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Fast track report

Subordinate regulatory mode and leader power: Interpersonal regulatory complementarity predicts task performance

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Abstract

This research examines the implications of locomotion regulatory mode (orientation toward making progress on goals) and assessment regulatory mode (orientation toward critically evaluating alternatives) for employees' performance. Regulatory mode theory suggests that, although these are both integral to self-regulation, they may also function independently of one another and affect distinct, but equally important, performance aspects. We propose and find that performance of locomotion-oriented employees is complemented by their leader's expert power (ability to provide superior knowledge and information), whereas performance of assessment-oriented employees is complemented by their leader's coercive power (ability to administer negative consequences). These findings support the regulatory mode interpersonal complementarity hypothesis and show that complementarity plays a role in self-regulation of objective performance. Copyright © 2013 John Wiley & Sons, Ltd.

Imagine two technical support workers, both highly motivated to aid their clients in times of need. The first does so with a strong orientation to help as many clients as possible and to not keep the next client waiting. The second does so with a strong orientation to find the right solution. Although both may be useful strategies in their own right, a combination of both of these orientations seems most beneficial to actual job performance.

Regulatory mode theory proposes that these *locomotion* and *assessment* aspects of self-regulation can function as distinct motivational orientations (Higgins, Kruglanski, & Pierro, 2003; Kruglanski et al., 2000). That is, rather than being interdependent components of a larger system that regulates toward a desired end state (e.g., Carver & Scheier, 1998), locomotion (orientation toward moving away from a current state), and assessment (orientation toward critically evaluating a current state) may represent ends in themselves (Kruglanski, Orehek, Higgins, Pierro, & Shalev, 2010). As such, assessment and locomotion orientations affect engagement in distinct strategic aspects of task-relevant behavior (Orehek, Mauro, Kruglanski, & van der Bles, 2012) and may interactively benefit successful self-regulation (Kruglanski et al., 2000).

Moreover, we propose that the performance of employees oriented strongly toward either of these modes may be complemented by distinct types of power employees perceive their leaders to hold. As assessors are highly concerned with pursuing the *right* means and goals, leaders may complement assessors' job

performance when leaders are perceived as holding the ability to influence followers to initiate action away from an evaluative state. That is, performance of individuals with a strong desire for assessment may be complemented by their leader's *coercive power*. In contrast, as locomotors are concerned with change and *movement* away from a current state, leaders may complement locomotors' job performance when leaders are perceived as holding the ability to inform followers and influence them toward evaluating alternatives. That is, performance of individuals with a strong desire for locomotion may be complemented by their leader's *expert power*.

Regulatory Mode Theory

Regulatory mode theory distinguishes two motivational orientations, namely locomotion and assessment (Higgins et al., 2003; Kruglanski et al., 2000). Locomotion orientation implies the desire to change one's current state, to move from one task to the next quickly, simply in order to change without regard for whether it is the correct thing to do in the context or task. Although movement is the core concern when locomotion tendencies are strong, it is psychological, experiential movement, and primarily directed at moving away from one's current state. That is, the intent is simply to do something else, anything other than the same thing; and a goal or end state is secondary to the desire to *experience* movement and change (because it creates a sense of flow; Pierro, Pica, Mauro, Kruglanski, & Higgins, 2012).

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Because they want to switch to the next task, while in a locomotion mode, people tend to quickly choose means, to initiate action, and to complete tasks (Klem, Higgins, & Kruglanski, 1996; Kruglanski et al., 2000). In contrast, an assessment orientation implies the desire to critically evaluate one's current state, to make comparisons among all alternative goals and means even at the expense of initiating goal-directed action. As a consequence, assessors also tend to procrastinate (Pierro, Giacomantonio, Pica, Kruglanski, & Higgins, 2011). Because they want to make sure they do the right thing, while in an assessment mode, people tend to generate more potential means, to evaluate relevant information, and to complete tasks accurately (Klem et al., 1996; Kruglanski et al., 2000).

Although these examples indicate that locomotion and assessment imply self-regulatory strategies engaged in for their own sake, most task performance would benefit from combining them (Kruglanski et al., 2000; Mauro, Pierro, Mannetti, Higgins, & Kruglanski, 2009). Indeed, Kruglanski and colleagues (2000) found that academic and military successes depended on the interaction of regulatory modes; locomotion and assessment positively predicted achievement when both were high but not when one or both were low. Moreover, Pierro, Pica et al., (2012) recently found that self-reported and managers' ratings of work performance were predicted by the interaction of regulatory modes. Thus, our first aim is to replicate this basic outcome of regulatory modes to objective job performance.

Moreover, it is not always the case that individuals decide by themselves on the manner in which they carry out tasks. Although locomotors versus assessors may be motivated to engage in one particular strategic aspect of a task or job, situational influences on self-regulation are certainly important (Pierro, Pica et al., 2012), and individuals are not consumed by their regulatory modes to the extent that situational or social factors are unable to focus individuals' attention and efforts elsewhere. Particularly in the work place, social influences on self-regulation are abundant. Given the aim of leadership, specifically, to influence follower motivation and goal attainment (Stogdill, 1950), we propose that different types of power leaders that are able to exert may complement the performance of locomotion-oriented and assessment-oriented employees.

Power That Complements Regulatory Modes

We focus on two specific types of power that, as we discuss next, hold the strongest complementary potential with regard to regulatory modes: coercive power and expert power (French & Raven, 1959; Raven, 1993). Coercive power moves followers on the basis of the threat of negative consequences; it arises when followers perceive their leader as having the ability to administer undesirable consequences or limit desirable consequences. In contrast, expert power implies the ability to influence followers through expertise and superior knowledge—to influence another person by administering information (Hinkin & Schriesheim, 1989). We suggest that these two types of power may be associated with encouraging different action tendencies.

Coercive power is likely to motivate individuals to move away from what they are doing; the threat of negative consequences may signal that a current activity will lead to punishment, heightening the motivation to do something *else*

(Kruglanski, Pierro, & Higgins, 2007). That is, punishment (or the threat of) is a signal that what one is currently doing is wrong, and in order to avoid this potential punishment, individuals may be motivated to do anything other than what they were doing. That is, any movement away from that which might lead to the punishment is a better alternative than what one was doing, even if this goes against one's natural action tendency (cf. Scholer, Zou, Fujita, Stroessner, & Higgins, 2010). Hence, the threat of negative consequences may encourage a locomotion tendency.

Locomotors already engage in this particular type of movement naturally. Yet, assessors are primarily concerned with contemplating what the right course of action is and tend to remain in this state of evaluation. Strongly focusing on assessment may inhibit the tendency to actually initiate change away from evaluation and, accordingly, may not be sufficient to perform well on the overall task (Pierro, Presaghi, Higgins, Klein, & Kruglanski, 2012). Indeed, assessors tend to procrastinate (Pierro et al., 2011). Thus, when it comes to actual successful self-regulation, coercive power may give assessors the push needed to actually initiate change away from their highly evaluative state, to stop assessment and, instead, to initiate goal-directed action.

Expert power is likely to motivate individuals to critically evaluate what they are doing. Informing individuals more deeply about tasks and offering suggestions for alternative courses of action may force the individual to evaluate and compare their task approach with alternatives (Kruglanski et al., 2007). That is, when a leader has the ability to influence someone because this leader has great expertise, the fact that this information is coming from an individual in a formal position of authority may make subordinates consider more information seriously. The ability to provide information on how to best perform a task and what alternative courses of action are, in a sense, forces this information to be considered, also by people who might not normally tend to do so.

Assessors already engage in this particular type of evaluation naturally. Yet, locomotors are primarily concerned with changing and moving from task to task and tend to remain in this state of movement. Strongly focusing on this locomotion aspect of tasks may inhibit a critical evaluation of whether the individual is pursuing the best course of action and, accordingly, may not be sufficient to perform well on the overall task (cf. Pierro, Pica et al., 2012). That is, locomotors do not normally consider many different alternatives (Klem et al., 1996; Kruglanski et al., 2000). Thus, when it comes to actual successful self-regulation, expert power may make locomotors stop and evaluate what they are doing, to discontinue simply moving and, instead, to critically assess courses of action.

As discussed earlier (Pierro, Pica et al., 2012), situational cues may lead individuals to focus on assessment or locomotion, and these situational or social cues may be particularly important when it comes to overall task performance that requires focusing on several strategic aspects. That is, individuals who are highly motivated to engage in one aspect of a task may benefit from situational cues (in this case leaders' type of power), focusing their attention to also consider other aspects of the task.

Several previous studies are relevant to these hypotheses. When asked explicitly, employees tend to prefer behaviors that 'fit' (i.e., are similar to) their regulatory modes (Kruglanski

et al., 2007): locomotors prefer coercive power, whereas assessors prefer expert power. This previous work indicates that coercive power implies locomotion, whereas expert power implies assessment. Yet, research outside the leadership domain indicates that performance is heightened when collaborating with others who have a complementary (i.e., dissimilar) regulatory mode (Mauro et al., 2009; Pierro, Presaghi et al., 2012). Although the former studies focused on subjective value attached to leaders, these did not study performance; although the latter studies investigated performance, these did not study leadership. Integrating previous work, we suggest that when it comes to actual self-regulation of performance, locomotors may benefit from a leader who complements their orientation and is able to influence them to also focus on assessment. Analogously, assessors may benefit from a leader who complements their orientation and is able to influence them to also focus on locomotion. Complementarity, in this case, refers to the boosting or improving of overall job performance of individuals who are already highly focused on one strategic aspect of their task; and this boosting, we suggest, occurs when leaders have a type of power that has the potential to make subordinates also focus on the *other* strategic aspect of their task.

First, we hypothesized that employees' assessment and locomotion orientations interact to predict job performance. Second, we expected that locomotors' job performance is complemented by their leader's expert power. Third, we expected that assessors' job performance is complemented by their leader's coercive power. We tested these hypotheses in a customer service call center.

METHOD

Participants

Participants were 96 call center agents (42.7% female; $M_{\text{age}} = 32.59$, $SD_{\text{age}} = 8.95$) from the inbound call center of a Dutch utility company. Tenure ranged from 1 month–25 years ($M_{\text{tenure}} = 2.56$, $SD_{\text{tenure}} = 3.00$). Participants worked in 19 teams with separate leaders ($M_{\text{team size}} = 5.05$, $SD_{\text{team size}} = 2.97$).

Procedure

Participants completed measures of regulatory mode orientations and of leader expert power and coercive power. Data were collected over 2 weeks on percentages of requests fixed on the first call.

Measures

Leaders' types of power were assessed with two subscales of the social power scale developed by Hinkin and Schriesheim (1989). Expert power ($M = 3.77$, $SD = 0.82$; $\alpha = .76$) was assessed with four items such as 'My team leader can provide me with technical or administrative knowledge.' Coercive power ($M = 2.43$, $SD = 0.89$; $\alpha = .82$) was assessed with four items such as 'My team leader can give me undesirable job assignments.' Items were rated on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

Locomotion and assessment were assessed with the scale validated by Kruglanski and colleagues (2000). Locomotion ($M = 4.61$, $SD = 0.59$; $\alpha = .81$) was assessed with 12 items such as 'By the time I accomplish a task, I already have the next one in mind.' Assessment ($M = 3.72$, $SD = 0.55$; $\alpha = .67$) was measured with 12 items such as 'I spend a great deal of time taking inventory of my positive and negative characteristics.' Items were rated on a scale from 1 (*strongly disagree*) to 6 (*strongly agree*).

Performance was defined as the percentage of problems successfully fixed on the first call ($M = 86.48$, $SD = 9.55$) and was recorded over a 2-week period. Performance depends on finding the right solution and actually implementing it. As callers are customers of the company, the company can keep track of whether customers call back and whether they are calling about the same problem or about a different problem. These data are collected in the organization continuously and were provided to the authors by the organization.

RESULTS

Analytic Strategy

From the 19 teams and 96 agents, performance data from the time period we studied were available for 72 individuals. To benefit from intersubjective assessments of power types, we used ratings on expert power and coercive power from all 96 team members. We performed a multilevel analysis in which expert and coercive power were modeled as fixed effects of group means, and locomotion and assessment were modeled as individual-level fixed effects. Our main hypothesis tests are modeled by the cross-level interactions between these two sets of variables. We subsequently performed simple slopes analyses at high (+1 SD) and low (−1 SD) levels of power types.

To assess whether aggregation of expert and coercive power to the group-level was justified, we explored between-group differences and within-group reliabilities. Intra-class correlation (ICC) 1 was 0.09 for coercive power and 0.10 for expert power. ICC(2) were 0.34 and 0.35, whereas R_{wg} were 0.64 and 0.70. Although the ICC(1) values indicate sufficient support for aggregation, ICC(2) values are modest (but comparable to prior research; Wu, Tsui, & Kinicki, 2010).

Hypothesis Testing

Descriptive statistics, alphas, and correlations are presented in Table 1. We conducted a multilevel analysis that simultaneously tested all hypotheses. In line with regulatory mode theory, while there seemed to be a main effect of locomotion, $\gamma_{10} = 3.43$, $SE \gamma = 1.16$, $t = 2.96$, $p = .01$, we observed a significant interaction between locomotion and assessment, $\gamma_{30} = 2.53$, $SE \gamma = 0.68$, $t = 3.74$, $p = .001$. The main effect of assessment was not significant, $\gamma_{20} = 0.21$, $SE \gamma = 0.79$, $t = 0.27$, $p = .79$. More specifically, the relationship between locomotion and performance was significant when assessment was high, $\gamma_{10} = 5.97$, $SE \gamma = 1.68$, $t = 3.55$, $p = .003$, but not when assessment was low, $\gamma_{10} = 0.91$, $SE \gamma = 1.16$, $t = 0.78$, $p = .45$.

Table 1. Means, standard deviations, alphas, and zero-order correlations

Variable	Mean	SD	1	2	3	4	5
1 Locomotion	4.61	0.59	.81				
2 Assessment	3.72	0.55	.18	.67			
3 Coercive power	2.43	0.89	-.21	.18	.76	-.24	
4 Expert power	3.77	0.82	.20	.04	-.04	.82	
5 Performance	0.86	0.10	.26*	.08	-.08	.33**	.82

Note: $N=72$ respondent, 19 teams. Reliability coefficients alpha are presented in bold on the diagonal. Individual level correlations are presented below the diagonal. Group level correlation (based on group averages of coercive and expert power) is presented above the diagonal.

* $p > .05$. ** $p > .01$.

Similarly, the link between assessment and performance was only positive when locomotion was high, $\gamma_{20}=2.75$, $SE \gamma=1.17$, $t=2.34$, $p=.03$, but negative when locomotion was low, $\gamma_{20}=-2.32$, $SE \gamma=0.89$, $t=-2.59$, $p=.02$.

More germane to our regulatory complementarity hypotheses, results showed the expected interaction between locomotion and expert power, $\gamma_{12}=2.02$, $SE \gamma=0.49$, $t=4.16$, $p=.001$ (Figure 1) and between assessment and coercive power, $\gamma_{21}=2.79$, $SE \gamma=0.94$, $t=2.97$, $p=.01$ (Figure 2). The other two interactions were not significant, $t_s < 1.00$, $p_s > .33$.

Further analyses of the significant interaction showed that the relation between locomotion and performance was positive when expert power was high, $\gamma_{10}=5.45$, $SE \gamma=1.53$, $t=3.56$, $p=.003$, but not significant when expert power was low, $\gamma_{10}=1.41$, $SE \gamma=0.90$, $t=1.57$, $p=.14$. The relation between assessment and performance was positive when coercive power was high, $\gamma_{20}=3.00$, $SE \gamma=1.29$, $t=2.32$, $p=.03$, but negative when coercive power was low, $\gamma_{20}=-2.57$, $SE \gamma=1.17$, $t=-2.21$, $p=.04$.¹

GENERAL DISCUSSION

This study revealed that performance of locomotors was complemented when their leader held the ability to exert expert power. In contrast, performance of assessors was complemented when their leader held the ability to exert coercive power. Thus, these results support the notion that expert power may complement locomotion-oriented employees' performance, presumably because it increases the likelihood that they will stop moving and critically evaluate the manner in which they are working (rather than simply to keep moving as they were). In contrast, coercive power may complement assessment-oriented employees' performance, presumably because it provides them with the push that they need to stop evaluating and to move away from their current state.

These findings contribute to the self-regulation literature. First, locomotion-assessment interaction is a basic assumption in regulatory mode theory but has not been tested extensively

¹Initial analyses controlling for age, gender, and tenure showed that these variables did not affect the hypothesized results. That is, all three hypothesized interactions were significant after first controlling for these variables, $t_s > 2.50$, $p_s < .05$. It may be noted that, in a model including only these control variables, age was a negative predictor of performance, $coefficient=-0.19$, $SE=0.08$, $t(68)=-2.31$, $p=.02$. In addition, female participants showed significantly better performance than men, $coefficient=6.58$, $SE=1.40$, $t(68)=4.70$, $p < .001$.

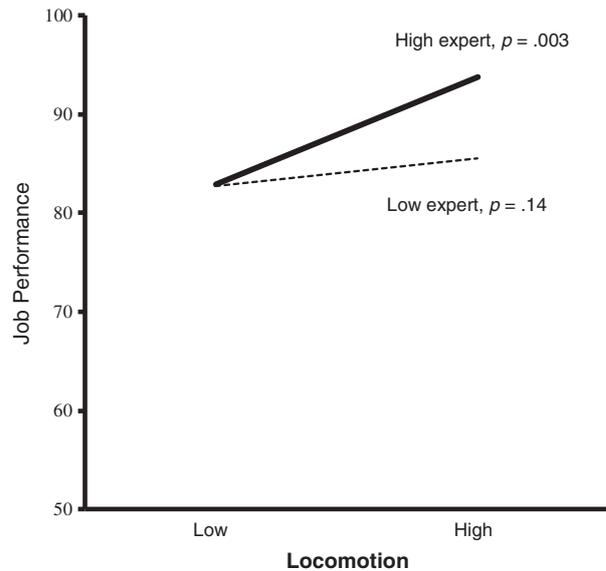


Figure 1. Interaction between locomotion and expert power on performance

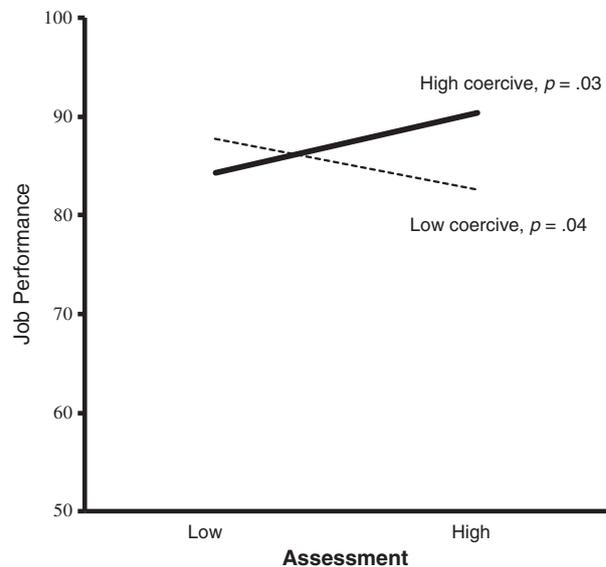


Figure 2. Interaction between assessment and coercive power on performance

(Kruglanski et al., 2000; Pierro, Pica et al., 2012). Revealing this interaction provides support for regulatory mode theory. Second, to our knowledge, this is the first study investigating the interpersonal complementarity hypothesis with regard to actual work performance. Third, self-regulation research has only recently started investigating self-regulation in social contexts (Finkel & Fitzsimons, 2011). The current research contributes to this by studying the interplay between regulatory modes and leader influence in a situation with abundant social factors: the work place. Generally, self-regulation experiments show that others can shape motivation and goals. However, these studies have largely neglected that distinct aspects of self-regulation involved in effective regulation may be complemented by social factors (Mauro et al., 2009).

As our hypotheses were based on the notion that actual on-the-job self-regulation requires focusing on distinct aspects of tasks, assessing objective job performance may be considered

a strong test. Nevertheless, as the work in service-oriented call centers implies that there is generally a next client waiting who wants to be helped correctly on the first call, the effects may be particularly visible here. Therefore, replication across diverse populations is an area for future research. Indeed, moderators of the current findings may be uncovered. For example, the ability to exert influence may be limited when direct contact is lacking.

Our complementarity hypotheses were based on the argument that the two types of power have the potential to create (and, hence, change) a particular action tendency. Coercive power, we proposed, has the potential to influence individuals toward locomotion, whereas expert power has the potential to influence individuals toward assessment. A potential alternative explanation of the process underlying the complementarity effect is that these types of power correspond to leaders' own preferred action tendencies. In that sense, it is possible that leaders' type of power reflects their own preferences and that the complementarity effect is partly based on role modeling, wherein subordinates follow the leader's action tendencies. For example, assessment-oriented leaders may develop greater expertise because of their tendency to critically evaluate options. Hence, future research might reveal that the effect we observed is partly because of the leaders' own regulatory modes.

It may be important to discuss the relationships between complementarity and other variables such as regulatory fit (Higgins, 2000). Regulatory fit occurs when tasks, contexts, or others' behaviors sustain application of a preferred strategy; it is an experience of engagement because the applied strategy feels 'right'. Although fit and complementarity both revolve around strategies, differences between fit and complementarity may be observed at the level of outcomes. Regulatory fit makes individuals *feel* engaged. Hence, the notion of regulatory fit would predict that locomotors have a preference for coercive power leaders, whereas assessors have a preference for expert power leaders (also relating to outcomes such as job satisfaction; Kruglanski et al., 2007). However, regulatory fit can enhance performance relating to the aspect of a task that is primarily served by that strategy: individuals engage in that particular strategic behavior more strongly (De Cremer, Mayer, van Dijke, Schouten, & Bardes, 2009). In contrast, regulatory complementarity revolves around overall self-regulation that depends on *different* strategic behaviors being beneficial to successful completion of tasks; individuals also engage in something other than their preferred strategy.

The current research studied expert and coercive power as holding the most potential for complementing regulatory modes. It is possible that complementarity might occur on the basis of other types of leadership variables and on the basis of other types of power. For example, according to Kruglanski and colleagues (2007) reward power would more likely fit locomotors than assessors because it is also relatively forceful style. Likewise, referent power might fit assessors rather than locomotors because it is a more advisory style.

While one might view reward power as more forceful, it is a basis of power that stems from the (perceived) ability to hand out rewards, and its influence is based on the desire to attain those rewards. Coercive power is certainly the more forceful compared with reward power. Moreover, reward power may

lead to staying the course because reward power reinforces what individuals were already doing. In contrast, the negative potential of coercive power is especially relevant here because coercive power is more naturally connected to motivating people to move away from what they were doing. Rewards reinforce good behavior and are taken as a signal that all is well and that one can continue the way one was working. In contrast, punishments signal that something is wrong and that something needs to change (see also Higgins, 1997).

Likewise, while it is true that referent power seems a more advisory style, it is essentially a basis of power that stems from the desire to be liked and to be *like* the leader. The informational quality, which characterizes expert power and is relevant to complementing locomotors, is not a deep quality associated with referent power. As such, the fit that assessors might experience from referent power may be due to something else or due to a more global aspect of referent power. That is, referent power may be advisory in its global nature, but it does not hold the type of power relating to knowledge and skill that expert power does, which is essential in getting individuals (locomotors) to be more critical. Hence, when it comes to actually changing and complementing regulatory modes, coercive and expert power have greater strength and potential because they provide a stronger one-on-one correspondence to relevant action tendencies.

This study does not aim to provide a full account of factors in the self-regulation of locomotors and assessors or self-regulation of job performance more generally. Indeed, research indicates that teams in which individuals work may also play a crucial role in their self-regulation (Pierro, Presaghi et al., 2012). We hope that this study may inspire research into the complex self-regulation process involved in job performance.

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