups (p < 0.05, data available from the authors on request).Similarly, we tested for residual behavior, linearity among variables, and the existence of collinearity between them to test the veracity of our analyses. No significant problems were observed in any of the preceding categories (full analyses are available upon request). Additionally, although demographic data was obtained in this research by our survey, to the extent possible, its validity was verified through the objective information obtained through the SABI Informa database. Therefore, potential common method variance problems associated with the collection of information from single informants were minimized. Nevertheless, as most of our variables may be tackled as straightforward variables (e.g., TMT diversity, TMT tenure, TMT size, etc.) any type of distortion by being subjectively measured by one individual is beyond question.

3.2. Variables

3.2.1. Dependent variable 1: Managerial complacency with firm results

To fix the ambiguous results found in the performance feedback literature and complement its understanding, in the present study, we propose the use of managerial complacency with firm results, a cognitive variable which combines the traditional (objective) measurement of firm performance carried out by the BTF-inspired literature (which is generally operationalized as the difference between firm current performance and its peers or historical results), with the executives' perception (or valuation) of these results. This variable shows the difference between both evaluations, which will thereby determine the level of managerial complacency (i.e., conformism or satisfaction) or non-complacency (i.e., non-conformism or dissatisfaction) the objective results obtained by the firm. Thus, managerial complacency with firm results will achieve its minimal values when even if the firm reaches high values of objective performance, managers' perceptions of these results are low.

On the contrary, this variable will obtain its maximal values when despite the firm gets low values of objective performance, manager's perceptions about them are high. Consequently, we argue that the consideration of this variable will generate more meaningful results in organizational behavior research.

In order to untangle the first part of the managerial complacency with firm results, degree of conformism/satisfaction the organization results (or objective data), we use a single-item measurement based on the CEO of the firm. We do so by directly asking them for their level of satisfaction with the results obtained by the organization regarding their prior expectations through a Likert scale from 1 to 5, where 1 = "Highly unsatisfactory" and 5 = "Highly satisfactory". This measure has been analogously used in the literature by several scholars to compare current outcomes with initial expectations (Carree & Verheul, 2012; Cooper & Artz, 1995) and to analyze different grades of commerce satisfaction (Peterson & Wilson, 1992; VandenHeuvel & Wooden, 1997).

Concerning the second part of the *managerial* complacency with firm results (or objective data), and following Buyl and Boone (2014b), Greve (2008) and Moliterno et al's. (2014) research among others, in this study we consider that company decision-makers compare its results with peer firms that carry out the same activities — which what is understood in the literature as social comparison performance feedback. In this sense, we consider the average sectorial performance as an aspiration

level against which organizations assess their performance when they examine their actual performance.

Following prior research, we operationalize social comparison performance feedback as the firm return on assets (ROA) minus the industry's median ROA (Buyl & Boone, 2014a; Greve, 2007). ROA has been repeatedly used by managers to self-evaluate the performance of their firms, and consequently, it makes sense to use this variable when assessing firm performance feedback (Lant et al., 1992). Next, to be able to operationalize managerial complacency with firm results we calculate quintiles of this objective part. Consequently, we generate a 5-point scale, where 5 would represent the maximum value (5th quintile) = companies with an outstanding result with respect to their peers; meanwhile, I would show the minimum value (1st quintile) = companies with very low performance concerning the average firms of the sector.

Finally, we subtract the second part (or objective data) from the first part (or subjective data) in order to obtain the overall value of the variable. Consequently, *managerial complacency with firm results* will range from -4 (when the lowest CEO's levels of conformism/satisfaction with firm results are obtained 1; while getting the highest objective levels of firm relative performance 5) to 4 (when the highest CEO's levels of conformism/satisfaction with firm results are obtained 5; while reaching the lowest objective levels of firm relative performance 1) and will be expressed as follows:

Managerial complacency with firm results = "subjective" data - "objective" data (1)

where, "subjective" data = CEO's level of conformism/satisfaction with the general course of the company, and "objective" data = company performance relativized by the sectorial mean.

3.2.2. Dependent variable 2: Magnitude of strategic intended changes

The contrasting results found in the performance feedback literature might lie in the imprecise operationalization of its core concepts. For instance, many scholars focus on actual or realized strategic changes made in organizations (Chen, 2008; Greve, 2003). However, as performance feedback theory is, in essence, a cognitive theory about the motives and behaviors of decision-makers, it is more accurate to focus on these decision-makers' planned or intended strategic changes (Gavetti et al., 2012; Labianca et al., 2009; Schillebeeckx et al., 2016).

In this sense, Mintzberg's (1978) work already made clear that we should distinguish realized from intended strategies, stating that while realized strategies are often the consequence of managers' intentions, they are also influenced by many other contextual factors (such as resources, skills, environmental pressures, etc.). And some of them are beyond managers' control (Hailey & Balogun, 2002).

Therefore, instead of actual strategic change, we will examine managerial intentions to change. Such intentions are argued to be more closely related to how managers cognitively assess and react to cues about their organization's performance (Labianca et al., 2009; Lohrke et al., 2006; Schillebeeckx et al., 2016). Hence, by going back one

step in the causal chain and measuring intentions instead of realized strategic changes, we are able to reduce noise. In addition, another positive aspect of this measure is that it considers intentions related to a broad set of changes, as opposed to, e.g., only changes in particular strategies, such as investments in research and development (R&D), risk-taking or innovation (Chatterjee & Hambrick, 2011; Chen, 2008), which often are seen as distal variables of performance feedback consequences (Ketchen & Palmer, 1999; Shinkle, 2012).

More particularly, we explore the magnitude of strategic intended changes managers intend to pursue (Haleblian & Rajagopalan, 2005), which depends both on the number of domains in which they wish to implement changes (that as we show below are six) and on the intended degree of change within these domains (that as we show below is calculated by assessing the differences between the present and future will to change in those domains). Following a procedure similar to the one proposed by Hambrick et al. (1993), in the present study we calculate this variable using a set of six items focused on different domains that configure the corporate strategy of an organization, including both scope (internationalization/changes in geographical markets; market penetration/consolidation; and diversification/changes in the product-market portfolio) and growth methods (organic growth; strategic alliances; and mergers & acquisitions). Particularly, to obtain information about the magnitude of strategic intended changes we directly asked the CEO of the firm to define the importance of those six domains during the last two years

(representing the current corporate strategic actions) and among the following two years (representing the future/intended corporate strategic actions). In particular, we asked him/her to identify the two options that had been (and will be) the most important and the least important for their respective organizations (in the last two years and in the following two). Of the selected options, we asked them to identify only one option that had been (will be) the most important and another that had been (will be) the least important. The options that were not rated as either important or unimportant were considered of neutral importance. This resulted in the following scale: 1 = "Least important"; 2 = "Unimportant"; 3 = "Neutral"; 4 = "Important"; 5 = "Most important".

Next, we calculated the sum of the absolute differences between the current and future/intended corporate strategy. In particular, this sum would reach higher values in case the strategic options were categorized in an opposite way for the present and future. Note that with this we mean that such

value will not depend on the direction of the scope or growth methods, i.e., a CEO who intends to increase the currently low level of internationalization (or strategic alliances) in his/her organization will have the same value as another CEO who wishes to decrease his/her organization currently high level of internationalization (or strategic alliances). However, it would reach lower values when the different strategic options were categorized similarly in both terms. Subsequently, we divided this result by the maximum score of absolute differences that could be obtained. Hence, the magnitude of strategic intended changes will achieve its maximum value of 1 when the CEO of the company aims to modify the current strategic pursued actions (both in terms of scope and growth methods) in the maximum possible value; meanwhile, this variable will reach its minimum value of 0 when the CEO of the firm wills to persist in the future with (exactly) the same combination of corporate strategic options currently followed.

$$Magnitude \ of \ strategic \ intended \ changes = \sum (ABS[p_{i-current} - p_{i-future}])$$

$$/MAX\left(\sum (ABS[p_{i-current} - p_{i-future}])\right) \tag{2}$$

where, $p_{i-current}$ = value of the i current corporate strategic action, $p_{i-future}$ = value of the i future/intended corporate strategic action

3.2.3. Independent variables: Functional and educational diversity

Respondents were first provided with a definition of a TMT as a group of senior managers that generally make decisions that are important to the future of the firm (Amason & Sapienza, 1997). Coming up next, we asked CEOs to identify and provide functional and educational information about those who had been members of their TMTs over the past three years. In particular, they individually differentiated TMT members among six functional categories: production, finance, human resources, marketing, R&D, and international business; and among three main educational groups: business/ economy/social sciences, sciences/engineering and humanities/others. Functional categories selected following previous studies such as Auh and Menguc (2005, 2006), Lant et al. (1992), Musteen et al. (2006) and Naranjo-Gil and Hartmann (2006). Meanwhile, educational categories imitated the ones beforehand used by Michel and Hambrick (1992) or Naranjo-Gil and Hartmann (2006) among others.

Following prior research, functional and educational diversity was calculated using Blau's (1977) index, which reflects the different types or categories there are in a dataset, and simultaneously considers how evenly its entities or individuals are distributed among those types or categories:

$$FD (or ED) = 1 - \sum p_i^2$$
 (3)

where, D = diversity (being FD = functional diversity, and ED = educational diversity), and p_i = percent of the TMTs in the i functional/educational category.

This index has been widely used in the literature (Allison, 1978; Finkelstein & Hambrick, 1996) and

ranges from 0 to 1. Thus, a perfectly homogeneous population would obtain a score of 0 (i.e., all the individuals would belong to the same category). Conversely, a perfectly heterogeneous population would get a score of 1 (i.e., there would be infinite categories with equal representation of the individuals in each category). That is to say, as the number of categories and their evenness increase, the maximum value of the diversity index score also increases and so does its degree of heterogeneity. For instance, a population with four categories represented in the following way: 70%, 10%, 10% and 10% would score 0.48. However, a population with four categories evenly represented (i.e., representing 25% of each category) would score 0.75. Meanwhile, a population with five categories evenly represented (i.e., representing 20% of each category) would score 0.80.

3.2.4. Independent variable: TMT tenure

This variable was measured as the mean number of years of employment in the firm as TMT members over the past three years. Several alternative measures of managerial tenure were considered, including tenure in the firm as a TMT member or not and tenure in the industry as a TMT member of this or other companies. Tenure in the firm as a TMT member was adopted here because it was the tenure variable most highly correlated with other tenure measures, hence serving as a central indicator of the different tenure possibilities. Regardless, the other tenure options produced patterns of results that were very similar to those reported in our study.

3.2.5. Control variables

Chief executive officers are distinguished by their diverse experiences and vast preparation to make complex decisions (Priem, 1994). Consequently, they are typically considered as central actors in strategic decision-making processes. However, they unusually

act alone but interact with the other members of the TMT to make strategic decisions and plan the future course of the organization (Tang & Crossan, 2017). Decision-making processes do not just involve the CEO of the firm but also the TMT members, whose participation will also influence the firm's actions (Hambrick, 1994; Hambrick & Mason, 1984). On top of that, several studies have pinpointed the importance of internal forces of the organization such as power and political structures, economies of scale, sunk cost, etc., in limiting decision-making actions. In the same vein, external forces to the organization such as competitors' reactions, bargaining power of suppliers, etc., have also been pointed as potential influencers in organizational strategic change (Hannan & Freeman, 1989; Lant et al., 1992; Tushman et al., 1986). Regarding this research stream, company- and industry-level factors should also be considered to understand strategic decisions. Hence, for the sake of completeness in our study, we include control variables at the managerial level, company level, and industry level.

To do so, we distinctly differentiate between both analyses performed in this research. Thus, for the first one, where the relationship between managerial complacency with firm results and the magnitude of strategic intended changes is assessed (H1) we control for TMT size, TMT average age and TMT members with university studies at the managerial level; for the size of the organization, age of the organization and number of additional businesses at the company level; and for industry innovation intensity at the industry level. Meanwhile, for the second one, where the relationship between the TMT characteristics and managerial complacency with firm results is evaluated (H2-H4), we control for exactly the same variables at the managerial level and at the industry level; however, at the company level we do not control for age of the organization and number of additional businesses for not considering them potentially influential to the managerial complacency with firm results (which, to some extent, may be considered as more managerial-related than firm-related) and to potentially avoid that our model was vitiated by the accumulation of (unrelated) variables.

At the managerial level we focus our attention on TMT characteristics including the CEO due to, as previously stated, both actors will be responsible for the strategic decision-making processes of the firm (Hambrick, 1994; Hambrick & Mason, 1984; Tang & Crossan, 2017). TMT size shows the total number of executives that are part of the TMT and, therefore, are considered by the CEO for strategic decision-making. Besides, Cho and Hambrick (2006) consider TMT size as an important covariate of executive attention which might closely be associated with perceptions and change concepts. TMT average age contains the average number of years of the organization's TMT members. This variable helps to predict individuals' non-work-related experiences (Yang & Wang, 2014). Thus, people of a similar age will have experiences in common and will share comparable attitudes and beliefs (Rhodes, 1983) which may introduce bias into their perceptions, thoughts and decision-making processes. Additionally, managerial age may also influence organizational strategic changes (Elbanna et al., 2013) in such a way that organizations composed of younger (and more energetic, open to accepting higher risks, etc.) TMT members may be more prone to initiate changes (Hambrick & Mason, 1984). Finally, TMT members with university studies represent the percentage of TMT members who have higher educational studies. This variable is regularly associated with more favorable attitudes toward change (Bantel & Jackson, 1989; Hambrick & Mason, 1984), which may facilitate the predisposition of CEOs to foster larger changes. Likewise, highly educated individuals further tend to be more efficient at tacking huge quantities of information, which may affect their ability to generate more complete interpretations of reality (Day & Lord, 1992; Starbuck & Milliken, 1988).

At the company level, we control for the *size of* the organization by measuring the average company operating income as several other scholars did in prior studies (Cho & Hambrick, 2006). We account for this variable as larger organizations might have more organizational slack to engage in exploratory activities (Lavie et al., 2010) and meticulously analyze processes of change (Boeker, 1997). At this level, we also control for the age of the organization, which is calculated as the total number of years since the firm was founded. In particular, we account for this variable as several authors such as Sánchez-Peinado et al. (2010) have argued that it might negatively affect the probability of undertaking strategic changes due to older companies are characterized by having consolidated routines and practices that hinder the prospects of change (Hannan & Freeman, 1989). Finally, we take into account the *number of additional businesses*, that is to say, the number of businesses that the firm has apart from its main activity. This variable is collected due to its close relationship with executives' search behavior (Carter, 1998). In fact, the literature has repeatedly stated that diversified firms have higher levels of risk tolerance, which in turn boosts strategic change and seizes business opportunities (Kihlstrom & Laffont, 1979). However, diversification may also promote complexity and generate difficulties for the CEO to control, influence and address strategic actions (Heese, 2015).

Finally, at the industry level, we include *industry innovation intensity* (operationalized as the industry average of organizations R&D expenses divided by its sales) to capture the industry's average degree of innovation, as a proxy for environmental dynamism, as this most probably affects strategic change (Cohen & Levinthal, 1990). Moreover, innovation is argued to be closely related to both external knowledge access and internal learning capacity (Tsai, 2001), therefore, likely affecting the perceptive capacity of managers.

4. RESEARCH RESULTS

The values of the means, standard deviations and correlations for all variables included in the analyses are presented in Table A.1. We tested our hypotheses using multiple hierarchical regressions (see Tables 1 and 2 below). We also checked for the presence of multicollinearity in our analyses, finding variation inflation factors (VIF) below 2.5 for all variables (analyses available from the authors on request).

4.1. Hypotheses tests

The present study includes two differentiated analyses. In the first one, and due to the lack of results concordance with organizational behavior research, it is proposed to add managerial perceptions when determining the strategic response of

organizations to performance feedback and more specifically, to test the effect of *managerial complacency with firm results* on the *magnitude of strategic intended changes* (see Table 2). In the second one, and taking one step back, the attention is focused on the influence that executives' characteristics present in decision-making processes, and in particular in determining the resulting level of *managerial complacency with firm results* (see Table 3).

Model 1 of Table 2 includes control variables only. As can be observed, these results seem to point out that the *magnitude of strategic intended changes* will be higher the younger the organizations are $(\beta = -0.361; p < 0.1)$, the less additional business they have $(\beta = -0.495; p < 0.05)$ and the more superior studies their TMT members hold $(\beta = 0.423; p < 0.05)$. These results are not surprising but follow previous predictions. Thus, older companies, generally characterized by having consolidated routines and practices, will probably hinder change prospects (Hannan & Freeman, 1989). Meanwhile, the rise in the *number of additional businesses* within an organization, usually associated with greater

complexity, will diminish the influence and power of the managers in taking strategic action (Heese, 2015). Finally, higher educational levels, often related to more efficient information processing (Day & Lord, 1992), will be associated with more favorable attitudes toward change (Bantel & Jackson, 1989).

In Model 2 (Table 1) we include managerial complacency with firm results in the analysis. Our findings indicate that there is a direct significant negative effect of this variable on the magnitude of strategic intended changes ($\beta = -0.510$; p < 0.001). Thus, we are able to support our hypothesis (H1), which anticipates that organizations are prone to change more substantially when facing low managerial complacency with firm results, disregarding the sign of the objective performance obtained by the firm. Obtaining these results suggest that the appending of managerial judgments to the analysis will help to shed light on the understanding of organizations' adaptive processes and to improve the knowledge about organizational behavioral attention and reaction present in the literature. In the discussion section, we extensively come back to this finding.

Table 1. Results of linear regression analysis: Magnitude of strategic intended changes

Measures	Model 1 Control variables	Model 2 Independent variable		
Dependent variable: Magnitude of strategic intended cha	anges			
Industry innovation intensity	-0.079	-0.144		
Size of the organization	0.338	0.271		
Age of the organization	-0.361*	-0.332**		
Number of additional businesses	-0.495**	-0.670***		
TMT size	0.150	0.090		
TMT average age	0.061	0.062		
TMT members with university studies	0.423**	0.446**		
Managerial complacency with firm results		-0.510***		
\mathbb{R}^2	0.387	0.575		
Adjusted R ²	0.216	0.427		
R ² change	0.387*	0.188***		
F-value	2.259*	3.888***		

Note: N = 137. Standardized coefficients are shown. * p < 0.1, ** p < 0.05, *** p < 0.01 (one-tailed).

Hypotheses H2, H3, and H4 are tested in Table 2. Model 1 of Table 2 incorporates control variables. Among them, only the size of the firm seems to significantly and negatively affect the level of managerial complacency with firm results (β = -0.228; p < 0.05). However, we previously established that bigger firms would have more available resources to engage in exploratory activities (Lavie et al., 2010) and to carefully analyze processes of change (Boeker, 1997), and, therefore, we argued that the size of the organization should be positively related to more complete interpretations of

the reality. A potential explanation of these results could be the greater levels of complexity and the more predictability, rigidity and lack of flexibility present in the behavior of such firms (Quinn & Cameron, 1983), which could, therefore, generate a larger tendency towards inertia and poorer strategic analysis (Boeker, 1997).

Models 2, 3 and 4, for their part, are responsible for showing the sequential introduction of *TMT functional diversity*, *TMT educational diversity* and *TMT tenure* respectively in the analysis.

Table 2. Results of linear regression analysis: Managerial complacency with firm results

Measures	Model 1 Control var.	Model 2 Indep. var. 1	Model 3 Indep. var. 2	Model 4 Indep. var. 3	Model 5 Total effect					
Dependent variable: Managerial complacency with firm results										
Industry innovation intensity	0.127	0.164	0.141	0.105	0.151					
Size of the organization	-0.228**	-0.229**	-0.211*	-0.203**	-0.198*					
TMT size	0.008	0.014	-0.017	0.076	0.054					
TMT average age	-0.108	-0.107	-0.171*	-0.212**	-0.237**					
TMT members with univ. studies	0.102	0.106	0.043	0.167	0.037					
TMT functional diversity		-0.112			-0.172*					
TMT educational diversity			0.074		0.143					
TMT tenure				0.279***	0.259**					
\mathbb{R}^2	0.098	0.117	0.118	0.153	0.212					
Adjusted R ²	0.058	0.066	0.066	0.106	0.145					
R ² change	0.098**	0.019	0.001	0.035***	0.059**					
F-value	2.436**	2.309**	2.239**	3.284***	3.135***					

Note: N = 137. Standardized coefficients are shown. * p < 0.1, *** p < 0.05, *** p < 0.01 (one-tailed).

Meanwhile, Model 5 introduces all these variables together and thus, shows the results for H2, H3, and H4. In H2, we test the influence of TMT functional diversity on managerial complacency with firm results. Our findings indicate the existence of a significant negative effect ($\beta = -0.172$; p < 0.1; Model 5), which gives us evidence to support this hypothesis. Consequently, we can argue that the variety of job-related knowledge will be connected with less complacent evaluations which, as previously stated, will be given by the greater breadth of perspectives and higher levels of information computation generated within these teams (Wiersema & Bantel, 1992; Yokota & Mitsuhashi, 2008). The effect of *TMT educational* diversity on managerial complacency with firm results, i.e., H3, is also tested in Model 5. However, no significant results are found. Thus, the findings of this analysis suggest that the educational diversity present in the background of a team does not affect its level of complacency with firm results. H4 controls the effect of TMT tenure on managerial complacency with firm results. Our findings (also in Model 5) indicate the existence of a direct significant positive effect (β = 0.259; p < 0.05), which allows us to support this hypothesis. In particular, this result suggests that long firm services will be associated with more conformist and complacent assessments which, as earlier mentioned, will be generated due to the more biased analyses, a smaller number of perspectives and opinions, less information processing about the environment and larger levels of satisfaction hold by these teams (Hambrick & Fukutomi, 1991; Katz, 1982; Miller & Friesen, 1984).

4.2. Additional analyses and robustness checks

In this study, we argue that performance feedback consequences will be better understood through the analysis of managerial complacency with firm results, a cognitive variable which combines the traditional (objective) measurement of firm performance carried out by the BTF-inspired literature, with the executives' perception (or valuation) of these results. To operationalize this variable and following Buyl and Boone (2014b), Greve (2008) and Moliterno et al.'s (2014) research, we consider that company decision-makers determine the level of (objective) results reached by a firm by comparing performance with the average sectorial performance, i.e., with the average performance obtained by the firms that carry out the same activities (or what is called social comparison performance feedback). Particularly, as our sample is medium-sized formed by companies potentially might suffer pressures from inertia, dominant logic and sectorial recipes, we state that most likely this sample will collect similar individual reference levels near the average (Lehner, 2000). Hence, this argumentation corroborates the correctness of using reference levels near the industry mean in this study.

Nevertheless, for the sake of robustness, we redid the analysis using the performance obtained by the firm in the prior year as the aspiration level against which the organization compares its actual performance (or what is also understood in the literature as historical performance feedback, a self-evaluation of the firm performance commonly

operationalized by some scholars). The results obtained follow the same line, however, they are slightly less convincing — which is not surprising given the prior reasoning for the use of the social comparison performance feedback according to our sample characteristics. Particularly, for our first analysis we still found a direct negative effect of *managerial complacency with firm results* on the *magnitude of strategic intended changes* (analyses available from the authors on request), though this effect was lower both in effect size and significance level as compared with the reported one $(\beta = -0.327; p < 0.1; adjusted R^2 = 0.289 versus prior results: <math>\beta = -0.510; p < 0.001; adjusted R^2 = 0.427)$.

On the other hand, for our second analysis, we also found similar results (full analyses can be requested from the authors), though with a lower effect size and significance level (*TMT functional diversity* $\beta = 0.037$, no significant, *TMT educational diversity* $\beta = 0.093$, no significant, and *TMT tenure* $\beta = 0.244$; p < 0.05, adjusted R² = 0.149 versus prior results: *TMT functional diversity* $\beta = -0.172$, p < 0.1; *TMT educational diversity* $\beta = 0.143$, no significant, and *TMT tenure* $\beta = 0.259$; p < 0.05; adjusted R² = 0.145).

Therefore, despite no big discrepancies from the prior reported models being raised, we detect a better behavior of our results when using the social comparison performance feedback instead of the historical performance feedback in configuring the managerial complacency with firm results.

5. DISCUSSION OF THE RESULTS

In this study, we aimed to deepen the knowledge of the intermediate hidden mechanisms whereby performance feedback cues generate specific reactions in organizations and specifically, to accentuate the relevance of evaluating the effects of executives' perceptions and cognitions in these strategic decision-making processes. Using a dataset comprising both archival and questionnaire information from 137 Spanish medium-sized firms, we found support for our main hypotheses, therefore, generating a very interesting pattern of results.

In particular, our findings suggest that performance feedback consequences will be better understood through the analysis of managerial complacency with firm results, a cognitive variable combines the traditional (objective) which measurement of firm performance carried out by the BTF-inspired literature, with the executives' perception (or valuation) of these results. More specifically, managerial complacency with firm results is found to have a negative effect on the magnitude of strategic intended changes. Or, in other words, we do find that BTF's change reasoning is kept against managers who are not complacent with firm results (contrary to what was previously considered: simple negative objective results).

This finding is in line with our postulations, through which we anticipated that the strategic intended change of the firm would be enhanced (just) in front of low managerial levels of complacency with organizational results, disregarding the sign of the objective performance feedback obtained by the firm (i.e., even if two firms obtain similar objective results, or even if one firm obtains a positive or a negative objective result) — which,

however, has precisely (and almost exclusively) guided prior BTF-inspired research (Lawrence, 1997; Ocasio, 1997). Thus, our results infer that perceptions (and in this case managerial conformism or complacency with firm results) will also drive firms' strategic intended change, which will not be merely based on "visible" measures of performance feedback (Lawrence, 1997; Ocasio, 1997).

Doing so, our findings suggest that the ambiguous effects proposed by the different performance feedback perspectives might not be confronted; but rather form part of the same continuum. Next, we discuss some of them.

Firstly, the BTF describes the generation of "problemistic search" situation when firms confront negative performance feedback, which makes the firm start initiating changes to revert the situation in order to achieve again a correct fit between the organization and the environment1. However, in our study, these theoretical grounds will not be totally true due to, as previously stated, manager's perceptions will be also responsible for driving strategic change and a (mere) objective negative performance may not be enough incentive to act (Sánchez-Peinado et al., 2010). Consequently, we argue that in spite of a firm obtaining a low objective performance (e.g., in comparison with the average of its industry), whether managers present an excess of over-satisfaction or complacency with these results, a lower magnitude of strategic intended changes or stagnation will be generated. In particular, we anticipate that this situation will be done by the great acceptance or conformism with organizational results which will result in managers assuming them as better than they actually are and consequently will not perceive the necessity to follow any strategic change behavior to "solve" the situation. Some of the circumstances that might provoke this situation could be, for instance, the unawareness or failure the diagnose existing (but hidden) dangers (or at least for these managers) over performance, an expected restructuration in the firm or the market, a prior known of turbulent business cycles. the prioritization of non-economic objectives against the economic ones. Focusing on the last aspect, we can argue that in Spain, where we obtained our sample, 88.8% of the companies are family firms, representing almost 70% of the private employment and nearly 60% of the contribution to the gross domestic product (GDP) (Instituto de la Empresa Familiar [IEF] & Network of Family Business Chairs, 2015). Therefore, it seems quite reasonable that these managers could be inclined to prioritize nonfinancial goals, such as socio-emotional wealth preservation (Gómez-Mejía et al., 2007; Martin & Gomez-Mejia, 2016) over the economic goals of such firms. In fact, these types of firms are much more conservative in their way of operating and assessing change, holding higher levels of conservatism and inertia in departing from established business practices (Berrone et al., 2012; Chrisman & Patel, 2012; Gómez-Mejía et al., 2007). Nonetheless, as we controlled for the percentage of family firms and non-family firms in our sample, obtaining a very similar percentage in each of them (around 50%), we can state that family firms are not over-represented (as it actually happens in reality), its "special" features such as being more conservative, risk-averse, etc. will not be "dominant". At least in this research. Therefore, in this case, family ownership could be ruled out as a cause of generating complacent evaluations in the managers (of our sample).

Secondly, the "organizational slack" perspective explains that positive performance feedback provides new resources (or "slack") to the organization, which facilitates the search for new opportunities. Similarly, following our precepts, although positive performance feedback might generate this "slack" and therefore help to boost strategic change, it could be the case where managers are conformed or complacent with these results and therefore, they would not have enough incentive to act (Sánchez-Peinado et al., 2010).

Thirdly, for its part, the "threat-rigidity" perspective argues that when facing a threat (such as negative performance feedback), organizations decrease their change and search behavior. However, in order to perceive this threat and start acting (or better said, start not acting), regarding our arguments managers should hold a high level of complacency with these results, which will be considered as a turning point for this inaction. That is to say, the objective performance will be a sufficient but not necessary condition.

Finally, the "capability cue" perspective stipulates that previous performance is seen by the managers of the organizations as a "cue" for their capability (i.e., as an indicator of their overall level of ability to achieve something). Thus, this perspective proposes that these 'cues' will either encourage or discourage managers' self-confidence and in turn their inclinations to engage in search and change-related behavior. However, as happened with previous perspectives, this one is also based (only) on objective values. Consequently, we argue that its line of reasoning will not be (completely) valid as cognitive patterns, and in this case, the managerial complacency with firm results will also affect strategic intended changes.

Note that the present research is not interested in supporting one theoretical perspective or another, but in providing a common frame of reference to analyze performance feedback consequences. With this aim, we propose that objective data and subjective interpretations jointly affect strategic change and that organizational decision-making processes cannot be unraveled when managers' cognitions and interpretations are not taken into account.

In the second part of our analysis, we evaluate the influence of executives' characteristics on the resulting level of managerial complacency with firm results. As expected, we found significant and confirmatory results for the proposed effects of TMT functional diversity and TMT tenure on this variable. Nevertheless, we did not find significant results for TMT educational diversity. Following prior literature, we can argue that the educational diversity present in the background of a team increases the breadth of perspectives, boosts the information computation, promotes the sharing of ideas and information, and improves the awareness of the current course of action (Cho & Hambrick, 2006; Haleblian & Finkelstein, 1993; Hambrick & Fukutomi, 1991; Katz, 1982). Then, by its own definition, TMT educational diversity should have

¹ Hence, the underlying idea is that this "attainment discrepancy" leads to a state of dissatisfaction (usually measured by objective levels of firm relative performance), which subsequently drives managers' intention to adapt the organization current strategies in an effort to fix the problem (also called "problemistic search").

a negative relationship with managerial complacency with firm results (as TMT functional diversity shows). However, we do not find significant results for this interaction. One possible explanation for the lack of significant results shown by this variable could be grounded on analytical aspects. Thus, TMT diversity could not produce a relationship with either high or low managerial complacency with firm results, but a relationship with realism. This value is represented by a 0 in the managerial complacency with firm results (see measures section) and therefore, could be the reason why this variable does not show a stronger significance. To accurately discover this assumption, scholars could rescale the managerial complacency with firm results variable and/or distinguish between different levels or groups of education.

6. CONCLUSION

This research contributes to the performance feedback literature by denouncing the (traditional) common practice of proxy performance feedback by simple comparisons of prior performance with industry mean performance and/or the organization's historical performance. This assumption is supported by prior scholars such as Jordan and Audia (2012) and Ocasio's (1997) research which propose that these evaluation processes will be affected by individual perceptions and cognitions of the organization's main decision-makers — that therefore will work as perceptual filters of reality. Cho and Hambrick (2006) similarly sustain this statement by arguing that managers will differ in how they perceive the stimuli around them which, in the last instance, will be reflected in strategic differences (Hambrick & Mason, 1984). Hence, we argue that this proposition is not new to the literature but despite having been theoretically highlighted on numerous occasions, it has rarely been under direct scrutiny in prior research (Hambrick, 1994; Jordan & Audia, 2012; Lawrence, 1997; Ocasio, 1997). In this study, we take this call and introduce the level of managerial complacency with firm results into the equation. Consequently, different interpretations of performance feedback will be able to be obtained, which may have important implications for some of the key predictions made by the conventional performance feedback research and, thus, become a source of reinterpretation of their expected responses. Based on our findings, we argue that the use of managerial complacency with firm results in our analyses generates a better understanding of organizational behavior. Additionally, we anticipate that under this approach apparently contradictory perspectives of performance feedback literature may be reconciled. In sum, our study suggests that objective performance feedback by itself does not properly rule out strategic intended change, but it needs to be interpreted and contextualized by the decisionmakers in order to generate more accurate predictions. Thus, with this research, we propose a more nuanced understanding of how decisionmakers assess and respond to performance cues.

In addition, our research also complements performance feedback literature with ideas from the upper-echelons research tradition, which emphasizes the relevance of managers' values, perspectives and experiences on strategic decision-

making processes and organizational outcomes (Bantel & Jackson, 1989; Hambrick & Mason, 1984). However, to predict these variables the extant research has typically focused on managers' observable characteristics of management teams (such as demographics or functional experiences) and has considered managerial cognitions and rarely perceptions explicitly — even though the latter are actually assumed to act as perceptual filters of reality and, therefore, could generate richer interpretations of the decision-making processes (Cho & Hambrick, 2006; Hambrick, 1994; Lawrence, 1997). Our study addresses this dearth of research by analyzing how managerial perceptions, and more specifically managerial complacency with firm results, affect organizational strategic response. As a consequence, our findings allow us to further substantiate the explicative value of these variables (Cho & Hambrick, 2006; Hambrick, 1994; Lawrence, 1997) and cognitive implications for strategic choices (Herrmann & Datta, 2002).

Like any research, ours does not remain free from limitations which similarly represent new research opportunities. In the first place, we intentionally focus our study on explaining the effects of performance feedback cues on intentions to change instead of on the actual change. As we discussed in the methods section, we do so due to this variable being much closer and appropriate to reflect the decisions that organizations' key decisionmakers will actually make based on organizational performance feedback (Holmes et al., 2011; Schillebeeckx et al., 2016). However, an interesting research avenue for future scholars could test whether these intentions (at the managerial level) are also reflected in actual change (at the company level) or even in performance-related variables (also at the company level). This presumes insights into the implementation process of strategic changes (Hailey & Balogun, 2002) and might require longitudinal data. Additionally, another fruitful research line could be obtained by assessing the type of change achieved. As previously explained, the variable magnitude of strategic intended changes includes both scope (internationalization/changes in geographical markets, current market penetration/consolidation, and diversification/changes in the product-market portfolio) and growth methods (organic growth, strategic alliances, and mergers and acquisitions). However, this variable is calculated by the sum of the absolute differences between the importance given to each of these six domains in the present and in the future/intended strategy. Thus, we argue that to improve our findings we could report actual change based on these six domains or a group of them. In this way, for instance, a firm could present a high level of change based on an increase in current market penetration/consolidation and organic growth. However, another firm could present a similar level of change but in this case, based on internationalization/changes in geographical markets and strategic alliances. Therefore, despite its similar meaning in terms of absolute change values, the first case would be more related to exploitative or inner solutions. Meanwhile, the latter would be more associated with exploratory or expansive actions.

Second, following prior research (Greve, 2008; Chatterjee & Hambrick, 2011) we consider that company decision-makers assess firm performance by comparing it with the average sectorial performance, i.e., we implicitly consider the industry mean as the aspiration level against which managers assess their organizations' performance. Accordingly, we calculated managerial complacency with firm results. Nevertheless, there is a growing literature which establishes that similar organizations or reference groups might influence one another more than the complete sectorial mean (Fiegenbaum et al., 1996; Labianca et al., 2009; Panagiotou, 2007; Short & Palmer, 2003). Thus, future research could focus its attention on these sets of individuals. In particular, in this study, we do not implement this approach due to two main reasons. The first one is related to the inability to obtain this data from our sample. Meanwhile, the second one concerns the fact that firms of our sample belong typically to mature sectors. These sectors usually generate strong pressure from inertia, dominant logic and sectorial recipes; thus, we argue that in our sample there will be anyway many similar individual reference levels near the industry median (Lehner, 2000).

Third, in the organizational performance feedback literature, several scholars have discussed that there could be a direct link between prior (objective) performance and satisfaction (Audia et al., 2000; Mahto & Khanin, 2015). Indeed, one illustration of the latter may be found in Cooper and Artz's (1995) research where it is argued that "those who do better should feel better" (p. 441). If so, our results would lack relevance as, managerial complacency with firm results, would present values close to 0 (see methods section to go into more detail) and thus would not be able to provide significant relationships. However, this circumstance is not sustained for several reasons. In the first case, because in practical research of organizational behavior the link between objective cues and satisfaction appears to be weak at best (Christen et al., 2006); and because many scholars have delved into this topic indicating that although (objective) performance is found to be a determinant of satisfaction, a range of other factors such as expectations, demographic attributes, previous experiences, stakeholders' pressures, etc., will also influence this variable. And, in the second case, our investigation presents significant interactions where

managerial complacency with firm results is found to influence the magnitude of strategic intended changes and likewise be affected by some TMT characteristics (TMT functional diversity and TMT tenure).

The final point pertains to methodological issues. Thus, based on prior research and intuition (as, for instance, the previous difference shown by scholars between objective performance and satisfaction), further research could propose to test different regression models using performance cues and satisfaction in an individual way. Consequently, we suggest that potential interesting effects among performance feedback, satisfaction and strategic intended change could be found through mediation, moderation or even moderated mediation analyses and, therefore, generate relationships with more explanatory power. For instance, prior research such as Audia et al. (2000) tried to do something similar using the level of satisfaction as a mediator between past success and persistence in strategies. Indeed, incipient empirical tests provide initial support for the existence of a mediation relationship in our dataset as evidenced by the positive and significant correlation between performance feedback and satisfaction ($\beta = 0.371$, p < 0.001, full analyses are available from the authors upon request) and the negative correlation between satisfaction and organizational intended change ($\beta = -0.124$, no significant; analyses available from the authors on request). Further research could appropriately test these propositions in order to clarify the existent relationship among these variables.

In sum, our investigation represents one of the first studies in performance feedback research which incorporates both objective performance figures and managerial perceptions to determine the magnitude of strategic intended changes shown by a firm. Thus, we complement conventional BTF precepts helping to broadly analyze its predictions and the ambiguous results existing in the literature. With this research, this paper builds upon recent efforts to advance performance feedback theory hoping to set the stage for many others to come and open the range of considered options in this issue.

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APPENDIX

Table A.1. Descriptive statistics and correlation matrix

Measures	Mean	Std. dev.	1	2	3	4	5	6	7	8	9	10	11	12
Dependent variables														
1. Magnitude of strategic intended changes	0.3527	0.1785	1.00											
2. Managerial complacency with firm results	0.3548	1.53	-0.182*	1.00										
Independent variables														
3. TMT functional diversity	0.7375	0.1203	0.205*	-0.072	1.00									
4. TMT educational diversity	0.3765	0.2283	0.286***	0.080	0.003	1.00								
5. TMT tenure	9.48	7.10	-0.339***	0.179*	-0.127	-0.175*	1.00							
Control variables														
6. Industry innovation intensity	1.22	0.7736	0.072	0.090	0.185**	0.120	-0.002	1.00						
7. Size of the organization	31820.67	72234.13	0.172	-0.209**	0.003	0.142	-0.169*	0.041	1.00					
8. Age of the organization	37.20	28.18	0.084	-0.215**	0.159*	-0.056	0.178**	0.088	-0.023	1.00				
9. Number of additional businesses	3.03	2.28	0.026	-0.209	-0.054	0.012	0.071	0.190	0.378**	-0.011	1.00			
10. TMT size	7.40	6.68	0.116	-0.015	0.091	0.032	-0.315***	-0.032	0.264**	0.091	0.293*	1.00		
11. TMT average age	42.54	6.36	-0.059	-0.133	0.050	0.056	0.418***	0.021	0.140	0.286***	0.191	-0.041	1.00	
12. TMT members with university studies	70.09	42.16	0.315***	0.116	-0.001	0.370***	-0.306***	0.239***	0.209**	0.057	0.095	0.073	-0.135	1.00

Note: N = 137, * p < 0.1, ** p < 0.05, *** p < 0.01 (two-tailed).