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How do managers react to a Peer's situation? The influence of environmental similarity on budgetary reporting[☆]

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ABSTRACT

We investigate the impact the degree of similarity between one's decision environment and that of a referent peer has on budgetary reporting. Self-categorization theory suggests that greater environmental similarity leads individuals to adjust their behavior to adhere to the social norms of peers within the same environment. We look at a reporting environment where managers *can* observe environmental similarity but *cannot* observe peers' behavior (e.g., managers do not communicate their budget reports between departments). In this setting, we find that managers facing a similar decision environment to that of a peer manager report higher budgets than managers facing a dissimilar decision environment. Further, consistent with the idea that managers base their perceptions about the group's social norms on their own desired behavior when peer behavior is unobservable, we find evidence that managers predict peers to report as they would, given similar environmental circumstances. Our findings provide a valuable insight into how peer *environments*, without knowledge of peer *actions*, can subtly affect managerial behavior.

1. Introduction

Prior accounting research examines the effects of managers' individual characteristics and institutional factors on budgetary reporting (Brown et al., 2009; Hannan et al., 2006; Evans et al., 2001; Chow et al., 1988). However, managers often make budgetary reporting decisions not in isolation, but surrounded by other "peer" managers. Recent research shows how managers' decisions are influenced by peer behavior (Emett et al., 2018; Huddart and Qu, 2014). While peer behavior is important, we examine the impact that merely the similarity of a peer manager's decision environment to one's own has on budgetary reporting. This is especially relevant as managers generally know less about their peers' actions than about their peers' environment.[1] The process of comparing and acting on the degree of similarity between one's own environment and that of a referent other is called self-categorization. In this study, we identify how self-categorization influences managers' budgetary reporting.

Self-categorization theory suggests that managers feel a part of a group when they share common environmental circumstances with other peer managers (Turner et al., 1987). As a manager feels part of a group, s/he is prone to behave in ways that adhere to the perceived social norms of those peer group members (Wenzel et al., 2002; Wenzel, 2001; Hogg and Terry, 2000; Mummendey and Wenzel, 1999). Of course, there may be situations, such as when submitting budget reports, where a manager is unable to observe peer managers' behaviors. In these situations, the manager forms expectations about social norms by projecting his or her own beliefs on peer group members (Bauman and Geher, 2002; Baumeister et al., 1998). That is, a manager expects peers to behave the same way the manager intends to behave – a consensus effect (Ross et al., 1977). Applying this consensus effect to self-categorization theory, we expect managers in a more similar environmental situation to that of a peer manager feel less inhibited in engaging in their desired behavior and, inasmuch the manager acts on the lowered inhibition, they will engage in that behavior to a greater degree. In this study, we examine the effect of environmental similarity on budgetary reporting behavior through self-categorization and the consensus effect.

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[1] For example, managers may be aware that they and their peer managers are all submitting budgets for an upcoming fiscal period, but are unaware of how much budget each manager is submitting and even less aware of whether the submission is in excess of that needed to accomplish the objective.

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We manipulate the degree of self-categorization through environmental similarity. We introduce environmental similarity to the managers by providing information about a manager's own workforce span of control and a peer manager's span of control. We believe that span of control is a business environment dimension that is ubiquitous in managerial decision-making (Ernst et al., 2004), is easily compared between managers, and has been found to be relevant in the context of participative budgeting (Hannan et al., 2010). Specifically, we inform participants, playing the role of departmental managers, that the number of employees they supervise is identical to the number of employees a peer manager supervises. We then manipulate environmental similarity by informing the participant about a future workforce change (or lack thereof) in the peer's department. To avoid evoking behaviors associated with distributive fairness and reciprocity, we attribute the workforce change to exogenous economic conditions.

Empirically, we find that those whose expected span of control is the same submit higher budgets than those whose expected span of control differs. We also find that those whose expected span of control is the same report higher levels of perceived similarity to the peer, supporting the theoretical connection between environmental similarity and self-categorization. As further support of self-categorization reporting behavior, we find a positive association between participants' self-reported perceived similarity and their budget reports. Utilizing a second experiment, we test the relation between environmental similarity and the consensus effect (i.e., the belief that perceived peers would behave similarly to oneself). We find further evidence that supports our causal model, connecting greater environmental similarity to similar reporting behavior and to higher levels of budgetary over-reporting.

We contribute to the participative budgeting literature in two ways. First, we incorporate a key component to decision making in organizations – the presence of other decision makers (i.e., peers) surrounding the manager – into a budgetary reporting task. Second, we demonstrate how an environmental factor (similarity between one's own and a peer's decision environment) influences budgetary reporting even when managers cannot observe peers' actual behavior. Specifically, self-categorization behavior leads those with greater similarity of one's own situation to that of a peer manager to report higher reported budgets. One potential application of this finding is that owners consider limiting communication about similarities between managers' environmental conditions in cases where managers may desire to behave in ways that are detrimental to the owners' welfare.[2]

The remainder of the paper is organized as follows: Section 2 provides a review of relevant literature and develops our hypothesis; Section 3 describes the experimental method and design; Section 4 reports results; and Section 5 summarizes, discusses the study's findings and limitations, and concludes.

2. Literature review and hypothesis development

2.1. Participative budgeting

In participative budgeting, managers propose and receive approval from firm owners to incur budgeted costs in return for promised value (e.g., providing a good or service benefiting the firm's owners). Managers often possess more precise information about the actual costs required to deliver the promised value than do firm owners. Further, managerial control systems may be sufficiently weak that managers have the opportunity to over-report, receiving approval for budgets in excess of the actual cost of resources needed (Hannan et al., 2010, 2006; Dunk, 1993; Chow et al., 1988; Melumad and Reichelstein, 1987; Baiman and Evans, 1983).[3] Managers can then benefit from over-reporting by increasing their personal compensation and perquisite consumption (Yermack, 2006; Borokhovich et al., 1997), investing in value-decreasing "pet" projects (Giroud and Mueller, 2011; Titman et al., 2004), inflating loyal employees' wages (Giroud and Mueller, 2011, 2010; Cronqvist et al., 2009; Bertrand and Mullainathan, 2003), and engaging in general empire-building behaviors (Chen et al., 2012; Masulis et al., 2007) at the owners' expense.[4]

Owners seek to minimize managers' personal use of excess budgets in order to increase the value of their firm. Prior literature has demonstrated both direct incentive mechanisms (Holmstrom and Milgrom, 1987) and individual behavioral characteristics such as honesty preferences influence managers' choice to over-report, suggesting managers have disutility for dishonest activities that may offset the utility of personal benefits gained by over-reporting (Rankin et al., 2008; Hannan et al., 2006; Evans et al., 2001).

Recent research has begun to examine the effect of peer behavior on individual decisions in settings of interest to management accountants (Emett et al., 2018; Huddart and Qu, 2014; Tayler and Bloomfield, 2011). As managers are often surrounded by their peers when making decisions, understanding the effect that peers have on the decision-making process is particularly important. Tayler and Bloomfield (2011) find that formal controls influence individuals' conformity to peer behavior (i.e., descriptive norms). Emett et al. (2018) show that individuals asymmetrically respond to peers' actions when the individuals' behavioral norms are contrary to those actions, by conforming more with self-interested actions of peers than with altruistic actions of peers. In a managerial reporting setting, Huddart and Qu (2014) show that managers report more honestly when they observe that their peers report more honestly. While these studies focus on the influence of observed peer *behavior*, we focus on a more general construct of the mere presence of a peer and the resulting ability of a manager to compare his or her own environmental *situation* (rather than behavior) to that of a peer. Specifically, we employ self-categorization theory and the consensus effect to explain the expected impact of similarity between managers' and their peers' decision-making environments on budgetary reporting responses when managers cannot observe peer behavior.

2.2. Self-categorization theory and the consensus effect

Self-categorization theory suggests that people view themselves as part of a group of individuals whose characteristics (such as environmental situations) are similar to their own (Turner et al., 1987). People self-categorize into groups by mentally formulating a list of individual and situational characteristics that are common among members, resulting in group identities whose strength is commensurate with the degree of shared commonality (Latané et al., 1979). Group members feel less inhibited in acting on behaviors that they perceive to be common to a group because they believe those behaviors align with the group's social norms. Thus, the more similar the individuals' characteristics, the less inhibited those individuals feel in engaging in behaviors they believe to be consistent with a group's norms (Wenzel et al., 2002; Wenzel, 2001; Hogg and Terry, 2000; Mummendey and Wenzel, 1999).

We are specifically interested in settings where potential group

[2] Alternatively, owners might consider mitigating the negative reporting effects of self-categorization by offering additional information, such as attributions that explain changes or lack of changes in span of control, which differentiates environmental conditions across departments despite similar changes to span of control.

[3] Theoretically, firm owners approve managers' use of their resources. Practically speaking, we recognize that firm owners often delegate this budget approval authority to boards of directors and senior managers within the firm, each of whom may have an opportunity to use company resources to gain personal benefits.

[4] Anecdotally, one of the authors, while employed by a Fortune-100 company, observed cases where lower- and mid-level managers manipulated budget submissions for personal gain. In one case, the manager manipulated budgets across projects to avoid requesting resources when justification was more difficult (e.g. creating a "bank" of resources to ease the manager's workload). In a second case, the manager manipulated budgets to avoid layoffs within that manager's team.