Social Comparison and Learning from Others

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ABSTRACT

Using social comparison theory as an overarching perspective, we review the literature on learning from other's experience. We examine how social referents are chosen, based on (1) different cues – structural, cognitive, affective, social, or external cues; and (2) different motivations – self-assessment, self-enhancement, or self-improvement. We highlight the usefulness of considering these cues for reference group selection, in predicting the likelihood, the type, and the level of learning. We describe several challenges in predicting learning outcomes based on motives alone. Taken together, we call for more understanding of different cues and bases of social comparison, alongside consideration of motivation, to better understand from whom actors can learn, and what can be learned from them. (110)

Keywords: Social Comparison, Vicarious Learning, Learning from Failure, Organizational Learning, Self-Enhancement, Performance Feedback, Social Networks, Knowledge Transfer, Attention, Sampling Biases

I. Introduction

We define "learning from others" as a construct that has been variously described by scholars as network learning, social performance feedback, vicarious learning, interorganizational learning, knowledge transfer, and population learning (Beckman and Haunschild, 2002; Greve, 1998; Huber, 1991; Argote and Ingram, 2000; Ingram, 2002; Levitt and March, 1988; Miner and Haunschild, 1995; see social learning in the individual literature, Bandura, 1977). In these streams of work, organizational actors are more or less mindful in how they interpret and incorporate the experience of others. Learning from others can be defined simply as an organizational change resulting from the observation of others' experience – without any claim that what is "learned" is accurate or useful for the organization (Argote and Miron-Spektor, 2011; Desai, Madsen and Maslach, this volume). This broad body of research makes it challenging to summarize what we know about (and to build on) learning from others. Yet it is critically important because an actor's own information is often limited or biased (March, Sproull and Tamuz, 1991) and our basic social nature suggests that actors (both individual and organizational) make regular and frequent social comparisons with others (Festinger, 1954).

In this chapter, we ask: from *whom* do organizational actors learn? Other research has focused on *what* is learned, and we focus more narrowly on the source of learning and how actors might determine from whom to learn. This focus helps us understand social comparison and the process of social reference group selection. We highlight several important distinctions in the research on organizational learning from others (individuals or organizations that serve as a point of reference and evaluation): 1) actors

focus attention on both individuals and groups as objects of social comparison; 2) distinct cues are used as the basis for selecting social referents; and 3) different motivations underlie the choice of social referents. These distinctions are important because *what* is learned is very dependent on from *whom* and *why* social comparisons are made in the first place. We detail the cues and motivations underlying social comparison in order to demonstrate the unexplored complexities that shape social comparisons between organizations. We highlight some of the challenges and opportunities that result from these considerations.

II. Social Referents

We begin with social comparison theory. Although Festinger wrote about the individual psychological processes of social comparison, we focus on individuals as decision makers in organizations and thus consider social comparison as an individual and organizational process. For example, research on CEO compensation suggests that executives make social comparisons to CEOs based both on individual and associated organizational characteristics (DiPrete, Eirich, Pittinsky, 2010; Kim, Kogut and Yang, 2015; Porac, Wade and Pollock, 1999). Thus, social comparison processes are usefully considered at both individual and organizational levels, although these processes may not be symmetrical.[1]

This important distinction between individual and organizational levels notwithstanding, social comparison theory emphasizes affiliating with social referents

[1] For example, Vissa, Greve and Chen (2010) find Indian firms associated with business groups attend to a different social comparison group than firms without such affiliations. Thus, social comparison might depend on dimensions such as organizational structure and form, in addition to individual and organizational characteristics.

and comparing oneself to them as foundational to human experience. In particular, when objective information is unavailable, actors look to others to assess their own "opinions and abilities" (Festinger, 1954: 118). These social referents could be individual actors or a group of other actors. A set of actors against which focal actors evaluate or compare themselves is described as a reference group.. To summarize the basic social comparison process underlying the work on "learning from others": a meaningful comparison or evaluation of an actor's behavior is made against a social referent or reference group, and this in turn influences an actor's subsequent behavior.

Individual Social Referents and Reference Groups

Both individual actors and reference groups are potential social referents to which an actor might attend. Early work on organizational learning from others, and the diffusion literature more generally, focuses on learning from particular others. Frequently, learning is observed as imitation, and the imitated other is often a social tie, such as a board interlock tie, or a similar or proximate other (Davis, 1991; Davis and Greve, 1997; Haunschild, 1993). The learning that moves through social ties can be seen in the spread of diverse practices spanning from "hybrid corn to poison pills" (Strang and Soule, 1998: 265), and this type of learning can be described as mimetic isomorphism, contagion, or imitation (Galaskiewicz and Burt, 1991; Haunschild, 1993; Mizruchi and Fein, 1999). In addition to learning through similar ties or proximate others, learning may flow through attention to a highly salient other, such as a more profitable firm (Haveman, 1993) or even another firm with a very negative experience (see Desai, Madsen, and Maslach, this volume on learning from failure). More recent work theorizes about the various contingencies associated with diffusion and learning (Briscoe, Gupta, and Anner,

2015; Fiss, Kennedy and Davis, 2012), but the point here is that individual actors (primarily organizational actors in this review) are important sources for learning.

In contrast, performance feedback theory has focused on learning as a result of comparison to a reference group (see Greve and Gaba, this volume). With the average performance of the reference group as the aspiration, this work has implicitly focused on the group itself as the relevant unit. Comparisons to a social reference group motivate learning in the form of search, organizational change, and risk taking. Recent debate within this literature, however, has questioned the appropriate aspiration level within the reference group - as the average, best or survival level (Boyle and Shapira, 2012; Washburn and Bromiley, 2012; Moliterno, Beck, Beckman and Meyer, 2014; Audia and Greve, 2006). This debate raises questions about the importance of *particular* actors within the reference group (e.g., the leader or closest competitor) and brings us back to the question of which individual social referents are most important. These new developments in performance feedback theory suggest that even when we consider the reference group as the overall source of information for learning, we need to consider the individual actors within that group.

In addition, research at the group or population level, using the terms network or population learning, has focused on the importance of learning from collective experiences. This work suggests that the experience of a reference group might lead to inferential learning - learning that requires drawing conclusions and making assessments after observing the outcomes of others (Miner and Haunschild, 1995). Thus, rather than consider the average performance of the social referents as is done within the performance feedback literature, or even a particular aspiration point as defined by a high

or low performing actor, the breadth of experience within a reference group may be useful to understand what and how an organization learns from others. For example, Beckman and Haunschild (2002) find that the diversity of acquisition experience within the board of directors influences the acquisition premium paid by the focal organization. It is the collection of experiences that drives learning. Although this research focuses on the content of particular ties, it also considers the distribution of experience and as such is aligned with structuralist approaches to networks that focus on positions, equivalence and the structure of networks (Borgatti and Foster, 2003; Burt, 2004). We see this attention to the structure of experience in other contexts as well, such as alliances and venture capital (Beckman, Schoonhoven, Rottner, and Kim, 2014; Zhang, Gupta and Hallen, 2016), although the link has not been made to learning processes in those instances.

Taken together, this research suggests that social comparison processes, and learning from others, can occur through attention to individual actors as well as to reference groups. If social referents are the basis of learning, however, this begs the question of how actors choose a social referent or social reference group.

Choice of Social Referents

Following Festinger (1954), most research examines similar others as the basis for social comparison. Indeed, recent experimental work documents that similar others are the first order choice for social comparisons (Audia, Brion and Greve, 2015). Although this is a useful heuristic for researchers, and decades of social psychological research suggests that social comparisons are made to commensurate others, the simplicity of the logic belies a number of important questions. What dimensions of similarity are most important? For example, does geographic or strategic similarity matter more (Kim and

Miner, 2007 ; Darr and Kurtzberg, 2000)? Or is there some other attribute, such as similarity of size or even similarity in innovativeness that drives social comparison (Baum, Li and Usher, 2000; Massini, Lewin and Greve, 2005)? How many similar others are considered (e.g., how big is the reference group; Porac, Thomas and Badden-Fuller, 1989)? For example, is a reference group an entire industry or a subset of industry members (Audia and Greve, 2006, Porac et al., 1999)? Scholars have shown that all of these factors matter for learning, but when one dimension dominates over another is largely unknown and probably contextual. Suggesting similarity as the basis for social comparison does not offer enough precision for researchers (but see Darr and Kurtzberg, 2000, for an attempt to tackle this problem). In an attempt to move beyond similarity, we offer a different approach and delineate five means by which social referents can be determined: structure, cognition, affect, social or external considerations.

The problem of using similarity as the heuristic for choosing social referents can be seen by considering industry as the basis for reference group selection. Industry similarity is one of the most commonly examined reference groups, but similarity can be constructed differently even within the industry category. For example, social referents might be considered to be all those in the same industry or to be only those most similar within an industry (Bromiley, 1991; Baum et al., 2005; Baum and Dahlin, 2007). Industry might be determined by the formal designation (the SIC code), with clear ramifications for the boundaries of competition, or as a cognitive category to which firms could more or less identify (Porac et al., 1989).

Structural basis of social referent selection. Beginning with this most common empirical example, we highlight the structural basis for choosing industry as a social

referent. In performance feedback studies, all firms in the industry (as defined by SIC code) often comprise the reference group (e.g., Bromiley, 1991). Industry is a useful and tractable heuristic for describing patterns of competitive interaction. Similarly, studies have used similarity in size or proximity in location to explain intra-population variances in competitive interaction (Hannan and Freeman, 1977; Baum and Mezias, 1992; Haveman, 1993). These are reference groups based on competitive pressures, and researchers often focus on these structural categorizations of reference groups. In other words, social referents are those with the same structurally similar characteristics.

As we discuss below, structural categorizations overlap with cognitive constructions, and it is important to understand whether these structural categorizations are meaningful for actors. If we are to assert social comparison is occurring, actors have to be knowledgeable of (e.g., through a tie) or be aware of the reference group. A structural logic might suggest equivalent actors respond similarly because of their positions or resources (e.g., Burt, 1987) but this would not be considered a social comparison process per se if it is being embedded in similar structure rather than actual comparison or knowledge that drives behavior. This brings us to questions of cognition in reference group selection.

Cognitive basis of social referent selection. Using industry as an example, it is clear that reference groups are at least partially social constructions. Fiegenbaum and colleagues note that strategic groups are important reference groups that shape firm action and that such groups are narrower than the industry (Fiegenbaum and Thomas, 1990, 1995; Fiegenbaum et al., 1996; Shoham and Fiegenbaum, 2002). A similar stream of work in competitive dynamics emphasizes behavioral and cognitive aspects of

interfirm competition. Chen and others clearly acknowledge objective and structural attributes such as resource endowment or market commonality as predictors of competitive behaviors between two firms, yet they argue that in order for competitive responses to occur, a focal firm should be aware of competitor's moves and be motivated to and be capable of responding to those actions (Chen, Smith, & Grimm, 1992; Chen, 1996).

Moreover, because of these behavioral assumptions in the competitive dynamics literature, competitive asymmetry between firms is likely to exist between two firms, where "if A is B's primary competitor, it does not necessarily follow that B is A's primary competitor" (Chen, 1996: 116). This suggests that even if two firms are structurally predicted to have each other in their reference group, this may not be so when we consider cognitive mechanisms. These prerequisites for organizational awareness and the possibility of potential asymmetry become clearer when examining the cognitive mechanisms underlying the construction of the competitive environment and reference groups. In their study of the Scottish knitwear industry, Porac et al. (1989) argue that the scope of the reference group is bound by the cognitive limits of the actors. Consequently, mutually defined set of competitors construct a "cognitive oligopoly" situation, where a limited set of actors compete in terms of material conditions based on the shared mental models of the competitive environment (p. 413). Incorporating these insights raises questions about researchers' use of structural determinants of reference groups. Focusing on structural conditions alone does not reveal how the reference group is actually constructed within the minds of the decision makers. In fact, the choice of reference

group made by organizational actors based on cognitive processes only loosely corresponds to the categorical systems that researchers on which rely.

Cognitive processes are often driven by the salience of particular actors or groups, and this can be more important than considerations of similarity. Actors might rely on visible and apparent signals of others' success – such as status, size, or performance - in selecting reference groups. For example, sometimes actors attend to higher status reference groups and individuals (Kim and Tsai, 2012; Labianca, Fairbank, Andrevski and Parzen, 2009; Podolny and Stuart, 1995). High status referents reflect enhanced status and thus can influence perceptions of quality by association (Podolny, 2005). Sometimes, however, extreme and poor performance drives attention because those extreme performances are visible and salient to actors (Haunschild and Miner, 1997; Kim and Miner, 2007; KC, Staats and Gino, 2013). Alternatively, sometimes actors attend to internal social comparisons, other times to external comparisons, and the salience of one group or another drives attention. For example, the focus on internal social comparisons might be related to fears about individual career prospects whereas external comparisons might reflect organizational rather than individual considerations (Kacpercyzk, Beckman and Moliterno, 2015).

The fact that cognition is involved in reference group selection, and that a wide range of salient and similar others might be chosen based on these cognitive processes, highlights the difficulty for researchers in selecting a reference group based on archival information without any insight into the organizational decision makers' preferences and cognitions. The general empirical strategy to deal with this problem has been to examine performance relative to multiple potential reference groups, and referent group choice is

presumed to be operating when organizational action (such as change) is observed as a function of performance relative to that groups' social comparison or when the predicted reference group weighting fits the observed data (Blettner, He, Hu and Bettis, 2015; Kacpercyzk et al., 2015; Vissa, Greve and Chen, 2010). For example, Hu, He, Blettner and Bettis (2016) find that actors attend to inconsistent feedback from two different social referents by focusing on the social referent to which they are underperforming.

Affective basis of social referent selection. Although it is clear that high status others are chosen as social referents as a result of the cognitive availability and visibility of such firms, it is also the case that high status firms can be chosen as social referents for affective and affiliation reasons. Membership in a social referent group allows for "basking in the reflected glory" of association with others (Cialdini, Borden, Thorne, Walker, Freeman and Sloan, 1976 in Washington and Zajac, 2005: 286; also see Pfeffer and Fong, 2005: 377). Such reflection generates positive affect for reference group members and can motivate the referent group choice. In other instances, it is negative affect such as fear that drives attention to a particular reference group. Kacperczyk et al. (2015) find that poor performance relative to an internal comparison group can lead to focus on that internal comparison set because of fears of termination.

As another example of a referent group choice potentially driven by affective reasons, consider rivals. Conceptually, rivalry shares essential elements to structural bases for social comparison. Rivalries are created via a history of competition, and small performance differentials suggest intense efforts to dominate the opponent (Kilduff et al., 2010). However, a careful reading of studies of rivalry and competition suggest that rivalry is more than structural similarity, there is also a strong emotional component. The

intensity of the interaction can even lead to unethical behavior in the course of trying to win at all costs (Kilduff et al., 2016). Recent studies emphasize cognitive as well as emotional aspects of rivalry (Kilduff et al., 2010; Horwitz & Perreti, 2014). Kilduff and his colleagues (2010) conceptualize rivalry as a "subjective competitive relationship that an actor has with another actor that entails increased psychological involvement and perceived stakes of competition for the focal actor, independent of the objective characteristics of the situation" (p. 945). Similarly, Malhotra (2010) define rivalry as "heightened consciousness of a competitor's role in obstructing goal achievement". From these definitions, rivalry is a subset of competition with stronger emotional engagement. Thus, even within a group of competitors that are expected to compete on material conditions and resources, rivals' actions are much more saliently recognized compared to non-rivals, which can lead rivals to be more influential as social referents.

Social basis of social referent selection. Social referents are often determined by interaction patterns. Regular interactions lead to actors serving as social referents because information about them is available. When looking at interorganizational learning, the relevant social referents can include boards of director ties, alliance partners, or other market ties (see Beckman, 2010, for a review). When looking at individuals, shared affiliation at work or a similar educational background offers opportunities for individuals to interact, leading to the formation of peer reference groups from whom individuals may learn. Knowledge can be transferred directly from these peers, such as skills needed to start a new venture (Nanda and Sorenson, 2010) or private information needed to identify entrepreneurial chances (Kacperczyk, 2013). Contact with peers can also influence an actor's motivation and values. For example, a high-performing

roommate can drive a student to prioritize academic achievement and set realistic goals to get good grades (Hasan and Bagde, 2013). In the context of entrepreneurship, peers can alleviate concerns towards entrepreneurship if it is not seen as typical (Stuart and Ding, 2006). Yet not all sources of information are equally useful or hold equal weight. Sometimes a single peer or source of information is enough to motivate learning, other times two sources are complementary and together increase the likelihood of learning (Haunschild and Beckman, 1998). Yet, overall, there is extensive evidence that direct social ties provide a source for social referents and an opportunity for learning.

External basis of social referent selection. A final option is that organizations are assigned or provided reference groups by other actors. For example, consider the increasing prevalence of rankings. Rankings are published by organizations such as certifying bodies and magazines. It is difficult for organizations to ignore public rankings (if their customers attend to those rankings) because they are often publically available and disclosed to customers and external audiences. Indeed, Garcia, Tor, Gonzalez (2006) find that competitiveness becomes intensified when actors are competing close to a meaningful threshold that has some symbolic or substantive reward, such as might be indicated by a Fortune 500 ranking. Among US law schools, rankings motivate changes in school behavior. For example, schools focus on activities captured by the rankings and in so doing the rankings become self-fulfilling (Espeland and Sauder, 2007). This finding suggests that rankings can lead actors to attend to their position in the ranking, and other actors in the ranking, and so rankings help establish social referents. Indeed, being surrounded by peers being rated can lead to diffusion of related behavior, even if the firm itself is not being rated (Sharkey & Bromley, 2015).

However, external rankings are not always relevant because actors might not use them as the basis for social comparison, especially when those rankings are not related to the primary goals of the organization (such as financial performance). For example, Rowley, Shipilov and Greve (2016) find that board confidence rankings, a non-financial ranking, are of secondary importance and do not influence the adoption of corporate governance practices when profitability is low (relative to other large public firms).

Thus, external factors, such as rankings, can be a basis for social comparison but they also reveal the possibility for multiple reference groups to operate simultaneously and for actors to selectively choose or focus on a particular social referent. For example, a Business Week ranking with an overall ranking as well as rankings by particular programs or target markets might lead schools to highlight one ranking (and reference group) over another. In the context of US business schools, decision makers selectively attend to certain aspects of rankings that affirm positive perceptions of themselves (Elsbach & Kramer 1996), or selectively engage in change depending on how that ranking matches the decision maker's perceived identity (Martins, 2005). Of course, a similar process might operate when organizations create (rather than are assigned) multiple reference groups. Business schools can create competitive and striving reference groups that motivate different types of decisions (Labianca et al., 2009). Trying to understand and predict actors' responses to these rankings highlights actor motivation as relevant for predicting response to and selection of social referents.

To sum up, actors choose reference groups for a variety of reasons: structural similarity or direct ties, cognitive or affective processes, or external determinations such as rankings. And what we learn from others will likely be determined from whom we

attend. Once we know the reference group, we know what can be learned. Although that does not mean learning will occur, identifying the reference group is an important first step. But we are left without enough precision: when is one basis for choosing a social referent preferred over another? One possibility is that the selection of a referent group depends upon actors' desires and motivations. As such, we examine the possible motivations that might underlie reference group selection; then, we look for patterns in the presence of particular motivations with the different bases for social referent selection.

III. Motivations for Social Referent Choice

The next step in understanding to whom actors look to for social comparison - whether it be to individuals or groups for social, cognitive, affective, structural or external reasons - is to consider the motivations underlying social comparison. We highlight self-assessment, self-enhancement, and self-improvement motives for social comparison, along with learning that occurs "mindlessly" or without any clear motivation (e.g., imitation without deliberate intent).

Self-assessment. The most common function of social comparison is assumed to be the comparative or evaluative function. This is what Jordan and Audia (2012) describe as the self-assessment motive (see also Trope, 1986; Sedikides and Hepper, 2009). Festinger (1954) begins his theory with the hypothesis that social comparison emerges from a "drive to evaluate" one's performance (117), and that the group serves as a "standard or comparison point" against which one can be evaluated (Kelley, 1952: 413). With self-assessment motives, actors want to evaluate themselves accurately, and they select the reference group accordingly, which implies that similarity (of some sort)

between the actor and the reference group is salient. Because of the "unidirectional drive upward" posited by Festinger (1954: 124), self-assessment often occurs alongside the desire to improve one's performance (self-improvement) and as such self-assessment is an important assumption underlying the performance feedback literature (Greve, 2003; Audia et al., 2015). Social referents are used to assess one's own performance and motivate change. The self-assessment motive describes how actors gather information about a reference group (or individual actor) and use it as the input to assess performance. When combined with self-improvement, self-assessment is the data used to direct action and make changes in an effort to improve one's position or performance. Thus, a primary motive attributed to organizational actors is self-assessment, which motivates the selection of a reference group and promotes learning from others.

----------Insert Table 1 about here----------

Table 1 maps the bases of social referent selection, described above, with possible motivations. The first row provides examples of studies in the learning literature that rely (implicitly or explicitly) on the self-assessment motive. For example, much of the early performance feedback literature relied on industry categorizations (*structurally* determined) as the input for social comparisons (e.g., Greve, 1998). The logic is that similar organizations (i.e., in the same industry) provide relevant (and accurate) social performance feedback. In contrast, Moliterno et al. (2014) suggest that the reference group threshold is the basis for social comparison, as a visible and upwardly focused reference group based on proximity to the organization's prior performance. This is a *cognitively* derived reference group against which actors assess their performance. When such self-assessments are motivated by strong emotion, such as fear of termination, we

observe reference groups selected for *affective* reasons (Kacpercyzk et al., 2015). Beckman and Haunschild (2002) suggest that board of director relationships, *social* ties, provide for appropriate and accurate causal inferences that improve decision making. The importance of *externally* derived reference groups for self-assessment can be seen in Martins (2005) who finds that business schools compare rankings with the school's perceived identity in order to assess performance. These studies all assume that the self-assessment motive leads actors to choose these social referents in an attempt to evaluate their own performance accurately.

Self-enhancement. A second motivation for reference group selection, with very different consequences, is self-enhancement. Audia and colleagues have demonstrated a range of conditions under which actors engage in self-enhancing responses. For example, actors choose goals or retrospectively revise performance standards in order to alter the interpretation of their position and performance, all in service of a positive self-appraisal (Jordan & Audia, 2012; Audia and Brion, 2007). Although this work has largely focused on how self-enhancement underlies assessments of performance, Audia, Brion and Greve (2015) also observe changes in reference group selection as a result of poor performance that threatens positive self-appraisal. With self-enhancement motives, organizations select reference groups in ways that reject similarity in objective and observable properties and instead choose others that reflect positively on the organization. The implicit motive here for reference group selection is that organizations and individuals choose social referents against which they will be favorably assessed. This motive is most likely when actors have both motivation and latitude to choose (Jordan & Audia, 2012), but this is not a strong requirement. As the earlier section outlines, actors often have

extensive latitude to attend to some actors over others given the range of choices and possibilities available for social comparison.

The self-enhancement motivation can be facilitated by a structural determination of reference group selection. Smith and Chae (2016), for example, show that attributes of the organization (atypicality) can make structural reference group selection problematic, and this atypicality allows organizations to self-enhance by strategically choosing social referents. In other words, the lack of structurally similar others can facilitate self-enhancement by choosing particular social referents. This point extends Audia et al. (2015), who find that actors self-enhance when given the opportunity, and this suggests more broadly that discretion and the ability to self-enhance can be facilitated by structural characteristics of the organization itself.

As the second row of Table 1 demonstrates, self-enhancement motives can be the motivation for all of the bases for social referent selection discussed earlier. Self-enhancement can motivate the choice of poorer performing industry referents, but referents within the same *structural* category, such as Audia et al. (2015) find in an experimental setting. In addition, self-enhancement can shape the cognitive and affective selection of referents: the choice of social referents for benchmarking CEO compensation is a *cognitive* choice that allows the leapfrogging of CEO pay (Diprete et al., 2010), and self-enhancement can motivate *affective* affiliations in a desire to be surrounded by high status others. In addition, organizations can establish *social* ties in order to send a positive signal about their legitimacy and quality (Stuart, Hoang, and Hybels, 1999) or respond to *external* rankings in ways that reflect positively on the organization (Elsbach and Kramer, 1996).

Self-improvement. Although self-assessment and self-enhancement motives are the most commonly discussed motives in the organizational literature, self-improvement can also influence the choice of social referents (Audia et al., 2015). Self-improvement, the motivation to improve performance (Sedikedes and Strube, 1997) underlies much of the organizational learning literature and is often assumed to co-occur with self-assessment motives. Accurate social comparison facilitates self-improvement. Yet these motives do not need to occur together. Kim and Tsai (2012) find that making *cognitive* comparisons to better performing others results in improved performance even though consumers do not see such social comparisons as accurate. Similarly, Labianca et al. (2009) find that organizations create striving *social* comparison groups that help them improve performance (and these are different than the competitive referent groups of similar others, as might be expected with a self-assessment motive).

No clear motivation. It is important to point out that a clear motive is not necessary for social comparison to occur.[2] The attention to salient and visible others might not be conscious, which suggests imitation of others can occur blindly. For example, Sharkey and Bromley (2015) suggest that being surrounded by peers rated in environmental rankings is associated with mimicry and imitation of those peers, resulting in actors aligning their behaviors to the ratings system. Similarly, Haunschild and Miner (1997) find that the high premium deals completed by other firms increase the likelihood that the same investment banker is chosen by acquiring firms. Given that high premiums are a negative outcome for an acquiring firm, this suggests that the motives discussed thus far (self-improvement, self-assessment, and self-enhancement) are not the

[2] It is also likely that other motives, like self-verification, operate (Sedikides and Strube, 1997; Audia et al., 2015).

motivations underlying the choice. Instead, the salient outcome may unintentionally drive partner choice through cognitive processes. The last row of Table 1 highlights a few studies that can be categorized by an unconscious or "mindless" motive.

Multiple motives. We have discussed each of these motivations separately, but they are "distinct only to a degree; they overlap greatly in their antecedents and consequences" (Sedikides and Strube, 1995: 1333). Although self-improvement, unlike self-assessment, does not require accuracy in order to motivate improvement, it is quite common for these motives to operate simultaneously. As noted earlier, the performance feedback literature generally assumes that self-assessment provides for accurate comparisons with the objective of improving performance (self-improvement). Sometimes these combinations of motives lead to learning from one social referent group rather than another. In another example, KC et al. (2013) find motives to improve performance (self-improvement) lead cardiologists to learn from others' failure by observing the negative outcomes of others' surgeries. It is more difficult for the cardiologists to learn from their own failure, due to self-enhancement motives, but they are able to learn from others (and thus engage in self-improvement without self-assessment).

Another possibility is that self-enhancement operates with self-improvement. Self-enhancement and self-improvement are often seen as, but need not be, mutually exclusive: these motives can co-occur and result in learning and self-enhancing. The conventional story of self-enhancement asserts that actors choose a reference group such that their performance is exemplary. This self-enhancement highlights good performance relative to a weaker set of performers (e.g., downward social comparison; Audia et al.,

2015) because a reference group of poor-performing social referents enhances social performance of the actor vis-à-vis others in the reference group (Elsbach & Kramer, 1996; Audia et al., 2015).

However, self- enhancement can also be claimed with a reference group of higher performers. As such, upward comparison driven by self-enhancement motives may lead to reference group selection where actors attend more to successful, high-status actors based on legitimacy needs or desired outcomes (Kraatz, 1998; Labianca et al., 2001; Moliterno et al., 2014). An upwardly biased reference group (that allows for self-enhancement) is also aligned well with a general point in social comparison theory that there exists a general bias for upward social comparison, such that actors try to compare and compete with slightly better others (Festinger, 1954). For example, Pfeffer and Fong (2005) asserts that relationships with high-status others is a form of self-enhancement which paves the way for low-status individuals to gain power. More broadly, upward comparison targeting high performers or high status others is consistent with the stream of literature that emphasizes the importance of affiliations or endorsements in soliciting favorable evaluation (Podolny, 1993; Stuart et al., 1999). Acquiring and sustaining a membership in a desired group is a pathway to being favorably evaluated.

Once the higher performance social reference group is established (facilitating self-enhancement by association with a higher performing group), firms interpret performance within that group and strive for higher performance. In these instances, self-improvement can also operate – by evaluating one's performance within that higher status group and learning about changes that could improve performance. Returning to Kim and Tsai (2012), we see that upward comparison can ultimately lead to economic

gains: automotive firms that compare themselves against reputable others experience an increase in sales. More specifically, studies have argued that actors possess striving aspirations such that they continuously look for and compare themselves against role models they aspire to be in the future (Labianca et al., 2001; Labianca et al., 2009). Actors engage in larger strategic changes when organizations have reference groups of higher reputation (Labianca et al., 2001; 2009). These upward social comparisons are motivated by self-improvement with self-enhancement, and both motives can operate simultaneously. The groups of higher reputation facilitate self-enhancement, and the attention to performance within that group facilitates self-improvement.

As noted above, these findings contrast with the conventional view that self-enhancement through downward comparison distorts self-assessment (Audia et al., 2015) and by implication harms self-improvement. In other words, self-enhancement is expected to hinder the ability to obtain accurate information. The examples above suggest this is not always the case (KC et al., 2013; Kim and Tsai, 2012; Labianca et al., 2001; 2009; Moliterno et al., 2014). This is because learning occurs when changes are made, even if those changes are based on inaccurate comparisons. So it is not the case that inaccuracy necessarily reduces the motive of self-improvement. But it may also be the case that downward social comparisons leads actors to be satisfied with their own performance and not engage in any change. In these instances, self-enhancement dominates self-improvement.

Why would downward social comparisons sometimes lead to learning (even if that learning is less accurate as a result of self-enhancement) and other times not lead to any change at all? Perhaps it depends on the relative magnitude of the social

comparisons. Work on status inequalities finds that extreme high status social referents are seen as dissimilar, whereas moderately high status social referents are seen as similar (Huang and Washington, 2015). In a learning context, this means that upward social comparisons with extremely high status others can lead to a contrast effect such that actors do not learn from those referents, but they might be more likely to learn from moderately high status social referents. Future research could usefully explore when self-enhancement overwhelms self-improvement and when they work together.

Despite the fact that these motives are distinct, it can be difficult to know which motivation is operant at a given moment in time. As noted above, self-enhancement and self-assessment can both be operating when organizations are choosing reference groups. For example, empirical studies on executive compensation have shown that organizations chose reference groups that support setting higher executive pay level. Porac et al. (1999) found that when including outside-industry firms in their comparison set, actors chose some firms that were performing more poorly than the focal firm (although not all, as there is also some self-assessment occurring). Presumably the poorer performing referents helped justify higher executive pay, which suggests a motivation of self-enhancement as well as self-assessment. Diprete, Eirich, and Pittinsky (2010) similarly argue that the cognitively constructed peer groups in local networks enable the diffusion of compensation norms that justify high levels of executive pay. They argue that not all comparable firms are necessarily higher performing, but actors tend to construct referent groups with higher levels of pay, which results in an ultimate outcome of "leapfrogging" levels of CEO pay (as reference groups justify higher levels of pay). This leapfrogging then shapes the observable macro patterns in the distribution of CEO compensation.

Whether self-assessment, self-improvement or self-enhancement is operating is not clear in this study. Perhaps all of them are operating at different moments in the process (e.g., referent group selection and interpretation of performance) – or perhaps referent group selection is driven by multiple motives. The determination of motive is clearly complicated. Indeed, Kim, Kogut and Yang (2015), also studying CEO compensation, and comparing these alternative mechanisms predicting increased CEO pay, find that pay spreads more within board interlocks as a social process. If this is the explanation for how CEO compensation spreads, we have self-improvement, and perhaps even self-assessment, without necessarily having self-enhancement because those social ties were not necessarily chosen for positive self-appraisal.

The complexity of determining motives raises the question of whether delineating motive is a useful exercise in understanding social reference group selection. Although we believe it is useful, adding an understanding of the basis for selecting the reference group provides the opportunity to move this research forward. At least in the context of CEO compensation, motives are often inferred and the focus has (usefully, in our view) been on determining how the social reference group has been chosen. Using this as an example, the five bases of social comparison that we have outlined can provide insights into the possible motivations in operation.

IV. Conclusions and Complications

To summarize, the bases of reference group selection and the underlying motivation for social comparison provide us with tools to better understand learning from others. First, we see opportunities for further research in understanding when and how different motivations prevail by incorporating an understanding of how social reference

groups are selected. Second, a renewed attention to learning from others can be facilitated more generally by explicitly considering these different bases for social referent selection. Finally, we conclude with a call to further explore the various bases of reference group selection and motivations that we have begun to analyze in Table 1 by incorporating these questions into research designs.

We have much to explore about the relationships between motivation, referent group selection and learning. Is likelihood of learning dependent on the relative strength of one motive over another? Or perhaps the ability to choose the social referent (as demonstrated by Smith, 2011; Smith and Chae, 2016) encourages self-enhancement to the detriment of learning? A better understanding of the relationship between self-enhancement and learning is a good place to start. We need to empirically examine when self-enhancement precludes or reduces learning and when they jointly occur. It may be that, despite self-enhancing social referent choices, learning does occur. We see this with several studies noted in this chapter (KC et al., 2013; Kim and Tsai, 2012; Menon and Pfeffer, 2003).

Another possibility is that the likelihood of learning depends on the *dimensions* on which social comparison occurs. There might be social comparisons that are too sensitive or threatening for learning to occur – and in fact self-enhancement can be an identity-preserving tactic. Indeed, Pfeffer and Fong (2005) warn that self-enhancement is most detrimental in domains that are central to self-image, because accurate evaluation of poor performance is most threatening and painful in those domains. ("Our tendency to self-enhance might lead us to be most vulnerable to not learning or seeing mistakes in the most important domains", pg. 383). While a self-enhancement motive itself does not

prohibit learning, such a motive can lead to critical comparisons on key dimensions or domains being ignored, which hinders learning. For example, it might be easier for an organization to learn a new marketing technique through social comparison than incorporate feedback on the problems in their core strategy.

The extent of learning (as well as what is learned) is also determined by the basis of social referent selection. For example, external rankings are based on a set of inputs on which an organization might strive to improve. The external rankings then shape the dimensions on which an organization focuses its attention. Espeland and Sauder (2007) showed that organizational actors adjust their behaviors based on rankings, and rankings channel actor's attention to behaviors relevant to information conveyed in rankings. In order to improve performance, behaviors that help actors perform better in evaluation metrics are be prioritized over others. Similarly, these external rankings direct attention to smaller and specialized groups for comparison (Elsbach and Kramer, 1996). Focusing on a smaller comparison group (e.g., top entrepreneurship programs) focuses attention on a particular set of activities that will shape learning. Thus, rankings place boundaries around behavioral responses and prioritize certain behaviors over others, which limits or focuses actor's choice set in deciding how to react to rankings. Learning opportunities are shaped by these external rankings.

More broadly, there might be a relationship between the basis for social referent selection and the likelihood of learning. Perhaps we should consider the extent to which actors choose the social referents (through cognitive or affective reasons) rather than the social referents being forced or given (through structural, external or perhaps social reasons). One possibility is that learning does not occur when actors have not chosen the

social referent -- either because social comparison takes place in a less important organizational domain and actors instead attend to other concerns (Rowley et al., 2016) or because social comparison occurs in a core domain yet actors have less discretion and are more threatened by the comparison (Pfeffer and Fong, 2005). This latter case – threat incurred from social comparison – suggests that the lack of discretion in choosing the referent group may lead to a reactance against attending to the selected reference group (and finding another group to which one might compare better), and thus a complete rejection of self-assessment and self-improvement. This behavior can be categorized as a type of "self-protective comparison strategy" to protect oneself from exposure to underperformance within the reference group (Gibbons, Benbow, and Gerrard, 1994). The opposite, however, could also be true. Perhaps it is easier to learn, as in the ranking example, when there are clear dimensions of performance to attend to and actors accept externally given referents. Without external rankings, perhaps organizations will simply focus on the social referents (through cognitive or affective reasons) that reflect well on the organization (because of desires for self-enhancement) rather than focus on those aspects of behavior where self-improvement might occur.

In order to predict the expected pattern (learning or not learning from forced social comparisons) we can explore two possibilities. First, the level of underperformance likely impacts how actors will respond. Although actors are motivated, at least partially, to minimize exposure to the threat caused by rankings, or find ways to justify their poor performance (Elsbach and Kramer, 1996), a modest underperformance can motivate learning because there are feasible solutions to improve performance. This is aligned with performance feedback theory where a survival threshold or threat-rigidity

response leads to less response when performance is very low relative to the comparison (Audia and Greve, 2006). Second, learning can occur with forced social comparisons when there are important external audiences attentive to those social comparisons. It is impossible to reject rankings, for example, when they are widely used by other actors and key audiences. This is aligned with studies that show behavioral changes as rankings become commonly used in the field (Espeland and Sauder, 2007; Sharkey and Bromley, 2015). In particular, when rankings are accessible and visible to key audiences, actors cannot ignore them and this increases the motivation to learn.

Another important question is the relative frequency of different social referent choices, and we should consider what is learned from these choices. However this suggestion is not without complications. First, reference group selection is a dynamic process. Organizations can have multiple reference groups at any one time, and, even more important, the reference groups themselves can shift over time. Indeed, the experiment by Audia et al. (2015) indicates that negative performance feedback leads actors to shift their social comparison. So there is a likely feedback loop whereby the performance relative to a particular reference group leads to changes in the choice of the referent group itself (and perhaps the basis for that comparison). Second, with multiple reference groups at play, underlying motivations for the selection of one reference group can also influence learning outcomes from other reference groups. Various social reference groups are likely to interact and jointly define learning outcomes rather than operate separately from one another. As such, learning from one reference group may have spill-over effects to learning from other reference groups. For example, in KC et al. (2013)'s study, surgeons are more likely to learn from other's failure because self-

enhancement motives make it hard to learn from their own mistakes. As a first order effect, self-enhancement motives influence how individuals assess their own successes and failures, and by second order effect influence how individuals come to differentially assess success and failure of their own versus others' experience. Similarly, Menon and Pfeffer (2003) showed that external knowledge is preferred over internal knowledge when valuing internal knowledge is not conducive for self-enhancement within the group. However, just as cardiologists are able to learn amidst self-enhancement motives as in KC et al. (2013), this intra-group self-enhancement motive does not necessarily forestall learning. Even if the motive prohibits learning from an internal source of knowledge, it drives actors to seek alternative sources of learning (knowledge from outsiders). A lesson from these studies is that different reference groups jointly define learning from others, and without specifying all relevant reference group at play, predicting learning outcomes from a given reference group and its motivations is likely to be flawed.

As alluded to above, we have only sketched an initial set of possibilities for reference group selection. Much more development can be done in the extension of Table 1. It is important to understand the basis for social referent selection – because it helps us understand from whom actors learn and in turn informs the possibilities for *what* is learned. In addition to the suggestions above, researchers can usefully examine in detail the rows or columns in Table 1. For example, the far right column of Table 1 demonstrates that external rankings can be associated with a range of motivations. When and with what impact are rankings associated with these different motives, such as self-improvement and/or self-enhancement? As noted above, this could be a function of an actor's position relative to the social referents (close or far below others) or of the

importance of the reference group to external audiences. It could also be a function of whether the actor is focused on upward or downward social comparisons (Elsbach and Kramer, 1996; Espeland and Sauder, 2007). To take another example, researchers can examine a single motivation and look at the impact of different bases for social reference group selection (a row in Table 1). Perhaps the motivation for self-assessment provides more useful information when the reference group is chosen based on cognitive or affective cues. Or perhaps self-assessment is more difficult when structural comparisons are at too high of a level or when social ties are too different than the focal actor. A research design based on a single motivation or a single basis for social comparison can be a useful strategy for extending our understanding of social comparison processes.

Although all of this is certainly daunting, we encourage researchers to tackle these questions head on. Our current assumptions about reference group selection are flawed and our understandings incomplete. The most promising research has begun to look at instances where organizations publically name their social referents (Porac et al., 1999; Labianca et al., 2009) or ask about social referents through a survey (Tsai et al., 2011) but the instances where organizations do this are few and far between. Another possibility is to derive contextually meaningful understandings of reference group selection, as Porac et al. (1989) do in the case of Scottish knitwear. This may be possible through media reports (for example, to identify rivalry). At the very least, we suggest that researchers should be very explicit about the choice of a social reference group and, when empirically possible, the motivation for such a choice. This may help us better understand the social comparison processes and organizational learning from others more generally.

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Table1. Mapping of reference group selection and motivations

Q. What motivates social comparison in reference group selection?	Q. What is the basis for reference group selection?				
	Structural	**Cognitive**	**Affective**	**Social**	**External**
	- Structural similarity (ex. industry, size)	- Visibility and salience	- Emotional engagement (ex. rivalry)	- Interaction through direct tie	- Rankings
Self-Assessment Desire for accurate evaluation	Greve (1998); Porac et al. (1999); Labianca et al. (2001)	Porac et al. (1989; 1995; 1999); Moliterno et al. (2014)	Kacpercyzk et al. (2015, internal comparison); Kilduff et al. (2010)	Beckman & Haunschild (2002); Labianca et al. (2009)	Martins (2005)
Self-Enhancement Desire for positive self-appraisal	Audia et al. (2015); Porac et al. (1999); Labianca et al. (2001)	Diprete et al. (2010)	Washington & Zajac (2005); Labianca et al. (2001)	Stuart et al. (1999); KC et al.(2013)	Elsbach & Kramer (1996)
Self-Improvement Desire for improving performance	Askin and Bothner (2016)	Kim and Tsai (2012)		Hasan & Bagde (2013) KC et al.(2013); Kim et al.(2015); Labianca et al. (2009)	Rowley et al.(2016); Garcia, Tor, Gonzalez (2006)
No clear motivations Unconscious or "mindless" learning		Haunschild & Miner (1997)		Kim et al.(2015)	Sharkey & Bromley (2015)